

State of New Mexico



Commissioner of Public Lands

E. S. JOHNNY WALKER
COMMISSIONER



OPERATIONS
SEP 24 1962
☐ Exec:
☐ Perm:
☐ Sec:
☐ Acq:
☐ Adm:
☐ Prod:
☐ Mat:
☐ Pers:
☐ FILE
P.O. BOX 791
SANTA FE, NEW MEXICO

September 21, 1962

Ambassador Oil Corporation
P. O. Box 9338
Fort Worth 7, Texas

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Appl EXHIBIT NO. *E*
CASE NO. *2954*

Re: Proposed Langlie-Mattix
Penrose Sand Unit, Lea
County, New Mexico

Attention: Mr. E. A. Riley

Gentlemen:

We have received Proposed Langlie-Mattix Penrose Sand Unit Agreement, Lea County, New Mexico, together with Exhibits "A", "B", and "C".

This office has not received a letter of designation on the proposed unit area from the United States Geological Survey nor have we received the \$60.00 filing fee for this Unit.

We must request that the selection of a successor Unit Operator, under Sec. 10, require approval by the Commissioner of Public Lands.

We do not approve the Operating Agreement.

We will approve this proposed unit form as to form and content if the aforementioned change is made, our approval being subject to like approval by the United States Geological Survey.

Ambassadr Oil Corporation
P. O. Box 9338
Ft. Worth 7, Texas
September 21, 1962
(page 2)

When this unit is presented for final approval we will require a statement from Ambassador Oil Corporation as to the tracts qualified together with an original ratified copy of the Unit Agreement and one originally signed copy of the Operating Agreement. We will require one other copy of the Unit Agreement which may be a fully conformed copy submitted after approval by the United States Geological Survey.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

Marian M. Rhea

BY:

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

ESW/mmr/v



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25 D.

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
FEB 7 1965	EXHIBIT NO. <u>D</u>
CASE NO. <u>2954</u>	

Ambassador Oil Corporation
P. O. Box 9338
Fort Worth 7, Texas

Attention: Mr. E. A. Riley *HA*

Gentlemen:

Your undated application, filed November 20, 1962, with the Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of 3,880 acres, more or less, in Lea County, New Mexico, as logically subject to operation under unitization provisions of the Mineral Leasing Act, as amended. The unit area contains 280.00 acres (7.21 percent) of Federal land, 680.00 acres (17.53 percent) of State of New Mexico lands, and 2,920.00 acres (75.26 percent) of patented lands.

Unitization will be limited to the Langlie-Mattix zone as identified in section 2 (h) of the proposed unit agreement form. The unit area has been developed by 95 oil wells completed in the formation to be unitized of which 75 are currently on producing status. Participation will be based upon ultimate primary recovery as defined by section 2(k) of the unit agreement form. You estimate that the proposed water flood project under unitized operations will result in the recovery of 5 million barrels of oil over and above that recoverable by primary methods.

The land outlined on your plat marked "Langlie-Mattix Unit Area, Lea County, New Mexico", will be acceptable as a logical unit area for secondary recovery operations with the addition of the NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 22 S., R. 37 E., N.M.P.M., which will increase the unit area to 3,920 acres, more or less. The location of this tract requires its inclusion in the unit area hereby designated.

Your proposed form of unit agreement will be acceptable if modified as marked in colored pencil and/or attached rider. One copy of the marked form is returned herewith, and the remaining copies are retained for distribution to the appropriate offices of the Geological Survey. Please contact the State of New Mexico before soliciting joinders.

In the absence of any type of land requiring special provisions or any objection not now apparent, a duly executed agreement conformed to the marked copy, approved by the appropriate officials of the State of New Mexico, and accompanied by an acceptable allocation schedule calculated in accordance with the basic participation formula, will be approved if submitted in approvable status within a reasonable time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have full commitment of sufficient lands to afford effective control of secondary recovery operations.

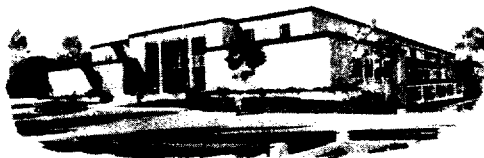
Include the latest status of all acreage when the executed agreement is submitted for approval. The format of the sample exhibits attached to the 1961 reprint of the standard form of unit agreement should be followed closely in preparation of Exhibits A and B.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "William R. Baker".

Acting Director

State of New Mexico



Commissioner of Public Lands

June 8, 1972

2754

ALEX J. ARMIJO
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Re: Langlie-Mattix Penrose Sand Unit,
Langlie-Mattix Oil Pool, Lea
County, New Mexico-REVISED
PLAN OF OPERATION

ATTENTION: Mr. C. W. Stumhoffer

Gentlemen:

The Commissioner of Public Lands has this date approved your Revised Plan of Operation for the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico. This approval is subject to like approval by the United States Geological Survey.

Enclosed is one approved copy of the plan.

Please remit a three (\$3.00) Dollar filing fee.

Very truly yours,

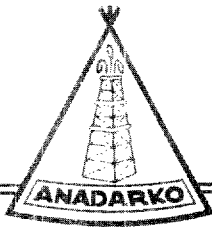
RAY D. GRAHAM, Director
Oil and Gas Department

AJA/RDG/s

encl.

cc:

OCC-Santa Fe, New Mexico ✓
USGS-Roswell, New Mexico

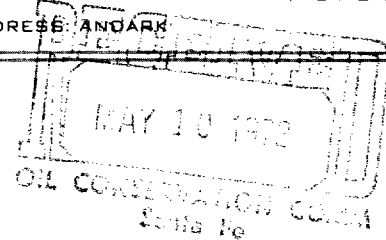


ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANADARK

May 8, 1972



Regional Oil & Gas Supervisor
United States Department of the Interior
Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Langlie-Mattix Penrose Sand
Unit, Langlie-Mattix Oil Pool,
Lea County, New Mexico

Gentlemen:

Under the provisions of Section 12 of the Unit Agreement for the Langlie-Mattix Penrose Sand Unit, Langlie-Mattix Oil Pool, Lea County, New Mexico, we submit herewith for your approval a proposed revision of the plan of operation for the secondary recovery of oil by waterflood.

This proposed revision of the plan of operation, involving the completion of waterflood development along the north and east boundaries of the LMPSU, is set out on the attached map of the LMPSU and includes

1. Conversion of Well Nos. 3-3, 5A-1, and 7-3 to water injection by the LMPSU.

Commissioner of Public Lands
State of New Mexico

2. Conversion of Anadarko's R.E. Cole Well No. 3 and E.W. Walden Well No. 6 and Conoco's Elliott A-15 Well No. 1 to water injection in offset cooperation with the LMPSU.
3. Drilling and completion for water injection LMPSU Well Nos. 1-2, 2-2, and 40-1 along the east boundary of the LMPSU.

This revised plan of operation for the LMPSU has been necessitated by the election of Gulf Oil Company-USA not to convert their R.E. Cole NCT "A" Well No. 1, SE/4 SE/4 Section 16-T22S-R37E, to water injection as an expansion of the established water injection pattern on the LMPSU.

Your approval of this proposed revision of the plan of operation for the LMPSU is requested at your earliest convenience. Should you have any questions and/or comments, please contact the undersigned.

Very truly yours,

ANADARKO PRODUCTION COMPANY

Original Signed By
C. W. Stumhoffer

C.W. Stumhoffer

CWS/nl

RECEIVED

OCT - 4 1971

OIL CONSERVATION COMM.
SANTA FE

September 30, 1971

Anadarko Production Company
3109 Winthrop Avenue
P. O. Box 9317
Fort Worth, Texas 76107

Re: Expansion to the Langlie-
Mattix Penrose Sand Unit,
Lea County, New Mexico

ATTENTION: Mr. C. W. Stumhoffer

Gentlemen:

We are in receipt of your letter dated September 27, 1971, together with appropriate joinders and Exhibits committing tract 40 to the Langlie-Mattix Penrose Sand Unit, being the NW/4SW/4 of Section 23, Township 22 South, Range 37 East.

The Commissioner of Public Lands has this date given final approval to the expansion, subject to like approval by the United States Geological Survey

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas

AJA/RDG/s

cc: USGS-Roswell, New Mexico (ltr. only)
OCC- Santa Fe, New Mexico (ltr. only)



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer 1857
Roswell, New Mexico 88201

IN REPLY REFER TO:

RECEIVED
DEC 17 1971
OIL CONSERVATION COMM.
SANTA FE

December 15, 1971

2954

Anadarko Production Company
P.O. Box 931
Fort Worth, Texas 76107

Attention: Mr. C. W. Stumhoffer

Gentlemen:

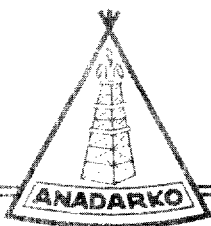
On December 15, 1971, your application for expansion of the Langlie Mattix Fenrose Sand unit area, Lea County, New Mexico, No. 14-08-0001-8607 was approved effective as of October 1, 1971. Such expansion increases the unit area from 4,000 to 4,040 acres.

One approved copy of the application is enclosed. You are requested to furnish the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and other interested principals with appropriate evidence of this approval.

Sincerely yours,

M. O. FREDERICK
Regional Oil and Gas Supervisor

cc:
Washington (w/cy appln)
BLM, Santa Fe (w/cy appln)
Hobbs (w/cy appln)
NMOC, Santa Fe
Com. Pub. Lands, Santa Fe
Accounts



RECEIVED
ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE

P. O. BOX 9317

FORT WORTH

NOV 10 1971
NEW MEXICO
OIL CONSERVATION COMM.
P.O. BOX 1857

CABLE ADDRESS: ANDARK

December 7, 1971

2954

**Regional Oil and Gas Supervisor
United States Department of the Interior
Geological Survey
P.O. Drawer 1857
Roswell, New Mexico 88201**

**RE: Application for Approval of
Unit Expansion, Langlie-Mattix
Penrose Sand Unit, Lea County,
New Mexico**

Gentlemen:

On September 27, 1971, Anadarko Production Company submitted an application to the Regional Oil and Gas Supervisor of the United States Geological Survey, the Commissioner of Public Lands of the State of New Mexico, and the New Mexico Oil Conservation Commission for approval to expand the Langlie-Mattix Penrose Sand Unit by adding thereto Tract 40, Anadarko's Barton "A" lease covering the NW/4 SW/4 Section 23, Township 22 South, Range 37 East, Lea County, New Mexico.

We enclose herewith an original approval of this application from the New Mexico Oil Conservation Commission which, along with

the Commissioner's approval that has been previously furnished to your office, should allow the Supervisor to grant final approval of this proposed expansion to be effective October 1, 1971.

Anadarko hereby respectfully requests approval of this proposed expansion of the Langlie-Mattix Penrose Sand Unit as set out in the September 27, 1971 application.

Very truly yours,

ANADARKO PRODUCTION COMPANY

Original Signed By
C. W. Stumhoffer

C.W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/nl
Encl:

cc: Commissioner of Public Lands
State of New Mexico
Santa Fe, New Mexico

New Mexico Oil Conservation Commission ✓
Santa Fe, New Mexico

RECEIVED

SEP 28 1971

OIL CONSERVATION COMM.
SANTA FE

APPLICATION
FOR APPROVAL OF UNIT EXPANSION
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

2754

September 27, 1971

Regional Oil and Gas Supervisor
United States Department of Interior
Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P.O. Box 1148
Santa Fe, New Mexico 87501

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

Gentlemen:

Anadarko Production Company, as Operator of the Langlie-Mattix Penrose Sand Unit, hereby requests approval to expand said Unit by adding thereto Tract No. 40, Anadarko's Barton A lease covering the NW/4 SW/4 Section 23, Township 22 South, Range 37 East, Lea County, New Mexico. Said expansion is proposed to be accomplished under the provisions of Section 4 of the Unit Agreement which was effective June 1, 1964. The procedures outlined by the Unit Agreement have been carried out as follows:

1. One hundred percent of the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit have signed letter ballots approving the expansion of the Unit to include Tract 40.
2. Preliminary concurrence of the proposed expansion was given on August 19, 1971 by the Director of the United States Department of the Interior Geological Survey and on August 31, 1971 by the State of New Mexico Commissioner of Public Lands.

3. A Notice of the Proposed Expansion dated August 26, 1971 was mailed on August 27, 1971 to the Commissioner, the Supervisor, each Working Interest Owner, lessee, and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed. Copies of the Notice of Proposed Expansion together with a Certificate of Mailing are enclosed with the Supervisor's and Commissioner's copies of this Application.
4. Since the mailing of said Notice of Proposed Expansion more than 30 days have elapsed, and no objection to the proposed expansion has been received.
5. Joinder executed by Anadarko Production Company, the owner of 100 percent of the Working Interest in Tract 40 above described is enclosed with the Supervisor's copy and with the Commissioner's copy of this Application.
6. Joinders of 100 percent of the Royalty Owners under Tract 40 above described are also enclosed with the Supervisor's copy and with the Commissioner's copy of this Application.

In addition to the enclosures described above, there is furnished herewith (1) revised Exhibit "A" showing revised Unit boundaries and Tract designation, (2) revised Exhibit "B" showing relevant data on all tracts within the Unit area. A revised Exhibit "C" to the Operating Agreement should not be necessary because Anadarko proposes to assign the Working Interest of Tract 40 to the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit after the expansion is effective and effective as of the effective date of the expansion.

The proposed effective date of the expansion is October 1, 1971 which is the first day of the month after the date of this Application.

Wherefore, Anadarko requests approval of the expansion of the Langlie-Mattix Penrose Sand Unit as outlined above.

Approved.....12/3.....1971

[Signature]
.....
Secretary-Director

THE CONSERVATION COMMISSION
THE APPROVAL GRANTED SUBJECT TO LINE APPROVAL
IS NOT STANTED BY THE UNITED STATES GEOLOGICAL
SURVEY AND NOT BY THE COMMISSIONER OF PUBLIC LANDS
OF THE STATE OF NEW MEXICO.

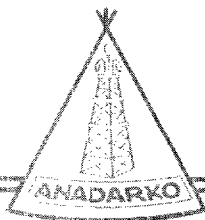
CWS/JF/hb

Respectfully submitted,

Anadarko Production Company

[Signature]

C. W. Stumhoffer
Superintendent
Secondary Recovery Division



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

December 3, 1971

RECEIVED
DEC - 6 1971
OIL CONSERVATION COM.

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. J.E. Kapteina

RE: Application for Approval of
Unit Expansion,
Langlie-Mattix Penrose Sand
Unit, Lea County, New
Mexico

Gentlemen:

On September 27, 1971, Anadarko Production Company submitted an application to the Regional Oil and Gas Supervisor of the United States Geological Survey, the Commissioner of Public Lands of the State of New Mexico, and the New Mexico Oil Conservation Commission for approval to expand the Langlie-Mattix Penrose Sand Unit by adding thereto Tract 40, Anadarko's Barton "A" lease covering the NW/4 SW/4 Section 23, Township 22 South, Range 37 East, Lea County, New Mexico.

The Commissioner has given final approval of this proposed expansion, and final approval of the Supervisor will be given when the approval of the Commission has been received.

From my conversations with your office, you do not have your copy of the above referenced application, and to enable you to consider and give approval of this proposed expansion, we enclose herewith another copy of the application along with the

following attachments:

- (1) Notice of Proposed Expansion dated August 26, 1971 that was mailed on August 27, 1971 to the Supervisor, the Commissioner, each Working Interest Owner, lessee and lessor whose interests are effected, and to the lessee and lessor whose interests are proposed to be committed.
- (2) Affidavit of Mailing of the above Notice of Proposed Expansion.
- (3) Original Joinder executed by Anadarko Production Company, the owner of one hundred (100) percent of the Working Interest in Tract 40 above described.
- (4) Copies of Joinder executed by one hundred (100) percent of the Royalty Owners under Tract 40 above described.
- (5) Copy of revised Exhibit "A" to the Unit Agreement showing revised Unit boundaries and Tract designations.
- (6) Copy of revised Exhibit "B" to the Unit Agreement showing relevant data on all Tracts within the Unit Area as expanded.

The proposed effective date of the subject expansion is October 1, 1971 which was the first day of the month after the date of the attached Application.

Your approval of this proposed expansion at your earliest convenience is requested so that a change of the proposed effective date will not be necessary.

We further wish to request that you mail an original of your approval of this proposed expansion to the Supervisor and Commissioner as well as to this office.

Anadarko hereby respectfully requests approval of this proposed expansion of the Langlie-Mattix Penrose Sand Unit as outlined.

Respectfully,

ANADARKO PRODUCTION COMPANY



C.W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/nl

Encl:

cc: Regional Oil and Gas Supervisor
United States Geological Survey
Roswell, New Mexico

Commissioner of Public Lands
State of New Mexico
Santa Fe, New Mexico

RECEIVED

DEC - 6 1971

OIL CONSERVATION COMM

APPLICATION
FOR APPROVAL OF UNIT EXPANSION
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

September 27, 1971

Regional Oil and Gas Supervisor
United States Department of Interior
Geological Survey
Drawer 1857
Roswell, New Mexico 88201

Commissioner of Public Lands
State of New Mexico
P.O. Box 1148
Santa Fe, New Mexico 87501

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

Gentlemen:

Anadarko Production Company, as Operator of the Langlie-Mattix Penrose Sand Unit, hereby requests approval to expand said Unit by adding thereto Tract No. 40, Anadarko's Barton A lease covering the NW/4 SW/4 Section 23, Township 22 South, Range 37 East, Lea County, New Mexico. Said expansion is proposed to be accomplished under the provisions of Section 4 of the Unit Agreement which was effective June 1, 1964. The procedures outlined by the Unit Agreement have been carried out as follows:

1. One hundred percent of the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit have signed letter ballots approving the expansion of the Unit to include Tract 40.
2. Preliminary concurrence of the proposed expansion was given on August 19, 1971 by the Director of the United States Department of the Interior Geological Survey and on August 31, 1971 by the State of New Mexico Commissioner of Public Lands.

3. A Notice of the Proposed Expansion dated August 26, 1971 was mailed on August 27, 1971 to the Commissioner, the Supervisor, each Working Interest Owner, lessee, and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed. Copies of the Notice of Proposed Expansion together with a Certificate of Mailing are enclosed with the Supervisor's and Commissioner's copies of this Application.
4. Since the mailing of said Notice of Proposed Expansion more than 30 days have elapsed, and no objection to the proposed expansion has been received.
5. Joinder executed by Anadarko Production Company, the owner of 100 percent of the Working Interest in Tract 40 above described is enclosed with the Supervisor's copy and with the Commissioner's copy of this Application.
6. Joinders of 100 percent of the Royalty Owners under Tract 40 above described are also enclosed with the Supervisor's copy and with the Commissioner's copy of this Application.

In addition to the enclosures described above, there is furnished herewith (1) revised Exhibit "A" showing revised Unit boundaries and Tract designation, (2) revised Exhibit "B" showing relevant data on all tracts within the Unit area. A revised Exhibit "C" to the Operating Agreement should not be necessary because Anadarko proposes to assign the Working Interest of Tract 40 to the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit after the expansion is effective and effective as of the effective date of the expansion.

The proposed effective date of the expansion is October 1, 1971 which is the first day of the month after the date of this Application.

Wherefore, Anadarko requests approval of the expansion of the Langlie-Mattix Penrose Sand Unit as outlined above.

Respectfully submitted,

Anadarko Production Company

C. W. Stumhoffer

C. W. Stumhoffer
Superintendent
Secondary Recovery Division

August 26, 1971

LANGLIE-MATTIX PENROSE SAND UNIT
Lea County, New Mexico
NOTICE OF PROPOSED EXPANSION

Under the provisions of Section 4 (b) (1) of the Unit Agreement of the Langlie-Mattix Penrose Sand Unit, Langlie-Mattix Oil Pool, Lea County, New Mexico notice is hereby given that it is proposed to expand the Unit Area to include the Anadarko Production Company Barton "A" lease covering the NW/4 SW/4 Section 23, Township 22 South, Range 37 East as Tract 40 (see attached plat).

Inclusion of the Barton "A" lease in the Langlie-Mattix Penrose Sand Unit will permit the drilling of a water injection well in an area of the Unit that requires a more effective water injection program to make possible the maximum recovery of waterflood oil from the Unitized Formation (Penrose Sand).

To take into account the early abandonment of the one well that produced Unitized Formation primary oil under the Barton "A" lease, a pseudo-ultimate primary oil recovery of 44,201 barrels as determined on the attached data sheet has been utilized to determine Unit participation for the lease.

By adding this pseudo-ultimate primary oil recovery for the lease to the primary oil recovery of 6,448,817 barrels for the present Unit Area and dividing the resultant total of 6,493,018 barrels into the pseudo-ultimate primary of 44,201 barrels for the lease, a Unit participation of 0.680747 percent is determined for the Barton "A" lease.

8-26-71

Page #2

Notice of Proposed Expansion

Langlie-Mattix Penrose Sand Unit

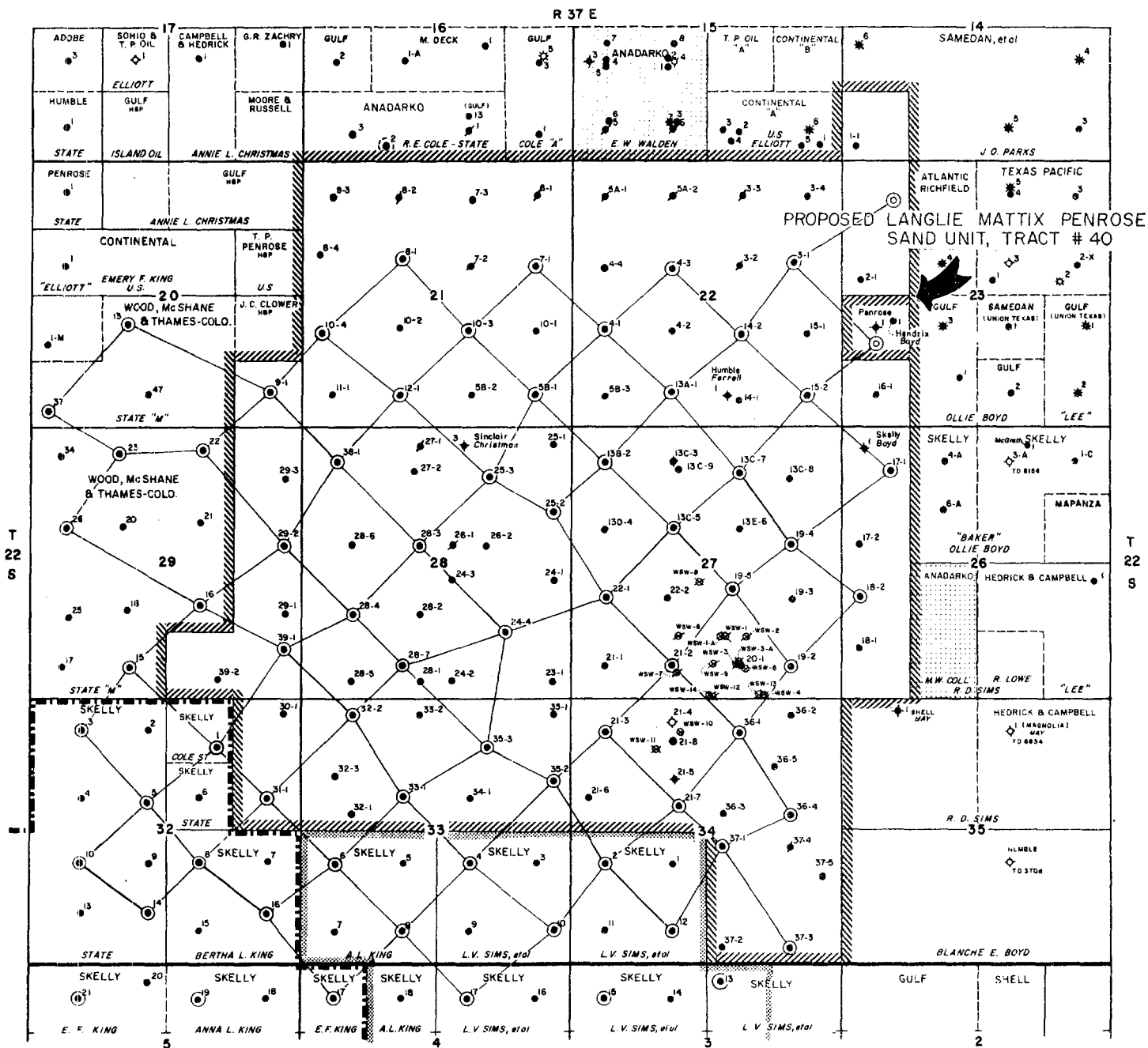
As required by Section 4 (b) of the Unit Agreement, over 90 percent of the present Unit Working Interest Owners have approved this proposed expansion of the Unit and Unit participation for the Barton "A" lease of 0.680747 percent.

The proposed effective date of the expansion of the Unit to include the Anadarko Production Company Barton "A" lease as Tract 40 is October 1, 1971.

Anadarko Production Company, Unit Operator

A handwritten signature in cursive script, reading "C. W. Stumhoffer".

C. W. Stumhoffer, Superintendent
Secondary Recovery Division



LEGEND

- - Oil Well
- ◆ - Plugged & Abandoned
- - Temporarily Abandoned
- ◇ - Dry & Abandoned
- ✕ - Gas Well
- * - Dual Completion (Oil & Gas)
- ⊙ - Water Injection Well
- ⊕ - Proposed Water Injection Well
- ⊗ - Water Supply Well
- ⊗ - WSW - Plugged & Abandoned
- //// - Langle Mattix Penrose Sand Unit
- - Skelly Penrose "A" Unit
- - Skelly Penrose "B" Unit
- ⤴ - Proposed Location



ANADARKO PRODUCTION COMPANY

LANGLIE MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO
PROPOSED EXPANSION UNIT AREA
TO INCLUDE
N. W./4, S. W./4, SEC. 23, T 22 S, R 37 E



LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

EXPANSION UNIT AREA
NW/4 SW/4 Section 23-T22S-R37E

Determination Pseudo-Ultimate Primary Recovery Unitized Formation

<u>Well Number</u>	<u>Location</u>	<u>Cumulative Oil Recovery 1-1-64</u>
LMPSU 2-1	SW/4 NW/4 Section 23	117,897
LMPSU 3-1	SE/4 NE/4 Section 22	111,114
LMPSU 15-1	NE/4 SE/4 Section 22	53,098
LMPSU 15-2	SE/4 SE/4 Section 22	43,315 *
LMPSU 16-1	SW/4 SW/4 Section 23	61,390
Olean-Penrose Boyd 1	NW/4 SW/4 Section 23	10,999
No Well	SE/4 SW/4 Section 23	0
No Well	NE/4 SW/4 Section 23	0
No Well	SE/4 NW/4 Section 23	0
		<hr/> 397,813 Barrels

$397,813 \div 9 = 44,201$ Barrels Oil - pseudo ultimate primary recovery for NW/4
SW/4 Section 23 (Proposed Tract 40-LMPSU)

- * Pseudo-ultimate primary recovery Unitized Formation based on average primary recovery of nine 40-acre tracts around LMPSU 15-2 - water injection well drilled and completed during December, 1969.

RECEIVED

DEC - 6 1971

CONSERVATION COMM

AFFIDAVIT OF MAILING

C. W. Stumhoffer, of lawful age, being first duly sworn,
deposes and says:

That on August 27, 1971, a copy of a Notice of Proposed
Expansion of the Langlie-Mattix Penrose Sand Unit, Lea County, New
Mexico to include Anadarko Production Company's Barton "A" Lease
covering the NW/4 SW/4 Section 23, Township 22 South, Range 37 East
as Tract 40 was mailed to each of the lessors and lessees affected at
their last known address by depositing said notice in the United States
Mail with postage thereon fully paid.

Dated September 20, 1971.

C. W. Stumhoffer

C. W. Stumhoffer

Subscribed and sworn to before me this 20th day of September,
1971.

Hazel Bied
Notary Public

My Commission Expires:

1973

HAZEL BIED, Notary Public
In and for the State of Texas
My commission expires 12-31-1973

RECEIVED

DEC - 6 1971

WORKING INTEREST OWNER

CONSERVATION COMMISSION

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
AND TO UNIT OPERATING AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Anadarko Production Company acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement" and a counterpart of an instrument entitled "Unit Operating Agreement", together with all amendments thereto as of the date of the execution of this instrument, the originals or counterparts of such instruments having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, one of the requirements for such expansion is for the Working Interest Owner or Owners of a tract or tracts desiring to bring such tract or tracts into said Unit to become parties to the above mentioned Unit Agreement and Unit Operating Agreement; and,

WHEREAS, the above mentioned Unit Agreement and Unit Operating Agreement provide that a party may become bound by such instruments by the execution in writing of a separate ratification of said instruments and thereafter said party or parties shall be bound by the terms of the agreements as so ratified:

NOW, THEREFORE, Anadarko Production Company is the owner of 100% of the working interest in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and Anadarko Production Company agrees to become a party to, and to be bound by the provisions of, the Unit Agreement and the Unit Operating Agreement as now amended as if it had signed the originals (and agreed to all amendments thereto) and hereby commits to said Agreements its entire interest in the above-described land and agrees that the parties to the Unit Agreement and the Unit Operating Agreement, their successors or assigns, are those that signed the originals, any counterpart of both instruments, or any instrument that evidences an intention to be so bound.

Anadarko Production Company does further acknowledge and agree that ANADARKO PRODUCTION COMPANY is now the Unit Operator of said Unit.

EXECUTED as of the 23rd day of July, 1971.

WORKING INTEREST OWNER

ATTEST: (WITNESS):

ANADARKO PRODUCTION COMPANY

Mr. L. Schultz

By James W. Hays

Date: _____

Address: 3109 Winthrop Ave.
Fort Worth, Texas 76107

STATE OF TEXAS)
)
COUNTY OF TARRANT)

The foregoing instrument was acknowledged before me this 23rd day
of July, 1971, by James W. Water, Jr.,
Vice President of ANADARKO PRODUCTION COMPANY, a Delaware corporation,
on behalf of said corporation.

Betty Franks
Notary Public in and for Tarrant County,
Texas

BETTY FRANKS, Notary Public
in and for Tarrant County, Texas
My commission expires June 1, 1973

My Commission Expires

RECEIVED

DEC - 6 1971

ROYALTY INTEREST OWNER

OIL CONSERVATION COMMISSION

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

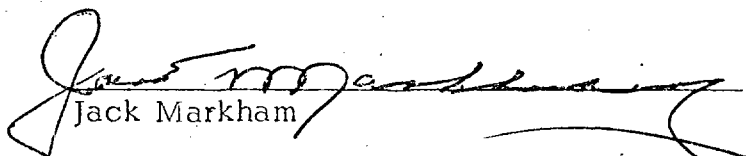
NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

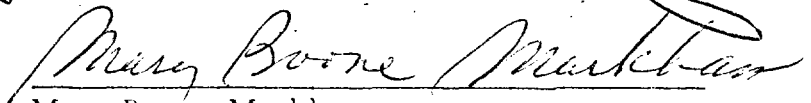
The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 3rd day of September, 1971.

ROYALTY INTEREST OWNER


Jack Markham


Mary Boone Markham

STATE OF TEXAS)
)
COUNTY OF LUBBOCK)

The foregoing instrument was acknowledged before me this 5th day
of September, 1971, by JACK MARKHAM and wife, MARY BOONE
MARKHAM.

Charles M. Wilson **CHARLES M. WILSON**
Notary Public

My Commission Expires:

June 1, 1973

RECEIVED
DEC - 6 1971
CONSERVATION COMMISSION

ROYALTY INTEREST OWNER

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 7 day of September, 1971.

ROYALTY INTEREST OWNER

J. M. Armstrong
J. M. Armstrong

Mary Lee Armstrong
Mary Lee Armstrong

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing instrument was acknowledged before me this 7 day
of September, 1971, by J. M. ARMSTRONG and wife, MARY LEE
ARMSTRONG.

Lily Rorden
Notary Public

My Commission Expires:

June 1, 1973.

RECEIVED

SEP - 6 1971

ROYALTY INTEREST OWNER

CONSERVATION COMM

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 7 day of September, 1971.

ROYALTY INTEREST OWNER

W. A. Yeager
W. A. Yeager

Patsy Goss Yeager
Patsy Goss Yeager

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

The foregoing instrument was acknowledged before me this 2 day
of September, 1971, by W. A. YEAGER and wife, PATSY GOSS YEAGER.

Lily Borden
Notary Public

My Commission Expires:

June 1, 1973

RECEIVED

DEC - 6 1971

ROYALTY INTEREST OWNER

CONSERVATION COM.

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 31st day of August, 1971.

ROYALTY INTEREST OWNER

H. B. Fuqua H.B.
H. B. FUQUA, Independent Executor of
the Estate of Clifford Mooers, Deceased

H. B. Fuqua H.B.
H. B. FUQUA, Independent Executor of
the Estate of Dolores Mooers, Deceased

H. B. Fuqua H.B.
H. B. FUQUA, Attorney-in-Fact for
Maria Mooers Heater

ATTEST:

M. B. L. L. L.
VICE-PRESIDENT & TRUST OFFICER

THE FIRST NATIONAL BANK OF FORT WORTH
as Trustee under written trust dated March 6,
1964, of Estate of Gillis A. Johnson, et al,
as Trustors

By M. B. L. L. L.
Vice-President and Trust Officer

STATE OF TEXAS)
)
COUNTY OF TARRANT)

The foregoing instrument was acknowledged before me this 31st day
of August, 1971, by H. B. FUQUA, Independent Executor of the
Estate of Clifford Mooers, Deceased, and in the capacity therein stated.

Ralph W. Sablstrom
Notary Public

My Commission Expires: June 1, 1973

STATE OF TEXAS)
)
COUNTY OF TARRANT)

The foregoing instrument was acknowledged before me this 31st day
of August, 1971, by H. B. FUQUA, Independent Executor of the
Estate of Dolores Mooers, Deceased, and in the capacity therein stated.

Ralph W. Sablstrom
Notary Public

My Commission Expires: June 1, 1973

STATE OF TEXAS)
)
COUNTY OF TARRANT)

The foregoing instrument was acknowledged before me this 31st day
of August, 1971, by H. B. FUQUA, Attorney-in-Fact for Maria Mooers
Heater, and in the capacity therein stated.

Ralph W. Sablstrom
Notary Public

My Commission Expires: June 1, 1973

STATE OF TEXAS)
)
COUNTY OF TARRANT)

The foregoing instrument was acknowledged before me this 1 day
of Sept, 1971, by H. T. WEBSTER,
Vice-President and Trust Officer of THE FIRST NATIONAL BANK OF FORT
WORTH as Trustee under written trust dated March 6, 1964, of Estate of
Gillis A. Johnson, et al, as Trustors, in the capacity therein stated.

Barbara Bowman
Notary Public

My Commission Expires:

~~My Commission Expires June 1, 1973~~

RECEIVED

DEC - 6 1971

CONSERVATION COMM

ROYALTY INTEREST OWNER

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 30 day of August, 1971.

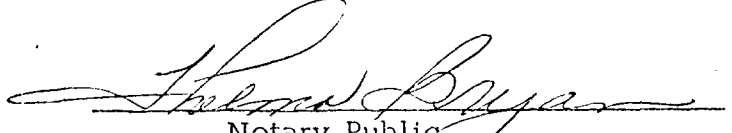
ROYALTY INTEREST OWNER

Roy G. Barton
Roy G. Barton

Opal Barton
Opal Barton

STATE OF NEW MEXICO)
)
COUNTY OF LEA)

The foregoing instrument was acknowledged before me this 30 day
of August, 1971, by ROY G. BARTON and wife, OPAL BARTON.


Notary Public

My Commission Expires:

My Commission Expires Dec. 8, 1971

RECEIVED
DEC - 6 1971
CONSERVATION COMMISSION

ROYALTY INTEREST OWNER

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 31 day of August, 1971.

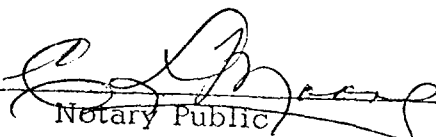
ROYALTY INTEREST OWNER

J. R. Cone
J. R. Cone

Dorothy Cone
Dorothy Cone

STATE OF TEXAS)
)
COUNTY OF LUBBOCK)

The foregoing instrument was acknowledged before me this 31st day
of August, 1971, by J. R. CONE and DOROTHY CONE, husband and
wife.



Notary Public
C. L. MOORE

My Commission Expires:
June 1, 1973

ROYALTY INTEREST OWNER

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 27th day of August, 1971.

ROYALTY INTEREST OWNER

J. Hiram Moore and Betty Jane Moore, Trustees under Indenture of Trust dated July 1, 19 between J. Hiram Moore and wife, Betty Jane Moore, as Trustors, and J. Hiram Moore, Betty Jane Moore and Michael Harrison Moore, Trustees

J. Hiram Moore
J. Hiram Moore, Trustee

Betty Jane Moore
Betty Moore, Trustee

[illegible]

The foregoing instrument was acknowledged before me this 27th day of August, 1971, by J. HIRAM MOORE and ~~wife, BETTY MOORE~~ Betty Jane Moore, Trustees.

Notary Public

My Commission Expires:
June 1, 1973

RECEIVED

DEC - 6 1971

OIL CONSERVATION COMM

ROYALTY INTEREST OWNER

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

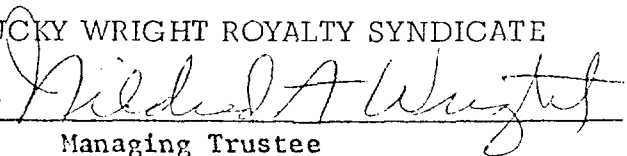
and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 16th day of September, 1971.

ROYALTY INTEREST OWNER

LUCKY WRIGHT ROYALTY SYNDICATE

By


Managing Trustee

STATE OF NEW MEXICO)
)
COUNTY OF SAN JUAN)

The foregoing instrument was acknowledged before me this 16th day
of September, 1971, by Mildred A. Wright, Managing Trustee for
Lucky Wright Royalty Syndicate

Livela Goodding
Notary Public

My Commission Expires: 1-9-74

CERTIFICATE OF RESOLUTION PASSED

STATE OF NEW MEXICO)
 (SS:
COUNTY OF SAN JUAN)

I, Secretary of a meeting of the Trustees of the Lucky Wright Royalty Syndicate, a common law Trust, held in Farmington, New Mexico, on December 9, 1967, do hereby certify that at said meeting, duly called for such purpose, the following Resolution was duly and unanimously passed by the Trustees of Said Syndicate, quorum being present, to-wit:

"Be it resolved by the Trustees of the Lucky Wright Royalty Syndicate, a common law Trust, that Mildred A. Wright, managing Trustee of this Syndicate, be, and she hereby is authorized and directed to execute and deliver to Mr. J. Norman Morris, Roswell, New Mexico, an oil and gas lease covering the Syndicate's mineral interest in the following described lands situated in Lea County, New Mexico, to-wit:

NW/4 SW/4 of Section 23, Township 22 South, Range 37 East, N.M.P.M.

Said oil and gas lease shall be dated as of December 6, 1967 and shall be for a term commencing with that date and ending December 6, 1972 and so long thereafter as oil or gas is produced from the leased premises under the terms of the lease as such term and production is therein defined. The lease shall provide for an annual delay rental of one dollar per acre leased per annum. The form of the lease submitted by the managing Trustee at this meeting is hereby approved.

Said managing Trustee is further authorized and directed to collect and receipt for, in behalf of the Syndicate, all bonus, rentals, royalties and other benefits payable under the terms of said lease, and such receipt shall relieve the payee of further obligation to see to the application of such funds so paid.

I further certify that the attached copy of oil and gas lease is a true and correct copy of the lease above referred to in said Resolution as approved by the Trustees.

I further certify that said Resolution has not been altered, amended or changed to the date hereof and that the same is in full force and effect.

Linda Knadling
Secretary of the Meeting

SUBSCRIBED AND SWORN TO before me this 11th day of December, 1967.

Donald Mitchell
Notary Public

My Commission Expires:

11/14/1971

Lovington Abstract Co.
Lovington, New Mexico

STATE OF NEW MEXICO
COUNTY OF LEA
FILED

JAN 26 1968

at 11:40 o'clock P.M.
and Recorded in Book 872
Page 277

12685

RECEIVED

SEP - 6 1971

CONSERVATION COM.

ROYALTY INTEREST OWNER

AGREEMENT TO BECOME A PARTY TO UNIT AGREEMENT
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Each of the persons who signs this instrument acknowledges receipt of a counterpart of an instrument entitled "Unit Agreement", together with all amendments thereto as of the date of the execution of this instrument, the original or counterpart of such instrument having both been executed as of the 1st day of April, 1963, by Ambassador Oil Corporation, for conducting unit operations with respect to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico.

WHEREAS, Section 4 of the Unit Agreement provides for an expansion of the Unit Area; and,

WHEREAS, the above mentioned Unit Agreement provides that a party may become bound by such instrument by the execution in writing of a separate ratification of said instrument and thereafter said party or parties shall be bound by the terms of the agreement as so ratified:

NOW, THEREFORE, each of the persons or parties who signs this instrument is or claims to be a Royalty Interest Owner in the following described tract of land, located and lying in Lea County, State of New Mexico, to-wit:

The NW/4 SW/4 of Section 23, T-22S, R-37E, N.M.P.M., from surface to 4000 feet below surface (Anadarko Production Company's Barton "A" Lease - Tract No. 40)

and each of the undersigned agrees to become a party to, and to be bound by the provisions of, the Unit Agreement as now amended as if each of the undersigned had signed the original (and agreed to all amendments thereto) and hereby commits to said Agreement its entire interest in the above-described land and agrees that the parties to the Unit Agreement, their successors or assigns, are those that signed the original, any counterpart of the instrument, or any instrument that evidences an intention to be so bound.

EXECUTED as of the 3rd day of September, 1971.

ROYALTY INTEREST OWNER

~~REDFERN OIL COMPANY~~
FLAG-REDFERN OIL COMPANY

ATTEST:

Tom E. Johnson
Tom E. Johnson, Asst. Secretary

By John J. Redfern, Jr.
John J. Redfern, Jr., President

THE STATE OF TEXAS I
 I
COUNTY OF MIDLAND I

The foregoing instrument was acknowledged before me this 3rd day of September, 1971, by John J. Redfern, Jr., President of Flag-Redfern Oil Company, a Delaware corporation, on behalf of said corporation.

BARBARA C. REED - Notary Public
Midland County, Texas
My Commission Expires June 1, 1973

Barbara C. Reed
Notary Public in and for Midland
County, Texas

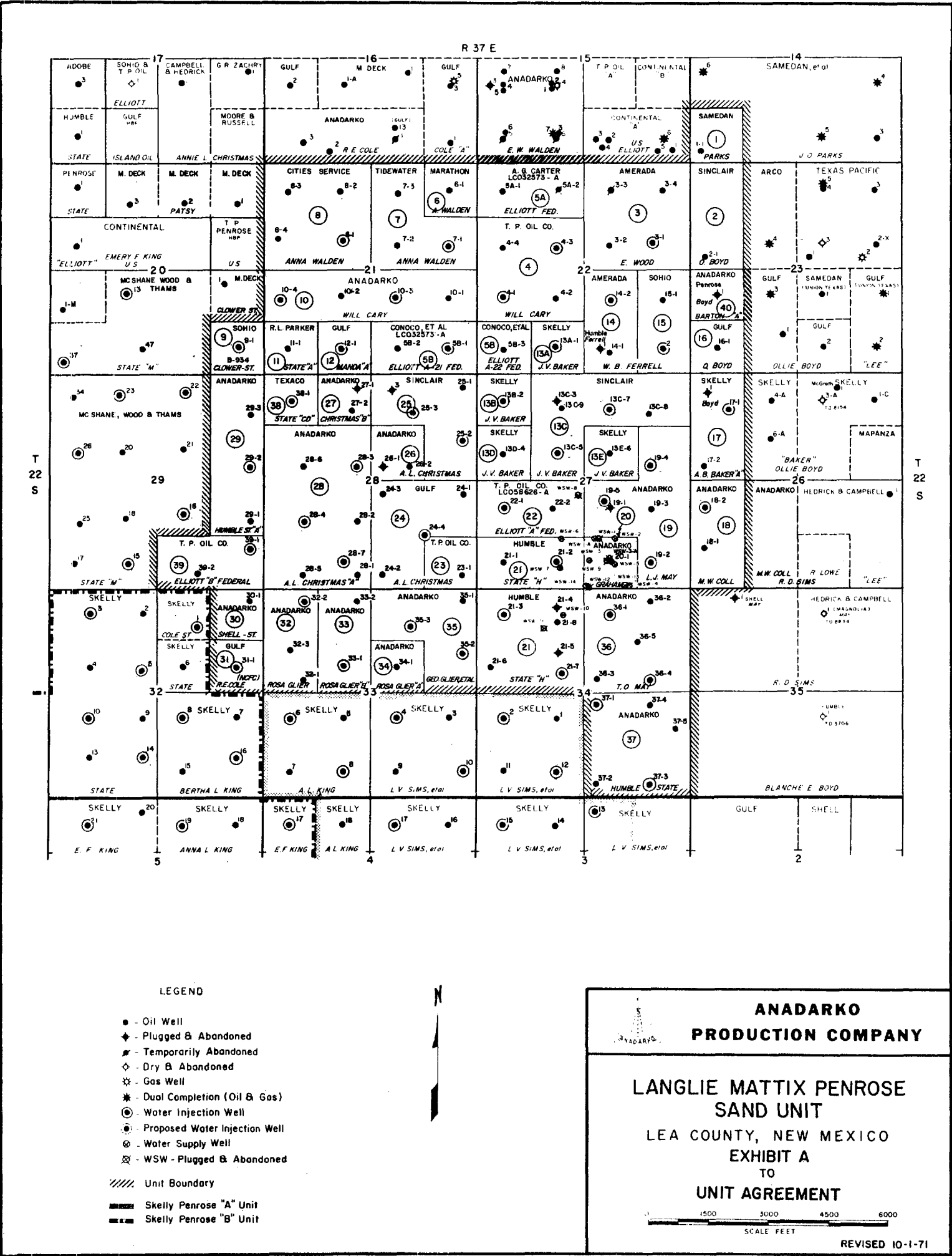


EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LFA COUNTY, NEW MEXICO

Section	Number of Acres	Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
T22S, R37E - FEDERAL LANDS							
5-A N/2 NW/4 Sec. 22	80	LC-032573 (a) Dated 8-1-56	12½% 25%	Marion M. Leonard	Sunshine Royalty Mable F. Leonard Trustees of Harry M. Leonard Estate Midwest Oil Corp. First National Bank of Nevada, Trustee U/W of Allie M. Lee, Deceased	Carter Foundation Production Co.	1.973961 100%
5-3 S/2 SE/4 Sec. 21 and SW/4 SW/4 Sec. 22	120	LC-032573 (a) Dated 8-1-56	12½% 25%	Marion M. Leonard	15 or more Barrels Per Well Per Day Sunshine Royalty	Continental Oil The Atlantic Refining Company Pan American Petroleum Corp. Standard Oil Company of Texas, a Div. of California Oil Company	3.044117 25% 25% 25% 25%
					Estate of Harry Leonard, Deceased First National Bank of Nevada, Exec. of Est. of Allie M. Lee, Deceased Midwest Oil Corp. Mable F. Leonard		
					1/6 of 7.5% 1/6 of 7.5% 1/3 of 7.5% 1/6 of 7.5%		

RECEIVED
 DEC - 6 1971
 U.S. CONSERVATION COM.

EXHIBIT "B"
 LANGLEY-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Act	Description	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
-B (continued)							
					15 or Less Barrels Per Well		
					Per Day		
					Sunshine Royalty 1/6 of 5.0%		
					Estate of Harry Leonard,		
					Deceased 1/6 of 5.0%		
					First National Bank of		
					Nevada, Exec. of Est.		
					of Allie M. Lee,		
					Deceased 1/6 of 5.0%		
					Midwest Oil Corp. 1/3 of 5.0%		
					Mable F. Leonard 1/6 of 7.5%		
12	N/2 SW/4 Sec. 27	80	LC-058626 (a)	12½% 25% Texas Pacific Oil	Sunshine Royalty 1.25% Mable Leonard 1.25% First National Bank of Roswell, Trustee of Harry Leonard Est. 1.25% First National Bank of Nevada 1.25% Midwest Oil Corp. 2.50%	Texas Pacific Oil Company Schio Petroleum Company Brosoco Corp. John B. Rich	5/8 1/4 95% x 1/8 5% x 1/8
19	S/2 SE/4 Sec. 29	80	LC-058626 (b)	*(See below) Texas Pacific Oil Co. Schio Brosoco Corp. John B. Rich	None	Texas Pacific Oil Company Schio Brosoco Corp. John B. Rich	62.500% 25.000% 11.875% 0.625%

EXHIBIT "B"
 LANGLEIE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Tract or Description	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation Tract in Unit
39 (continued)						
OIL:						
Oil over 30° Baume (30.2° API)						
(a) 20 bbls. or less	12 1/2%		GAS:			
(b) 20 to 50 bbls.	16 2/3%		3MM or less	12 1/2%	2. Oil less than 30° Baume (30.2° API)	
(c) 50 to 100 bbls.	20%		Over 3MM	16 2/3%	(a) 20 bbls. or less	12 1/2%
(d) 100 to 200 bbls.	25%				(b) 20 to 50 bbls.	14 2/7%
(e) Over 200 bbls.	33 1/3%				(c) 50 to 100 bbls.	16 2/3%
					(d) 100 to 200 bbls.	20%
					(e) Over 200 bbls.	25%

T223, R37E - STATE LANDS

9	SE/4 SE/4 Sec. 20	40	B-934 6-6-32	1/8	Humble Oil & Refining Company	Humble Oil & Refining Company	1/16 x 8/8	Sohio Petroleum Company	1/4	0.228319
					Working Interest Owners Langlie-Mattix Penrose Sand Unit			Anadarko Production Company	1/4	
								Texas Pacific Oil Broseco	1/4	
								John B. Rich (to 4,000 ft.)	1.25%	
11	SW/4 SW/4 Sec. 21	40	B-148 8-14-36	1/8	Parker Drilling Company	The Texas Company		Robert L. Parker	100%	1.043019
21	S/2 SW/4 Sec. 27 & NW/4 Sec. 34	240	B-934 6-6-32	1/8	Humble Oil Refining Company	None		Humble Oil & Refining Company	100%	6.654521

EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 TEA COUNTY, NEW MEXICO

Tract No.	Description	Number of Acres	Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
29	E/2 NE/4 NE/4 SE/4 Sec. 29	120	B-934-8 6-6-32	1/8	Humble Oil & Refining	Humble Oil & Refining Company 1/16	Anadarko Production Texas Pacific Oil (to 4,000 ft.) 1/2	4.127247
30	NE/4 NE/4 Sec. 32	40	B-1167	1/8	Shell Oil Co. (1) Shell Oil	1/16 of 1-40 bbls per day 1/8 of 40-150 bbls per day 1/4 of 150 bbls or more per day (2) Gulf Coast Western Oil Co. Prod. Pay of 1,132 bbls. out of 4.6875% of Production	Anadarko Production Co. 1/2 Texas Pacific Oil (to 4,000 ft.) 1/2	0.395517
31	SE/4 NE/4 Sec. 32	40	B-3480 12-13-34	1/8	Gulf Oil Corp. None		Gulf Oil Corporation 100%	0.743497
37	SE/4 Sec. 34	160	B-934-19 6-6-32	1/8	Humble Oil & Refining	(1) Humble 1/8 x 7/8 of prod. (2) Gulf Coast Western Oil Co. Prod. pay of 7,818 bbls out of 4.6875% of prod.	Anadarko Production Company 1/2 Texas Pacific Oil Co. 1/2 (to 4,000 ft.)	2.638367
33	NW/4 NW/4 Sec. 23	40	B-148-6 8-14-31	1/8	Texaco	None	Texaco 100%	0.707987

EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Tract No.	Number of Acres	Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
<u>T22S, R37E, FEE LANDS</u>							
1	SW/4 SW/4 Sec. 14	40 Fee Land 12-23-35	1/8	Samedan Oil Corp.	None	Samedan Oil Corp.	74.25%
				Sam Noble	74.25%	Sam Noble	0.25%
				E.E. Noble	0.25%	E.E. Noble	0.25%
				Ann Noble	0.25%	Ann Noble Brown	0.25%
				Brown	0.25%	Michael F. Cusack	4.00%
				Michael F. Cusack	4.00%	John P. Cusack, Jr.	4.00%
				John P. Cusack, Jr.	4.00%	J.P. Cusack	17.00%
				J.P. Cusack	17.00%		
2	NW/2 NW/4 Sec. 23	80 Fee Land 5-30-26	1/8	Sinclair	None	Sinclair	100%
							2.237109
3	NE/4 Sec. 22	160 Fee Land 3-15-27	1/8	F.S. Blackmar	Humble O & R 6.25%	Amerada	100%
							5.237457
4	NW/2 SW/4 S/2 NW/4 Sec. 22	160 Fee Land	1/8	Texas Pacific Oil Company	None	Broseco Corp. John B. Rich	10.555555% 0.555555%
						Sohio Pet. Co. Texas Pacific Oil Co.	55.555557% 33.333333%
							4.512181

EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Tract No.	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
6	NE/4 NE/4 Sec. 21	40	Fee Land 9-20-28	1/8 Marathon Oil Co. None	Marathon Oil Co.	100% 0.948188
7	NW/4 NE/4 & S/2 NE/4 Sec. 21	120	Fee Land 10-5-26	1/8 Tidewater None	Tidewater	100% 3.004957
8	NW/4 Sec. 21	160	Fee Land 10-5-26	1/8 Cities Service None	Cities Service Petroleum Co.	100% 2.856490
10	N/2 S/2 Sec. 21	160	Fee Land 8-18-34	1/8 Mobil Oil Corp. Oil payment in original amount of \$110,000.00 payable out of 2.1875% of Unit production owned by Mobil Oil Corporation	Anadarko Production Company	100% 4.917837
12	SE/4 SW/4 Sec. 21	40	Fee Land 4-20-28	1/8 Gulf Oil Corp. None	Gulf Oil Corp.	100% 0.803547
13-A	SE/4 SW/4 Sec. 22	40	Fee Land 4-1-26	1/8 Skelly Oil Co. None	Skelly Oil Co.	100% 1.594507
13-B	NW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8 Skelly Oil Co. None	Skelly Oil Co.	100% 2.039174

EXHIBIT "B"
 LANGLE-MATTHE PENROSE SAND UNIT
 LPA COUNTY, NEW MEXICO

Tract No.	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation Tract in Unit
13-C	160	NE/4 NW/4 N/2 NE/4 & SE/4 NW/4 Sec. 27	1/8 Skelly Oil Co.	None	Skelly Oil Co.	100% 5.747944
13-D	40	SW/4 NW/4 Sec. 27	1/8 Skelly Oil Co.	None	Skelly Oil Co.	100% 1.173232
13-E	40	SW/4 NE/4 Sec. 27	1/8 Skelly Oil Co.	None	Skelly Oil Co.	100% 1.338926
14	80	W/2 SE/4 Sec. 22	1/8 F.S. Blackmar	Humble Oil & Refining Co. 6.25%	Amerada Petroleum Corp.	100% 0.871901
15	80	E/2 SE/4 Sec. 22	1/8 F.S. Blackmar	Humble Oil & Refining Co. 6.25%	Sohio Petroleum Co. Brosoco Corp. 95% of John B. Rich 5% of (to 4,000 ft.)	2/3 0.792750 1/3 1/3
16	40	SW/4 SW/4 Sec. 23	1/8 Gulf Oil Corp.	None	Gulf Oil Corp.	100% 0.938921
17	80	W/2 NW/4 Sec. 26	1/8 Skelly Oil Co.	None	Skelly Oil Co.	100% 1.910370

EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Tract	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
3 W/2 SW/4 Sec. 26	80	Fee Land 9-20-28	Anadarko Prod- uction Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Tidewater Oil Co. - 1/3 of 7/8 on 50 bbls or over per well, per day and 1/16 of 7/8 on less than 50 bbls per well per day	Anadarko Production Co. Texas Pacific Oil Co. (to 4,000 ft.)	50% 50%
				(2) Gulf Coast Western Oil Co. -Prod. pay of 5,671 bbls out of 4.6875% of production		
3 SE/4 SE/4, N/2 SE/4 SE/4 NE/4 Sec. 27	160	Fee Land 7-25-30	Anadarko Prod. 1/2 Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Gulf Oil Corp. 1/8 (2) Gulf Coast Western Oil Co. -Prod pay of 16,592 bbls out of 4.6875% of prod.	Anadarko Production Co. Texas Pacific Oil Co. (to 4,000 ft.)	50% 50%
						5.587639

EXHIBIT "E"
 LANGLE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Tract No.	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
20	SW/4 SE/4 Sec. 27	40 Fee Land 10-15-34	1/8 Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Gulf Coast Western Oil Co.-Prod pay of 5,291 bbls out of 5.46875% of prod.	Anadarko Production Co. 1/2 Texas Pacific Oil Co. (to 4,000 ft) 1/2	1.540522
23	SE/4 SE/4 Sec. 23	40 Fee Land	1/8 Texas Pacific Oil Co.	None	Texas Pacific Oil Co. 1/2 Schio Petroleum Co. 1/3 Broseco Corp. 95% x 1/6 John B. Rich 5% x 1/6	1.019863
24	N/2 SE/4 & SW/4 SE/4 Sec. 23	120 Fee Land 5-6-25	1/8 Gulf Oil Corp.	None	Gulf Oil Corp. 100%	3.366151
25	N/2 NE/4 & SE/4 NE/4 Sec. 23	120 Fee Land 5-6-26	1/8 Sinclair Oil & Gas Co.	None	Sinclair Oil & Gas Co. 100%	2.251687
26	SW/4 NE/4 Sec. 23	40 Fee Land 5-6-26	1/8 Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Sinclair O & G 1/16 (2) Gulf Coast Western Oil Co.-Prod pay of 2,084 bbls out of 5.078125% of prod.	Anadarko Production Co. 1/2 Texas Pacific Oil Co. (to 3,900 ft.) 1/2	0.643625

EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Tract No.	Description	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
27	N2/4 NW/4 Sec. 28	40	Fee Land 4-20-28	1/8 Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Gulf Oil Corp. - 1/16 to 46 bbls per well per day 3/32 on 46 - 200 bbls per well per day 1/6 over 200 bbls (to 3,800 ft.) per well per day.	Anadarko Production Company Texas Pacific Oil Co. 1/2	0.584247
28	S/2 NW/4 & SW/4 Sec. 28	240	Fee Land 5-6-26	1/8 Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	Same as Tract 27	Anadarko Production Texas Pacific Oil Co. (to 3,800 ft.) 1/2	5.080012
32	W/2 NW/4 Sec. 33	80	Fee Land 4-19-28	1/8 Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Shell Oil Co - 1/16 of 1-40 bbls. per day; 1/8 of 40 - 150 bbls. per day; 1/4 of 150 bbls. or more per day	Anadarko Production Co. Texas Pacific Oil Co. 1/2	1.057828
					(2) Gulf Coast Western Oil Co - Prod pay of 2,616 bbls out of 4.6875% of prod.		

EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LRA COUNTY, NEW MEXICO

Tract No.	Description	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
33	E/2 NW/4 Sec. 33	80	Fee Land 4-19-28	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	Shell Oil Company 1/16 of 1-40 bbls per day 3/32 of 41-200 bbls per day 1/16 of more than 200 bbls per day	Anadarko Prod. Co. Texas Pacific Oil Co. (to 4,200 ft.)	1/2 1/2 1.364807
34	SW/4 NE/4 Sec. 33	40	Fee Land 4-19-28	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	Shell Oil Co. - Same as Tract 33	Anadarko Prod. Co. Texas Pacific Oil Co. (to 4,200 ft.)	1/2 1/2 0.868775
35	N/2 NE/4 & SE/4 NE/4 Sec. 33	120	Fee Land 4-25-28	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Shell Oil Co. - 1/16 when daily average prod is 35 bbls or less 1/8 when daily average prod is 36 to 150 bbls 1/4 when daily prod is 151 bbls or more (2) Gulf Coast Western Oil Co. Prod. pay of 6,429 bbls out of 4.6875% of prod.	Anadarko Prod. Co. Texas Pacific Oil Co. (to 4,200 ft.)	1/2 1/2 2.152184

EXHIBIT "B"
 LANGLEL-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Tract No.	Description	Number of Acres	Serial No. and Lease Date	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation in Tract in Unit
36	NE/4 Sec. 34	160	Fee Land	1/8 Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Sinclair Oil & Gas 1/16 when daily average prod is 15 bbls or less 1/8 when daily average prod is 16 bbls or more (2) Gulf Coast Western Oil Co. - Prod pay of 12,905 bbls out of 4.6875% of prod	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. (to 4,000 ft.)	1/2 4.120415
40	NW/4 SW/4 Sec. 23	40	Fee Land	18.28125% Anadarko Prod. Co.	None	Anadarko Prod. Co.	100% 0.680747
TOTALS							
4	Federal Tracts		(9 wells)		360 acres		8.910891% of Unit Area
8	State of New Mexico Tracts		(19 wells)		720 acres		17.821782% of Unit Area
32	Fee Land Tracts		(77 wells)		2,960 acres		73.267327% of Unit Area
44	Tracts		(105 wells)		4,040 acres		100.000000% of Unit Area

LANGLEL-MATTIX PENROSE SAND UNIT - LEA COUNTY, NEW MEXICO

ADDITION TO EXHIBIT "B"
 LANGLE-MATTHE PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FREE LANDS:

TRACT NO.

PERCENT OF BASIC ROYALTY INTEREST OWNED

1	John Ottis Parks	12.50000%		
2	J.M. Armstrong Charles Keith Ault Robert Vernon Ault Kenneth Edmond Ault Harian Smith Ault Roy G. Barton Hugh Corrigan, III J. Patrick Corrigan Island Davison & Allie Gayle Davison The Fluor Corporation, Ltd. Four States Oil & Gas Company Geraldine Stuart Ault Heister Humble Oil & Refining Company	.78125% .07813% .07812% .07813% .07813% .13020% .19531% .19531% .05426% 1.56250% 1.05469% .07812% 2.34375%	Donald L. Jones Marjorie Cone Kastman, Guardian of the Estate of S.E. Cone N.C.M. Mabee Royalties, Inc. Ross L. Malone, Jr. Executor of the Estate of Frank Jack Danglade, Deceased Jack Markham Midwest Oil Corporation W.M. Osborn Carl R. Pfluger John J. Redfern, Jr., Indiv. & as a/i/f Rosilind Redfern H. Dillard Schenck J.M. Welborn W.A. Yeager	.19531% .50594% 1.17188% .78125% .16276% .56594% .05426% .69343% 1.0651% 1.0650% 1.9531% 1.6276% .78125%
3	Jean Rowan Altgelt Dr. Hugh Beaton Sam Campbell John J. Christmann and Frances Brownfield Christmann J.R. Cone Arthur L. Cone, Roy Riddel & Alex McDonald, Trustees of Katherine Adeline Cone Trust L.M. Duncan J. H. Hard Martha Rowan Hyder	.15625% .23438% .15625% .39063% 1.87499% .78125% .07813% 1.09376% .23437%	Sue Rowan Laughlin Jack Markham C.B. Markham W.M. Osborn Rosilind Redfern John J. Redfern, Jr. Indiv. & as a/i/f Archibald H. Rowan, Jr., Deceased William Albert Rowan J.M. Welborn	.15625% 1.43229% .39032% .46875% 1.30205% 1.56249% .15625% .23438% 1.75698%

ADDITION TO EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FREE LANDS:

PERCENT OF BASIC ROYALTY INTEREST OWNED

4

Jean Rowan Altgelt	.05208%	Gustav J. Meyer	.39063%
Roy G. Barton	.13021%	H.B. Fuqua, Independent Executor of	
Frederick S. Blackall, Jr.	.03906%	Estate of Clifford Mooers, Deceased	.78125%
Darwood H. Bradley	.78125%	O.L. Nislar	.31250%
Marjorie Cone Kastman, Guardian of		Ralph Nix	.39062%
S.E. Cone Estate	.15625%	North Central Oil Corporation	1.56250%
Leland Davison & Allie Gayle Davison	.05425%	Roger S. Owings	.39062%
Felmont Oil Corporation	.93751%	W.M. Osborn	.05425%
Juliette Rathbone Finch	.39062%	Phillips Investment Corporation	.31250%
W.T. Gaston	.31250%	Charles A. Peirce, Indiv. and as Executor	
Julian W. Glass, Jr. Trustee	.15625%	Estate of Mary E. Peirce, Deceased	.11713%
Pennsylvania Bank & Trust Co., Successor to		Rosalind Redfern	.10651%
the Warren Bank and Trust Co., Executor and		John J. Redfern, Jr., Indiv. and as a/1/4	.10651%
Trustee of the Estate of A.W. Goal, Deceased	.78125%	Erna Louise Riisoe	.39062%
Donald L. Jones	.78125%	Archibald H. Rowan, Jr., Deceased	.05208%
Winston King	.07813%	Alex Singer	.93750%
George L. Knight, Executor of the Estate		First National Bank of Houston, Trustee	
of Mary Alice Knight	.78125%	U/W Marguerite Smith Walker, Deceased	.39062%
Sue Rowan Laughlin	.05209%	J.M. Welborn	.16275%
Margaret Nettles Lone, Executrix of Estate	.39063%		
of R.L. Long, Deceased	.16276%		
Jack Markham			

J.F. Simmons	.58590%	Erma C. Huckabey	.89290%
Ernest Walden & Alpha E. Walden	.89290%	A.L. Cone	.19530%
Russell Walden & Mary Walden	.89290%	Annie Belle Morris	.89290%
Annie Belle Morris & James A. Morris	.89290%	Peter Michael Curry, Executor of the Estate	
Col. E.H. Coiner	.39060%	of Lottie Walden, Deceased	.65700%
Southland Royalty Company	.58590%	Ross L. Malone, Jr., Executor of the Estate of	
Roger B. Owings	.19520%	Frank Jack Danglade, Deceased	3.71000%
		North Central Oil Corporation	.78120%

ADDITION TO EXHIBIT "B"
 LANGLE-MATTHE PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FREE LANDS:

TRACT NO.

PERCENT OF BASIC ROYALTY INTEREST OWNED			
6	George L. Knight, Indiv. & as Executor of Mary Alice Knight Estate	.89290%	
7	Jean Rowan Altgelt Col. B.H. Colner A.L. Cone Peter Michael Curry, Executor of Estate of Lottie R. Walden Felmont Oil Corporation Julian W. Glass, Jr., Trustee Erna Celia Walden Huckabey George Lofton Knight, Executor of Estate of Mary Alice Knight Sue Rowan Laughlin Ross L. Malone, Jr., Executor of Estate of Frank Jack Danglade	.06944% .39062% .19531% .69755% .93750% .20833% .39286% .89286% .06944% 1.62760%	Annie Belle Morris North Central Oil Corporation Roger B. Owings Phillips Investment Corporation A.H. Rowan, Jr., Deceased J.E. Simmons Southland Royalty Company Ernest Walden Russell Walden
8	Col. B.H. Coiner A.L. Cone Peter Michael Curry, Executor of Estate of Lottie R. Walden Billie June Grizzell Ione M. Grizzell Marjorie Cone Kastman, Guardian of Estate of S.E. Cone George L. Knight, Executor of Estate of Mary Alice Knight Ross L. Malone, Jr., Executor of Estate of Frank Jack Danglade Annie Belle Morris	.39060% .19530% .69750% .19534% .58596% .19530% .89290% 2.14840% 1.78570%	North Central Oil Corporation Roger B. Owings J.E. Simmons Southland Royalty Company Ernest Walden Erna Walden Huckabee Russell Walden Hattie C. Williams

ADDITION TO EXHIBIT "B"
 LANGLEE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FREE LANDS:

PAGE NO.

PERCENT OF BASIC ROYALTY INTEREST OWNED

19	Jean Rowan Altgelt Roy G. Barton J. Pat Corrigan Felmont Oil Corporation Julian W. Glass, Jr. Trustee of the Estate of J. Wood Glass, Deceased J.M. Welborn J.M. Mouser Lucy P. Owings Sue Rowan Pittman John J. Redfern, Jr., Agent and Attorney- Fact for Frank J. Redfern	.05208% .13021% 1.56250% .70312% .15625% .16276% 1.04166% .39063% .05209% .10851%	J.M. Armstrong Hugh Corrigan, III Allie Gayle Davison, Indiv. & Indep. Exec. of Estate of Ieland Davison, Deceased George Lofton Knight Ancillary Exec. of the Estate of Mary Alice Knight, Deceased Jack Markham W.M. Osborn Phillips Investment Corporation John J. Redfern, Jr. Arch Rowan & Co., Ltd. W.A. Yeager	1.04167% 1.56250% .05425% 3.90625% .16276% .05425% .15625% .10850% .05208% 1.04167%
12	Joyce Christmas Brown B.A. Christmas, Jr.	3.12500% 3.12500%	Joyce Ann Brown B.A. Christmas, Jr. Trustee U/W of B.A. Christmas	1.25000% 5.00000%
13-A	June P. Danglade	6.25000%	Ross L. Malone, Jr., Executor of Estate of Frank Jack Danglade	6.25000%
13-B	Ada Hinton Gustav J. Meyer Bank of the Southwest National Association, Houston, Trustee for Rolla Lewis Long, Jr.	3.12500% 1.56250% .78125%	J.R. Hinton First City National Bank of Houston, Trustee U/W of Marguerite Smith Walker Houston Bank & Trust Company, Trustee Account #785	3.12500% 3.12500% .78125%
13-C	J.R. Hinton	6.25000%	Ada Hinton	6.25000%
13-D	Robert Murray Fasken, Ancillary Executor of Estate of A. Fasken	6.25000%	Constance French Ellison	6.25000%

ADDITION TO EXHIBIT "B"

LANGLIE-MATTIX PENROSE SAND UNIT LEA COUNTY, NEW MEXICO

FED LANDS:

TRACT NO.

PERCENT OF BASIC ROYALTY INTEREST OWNED

13-E	Fluor Corporation, Ltd.	12.50000%	
14	Gordon M. Cone	.39063%	Constance French Ellison - Life Estate
	Murray Fasken	.39062%	(REMAINDERMEN:
	Mrs. E.A. Kelly	.05664%	W.A. Cox, Jr., Mrs. Jane Cox Allen,
	Kops Oil Company	.27734%	James Ellison Cox, Mrs. Fern Cox Niehuss,
	Sabine Royalty Corporation	9.37500%	Mrs. Lelya Cox Lynch, L.H. Cox, and
	Suda Willis Oles	.05664%	Mrs. Zula Cox Moore)
	Marjorie Cone Kastman, Guardian of Estate of S.E. Cone	1.56250%	
15	Gorson M. Cone	.39063%	Constance French Ellison
	Marjorie Cone Kastman, Guardian of Estate of S.E. Cone	1.56250%	Eliza Kelly
	Suda Willis Oles	.05664%	Kops Oil Company
			Sabine Royalty Corporation
			9.37500%
16	Humble Oil & Refining Company	3.12500%	Andrew M. Taylor
	Sabine Royalty Corporation	.78130%	Mildred W. Zouck, Surviving Trustee U/W of Charles L. Wagandt
	June P. Danglede	1.56250%	Gail Whitcomb
	First National Bank of Nevada Executor U/W of Althe M. Lee	.78120%	Flora G. Sarkisian
	Gordon G. Berg	.00110%	W.B. Trammell
	Howard W. Bradshaw	.00180%	Josephine Radue
	Robert G. Bradshaw	.00180%	Cranfill Fowler
	John L. Brady	.00110%	Ernest O. Knapp, Mildred K. Stonebumer, and Gertrude K. Schreengost, Co-Executors
	Max R. Chudy	.01100%	Adam F. Arnold, Deceased
	George W. Clark	.00140%	Ella Mattimore
	David Cohen	.00110%	Norma Sanders
	Robert C. Eble	.00530%	
	Della B. Edwards	.00160%	

ADDITION TO EXHIBIT "B"
 LANGLE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FEE LANDS:

TRACT NO.

PERCENT OF BASIC ROYALTY INTEREST OWNED

16 (continued)	Edward Mitchell Edwards E.M. Edwards Company Rose P. Feltman Charles T. Gallaher II Joseph W. Gallaher II Mrs. Carrie Gidwitz Charles W. Hastings Grace C. Hayes George P. Holman Elmer G. Johnson Harry L. Jones & Isabel Jones Ellenor June McCashan John E. McConnell, Jr. Miss Ida Miller Florence C. Robertson Edwin F. Scheetz, Jr. Lionel L. Shatford Catherine A. Sheridan	.00270% .00350% .00850% .00050% .00050% .00550% .00110% .00050% .00120% .00050% .00440% .00080% .02180% .00050% .00050% .00110% .00050% .00850%	Robert R. McKee, and Mildred E. McKee, Executrix of the Ernest W. McKee Estate The Mullen Foundation Normarth Corporation Ross L. Malone, Jr., Executor of Frank Jack Dalgide Estate Neil Evans Wrightsmen Petroleum Company Rose Lancaster Anna Gobhardt Mrs. Hylah G. Sullivan Roland Binning, Jr. The Chase Manhattan Bank, Roland Binning, Jr., and Harry R. VanAllen, Trustees U/W of Roland Binning Irving Abelow, Aida Abelow, and Elinu Fier, Trustees of Abelow Family Trust John F. Corvino and Rita M. Corvino	1.50000% .30000% 4.30000% .00000% .00100% .00000% .00000% .00000%
17	The Chase Manhattan Bank, Assignee Hugh Corrigan, III Genevieve Crabb John Ed Crabb The First National Bank of Midland, Trustee for Trust No. 341	5.93750% .44643% .44642% .14881% .14881%	The Atlantic Refining Company J. Patrick Corrigan R.C. Crabb, Jr. Ralph Lowe, Deceased	.31250% .44643% .14881% 4.46429%
18	James N. Bujac Roberta Kelly Leah F. McDonald	.52083% .39063% .48828% and .29297%	Alline B. Johnson, Executrix Johnson Estate Keohane, Inc. Elizabeth H. Neumann	.52083% 1.26563% .52083%

ADDITION TO EXHIBIT "B"

LANGHE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

FREE LANDS:

TRACT NO.

PERCENT OF BASIC ROYALTY INTEREST OWNED

17 (continued)	Fluor Corporation, Ltd. Beuna Barker North Central Oil Corporation	1.56250% .78125% 1.17188%	H. Dillard Schenck and L. Kirby Schenck Ross L. Malone, Jr., Executor of Estate of Frank J. Danglade	.58394% .58504%
19	New Mexico Bank & Trust Company Account Roy G. Barton Cledine Brady D.H. Byrd Leon Geddis Byerley, Jr., Indiv. & as Executor of L.G. Byerley Estate R.C. Crabb, Jr. First National Bank of Midland, Agent & a/i/f/ for John Ed Crabb Genevieve Crabb Bessie Parker Coelling Jack Frost R. Ken Williams	.48828% .24414% .26042% .48828% .26042% .26041% .78125% 1.56250% .26041% .48828%	Arsona D. Harman Nancy Harman Jack Markham Midwest Oil Corporation W.M. Osborn Carl R. Pfluger Rosalind Redfern John J. Redfern, Jr., Indiv. and as a/i/f/ First National Bank of Midland, Trustee Trust #341-Helen Crabb Saline Elizabeth Reardon Sharp & John M. Winters, Jr., Trustees U/W of James R. Sharp Taber & Coleman J.M. Welborn	.13021% .13021% .32552% .78135% .13564% .48028% .27127% .40695% .26042% .24414% 3.90625% .32552%
20	Rebecca Graham Sally Huston	11.9791% .5209%		
23	Joyce Christmas Brown & B.A. Christmas, Jr. Executors U/W of Annie L. Christmas Estate First National Bank of Nevada, Trustees U/W of Allie M. Lee S.P. Johnson, Jr.	7.03125% .78125% .19531%	Reginald H. Johnson & John D. Woodfin, Surviving Joint Trustees of the Brewster Trust Midwest Oil Corporation Sabine Royalty Corporation Elizabeth Hamlin	1.56250% 1.56250% 1.17187% .19531%

ADDITION TO EXHIBIT "B"
 LANGLEE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FEE LANDS:

TRACT NO.		PERCENT OF BASIC ROYALTY INTEREST OWNED		
24	Joyce Christmas Brown & B.A. Christmas, Jr. Executors U/W of Annie L. Christmas, Estate Sabine Royalty Corporation Midwest Oil Corporation S.P. Johnson, Jr.	7.0312% 1.1719% 1.5625% 1.9531%	Reginald H. Johnson & John D. Woodfin Surviving Joint Trustees of the Brewster Trust First National Bank of Nevada, Trustee U/W of Allie M. Lee Elizabeth Hannifin	1.5625% .7813% 1.9531%
25	Joyce Ann Brown Joyce Christmas Brown B.A. Christmas, Jr., Trustee U/W of B.A. Christmas B.A. Christmas, Jr. First National Bank of Nevada, Trustee U/W of Allie M. Lee	.70313% 1.75781% 2.81250% 1.75781% .78125%	Elizabeth Hannifin S.P. Johnson, Jr. Midwest Oil Corporation Sabine Royalty Corporation Reginald H. Johnson & John D. Woodfin, Surviving Joint Trustees the Brewster Trust	.19531% 1.9531% 1.56250% 1.17188% 1.56250%
26	First National Bank of Nevada, Trustee U/W of Allie M. Lee Elizabeth Hannifin S.P. Johnson, Jr. Midwest Oil Corporation Sabine Royalty Corporation	.78125% 1.9531% 1.9532% 1.56250% 1.17187%	Joyce Ann Brown Joyce Christmas Brown B.A. Christmas, Jr., Trustee U/W of B.A. Christmas B.A. Christmas, Jr. Reginald H. Johnson & John D. Woodfin, Surviving Trustees of the Brewster Trust	.70313% 1.75781% 2.81250% 1.75781% 1.56250%
27	Joyce Christmas Brown B.A. Christmas, Jr.	3.1250% 3.1250%	Joyce Ann Brown B.A. Christmas, Jr., Executor of Estate of B.A. Christmas	1.2500% 5.0000%
28	Continental Oil Company The Fluor Corporation, Ltd.	.0558% 1.0045%	Charles Pfile H. Dillard Schenck	.1674% 1.110%

LAND-MAATEK PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

FEE LANDS:

TRACT NO. PERCENT OF BASIC ROYALTY INTEREST OWNED

23 (continued)			
Southland Royalty Company	.4464%	Mrs. S.S. Stinson	.1116%
Mrs. Evalynn Burress	.1116%	Sunshine Royalty Company	.0558%
Joseph M. Wilson	.0372%	Lucy Trammell	.0333%
E.L. Wilson	.0372%	Dosia Smith	.0333%
J.L. Crump	.1116%	Mamie Hess Branscomb, Deceased	.0333%
The Atlantic Refining Company	.5329%	Sigel Taylor	.0333%
Edson Petroleum Company	.0558%	Harvey Roberts	.0333%
Cities Service Petroleum Company	.2976%	Joyce Christmas Brown	.7535%
Foster Petroleum Corporation	.1488%	Madge Walden Cate	.0372%
W.A. Yeager	.0248%	Selma E. Andrews	.2997%
Southern Petroleum Exploration, Inc.	.5580%	Albuquerque National Bank, Testamentary Trustee of Frank A. Andrews	.2534%
Richard J. Moran, Ancillary Executor Estate of William J. Moran	.3348%	Helen M. Kolliker	.0273%
M.M. Meek	.1116%	Higgins Trust, Inc.	.8925%
Jehn K. Cleary	.0186%	Nelson H. James	.0482%
Roy G. Barton	.0558%	Bunice Gray	.0482%
Glen O. Brisco	.0124%	Robert W. Kellough & Ethel B. Kellough	.0155%
L.O. Carroll	.0558%	Fort Worth National Bank, Trustee for Roy S. Magruder	.0273%
James Rorick Cravens	.3906%	Maude Cowden Blackeney	.0124%
Bess Yearwood, Trustee for Rose Eaves Trust		Harvey H. Conger & Ruth B. Conger, Executors Estate of B.H. Blackeney	.0124%
.2232 and	.4465%	First National Bank of Roswell, Emmett D. White & Ralph A. Shugart, Trustees U/W of Harry Leonard	.0273%
Maggie Goode	.0651%	Mabel F. Leonard	.0273%
Mattie H. James	.0977%	B.A. Christmas, Jr., Executor of Estate of B.A. Christmas	1.2613%
Reginald H. Johnson & John D. Woodfin, Trustees Brewster Trust	.3348%	Birdie Loyd	.0333%
Mary Etta Killingsworth, Executrix Estate of G.F. Killingsworth	.0558%		
R.E. King	.0558%		
Jean M. Nolan, Indiv. & as Adm. of Estate of J.H. Nolan	.1674%		
Gordon M. Cone	.1116%		

ADDITION TO EXHIBIT "B"
 LANGLE-MATIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FEE LANDS:

TRACT NO.	PERCENT OF BASIC ROYALTY INTEREST OWNED			
23 (continued)	Lee Roberts	.0390%	Powhatan Carter, Jr.	.1674%
	Lizale Garwood	.0391%	Anderson Carter	.1675%
	Johnie Windsor	.0391%	The Chase Manhattan Bank, Assignee, Argo	
	Belle Taylor, Deceased	.0054%	Production Payment	.2297%
	Mary Beth Wood	.0390%	B.A. Christmas, Jr.	.7993%
	Efhe Carter	.3348%	Joyce Ann Brown	.3162%
32	M.W. Coll	1.56250%	Olivia W. Etz	1.56250%
	R.C. Crabb	.52083%	Midwest Oil Corporation	3.12500%
	First National Bank of Midland Account,		The Fluor Corporation, Ltd.	1.56250%
	John Ed Crabb	.52083%	First National Bank of Midland,	
	Mrs. Genevieve Crabb	1.56250%	Trustee Trust No. 341, Helen Crabb Seline	.52084%
	A.N. Etz	1.56250%		
33	M.W. Coll	1.56250%	Olivia W. Etz	1.56250%
	R.C. Crabb, Jr.	.52084%	Midwest Oil Corporation	3.12500%
	First National Bank of Midland		The Flour Corporation, Ltd.	1.56250%
	Account John Ed Crabb	.52083%	First National Bank of Midland, Trustee	
	Mrs. Genevieve Crabb	1.56250%	Trust No. 341, Helen Crabb Seline	.52083%
	A.N. Etz	1.56250%		
34	Rosa B. Glier	12.50000%		
35	Frank Glier	1.56250%	George Glier	1.56250%
	Willie Mae Glier	1.56250%	Mary Glier Kirkin	1.56250%
	Sabine Royalty Corporation	6.25000%		
36	Janet G. Appleman	.30187%	Peoples National Bank of Tyler, Trustee	
	Nathan Appleman, Executor of Estate of		U/W of Eleanor V. Willingham	1.56250
	Anna R. Appleman	.14344%		

ADDITION TO EXHIBIT "B"
 LANGLE-MATTK PINROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

FREE LAND:

TRACT NO.

PERCENT OF BASIC ROYALTY INTEREST OWNED

36 (continued)	Roy G. Barton	.03255%	Carl R. Pfluger	.04883%
	Claudine Brady	.02441%	John J. Redfern, Jr. Indiv. & as a 1/f	.04883%
	Leon Geddis Byerley, Jr., Indiv. and as		Rosalind Redfern	.02713%
	Executor Estate of L.G. Byerley		First National Bank of Midland, Trustee	
	Genevieve Crabb	.04883%	Trust No. 341 -Helen Crabb Seline	.13021%
	R.C. Crabb, Jr.	1.17137%	Elizabeth Reardon Sharp	.01221%
	Ieland Davison & Allie Gayle Davison	.13021%	Elizabeth Reardon Sharp & John M. Winters, Jr.	.13021%
	Irent T. Fenster	.10356%	Trustees U/W of James R. Sharp	.01221%
	The First National Bank of Midland, a 1/f	.00938%	Taber & Coleman	.01221%
	for John Ed Crabb	.13021%	Sally T. Tranin	.39063%
	Rita L. Gore	.03125%	Dorothy A. Turk	.00937%
	Josephine Grimes & Oscar L. Grimes,		Josephine Wacht	.03125%
	Co-Executors of the Estate of		J.M. Weiborn	.04069%
	Charles W. Grimes	.78125%	Viola L. Willingham	4.63750%
	Marion A. Janson	.07813%	Dudley A. Wood	2.34375%
	Marilyn L. Krulwich	.03125%	A.J. Lewis, Deceased	.09375%
	Jack Markham	.04069%	R. Ken Williams	.04883%
40	Lucky Wright Royalty Syndicate	.9375000%	H. B. Fuqua, Independent Executor of the Estate	
	Roy G. Barton	3.8671875%	of Clifford Mooers, Deceased; Independent	
	J. Hiram Moore	4.1015625%	Executor of the Estate of Dolores Mooers,	
	Redfern Development Corporation	1.1718750%	Deceased; and Attorney-in-Fact for Marie	
	Jack Markham	.5859375%	Mooers Heater; and The First National Bank of	
	J. R. Cone	.5859375%	Fort Worth as Trustee under written trust dated	
	W. A. Yeager	2.3437500%	March 6, 1964, of Estate of Gillis A. Johnson,	
	J. M. Armstrong	2.3437500%	et al, as Trustors	2.3437500%



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

RECEIVED
AUG 26 1971
U.S. GEOLOGICAL SURVEY

Andarko Production Company
P.O. Box 9317
Fort Worth, Texas 76107

AUG 19 1971

Attention: Mr. C. W. Stuchlik

Gentlemen:

Your letter of July 15 filed on July 19, 1971, with the Regional Oil and Gas Supervisor, Roswell, New Mexico, requests preliminary approval of a proposed expansion of the Langlie-Mattix Penrose Sand unit area, Lea County, New Mexico.

The Langlie-Mattix Penrose Sand unit agreement, No. 14-06-0001-8607, was approved on May 27, 1964, effective June 1, 1964. The agreement was formed for the purpose of conducting secondary recovery operations in the interval which includes the lower 100 feet of the Seven Rivers formation and all of the Queen formation. Participation in unitized substances for each originally qualified tract was based 100 percent on ultimate primary recovery.

The proposed expansion of 40 acres of privately owned land described as the NW 1/4 sec. 23, T. 22 S., R. 37 E., N.M.P.M., will increase the Langlie-Mattix Penrose Sand unit area from 4,000 acres to 4,040 acres, more or less. Such land was productive in the unitized formation and its inclusion in the unit area for an additional injection well location should result in a more efficient flood pattern and increased ultimate recovery from the project. Participation on the tract will be 0.680747 percent as established by negotiation pursuant to Sections 4 and 31 of the unit agreement.

Accordingly, no objection will be offered to the proposed expansion if accomplished in accordance with the applicable provisions of Section 4 of the unit agreement within a reasonable period of time. At least five copies of the application for final approval accompanied by the appropriate joinders for the new tract should be filed with the Oil and Gas

Supervisor, Roswell, New Mexico, after such application has been approved by the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission.

Sincerely yours,

W. A. Radlinski

Acting Director

cc:
BLM, Santa Fe
Com. Pub. Lands, Santa Fe
NMOC, Santa Fe
Roswell (2)

JWillock:ds

RECEIVED
OCT 1 1971
N.M. CONSERVATION COM.

August 31, 1971

2754

Anadarko Production Company
3109 Winthrop Avenue
P. O. Box 9317
Fort Worth, Texas 76107

Re: Notice of Proposed Expansion,
Langlie-Mattix Penrose Sand Unit,
Lea County, New Mexico to include
NW/4SW/4 Sec. 23-T22S-R37E
as Tract 40

ATTENTION: Mr. C. W. Stunhoffer

Gentlemen:

The Commissioner of Public Lands has this date approved your proposed Expansion to the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico to include the Anadarko Production Company Barton "A" lease covering the NW/4SW/4 of Section 23, Township 22 South, Range 37 East, as Tract 40 of the Unit Agreement.

Enclosed is one approved copy reflecting the Commissioner's approval.

Please submit appropriate pointers for the new tract also revised Exhibits "A", "B" and "C".

Very truly yours,

RAY D. GRAHAM, Director
Oil and Gas

AJA/RDG/s
encl. 1.

cc: USGS-Roswell, New Mexico (ltr only)
OCC-Santa Fe, New Mexico (ltr. only)

1967 JAN 17 AM 10 0

RECEIVED

JAN 16 1967

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

JAN 12 1967

2954

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Gentlemen:

On January 9, 1967, Arthur A. Baker, Acting Director of the Geological Survey, approved the application dated December 19, 1966, filed by your company as unit operator, requesting the expansion of the Langlie-Mattix Penrose Sand unit area, Lea County, New Mexico, No. 14-63-0001-2607.

Approval of the expansion, effective as of October 1, 1966, increases the unit area by the addition of 80 acres, making a total of 4,000 acres, more or less, in the unit area.

Enclosed are four copies of the approved application for your records. We request that you furnish the State of New Mexico, and any other interested principal, with whatever evidence of this approval is deemed appropriate.

Sincerely yours,

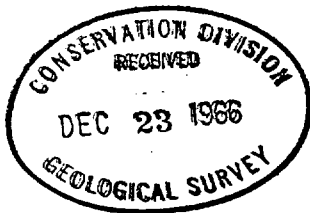
RUSSELL G. WAYLAND

For the Director

Enclosures 4

cc: Roswell 2 (w/2 copies of approved application)

APPLICATION
FOR APPROVAL OF UNIT EXPANSION
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO



November 15, 1966

RECEIVED
JAN 16 1967

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Director,
United States Geological Survey
c/o Regional Oil and Gas Supervisor
P.O. Box 1857
Roswell, New Mexico

The Honorable Guyton Hays
Commissioner of Public Lands
P.O. Box 791
Santa Fe, New Mexico

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

RECEIVED

DEC 19 1966

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Gentlemen:

Anadarko Production Company, as operator of the Langlie-Mattix Penrose Sand Unit, hereby requests approval to expand the Langlie-Mattix Penrose Sand Unit by adding thereto Tract No. 39, Texas Pacific Oil Company, et al Elliott B-29 Federal Lease (Serial No. LC-058626 (b)) consisting of S/2 SE/4 Section 29, T-22S, R-37E, Lea County, New Mexico. Said expansion is proposed to be accomplished under the provisions of Section 4 of the Langlie-Mattix Penrose Sand Unit Agreement that was effective June 1, 1964. The procedures outlined by said Unit Agreement have been carried out as follows:

1. As a result of Operators' Committee meetings of the Langlie-Mattix Penrose Sand Unit and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company, et al as Working Interest Owner of Elliott B-29 Federal lease, a letter ballot, dated March 14, 1966, was submitted to the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit together with a tabulation of proposed participation factors. Approval of 95.5% percent of the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit has been obtained for the expansion of the Unit to include the Elliott B-29 Federal lease.
2. Texas Pacific Oil Company, et al, made formal application to the Langlie-Mattix Penrose Sand Unit for admission of their Elliott B-29 Federal lease as a working interest owner in the Langlie-Mattix Penrose Sand Unit on June 1, 1966 on the basis of conditions approved by the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit.
3. Preliminary concurrence of the proposed expansion was given on June 29, 1966 by the Commissioner of Public Lands and on July 28, 1966 by the Director of the United States Geological Survey.

Page #2
Application
For Approval of Unit Expansion
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico
November 15, 1966

4. A Notice of Intent to Expand Langlie-Mattix Penrose Sand Unit, dated August 24, 1966 was mailed to the Commissioner, the Supervisor, each Working Interest Owner, lessee and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed. Copies of the Notice of Intent to expand the Unit area are enclosed.
5. Since the mailing of the said Notice of Intent to expand the Unit area, more than 30 days have passed and no objection to the proposed expansion has been received.
6. Joinders of Working Interest Owners under the Elliott B-29 Federal lease were received, and are attached hereto.

In addition to the attachments described above, there is furnished herewith (1) revised Exhibit A showing revised Unit boundary and tract designation, (2) revised Exhibit B showing relevant data on all tracts within the expanded unit area and (3) revised Exhibit C showing participation of each Working Interest Owner in the expanded Unit.

As stated in the aforementioned Notice of Intent to expand the Langlie-Mattix Penrose Sand Unit, the proposed effective date of expansion is October 1, 1966 which is the first day of the month subsequent to this notice.

Wherefore, Anadarko Production Company respectfully requests approval of the expansion of the Langlie-Mattix Penrose Sand Unit as outlined above.

Respectfully submitted,

C. W. Stumhoffer

C. W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/hb

CERTIFICATION APPROVAL

Pursuant to the authority vested in the Secretary of Interior under the Act approved February 25, 1920, 41 Stat. 437, 30 Secs. 181, et seq., as amended and delegated to the Director of the Geological Survey, the foregoing application for expansion of the Langlie-Mattix Penrose Sand unit area, Lea County, New Mexico, is hereby approved.

JAN 9 - 1967

Date

Arthur A. Baker

Acting Director, U. S. Geological Survey

RECEIVED

DEC 2 1966

U. S. GEOLOGICAL SURVEY
DENVER, NEW MEXICO

CERTIFICATE OF APPROVAL

COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

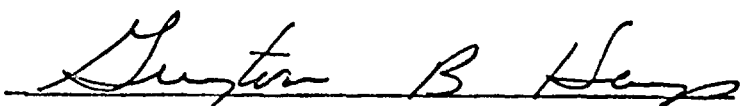
SUBSEQUENT JOINDER
LANGLIE-MATTIX PENROSE SAND UNIT-WATERFLOOD
LEA COUNTY, NEW MEXICO

There having been presented to the Commissioner of Public Lands of the State of New Mexico for examination and approval, the attached ratification and joinder to the LANGLIE-MATTIX PENROSE SAND Unit Agreement, which was approved by the Commissioner of Public Lands on FEBRUARY 13, 1964, and which covers Tract No. 39 as set forth on Exhibit "B" which is part of the LANGLIE-MATTIX PENROSE SAND Unit Agreement, described as:
SOUTH HALF OF THE SOUTH EAST QUARTER, SECTION 29, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO. EFFECTIVE OCTOBER 1, 1966
The Commissioner finds:

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

NOW THEREFORE, by virtue of the authority conferred upon me under Sections 7-11-39, 7-11-40, 7-11-41, 7-11-47, and 7-11-48, New Mexico Statutes Annotated, 1953 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the commitment of Tract No. 39, and any leases embracing lands of the State of New Mexico within the tract so committed shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 5th day of DECEMBER, 19 66.


COMMISSIONER OF PUBLIC LANDS
of the State of New Mexico

(SEAL)

Page #2
Application
For Approval of Unit Expansion
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico
November 15, 1966

4. A Notice of Intent to Expand Langlie-Mattix Penrose Sand Unit, dated August 24, 1966 was mailed to the Commissioner, the Supervisor, each Working Interest Owner, lessee and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed. Copies of the Notice of Intent to expand the Unit area are enclosed.
5. Since the mailing of the said Notice of Intent to expand the Unit area, more than 30 days have passed and no objection to the proposed expansion has been received.
6. Joinders of Working Interest Owners under the Elliott B-29 Federal Lease were received, and are attached hereto.

In addition to the attachments described above, there is furnished herewith (1) revised Exhibit A showing revised Unit boundary and tract designation, (2) revised Exhibit B showing relevant data on all tracts within the expanded unit area and (3) revised Exhibit C showing participation of each Working Interest Owner in the expanded Unit.

As stated in the aforementioned Notice of Intent to expand the Langlie-Mattix Penrose Sand Unit, the proposed effective date of expansion is October 1, 1966 which is the first day of the month subsequent to this notice.

Wherefore, Anadarko Production Company respectfully requests approval of the expansion of the Langlie-Mattix Penrose Sand Unit as outlined above.

Respectfully submitted,

C. W. Stumhoffer

C. W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/hb

Approved.....*Nov. 21*.....19*66*
A. L. [Signature]
.....
Secretary-Director

NEW MEXICO OIL CONSERVATION COMMISSION

THIS APPROVAL GRANTED SUBJECT TO LIKE APPROVAL
BEING GRANTED BY THE UNITED STATES GEOLOGICAL
SURVEY AND BY THE COMMISSIONER OF PUBLIC LANDS
OF THE STATE OF NEW MEXICO.

EXHIBIT "B"
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: October 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
T-225, R-37E - FEDERAL LANDS							
5-A	N/2 NW/4 Sec. 22	80	LC-032573 (a) Dated 8-1-56	Marion M. Leonard	Sunshine Royalty Mable F. Leonard Trustees of Harry M. Leonard Estate Midwest Oil Corp. First National Bank of Nevada, Trustee U/W of Allie M. Lee, Deceased	Carter Foundaion Production Co.	2.091029 100%
					0.83% 0.835% 0.835% 1.67%		
5-B	S/2 SE/4 Sec. 21 and SW/4 SW/4 Sec. 22	120	LC-032573 (a) Dated 8-1-56	Marion M. Leonard	15 or More Barrels Per Well Per Day Sunshine Royalty Estate of Harry Leonard, Deceased First National Bank of Nevada, Exec. of Est. of Allie M. Lee, Deceased Midwest Oil Corp. Mable F. Leonard	Continental Oil The Atlantic Refining Co. Pan American Petroleum Corp. Standard Oil Co. of Texas, a Div. of California Oil Company	3.224652 25% 25% 25% 25%
					1/6 of 7.5% 1/6 of 7.5% 1/3 of 7.5% 1/6 of 7.5%		
					15 or Less Barrels Per Well Per Day Sunshine Royalty Estate of Harry Leonard, Deceased First National Bank of Nevada, Exec. of Est. of Allie M. Lee, Deceased Midwest Oil Corp. Mable F. Leonard		
					1/6 of 5.0% 1/6 of 5.0% 1/6 of 5.0% 1/3 of 5.0% 1/6 of 7.5%		

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY		WORKING INTEREST		PERCENT PARTICIPATION OF TRACT IN UNIT
						OWNER	AMOUNT	OWNER	AMOUNT	
22	N/2 SW/4 Sec. 27	80	LC-058626 (a)	12½% 25%	Texas Pacific	Sunshine Royalty Mable Leonard First National Bank of Roswell, Trustee of Harry Leonard Est. First National Bank of Nevada Midwest Oil Corp.	1.25% 1.25% 1.25% 1.25% 1.25% 2.50%	Texas Pacific Oil Company Sohio Petroleum Company Broseco Corp. John B. Rich	5/8 2.522007 1/4 95% x 1/8 5% x 1/8	
39	S/2 SE/4 Sec. 29	80	LC-058626 (b) 7-1-57	*(See below)	Texas Pacific Oil Co. Sohio Broseco Corp. John B. Rich	None		Texas Pacific Oil Company Sohio Broseco Corp. John B. Rich	62.500% 25.000% 11.875% 0.625%	1.050027
* Oil:										
1.	Oil over 30° Baume (30.2° API)									
	(a) 20 bbls. or less			12 1/2%		3MM or less	12 1/2%			
	(b) 20 to 50 bbls.			16.2/3%						
	(c) 50 to 100 bbls.			20 %		Over 3 MM	16 2/3%			
	(d) 100 to 200 bbls.			25 %						
	(e) Over 200 bbls.			33 1/3%						
2.	Oil less than 30° Baume (30.2° API)									
	(a) 20 bbls. or less			12 1/2%						
	(b) 20 to 50 bbls.			14 2/7%						
	(c) 50 to 100 bbls.			16 2/3%						
	(d) 100 to 200 bbls.			20 %						
	(e) Over 200 bbls.			25 %						

EXHIBIT "B"
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: October 1, 1966

Tract No.	Description	Number of acres	Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
<u>T-22S, R-37 STATE LANDS</u>								
9	SE/4 SE/4 Sec. 20	40	B-934 6-6-32	1/8	Humble Oil & Refining Co.	Humble Working Interest Owners Langlie-Mattix Penrose Sand Unit 1/16 x 8/8	Sohio Petroleum Co. Anadarko Production Co. Texas Pacific Oil Broseco Corp. John B. Rich (To 4,000 Ft.)	1/4 1/4 1/4 23.75% 1.25%
11	SW/4 SW/4 Sec. 21	40	B-148 8-14-36	1/8	Parker Drilling Company	The Texas Company 1/8 Under 50 BOPD 3/32 Over 50 BOPD	Robert L. Parker	100% 1.104876
21	S/2 SW/4 Sec. 27 & NW/4 Sec. 34	240	B-934 6-6-32	1/8	Humble Oil & Refining Co.	None	Humble Oil & Refining Co.	100% 7.049175
29	E/2 NE/4 NE/4 SE/4 Sec. 29	120	B-934-8 6-6-32	1/8	Humble Oil & Refining	Humble Oil & Refining 1/16	Anadarko Production Texas Pacific Oil (To 4,000 Ft.)	1/2 1/2 4.372018
30	NE/4 NE/4 Sec. 32	40	B-1167	1/8	Shell Oil Co.	(1) Shell Oil 1/16 of 1 - 40 bbls per day Texas Pacific Oil 1/8 of 40-150 bbls. per day (To 4,000 Ft.) 1/4 of 150 bbls. or more per day (2) Gulf Coast Western Oil Co. Prod. Pay of 1,132 bbls. out of 4.6875% of Production (3) Same as (3) Under Tract 18	Anadarko Production Co.	1/2 0.418974

Page 3
 Revised 8-10-65
 Revised: January 6, 1966
 Revised: April 1, 1966
 Revised: July 19, 1966
 Revised: Dec. 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	LESSEE OF RECORD		OVERRIDING ROYALTY OWNER AND AMOUNT		WORKING INTEREST OWNER AND AMOUNT		PARTICIPATION OF TRACT IN UNIT	
				ROYALTY	RECORD						
31	SE/4 NE/4 Sec. 32	40	B-3480 12-13-34	1/8	Gulf Oil Corp.	None		Gulf Oil	100%	0.787591	
37	Se/4 Sec. 34	160	B-934-19 6-6-32	1/8	Humble Oil & Refining Co.	(1) Humble - 1/8 x 7/8 of Prod. (2) Gulf Coast Western Oil Co.-Prod.Pay of 7,818 Bbls. Out of 4.6875% of Production. (3) Same as (3) Under Tract 18		Anadarko Production Co. Texas Pacific Oil Co. (to 4,000 Ft.)	1/2% 1/2%	2.794839	
38	NW/4 NW/4 Sec. 28	40	B-148-6 8-14-31	1/8	Texaco	None		Texaco	100%	0.749975	
<u>T-22-S, R-37-E - FEE LANDS</u>											
1	SW/4 SW/4 Sec. 14	40	Fee Land 12-23-35	1/8	Samedan Oil Corp.	74.25%	None	Samedan Oil Corp.	74.25%	2.011354	
						0.25%		Sam Noble	0.25%		
						0.25%		E. E. Noble	0.25%		
						0.25%		Ann Noble Brown	0.25%		
						4.00%		Michael F. Cusack	4.00%		
						4.00%		John P. Cusack, Jr.	4.00%		
						17.00%		J. P. Cusack	17.00%		
2	W/2 NW/4 Sec. 23	80	Fee Land 5-30-26	1/8	Sinclair	None		Sinclair	100%	2.369783	
3	NE/4 Sec. 22	160	Fee Land 3-15-27	1/8	F.S.Blackmar	Humble O & R	6.25%	Amerada	100%	5.548070	
4	N/2 SW/4 S/2 NW/4 Sec. 22	160	Fee Land	1/8	Texas Pacific Oil Company	None		Broseco Corp. John B. Rich	10.555555% 0.555555%	4.779781	

EXHIBIT "B" CONTINUED

Effective: October 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATA	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
6	NE/4 NE/4 Sec. 21	40	Fee Land 9-20-28	1/8	Marathon Oil Co.	None	Marathon Oil Co.	100% 1.004421
7	NW/4 NE/4 & S/2 NE/4 Sec. 21	120	Fee Land 10-5-26	1/8	Tidewater	None	Tidewater	100% 3.183169
8	NW/4 Sec. 21	160	Fee Land 10-5-26	1/8	Cities Service	None	Cities Service Petroleum Co.	100% 3.025898
10	N/2 S/2 Sec. 10	160	Fee Land 8-18-34	1/8	Socony-Mobil Oil Co., Inc.	None	Socony Mobil Oil Co., Inc.	100% 0.000000
12	SE/4 SW/4 Sec. 21	40	Fee Land 4-20-28	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	100% 0.851203
13-A	SE/4 SW/4 Sec. 22	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 1.689071
13-B	NW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 2.160110
13-C	NE/4 NW/4 N/2 NE/4 & SE/4 NW/4 Sec. 27	160	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 6.088833
13-D	SW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 1.242811
13-E	SW/4 NE/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 1.418332
14	W/2 SE/4 Sec. 22	80	Fee Land 3-15-27	1/8	F.S. Blackmar	Humble Oil & Refining Co. 6.25%	Amerada Petroleum Corp. 100%	0.923610
15	E/2 SE/4 Sec. 22	80	Fee Land	1/8	F.S. Blackmar	Humble Oil & Refining Co. 6.25%	Sohio Petroleum Co. Brosoco Corp. 95% of 1/3 John B. Rich 5% of 1/3 (To 4,000 Ft.)	2/3 0.839765
Page 5	Revised: 8-10-65 Revised: 1-1-66 Revised: 4-1-66				Revised: 7-19-66 Revised: 12-1-66			

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY		WORKING INTEREST		PERCENT PARTICIPATION OF TRACT IN UNIT
						OWNER AND AMOUNT		OWNER AND AMOUNT		
16	SW/4 SW/4 Sec. 23	40	Fee Land 5-14-27	1/8	Gulf Oil Corp.	None		Gulf Oil Corp.		100% 0.994604
17	W/2 NW/4 Sec. 26	80	Fee Land 4-19-35	1/8	Skelly Oil Co.	None		Skelly Oil Co.		100% 2.023667
18	W/2 SW/4 Sec. 26	80	Fee Land 9-20-28	1/8	Anadarko Prod- uction Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Tidewater Oil Co. - 1/8 of 7/8 on 50 Bbls. or Over Per Well Per Day and 1/16 of 7/8 on Less Than 50 Bbls. Per Well Per Day.		Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)		50% 50% 2.043038
19	SE/4 SE/4 N/2 SE/4 SE/4 NE/4 Sec. 27	160	Fee Land 7-25-30	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(2) Gulf Coast Western Oil Co. - Prod. Pay of 5,671 Bbls. out of 4.6875% of Production				
						(3) Fidelity National Bank & Trust Co. of Oklahoma, as Trustee Under Trust indenture				
						(1) Gulf Oil Corp. 1/8 Gulf Coast Western Oil Co.-Prod. Pay of 16,592 Bbls. Out of 4.6875% of Prod.		Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)		50% 50% 5.919020
20	SW/4 SE/4 Sec. 27	40	Fee Land 10-15-34	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Gulf Coast Western Oil Co.-Prod. Pay of 5,291 Bbls. Out of 5.46875% of Prod.		Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)		1/2 1/2 1.631884
(2) Same as (3) Under Tract 18										

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
23	SE/4 SE/4 Sec. 28	40	Fee Land	1/8	Texas Pacific	None	Texas Pacific Oil Co. Sohio Petroleum Co. Broseco Corp. John B. Rich 95% x 1/6 5% x 1/6	1/2 1/3 1/6 1/6 1.080347
24	N/2 SE/4 & SW/4 SE/4 Sec. 28	120	Fee Land 5-6-25	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	100% 3.565785
25	N/2 NE/4 & SE/4 NE/4 Sec. 28	120	Fee Land 5-6-26	1/8	Sinclair	None	Sinclair Oil & Gas Company	100% 2.385226
26	SW/4 NE/4 Sec. 28	40	Fee Land 5-6-26	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Sinclair O & G - 1/16 (2) Gulf Coast Western Oil Co. - Prod. Pay of 2,084 Bbls. Out of 5,078125% of Prod.	Anadarko Production Co. Texas Pacific Oil Co. (To 3,900 Ft.)	1/2 1/2 0.681796
27	NE/4 NW/4 Sec. 28	40	Fee Land 4-20-28	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Gulf Oil Corp. - 1/16 To 46 Bbls. Per Well Per Day 3/32 on 46 - 200 Bbls. Per Well Per Day 1/6 Over 200 Bbls. Per Well Per Day.	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	1/2 1/2 0.618897
28	S/2 NW/4 & SW/4 Sec. 28	240	Fee Land 5-6-26	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	Same as Tract 27	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	1/2 1/2 5.381288
32	W/2 NW/4 Sec. 33	80	Fee Land 4-19-28	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Shell Oil Co. - 1/16 of 1 - 40 Bbls. Per Day; 1/8 of 40 - 150 Bbls. Per Day; 1/4 of 150 Bbls. or More Per Day.	Anadarko Production Co. Texas Pacific Oil Co.	1/2 1/2 1.120563

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY RECORD	LESSEE OF	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
33	E/2 NW/4 Sec. 33	80	Fee Land 4-19-28	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(2) Gulf Coast Western Oil Co. - Prod. Pay of 2,616 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Prod. Co. Texas Pacific Oil Co. (To 4,200 Ft.)	1/2 1.445749
34	SW/4 NE/4 Sec. 33	40	Fee Land 4-19-28	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	Shell Oil Co. - Same as Tract 33	Anadarko Production Co. Texas Pacific Oil Co. (To 4,200 Ft.)	1/2 0.920299
35	N/2 NE/4 & SE/4 NE/4 Sec. 33	120	Fee Land 4-25-28	1/8	Anadarko Prod. (1) Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Shell Oil Co. - 1/16 When Daily Average Prod. is 35 Bbls. or Less 1/8 When Daily Average Prod. is 36 to 150 Bbls. 1/4 When Daily Average Prod. is 151 Bbls. or More. (2) Gulf Coast Western Oil Co. Prod. Pay of 6,429 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	1/2 2.279821
36	NE/4 Sec. 34	160	Fee Land	1/8	Anadarko Prod. (1) Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Sinclair Oil & Gas 1/16 When Daily Average Prod. is 15 Bbls. or less 1/8 When Daily Average Prod. is 16 Bbls. or More. (2) Gulf Coast Western Oil Co. Prod. Pay of 6,429 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	1/2 4.364782

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
					(2)	Gulf Coast Western Oil Co.- Prod. Pay 1¢ 12,905 Bbls. Out of 4.6875% of Prod.		
					(3)	Same as (3) Under Tract 18		
TOTALS								
4	Federal Tracts	(9 Wells)		360 Acres		9.00% of Unit Area		
8	State of New Mexico Tracts	(18 Wells)		720 Acres		18.00% of Unit Area		
32	Fee Land Tracts	(66 Wells)		2,920 Acres		73.00% of Unit Area		
44	Tracts	(93 Wells)		4,000 Acres		100.00% of Unit Area		

LANGLIE-MATTIX PENROSE SAND UNIT - LEA COUNTY, NEW MEXICO

EXHIBIT "C"
 LANGLIE-MATTIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Effective October 1, 1966

<u>WORKING INTEREST OWNERS</u>	<u>PERCENT TOTAL UNIT</u>
Anadarko Production Company	17.056949
Amerada Petroleum Corporation	6.471680
Atlantic Oil & Refining Company	0.806163
Broseco Corporation	1.423134
Ann Noble Brown	0.005028
Carter Foundation Production Company	2.091029
Cities Service Petroleum Company	3.025898
Continental Oil Company	0.806163
J. P. Cusack	0.341931
John P. Cusack, Jr.	0.080454
Michael F. Cusack	0.080454
Gulf Oil Corporation	6.199183
Humble Oil & Refining Company	7.049175
Marathon Oil Company	1.004421
E. E. Noble	0.005028
Sam Noble	0.005028
Pan American Petroleum Corporation	0.806163
R. L. Parker	1.104876
John B. Rich	0.074902
Samedan Oil Corporation	1.493431
Sinclair Oil & Gas Company	4.755009
Skelly Oil Company	14.622824
Sohio Petroleum Company	4.528867
The Standard Oil Company of Texas, a Divison of California Oil Company	0.806163
Texaco, Inc.	0.749975
Texas Pacific Oil Company	21.422903
Tidewater Oil Company	3.183169
TOTAL	<u>100.000000</u>

Revised: 8-10-65
 Revised: 1-6-66
 Revised: 4-1-66
 Revised: 4-27-66
 Revised: 7-19-66
 Revised: 12-1-66

EXHIBIT "B"
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: October 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY		WORKING INTEREST		PERCENT PARTICIPATION OF TRACT IN UNIT
						OWNER AND AMOUNT		OWNER AND AMOUNT		
T-22S, R-37E - FEDERAL LANDS										
5-A	N/2 NW/4 Sec. 22	80	LC-032573 (a) Dated 8-1-56	12½% 25%	Marion M. Leonard	Sunshine Royalty	0.83%	Carter Foundation	100%	2.091029
						Mable F. Leonard	0.835%	Production Co.		
						Trustees of Harry M. Leonard Estate	0.835%			
						Midwest Oil Corp.	1.67%			
						First National Bank of Nevada, Trustee				
						U/W of Allie M. Lee, Deceased	0.83%			
5-B	S/2 SE/4 Sec. 21 and SW/4 SW/4 Sec. 22	120	LC-032573 (a) Dated 8-1-56	12½% 25%	Marion M. Leonard	15 or More Barrels Per Well		Continental Oil	25%	3.224652
						Per Day	1/6 of 7.5%	The Atlantic Refining Co.	25%	
						Sunshine Royalty		Pan American Petroleum Corp.	25%	
						Estate of Harry Leonard, Deceased	1/6 of 7.5%	Standard Oil Co. of Texas, a Div. of California Oil Company	25%	
						First National Bank of Nevada, Exec. of Est. of Allie M. Lee, Deceased	1/6 of 7.5%			
						Midwest Oil Corp.	1/3 of 7.5%			
						Mable F. Leonard	1/6 of 7.5%			
						15 or Less Barrels Per Well				
						Per Day				
						Sunshine Royalty	1/6 of 5.0%			
						Estate of Harry Leonard, Deceased	1/6 of 5.0%			
						First National Bank of Nevada, Exec. of Est. of Allie M. Lee, Deceased	1/6 of 5.0%			
						Midwest Oil Corp.	1/3 of 5.0%			
						Mable F. Leonard	1/6 of 7.5%			

Page 1

Revised: 8-10-65
Revised: 1-6-66
Revised: 4-1-66

Revised: July 19, 1966
Revised: 12-1-66

EXHIBIT "B"

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY		WORKING INTEREST		PERCENT PARTICIPATION OF TRACT IN UNIT
						OWNER AND AMOUNT		OWNER AND AMOUNT		
22	N/2 SW/4 Sec. 27	80	LC-058626 (a)	12½% 25 %	Texas Pacific	Sunshine Royalty Mable Leonard First National Bank of Roswell, Trustee of Harry Leonard Est. First National Bank of Nevada Midwest Oil Corp.	1.25% 1.25% 1.25% 1.25% 2.50%	Texas Pacific Oil Company Sohio Petroleum Company Broseco Corp. John B. Rich	5/8 1/4 95% x 1/8 5% x 1/8	2.522007
39	S/2 SE/4 Sec. 29	80	LC-058626 (b) 7-1-57	*(See below)	Texas Pacific Oil Co. Sohio Broseco Corp. John B. Rich	None		Texas Pacific Oil Company Sohio Broseco Corp. John B. Rich	62.500% 25.000% 11.875% 0.625%	1.050027
* Oil:										
1.	Oil over 30° Baume (30.2° API)					Gas:				
	(a) 20 bbls. or less			12 1/2%		3MM or less	12 1/2%			
	(b) 20 to 50 bbls.			16.2/3%		Over 3 MM	16 2/3%			
	(c) 50 to 100 bbls.			20 %						
	(d) 100 to 200 bbls.			25 %						
	(e) Over 200 bbls.			33 1/3%						
2.	Oil less than 30° Baume (30.2° API)									
	(a) 20 bbls. or less			12 1/2%						
	(b) 20 to 50 bbls.			14 2/7%						
	(c) 50 to 100 bbls.			16 2/3%						
	(d) 100 to 200 bbls.			20 %						
	(e) Over 200 bbls.			25 %						

EXHIBIT "B"
 LANGLE-MATLIX PENROSE SAND UNIT
 LEA COUNTY, NEW MEXICO

Effective: October 1, 1966

Tract No.	Description	Number of acres	Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
T-22S, R-37 STATE LANDS								
9	SE/4 SE/4 Sec. 20	40	B-934 6-6-32	1/8	Humble Oil & Refining Co.	Humble Working Interest Owners 1/16 x 8/8 Sohio Petroleum Co. 1/4	Anadarko Production Co. 1/4	0.241860
						Langlie-Matlrix Penrose Sand Unit 1/16 x 8/8 Broseco Corp. 23.75%	Texas Pacific Oil John B. Rich 1.25%	
							(To 4,000 Ft.)	
11	SW/4 SW/4 Sec. 21	40	B-148 8-14-36	1/8	Parker Drilling Company	The Texas Company 1/8 Under 50 BOPD 3/32 Over 50 BOPD	Robert L. Parker	1.104876
21	S/2 SW/4 Sec. 27 & NW/4 Sec. 34	240	B-934 6-6-32	1/8	Humble Oil & Refining Co.	None	Humble Oil & Refining Co.	7.049175
29	E/2 NE/4 NE/4 SE/4 Sec. 29	120	B-934-8 6-6-32	1/8	Humble Oil & Refining	Humble Oil & Refining 1/16	Anadarko Production Texas Pacific Oil (To 4,000 Ft.)	4.372018
30	NE/4 NE/4 Sec. 32	40	B-1167	1/8	Shell Oil Co.	(1) Shell Oil 1/16 of 1 - 40 bbls per day Texas Pacific Oil 1/8 of 40-150 bbls. per day (To 4,000 Ft.) 1/4 of 150 bbls. or more per day (2) Gulf Coast Western Oil Co. Prod. Pay of 1,132 bbls. out of 4.6875% of Production (3) Same as (3) Under Tract 18	Anadarko Production Co. 1/2	0.418974

Page 3
 Revised 8-10-65
 Revised: January 6, 1966
 Revised: April 1, 1966
 Revised: July 19, 1966
 Revised: Dec. 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT		
31	SE/4 NE/4 Sec. 32	40	B-3480 12-13-34	1/8	Gulf Oil Corp.	None	Gulf Oil	100% 0.787591		
37	Se/4 Sec. 34	160	B-934-19 6-6-32	1/8	Humble Oil & Refining Co.	(1) Humble - 1/8 x 7/8 of Prod. (2) Gulf Coast Western Oil Co.-Prod. Pay of 7,818 Bbls. Out of 4.6875% of Production. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (to 4,000 Ft.)	1/2% 1/2%	2.794839	
38	NW/4 NW/4 Sec. 28	40	B-148-6 8-14-31	1/8	Texaco	None	Texaco	100% 0.749975		
T-22-S, R-37-E - FEE LANDS										
1	SW/4 SW/4 Sec. 14	40	Fee Land 12-23-35	1/8	Samedan Oil Corp. Sam Noble E. E. Noble Ann Noble Brown Michael F. Cusack John P. Cusack, Jr. J. P. Cusack	74.25% 0.25% 0.25% 0.25% 4.00% 4.00% 17.00%	None	Samedan Oil Corp. Sam Noble E. E. Noble Ann Noble Brown Michael F. Cusack John P. Cusack, Jr. J. P. Cusack	74.25% 0.25% 0.25% 0.25% 4.00% 4.00% 17.00%	2.011354
2	W/2 NW/4 Sec. 23	80	Fee Land 5-30-26	1/8	Sinclair	None	Sinclair	100% 2.369783		
3	NE/4 Sec. 22	160	Fee Land 3-15-27	1/8	F.S.Blackmar	Humble O & R 6.25%	Amerada	100% 5.548070		
4	N/2 SW/4 S/2 NW/4 Sec. 22	160	Fee Land	1/8	Texas Pacific Oil Company	None	Broseco Corp. John B. Rich Sohio Pet.Co. Texas Pacific Oil Co.	10.555555% 0.555555% 55.55557% 33.333333%	4.779781	

Page 4

Revised: 8-10-65
Revised: 1-6-66
Revised: 4-1-66

Revised: 7-19-66
Revised: 12-1-66

EXHIBIT "B" CONTINUED

Effective: October 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATA	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	PERCENT	
							WORKING INTEREST OWNER AND AMOUNT	PARTICIPATION OF TRACT IN UNIT
6	NE/4 NE/4 Sec. 21	40	Fee Land 9-20-28	1/8	Marathon Oil Co.	None	Marathon Oil Co.	100% 1.004421
7	NW/4 NE/4 & S/2 NE/4 Sec. 21	120	Fee Land 10-5-26	1/8	Tidewater	None	Tidewater	100% 3.183169
8	NW/4 Sec. 21	160	Fee Land 10-5-26	1/8	Cities Service	None	Cities Service Petroleum Co.	100% 3.025898
10	N/2 S/2 Sec. 10	160	Fee Land 8-18-34	1/8	Socony-Mobil Oil Co., Inc.	None	Socony Mobil Oil Co., Inc.	100% 0.000000
12	SE/4 SW/4 Sec. 21	40	Fee Land 4-20-28	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	100% 0.851203
13-A	SE/4 SW/4 Sec. 22	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 1.689071
13-B	NW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 2.160110
13-C	NE/4 NW/4 N/2 NE/4 & SE/4 NW/4 Sec. 27	160	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 6.088833
13-D	SW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 1.242811
13-E	SW/4 NE/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100% 1.418332
14	W/2 SE/4 Sec. 22	80	Fee Land 3-15-27	1/8	F.S. Blackmar	Humble Oil & Refining Co.	Amerada Petroleum Corp.	100% 0.923610
15	E/2 SE/4 Sec. 22	80	Fee Land	1/8	F.S. Blackmar	Humble Oil & Refining Co.	Sohio Petroleum Co. Broseco Corp. John B. Rich (To 4,000 Ft.)	2/3 0.839765 95% of 1/3 5% of 1/3

TRACT NO.						NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
16	SW/4 SW/4 Sec. 23	40	Fee Land 5-14-27	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	100%	0.994604			
17	W/2 NW/4 Sec. 26	80	Fee Land 4-19-35	1/8	Skelly Oil Co.	None	Skelly Oil Co.	100%	2.023667			
18	W/2 SW/4 Sec. 26	80	Fee Land 9-20-28	1/8	Anadarko Prod- uction Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Tidewater Oil Co. - 1/8 of 7/8 on 50 Bbls. or Over Per Well Per Day and 1/16 of 7/8 on Less Than 50 Bbls. Per Well Per Day.	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	50% 50%	2.043038			
				(2)	Gulf Coast Western Oil Co. - Prod. Pay of 5,671 Bbls. out of 4.6875% of Production							
				(3)	Fidelity National Bank & Trust Co. of Oklahoma, as Trustee Under Trust indenture							
19	SE/4 SE/4 N/2 SE/4 SE/4 NE/4 Sec. 27	160	Fee Land 7-25-30	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Gulf Oil Corp. 1/8 (2) Gulf Coast Western Oil Co.-Prod. Pay of 16,592 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	50% 50%	5.919020			
20	SW/4 SE/4 Sec. 27	40	Fee Land 10-15-34	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Gulf Coast Western Oil Co.-Prod. Pay of 5,291 Bbls. Out of 5.46875% of Prod. (2) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	1/2 1/2	1.631884			

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF		OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT		PERCENT PARTICIPATION OF TRACT IN UNIT
23	SE/4 SE/4 Sec. 28	40	Fee Land	1/8	Texas Pacific		None	Texas Pacific Oil Co.	1/2	1.080347
								Sohio Petroleum Co.	1/3	
								Broseco Corp.	95% x 1/6	
								John B. Rich	5% x 1/6	
24	N/2 SE/4 & SW/4 SE/4 Sec. 28	120	Fee Land 5-6-25	1/8	Gulf Oil Corp.		None	Gulf Oil Corp.	100%	3.565785
25	N/2 NE/4 & SE/4 NE/4 Sec. 28	120	Fee Land 5-6-26	1/8	Sinclair		None	Sinclair Oil & Gas Company	100%	2.385226
26	SW/4 NE/4 Sec. 28	40	Fee Land 5-6-26	1/8	Anadarko Prod. Co. Texas Pacific Oil Co.	(1) (2)	Sinclair O & G - 1/16 Gulf Coast Western Oil Co. - Prod. Pay of 2,084 Bbls. Out of 5.078125% of Prod.	Anadarko Production Co. Texas Pacific Oil Co. (To 3,900 Ft.)	1/2 1/2	0.681796
							(3) Same as (3) Under Tract 18			
27	NE/4 NW/4 Sec. 28	40	Fee Land 4-20-28	1/8	Anadarko Prod. Co. Texas Pacific Oil Co.	(1)	Gulf Oil Corp. - 1/16 To 46 Bbls. Per Well Per Day 3/32 on 46 - 200 Bbls. Per Well Per Day 1/6 Over 200 Bbls. Per Well Per Day.	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	1/2 1/2	0.618897
28	S/2 NW/4 & SW/4 Sec. 28	240	Fee Land 5-6-26	1/8	Anadarko Prod. Co. Texas Pacific Oil Co.		Same as Tract 27	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	1/2 1/2	5.381288
32	W/2 NW/4 Sec. 33	80	Fee Land 4-19-28	1/8	Anadarko Prod. Co. Texas Pacific Oil Co.	(1)	Shell Oil Co. - 1/16 of 1 - 40 Bbls. Per Day; 1/8 of 40 - 150 Bbls. Per Day; 1/4 of 150 Bbls. or More Per Day.	Anadarko Production Co. Texas Pacific Oil Co.	1/2 1/2	1.120563

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
33	E/2 NW/4 Sec. 33	80	Fee Land 4-19-28	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(2) Gulf Coast Western Oil Co. - Prod. Pay of 2,616 Bbls. Out of 4.6875% of Prod.		1.445749
						(3) Same as (3) Under Tract 18		
34	SW/4 NE/4 Sec. 33	40	Fee Land 4-19-28	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	Shell Oil Co. - Same as Tract 33	Anadarko Production Co. Texas Pacific Oil Co. (To 4,200 Ft.)	0.920299
35	N/2 NE/4 & SE/4 NE/4 Sec. 33	120	Fee Land 4-25-28	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	(1) Shell Oil Co. - 1/16 When Daily Average Prod. is 35 Bbls. or Less 1/8 When Daily Average Prod. is 36 to 150 Bbls. 1/4 When Daily Average Prod. is 151 Bbls. or More.	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	2.279821
						(2) Gulf Coast Western Oil Co. Prod. Pay of 6,429 Bbls. Out of 4.6875% of Prod.		
						(3) Same as (3) Under Tract 18		
36	NE/4 Sec. 34	160	Fee Land	1/8	Anadarko Prod. Co. 1/2 Texas Pacific Oil Co. 1/2	Sinclair Oil & Gas 1/16 When Daily Average Prod. is 15 Bbls. or Less 1/8 When Daily Average Prod. is 16 Bbls. or More.	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	4.364782

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
					(2) Gulf Coast Western Oil Co.- Prod. Pay 1¢ 12,905 Bbls. Out of 4.6875% of Prod.			
					(3) Same as (3) Under Tract 18			
TOTALS								
4	Federal Tracts	(9 Wells)		360 Acres		9.00% of Unit Area		
8	State of New Mexico Tracts	(18 Wells)		720 Acres		18.00% of Unit Area		
32	Fee Land Tracts	(66 Wells)		2,920 Acres		73.00% of Unit Area		
44	Tracts	(93 Wells)		4,000 Acres		100.00% of Unit Area		

LANGLIE-MATTIX PENROSE SAND UNIT - LEA COUNTY, NEW MEXICO

EXHIBIT "C"
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective October 1, 1966

<u>WORKING INTEREST OWNERS</u>	<u>PERCENT TOTAL UNIT</u>
Anadarko Production Company	17.056949
Amerada Petroleum Corporation	6.471680
Atlantic Oil & Refining Company	0.806163
Broseco Corporation	1.423134
Ann Noble Brown	0.005028
Carter Foundation Production Company	2.091029
Cities Service Petroleum Company	3.025898
Continental Oil Company	0.806163
J. P. Cusack	0.341931
John P. Cusack, Jr.	0.080454
Michael F. Cusack	0.080454
Gulf Oil Corporation	6.199183
Humble Oil & Refining Company	7.049175
Marathon Oil Company	1.004421
E. E. Noble	0.005028
Sam Noble	0.005028
Pan American Petroleum Corporation	0.806163
R. L. Parker	1.104876
John B. Rich	0.074902
Samedan Oil Corporation	1.493431
Sinclair Oil & Gas Company	4.755009
Skelly Oil Company	14.622824
Sohio Petroleum Company	4.528867
The Standard Oil Company of Texas, a Divison of California Oil Company	0.806163
Texaco, Inc.	0.749975
Texas Pacific Oil Company	21.422903
Tidewater Oil Company	3.183169
TOTAL	<u>100.000000</u>

Revised: 8-10-65
Revised: 1-6-66
Revised: 4-1-66
Revised: 4-27-66
Revised: 7-19-66
Revised: 12-1-66

APPLICATION
FOR APPROVAL OF UNIT EXPANSION
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

November 15, 1966

Director,
United States Geological Survey
c/o Regional Oil and Gas Supervisor
P.O. Box 1857
Roswell, New Mexico

The Honorable Guyton Hays
Commissioner of Public Lands
P.O. Box 791
Santa Fe, New Mexico

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

Gentlemen:

Anadarko Production Company, as operator of the Langlie-Mattix Penrose Sand Unit, hereby requests approval to expand the Langlie-Mattix Penrose Sand Unit by adding thereto Tract No. 39, Texas Pacific Oil Company, et al Elliott B-29 Federal Lease (Serial No. LC-058626 (b)) consisting of S/2 SE/4 Section 29, T-22S, R-37E, Lea County, New Mexico. Said expansion is proposed to be accomplished under the provisions of Section 4 of the Langlie-Mattix Penrose Sand Unit Agreement that was effective June 1, 1964. The procedures outlined by said Unit Agreement have been carried out as follows:

1. As a result of Operators' Committee meetings of the Langlie-Mattix Penrose Sand Unit and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company, et al as Working Interest Owner of Elliott B-29 Federal lease, a letter ballot, dated March 14, 1966, was submitted to the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit together with a tabulation of proposed participation factors. Approval of 95.5% percent of the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit has been obtained for the expansion of the Unit to include the Elliott B-29 Federal lease.
2. Texas Pacific Oil Company, et al, made formal application to the Langlie-Mattix Penrose Sand Unit for admission of their Elliott B-29 Federal lease as a working interest owner in the Langlie-Mattix Penrose Sand Unit on June 1, 1966 on the basis of conditions approved by the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit.
3. Preliminary concurrence of the proposed expansion was given on June 29, 1966 by the Commissioner of Public Lands and on July 28, 1966 by the Director of the United States Geological Survey.

Page #2
Application
For Approval of Unit Expansion
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico
November 15, 1966

4. A Notice of Intent to Expand Langlie-Mattix Penrose Sand Unit, dated August 24, 1966 was mailed to the Commissioner, the Supervisor, each Working Interest Owner, lessee and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed. Copies of the Notice of Intent to expand the Unit area are enclosed.
5. Since the mailing of the said Notice of Intent to expand the Unit area, more than 30 days have passed and no objection to the proposed expansion has been received.
6. Joinders of Working Interest Owners under the Elliott B-29 Federal lease were received, and are attached hereto.

In addition to the attachments described above, there is furnished herewith (1) revised Exhibit A showing revised Unit boundary and tract designation, (2) revised Exhibit B showing relevant data on all tracts within the expanded unit area and (3) revised Exhibit C showing participation of each Working Interest Owner in the expanded Unit.

As stated in the aforementioned Notice of Intent to expand the Langlie-Mattix Penrose Sand Unit, the proposed effective date of expansion is October 1, 1966 which is the first day of the month subsequent to this notice.

Wherefore, Anadarko Production Company respectfully requests approval of the expansion of the Langlie-Mattix Penrose Sand Unit as outlined above.

Respectfully submitted,

C. W. Stumhoffer

C. W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/hb

APPLICATION
FOR APPROVAL OF UNIT EXPANSION
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

November 15, 1966

Director,
United States Geological Survey
c/o Regional Oil and Gas Supervisor
P.O. Box 1857
Roswell, New Mexico

The Honorable Guyton Hays
Commissioner of Public Lands
P.O. Box 791
Santa Fe, New Mexico

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

Gentlemen:

Anadarko Production Company, as operator of the Langlie-Mattix Penrose Sand Unit, hereby requests approval to expand the Langlie-Mattix Penrose Sand Unit by adding thereto Tract No. 39, Texas Pacific Oil Company, et al Elliott B-29 Federal Lease (Serial No. LC-058626 (b)) consisting of S/2 SE/4 Section 29, T-22S, R-37E, Lea County, New Mexico. Said expansion is proposed to be accomplished under the provisions of Section 4 of the Langlie-Mattix Penrose Sand Unit Agreement that was effective June 1, 1964. The procedures outlined by said Unit Agreement have been carried out as follows:

1. As a result of Operators' Committee meetings of the Langlie-Mattix Penrose Sand Unit and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company, et al as Working Interest Owner of Elliott B-29 Federal lease, a letter ballot, dated March 14, 1966, was submitted to the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit together with a tabulation of proposed participation factors. Approval of 95.5% percent of the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit has been obtained for the expansion of the Unit to include the Elliott B-29 Federal lease.
2. Texas Pacific Oil Company, et al, made formal application to the Langlie-Mattix Penrose Sand Unit for admission of their Elliott B-29 Federal lease as a working interest owner in the Langlie-Mattix Penrose Sand Unit on June 1, 1966 on the basis of conditions approved by the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit.
3. Preliminary concurrence of the proposed expansion was given on June 29, 1966 by the Commissioner of Public Lands and on July 28, 1966 by the Director of the United States Geological Survey.

Page #2
Application
For Approval of Unit Expansion
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico
November 15, 1966

4. A Notice of Intent to Expand Langlie-Mattix Penrose Sand Unit, dated August 24, 1966 was mailed to the Commissioner, the Supervisor, each Working Interest Owner, lessee and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed. Copies of the Notice of Intent to expand the Unit area are enclosed.
5. Since the mailing of the said Notice of Intent to expand the Unit area, more than 30 days have passed and no objection to the proposed expansion has been received.
6. Joinders of Working Interest Owners under the Elliott B-29 Federal lease were received, and are attached hereto.

In addition to the attachments described above, there is furnished herewith (1) revised Exhibit A showing revised Unit boundary and tract designation, (2) revised Exhibit B showing relevant data on all tracts within the expanded unit area and (3) revised Exhibit C showing participation of each Working Interest Owner in the expanded Unit.

As stated in the aforementioned Notice of Intent to expand the Langlie-Mattix Penrose Sand Unit, the proposed effective date of expansion is October 1, 1966 which is the first day of the month subsequent to this notice.

Wherefore, Anadarko Production Company respectfully requests approval of the expansion of the Langlie-Mattix Penrose Sand Unit as outlined above.

Respectfully submitted,

C. W. Stumhoffer

C. W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/hb



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

December 14, 1966

Mr. Ed Wyatt
United States Geological Survey
P.O. Box 1857
Roswell, New Mexico

Re: Expansion of Langlie-Mattix Penrose Sand Unit
to include Texas Pacific Oil Company et al
Elliott B-29 Federal Lease (S/2 SE/4 Section 29,
T-22S, R-37E, Lea County, New Mexico to be known
as Langlie-Mattix Penrose Sand Unit Tract No. 39)

Dear Mr. Wyatt:

In reference to our telephone conversation of December 2, 1966 with regard to the subject expansion, we are submitting a corrected Application For Expansion of the Langlie-Mattix Penrose Sand Unit area to include the subject tract and corrected Langlie-Mattix Penrose Sand Unit Agreement Exhibits "B" and "C" revised December 1, 1966 to become effective October 1, 1966.

We have made the corrections that you pointed out in the Application For Expansion and Exhibit "B". Since our conversation, an error was discovered in the participation percentages shown in Exhibits "B" and "C" as revised on July 19, 1966 with effective date October 1, 1966. These corrections were made on December 1, 1966 with effective date October 1, 1966.

If additional questions arise or data is needed, please contact this office.

Very truly yours,

C. W. Stumhoffer

C. W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/hb
CC with attachments:
Commissioner of Public Lands
State of New Mexico
P.O. Box 1148
Santa Fe, New Mexico

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

MAIN OFFICE

65 AUG 17 AM 9

August 17, 1965

Anadarko Production Company
Post Office Box 9317
Fort Worth, Texas

Att: E. A. Riley

In RE: Pearsall Queen Sand Unit
Lea County, New Mexico

3604

Grayburg-Jackson Unit
(R 2323)
Eddy County, New Mexico

3634

Langlie-Mattix Penrose
Sand Unit - Lea County,
New Mexico

3954

Gentlemen:

This office has received, by your letter of August 10, 1965, photostatic copies of executed ballots by working interest owners in the Pearsall Queen Sand Unit, Grayburg-Jackson Unit, and the Langlie-Mattix Penrose Sand Unit, selecting Anadarko Production Company as successor unit operator.

These ballots were subject to acquisition by Anadarko of Ambassador Oil Corporation's interests in these Units, and although Anadarko has made no statement nor furnished proof concerning such acquisition, we have ascertained from our records that Anadarko, by assignment, has acquired Ambassador's interests in the State of New Mexico leases which are included in these Units. We have no record of such acquisition concerning federal lands or fee lands.

C
O
P
Y

E. A. Riley
Anadarko Production Company
August 17, 1965
Page -2-

The Commissioner of Public Lands approves Anadarko as successor unit operator for the above designated units effective as of August 1, 1965; however, this approval is subject to the operator submitting evidence to this office of like approval by the United States Geological Survey.

Very truly yours,

GUYTON B. HAYS,
Commissioner of Public Lands

GBH/MMR/kcl

w/cc to: New Mexico Oil Conservation Commission ✓
Post Office Box 2038
Santa Fe, New Mexico

United States Geological Survey
Post Office Drawer 1857
Roswell, New Mexico

C
O
P
Y

MAILED
'65 JUL 20 PM 2

July 16, 1965

Ambassador Oil Corporation
P. O. Box 9338
Fort Worth 7, Texas

Attention: Mr. E. A. Riley

Re: Langlie-Mattix Penrose
Unit Agreement
Lea County, New Mexico

Gentlemen:

This will acknowledge receipt of the following described papers relating to the commitment and qualification for participation of fee land unit tract No. 4, Langlie-Mattix Penrose unit agreement, Lea County, New Mexico.

1. Copies of an "Indemnity Agreement" executed by Texas Pacific Oil Company, a Division of Joseph E. Seagrams & Sons, Inc.
2. Copies of ratifications and joinders to the unit agreement executed by basic royalty interest owners in fee land unit tract No. 4.
3. Copies of ratifications and joinders to the unit and unit operating agreements executed by the record title and working interest owners in fee land unit tract No. 4.

The ratifications and joinders to the unit agreement by basic royalty interest owners Jean Rowan Altgelt, Sue Rowan Laughlin, and A. H. Rowan as Executor of the Archibald H. Rowan, Jr., Estate are also considered as committing the basic royalty interests of each in fee land unit tracts 3 and 7, effective July 1, 1965. The ratification and joinder by basic royalty interest owner Gustav J. Meyer is also

2954
June 29, 1966

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Re: Langlie-Mattix Penrose
Sand Unit
Lea County, New Mexico

ATTENTION: Mr. M. D. Shaw

Gentlemen:

Pursuant to your letter of June 24, 1966, and your request for preliminary concurrence for the expansion of the Langlie-Mattix Penrose Sand Unit Area.

We are not certain as to which part of Section 4 of the Unit Agreement you are complying with in asking for our concurrence to the expansion.

Although, the acreage to be included is not described, we believe it to be the S/2 of the SE/4 of Section 29, Township 22 South, Range 37 East, covering two wells, T. P. Oil Company No. 1 and No. 2.

We have no objections to this acreage being brought into the unit, and will approve this expansion when formal request is made with attachments of approval by ninety per cent of the working interest owners to the inclusion of this tract; also revised Exhibit "A" setting forth the tract numbers and Exhibit "B" reflecting the revised per cent of participation of each tract.

RECEIVED
JUN 30 AM 7 56

Anadarko Production Company
June 29, 1966
Page 2.

Very truly yours,

SUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Director
Oil and Gas Department

GBH/MMR/s
cc: Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

JUL 28 1966

Andarho Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Attention: Mr. M. E. Shaw

Gentlemen:

Your letter of June 1 filed on June 3, 1966, with the Regional Oil and Gas Supervisor, Roswell, New Mexico, and supplemented by letter of June 24, requests preliminary approval of a proposed expansion of the Langlie-Mottin Penrose Sand unit area, Lea County, New Mexico.

The Langlie-Mottin Penrose Sand unit agreement, No. 14-02-001-0007, was approved on May 27, 1964, effective June 1, 1964. The agreement was entered for the purpose of conducting secondary recovery operations in the interval which includes the lower 100 feet of the Seven Rivers Formation and all of the Queen Formation. Participation in unitized substances for each originally unitized tract is based 100 percent on ultimate primary recovery as of July 1, 1961. Participation for the tract covering the acreage added by the proposed expansion will be 1.030025 percent which was established by negotiation as provided by Sections 4 and 31 of the unit agreement.

The proposed expansion of 90 acres of Federal land described as the SE1/4 sec. 29, T. 22 S., R. 37 E., N.M.P.M. will increase the Langlie-Mottin Penrose Sand unit area from 3,920 acres to 4,000 acres, more or less. Such land is productive in the unitized formation and its inclusion in the unit area should result in a more efficient flood pattern and increased ultimate recovery from the project.

Accordingly, no objection will be offered to the proposed expansion if accomplished in accordance with the applicable provisions of Section 4 of the unit agreement within a reasonable period of time. At least five copies of the application for final approval accompanied by the appropriate joinders for the new tract should be filed with the Oil and Gas Supervisor, Roswell, New Mexico, after such application has been approved by the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission.

ILLEGIBLE

The format of the sample exhibits attached to the 1961 reprint of the standard form should be followed in the preparation of revised Exhibits A and B. Do not number existing tracts.

Sincerely yours,

Arthur A. Baker

Acting Director

cc:
NIM, Santa Fe
Com. Pub. Lands, Santa Fe
NROCC, Santa Fe
Romeo 11 66

HHyatt:cm;7-13-66

ILLEGIBLE



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawn: 1857
Roswell, New Mexico 88201

IN REPLY REFER TO:

June 7, 1966

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76167

Attention: Mr. M. E. Slaw

Gentlemen:

Your letter of May 24 transmits five copies of a revised Exhibit A to the Langlie-Matrix Pentose Sand unit agreement, No. 14-08-0001-2647, Lea County, New Mexico. Such revision is occasioned by the commitment of the land unit tract No. 38 effective April 1, 1966.

The revised Exhibit A is hereby accepted for the record. Copies of such exhibit are being distributed to the Federal offices involved. One copy surplus to our needs is attached.

Sincerely yours,

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

cc:
Washington (w/cy rev. Ex. A)
BLM - Santa Fe (w/cy rev. Ex. A)
Hobbs (w/cy rev. Ex. A)
Com. of Public Lands - Santa Fe (ltr. only)
MIOCC - Santa Fe (ltr. only) ✓

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

2954

November 21, 1966

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Attention: Mr. C. W. Stumhoffer

Re: Expansion to Include
Tract No. 39, Langlie-
Mattix Penrose Sand Unit
Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the expansion to include Texas Pacific Oil Company et al Elliott B-29 Federal Lease, S/2 SE/4 of Section 29, Township 22 South, Range 37 East, as Tract No. 39 of the Langlie-Mattix Penrose Sand Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Two approved copies of the application are returned herewith and one approved copy is being forwarded to the Director, United States Geological Survey, Roswell, New Mexico.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe
United States Geological Survey - Roswell

C
O
P
Y

APPLICATION
FOR APPROVAL OF UNIT EXPANSION
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

November 15, 1966

Director,
United States Geological Survey
c/o Regional Oil and Gas Supervisor
P.O. Box 1857
Roswell, New Mexico

The Honorable Guyton Hays
Commissioner of Public Lands
P.O. Box 791
Santa Fe, New Mexico

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

Gentlemen:

Anadarko Production Company, as operator of the Langlie-Mattix Penrose Sand Unit, hereby requests approval to expand the Langlie-Mattix Penrose Sand Unit by adding thereto Tract No. 39, Texas Pacific Oil Company, et al Elliott B-29 Federal Lease (Serial No. LC-058625B) consisting of S/2 SE/4 Section 29, T-22S, R-37E, Lea County, New Mexico. Said expansion is proposed to be accomplished under the provisions of Section 4 of the Langlie-Mattix Penrose Sand Unit Agreement that was effective June 1, 1964. The procedures outlined by said Unit Agreement have been carried out as follows:

1. As a result of Operators' Committee meetings of the Langlie-Mattix Penrose Sand Unit and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company, et al as Working Interest Owner of Elliott B-29 Federal lease, a letter ballot, dated March 14, 1966, was submitted to the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit together with a tabulation of proposed participation factors. Approval of 95.57 percent of the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit has been obtained for the expansion of the Unit to include the Elliott B-29 Federal lease.
2. Texas Pacific Oil Company, et al, made formal application to the Langlie-Mattix Penrose Sand Unit for admission of their Elliott B-29 Federal lease as a working interest owner in the Langlie-Mattix Penrose Sand Unit on June 1, 1966 on the basis of conditions approved by the Working Interest Owners of the Langlie-Mattix Penrose Sand Unit.
3. Preliminary concurrence of the proposed expansion was given on June 29, 1966 by the Commissioner of Public Lands and on July 28, 1966 by the Director of the United States Geological Survey.

Page #2
Application
For Approval of Unit Expansion
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico
November 15, 1966

4. A Notice of Intent to Expand Langlie-Mattix Penrose Sand Unit, dated August 24, 1966 was mailed to the Commissioner, the Supervisor, each Working Interest Owner, lessee and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed. Copies of the Notice of Intent to expand the Unit area are enclosed.
5. Since the mailing of the said Notice of Intent to expand the Unit area, more than 30 days have passed and no objection to the proposed expansion has been received.
6. Joinders of Working Interest Owners under the Elliott B-29 Federal lease were received, and are attached hereto.

In addition to the attachments described above, there is furnished herewith (1) revised Exhibit A showing revised Unit boundary and tract designation, (2) revised Exhibit B showing relevant data on all tracts within the expanded unit area and (3) revised Exhibit C showing participation of each Working Interest Owner in the expanded Unit.

As stated in the aforementioned Notice of Intent to expand the Langlie-Mattix Penrose Sand Unit, the proposed effective date of expansion is October 1, 1966 which is the first day of the month subsequent to this notice.

Wherefore, Anadarko Production Company respectfully requests approval of the expansion of the Langlie-Mattix Penrose Sand Unit as outlined above.

Respectfully submitted,

C. W. Stumhoffer

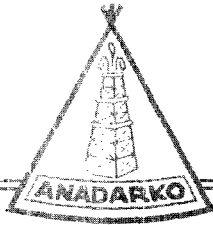
C. W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/hb

Approved *Nov. 21* 19*66*
G. H. Butler
Secretary-Director

NEW MEXICO OIL CONSERVATION COMMISSION

THIS APPROVAL GRANTED SUBJECT TO LIKE APPROVAL
BEING GRANTED BY THE UNITED STATES GEOLOGICAL
SURVEY AND BY THE COMMISSIONER OF PUBLIC LANDS
OF THE STATE OF NEW MEXICO.



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

November 14, 1966

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

NOV 21 1966

Re: Expansion of Langlie-Mattix Penrose Sand
Unit to include Texas Pacific Oil Company,
et al Elliott B-29 Federal lease (S/2 SE/4
Section 29 - T-22S, R-37E, Lea County, New
Mexico to be known as Langlie-Mattix Penrose
Sand Unit Tract No. 39)

Gentlemen:

Subsequent to a Notice of Proposed Expansion of the Langlie-Mattix Penrose Sand Unit dated August 24, 1966 mailed to the Supervisor, the Commissioner, each Working Interest Owner, lessee and lessor whose interests are affected, and to the lessee and lessor whose interests are proposed to be committed, we wish to advise you that Texas Pacific Oil Company, et al Elliott B-29 Federal lease (S/2 SE/4 Section 29, T-22S, R-37E, Lea County, New Mexico to be known as Langlie-Mattix Penrose Sand Unit Tract No. 39) has been qualified to become a part of the Langlie-Mattix Penrose Sand Unit effective October 1, 1966. No objections to this Notice of Expansion were received within the specified thirty (30) day period after mailing of notice.

Of the Langlie-Mattix Penrose Sand Unit Working Interest Ownership, 95.5+ percent have approved expansion of the Unit to include the subject lease as specified in the Notice of Expansion as amended by letter on September 9, 1966. Approval of ninety (90) percent of the Working Interest Ownership is required for proposed expansion to be effective. Copies of Working Interest Approvals are enclosed.

One hundred percent of the Working Interest Ownership of the subject lease have ratified the Unit documents. One copy of these executed ratifications are enclosed as specified in Section 4 (b) (3) of the Langlie-Mattix Penrose Sand Unit Agreement.

Also enclosed are four copies of an application for expansion of the Langlie-Mattix Penrose Sand Unit area to include the subject tract for your approval. Would you please furnish the Director of the United States Geological Survey an

Page #2

approved copy of this application and return two approved copies to this office. Preliminary approval of this expansion was granted by the Commissioner by letter dated June 29, 1966.

Langlie-Mattix Penrose Sand Unit Agreement Exhibits A, B, and C revised July 19, 1966 to become effective October 1, 1966 are enclosed for your file on the subject Unit.

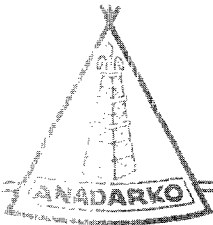
Your attention to this matter at your earliest convenience will be appreciated. Should you require additional data or information, please contact this office.

Very truly yours,

C. W. Stumhoffer

C. W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/hb



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

September 8, 1966

SEP 21 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit

Royalty Interest Owners
Langlie-Mattix Penrose Sand Unit

Working Interest Owners
Elliott B-29 Lease

Royalty Interest Owners
Elliott B-29 Lease (U.S.G.S.)

Re: Notice of Proposed Expansion dated
August 24, 1966 - Langlie-Mattix
Penrose Sand Unit, Lea County,
New Mexico

Gentlemen:

With reference to the above notice, please change the Unit participation percentage for Texas Pacific Oil Company's Elliott B-29 Federal lease from 1.05526% to 1.050026%.

This was a typographical error on our part and should be corrected.

We apologize for this mistake and hope that it has not caused you any undue inconvenience.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Division

EAR/hb



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

August 24, 1966

Working Interest Owners
Elliott B-29 Federal Lease
Lea County, New Mexico

Royalty Interest Owners
Elliott B-29 Federal Lease
Lea County, New Mexico

Gentlemen:

Enclosed herewith are the following, attendant to expansion of the Langlie Mattix Penrose Sand Unit by the inclusion of your Elliott B-29 Federal Lease (S/2 SE/4 Section 29, T22S, R37E):

1. Notice of Proposed Expansion dated Aug. 24, 1966.
2. Ratification Forms, six (6) copies, of the Unit Agreement and Unit Operating Agreement for the subject unit.

Please execute, have acknowledged or notarized, and return five (5) copies of the Ratification Forms to us for filing and records.

Yours very truly,

ANADARKO PRODUCTION COMPANY

E. A. Riley, Superintendent
Secondary Recovery Division

EAR:pr

NOTICE OF PROPOSED EXPANSION
THE LANGLIE MATTIX PENROSE SAND UNIT
IN LEA COUNTY, NEW MEXICO

It is proposed to expand the subject unit by adding the Texas Pacific Oil Company, et al Elliott B-29 Federal lease (S/2 SE/4 Section 29, T-22S, R-37E).

The lease is urgently needed in the subject unit to enable timely and prudent development of the area for waterflooding under Cooperative Line Well Agreements between the subject unit and offset units. Serious pattern imbalance and loss in ultimate secondary oil recovery would be experienced if the lease was not allowed to enter the subject unit and development for waterflooding realized in an orderly fashion.

The basis of participation was determined by dividing primary oil production from the lease as of July 1, 1965 by the unit primary oil production as of February 1, 1966, plus the primary oil production from the lease. This results in the Elliott B-29 Federal lease receiving a unit participation of 1.050026% calculated thus:

$$\frac{66,445}{6,261,492 \div 66,445} \times 100 = 1.055026\%$$

These recovery figures were negotiated by the unit working interest owners and in excess of 90% approved the expansion and participation percentage, as stipulated in Section 4 (b) of the Unit Agreement.

The proposed effective date of the expansion is October 1, 1966 which is the first day of the month subsequent to this notice.


The Elliott B-29 lease will be assigned tract #39 in the subject unit.

AFFIDAVIT OF MAILING

E. A. Riley, of lawful age, being first duly sworn, deposes and says:

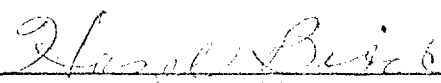
That on August 24, 1966, he mailed a copy of the foregoing Notice of Proposed Expansion to each of the lessors and lessees affected in the Langlie Mattix Penrose Sand Unit, Lea County, New Mexico, at their last known address, by depositing said notice in the United States Mail with postage thereon fully paid.

Dated August 24, 1966.



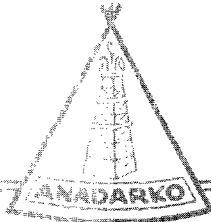
E. A. Riley

Subscribed and sworn to before me this 24th day of August,
1966.



Notary Public

My Commission Expires: June, 1967



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

September 8, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit

Royalty Interest Owners
Langlie-Mattix Penrose Sand Unit

Working Interest Owners
Elliott B-29 Lease

Royalty Interest Owners
Elliott B-29 Lease (U.S.G.S.)

Re: Notice of Proposed Expansion dated
August 24, 1966 - Langlie-Mattix
Penrose Sand Unit, Lea County,
New Mexico

Gentlemen:

With reference to the above notice, please change the Unit participation percentage for Texas Pacific Oil Company's Elliott B-29 Federal lease from 1.05526% to 1.050026%.

This was a typographical error on our part and should be corrected.

We apologize for this mistake and hope that it has not caused you any undue inconvenience.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Division

EAR/hb

NOTICE OF PROPOSED EXPANSION
THE LANGLIE MATTIX PENROSE SAND UNIT
IN LEA COUNTY, NEW MEXICO

It is proposed to expand the subject unit by adding the Texas Pacific Oil Company, et al Elliott B-29 Federal lease (S/2 SE/4 Section 29, T-22S, R-37E).

The lease is urgently needed in the subject unit to enable timely and prudent development of the area for waterflooding under Cooperative Line Well Agreements between the subject unit and offset units. Serious pattern imbalance and loss in ultimate secondary oil recovery would be experienced if the lease was not allowed to enter the subject unit and development for waterflooding realized in an orderly fashion.

The basis of participation was determined by dividing primary oil production from the lease as of July 1, 1965 by the unit primary oil production as of February 1, 1966, plus the primary oil production from the lease. This results in the Elliott B-29 Federal lease receiving a unit participation of 1.050026% calculated thus:

$$\frac{66,445}{6,261,492 \div 66,445} \times 100 = 1.055026\%$$

These recovery figures were negotiated by the unit working interest owners and in excess of 90% approved the expansion and participation percentage, as stipulated in Section 4 (b) of the Unit Agreement.

The proposed effective date of the expansion is October 1, 1966 which is the first day of the month subsequent to this notice.


The Elliott B-29 lease will be assigned tract #39 in the subject unit.

AFFIDAVIT OF MAILING

E. A. Riley, of lawful age, being first duly sworn, deposes and says:

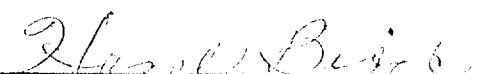
That on August 24, 1966, he mailed a copy of the foregoing Notice of Proposed Expansion to each of the lessors and lessees affected in the Langlie Mattix Penrose Sand Unit, Lea County, New Mexico, at their last known address, by depositing said notice in the United States Mail with postage thereon fully paid.

Dated August 24, 1966.



E. A. Riley

Subscribed and sworn to before me this 24th day of August,
1966.



Notary Public

My Commission Expires: June, 1967



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

September 8, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit

Royalty Interest Owners
Langlie-Mattix Penrose Sand Unit

Working Interest Owners
Elliott B-29 Lease

Royalty Interest Owners
Elliott B-29 Lease (U.S.G.S.)

Re: Notice of Proposed Expansion dated
August 24, 1966 - Langlie-Mattix
Penrose Sand Unit, Lea County,
New Mexico

Gentlemen:

With reference to the above notice, please change the Unit participation percentage for Texas Pacific Oil Company's Elliott B-29 Federal lease from 1.05526% to 1.050026%.

This was a typographical error on our part and should be corrected.

We apologize for this mistake and hope that it has not caused you any undue inconvenience.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Division

EAR/hb

NOTICE OF PROPOSED EXPANSION
THE LANGLEIE MATTIX PENROSE SAND UNIT
IN LEA COUNTY, NEW MEXICO

It is proposed to expand the subject unit by adding the Texas Pacific Oil Company, et al Elliott B-29 Federal lease (S/2 SE/4 Section 29, T-22S, R-37E).

The lease is urgently needed in the subject unit to enable timely and prudent development of the area for waterflooding under Cooperative Line Well Agreements between the subject unit and offset units. Serious pattern imbalance and loss in ultimate secondary oil recovery would be experienced if the lease was not allowed to enter the subject unit and development for waterflooding realized in an orderly fashion.

The basis of participation was determined by dividing primary oil production from the lease as of July 1, 1965 by the unit primary oil production as of February 1, 1966, plus the primary oil production from the lease. This results in the Elliott B-29 Federal lease receiving a unit participation of 1.050026% calculated thus:

$$\frac{66,445}{6,261,492 \div 66,445} \times 100 = 1.055026\%$$

These recovery figures were negotiated by the unit working interest owners and in excess of 90% approved the expansion and participation percentage, as stipulated in Section 4 (b) of the Unit Agreement.

The proposed effective date of the expansion is October 1, 1966 which is the first day of the month subsequent to this notice.

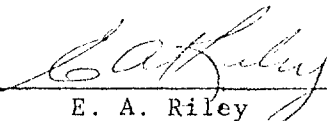
The Elliott B-29 lease will be assigned tract #39 in the subject unit.

AFFIDAVIT OF MAILING

E. A. Riley, of lawful age, being first duly sworn, deposes and says:

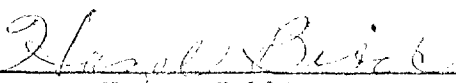
That on August 24, 1966, he mailed a copy of the foregoing Notice of Proposed Expansion to each of the lessors and lessees affected in the Langlie Mattix Penrose Sand Unit, Lea County, New Mexico, at their last known address, by depositing said notice in the United States Mail with postage thereon fully paid.

Dated August 24, 1966.



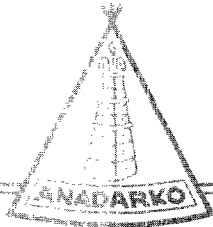
E. A. Riley

Subscribed and sworn to before me this 24th day of August,
1966.



Notary Public

My Commission Expires: June, 1967



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

September 8, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit

Royalty Interest Owners
Langlie-Mattix Penrose Sand Unit

Working Interest Owners
Elliott B-29 Lease

Royalty Interest Owners
Elliott B-29 Lease (U.S.G.S.)

Re: Notice of Proposed Expansion dated
August 24, 1966 - Langlie-Mattix
Penrose Sand Unit, Lea County,
New Mexico

Gentlemen:

With reference to the above notice, please change the Unit participation percentage for Texas Pacific Oil Company's Elliott B-29 Federal lease from 1.05526% to 1.050026%.

This was a typographical error on our part and should be corrected.

We apologize for this mistake and hope that it has not caused you any undue inconvenience.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Division

EAR/hb

NOTICE OF PROPOSED EXPANSION
THE LANGLEIE MATTIX PENROSE SAND UNIT
IN LEA COUNTY, NEW MEXICO

It is proposed to expand the subject unit by adding the Texas Pacific Oil Company, et al Elliott B-29 Federal lease (S/2 SE/4 Section 29, T-22S, R-37E).

The lease is urgently needed in the subject unit to enable timely and prudent development of the area for waterflooding under Cooperative Line Well Agreements between the subject unit and offset units. Serious pattern imbalance and loss in ultimate secondary oil recovery would be experienced if the lease was not allowed to enter the subject unit and development for waterflooding realized in an orderly fashion.

The basis of participation was determined by dividing primary oil production from the lease as of July 1, 1965 by the unit primary oil production as of February 1, 1966, plus the primary oil production from the lease. This results in the Elliott B-29 Federal lease receiving a unit participation of 1.050026% calculated thus:

$$\frac{66,445}{6,261,492 \div 66,445} \times 100 = 1.055026\%$$

These recovery figures were negotiated by the unit working interest owners and in excess of 90% approved the expansion and participation percentage, as stipulated in Section 4 (b) of the Unit Agreement.

The proposed effective date of the expansion is October 1, 1966 which is the first day of the month subsequent to this notice.

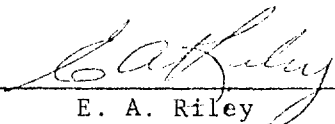
The Elliott B-29 lease will be assigned tract #39 in the subject unit.

AFFIDAVIT OF MAILING

E. A. Riley, of lawful age, being first duly sworn, deposes and says:

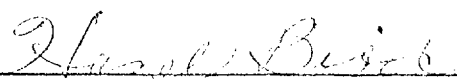
That on August 24, 1966, he mailed a copy of the foregoing Notice of Proposed Expansion to each of the lessors and lessees affected in the Langlie Mattix Penrose Sand Unit, Lea County, New Mexico, at their last known address, by depositing said notice in the United States Mail with postage thereon fully paid.

Dated August 24, 1966.



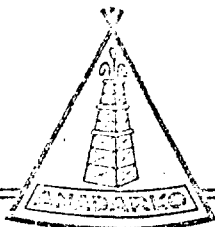
E. A. Riley

Subscribed and sworn to before me this 24th day of August,
1966.



Notary Public

My Commission Expires: June, 1967



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
E. A. Riley
Superintendent
Secondary Recovery Div.

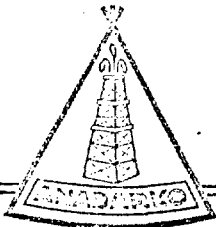
MES/hb

I _____ We ☒ Approve ☒
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name _____

Company AMERADA PETROLEUM CORPORATION

Date MAR 18 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANADARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

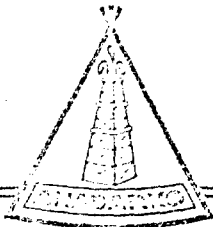
Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We X Approve X
~~disapprove~~ of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above
Name E. L. Smith *WPT*

Company THE ATLANTIC REFINING COMPANY
Date 3-21-66



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANOARK

DR	FILE
18 1966	
<input type="checkbox"/> Exec	
<input type="checkbox"/> Pres	
<input type="checkbox"/> Secy	
<input type="checkbox"/> Asst	
<input type="checkbox"/> Legal	
<input type="checkbox"/> L. Sales	
<input checked="" type="checkbox"/> <i>RC</i>	
<input type="checkbox"/> Pub	
<input type="checkbox"/> FILE	

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

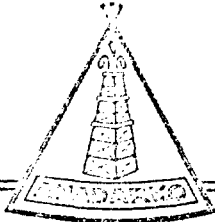
We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We ☒ Approve ☒
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.
Name *James M. [Signature]*
Company *Brocco Corporation*
Date *3/16/66*



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS
CABLE ADDRESS: ANDARK

PRODUCTION	
MAR 23 1966	
<input type="checkbox"/> Exec:	
<input type="checkbox"/> Asst.:	
<input type="checkbox"/> Eval:	
<input type="checkbox"/> L. Sales:	
<input type="checkbox"/> Adm:	<i>nc</i>
<input type="checkbox"/> Pur:	
<input type="checkbox"/> FILE:	

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

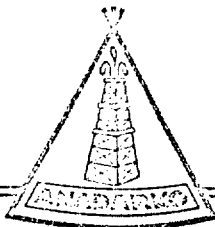
I _____ We _____ Approve _____
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name _____

Company _____

Date 3/23/66

President



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:


1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,


E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We ☒ Approve ☒
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name

J. E. Embury by M. G. Rebe
CITIES SERVICE OIL COMPANY

Company

Date

MAR 31 1966

RECEIVED

MAR 15 1966

CO. RECORDING DIV.

CABLE ADDRESS: ANDARK

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

March 14, 1966

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

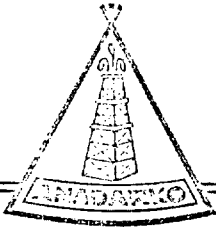
I _____ We X Approve X _____
 _____ disapprove of Texas Pacific Oil
 Company's entry into the Langlie-Mattix Unit
 as set out above. ✓

Name W. H. Long

Name L. P. Thompson
Company Continental Oil Company

Company Continental Oil Company

Date April 15, 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

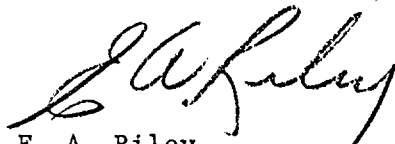
1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

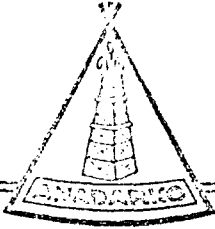
Very truly yours,


E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We X Approve X
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.
Name E. A. Riley

Company GULF OIL CORPORATION
Date March 21, 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

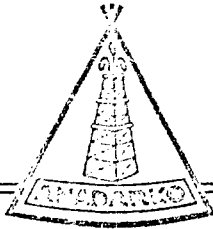
We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We X Approve X
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above. With understanding that Tract will pay its share of all past
Name J. M. Shepherd investments made by Unit.
Company Humble Oil & Refining Company
Date April 4, 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We ☒ Approve ☒
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.
Name W. L. Parker
W. L. Parker - Joint Interest Representative
Company MARATHON OIL COMPANY
Date March 18, 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE

P. O. BOX 9317

FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:


1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,


E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We X Approve X
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.
Name H. P. White
District Production Superintendent
Company Pan American Petroleum Corp.
Date April 29, 1966

ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
E. A. Riley
Superintendent
Secondary Recovery Div.

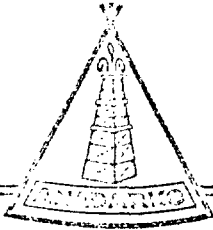
MES/hb

I X WEX Approve X
~~disapprove~~ of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name E. A. Riley

Company _____
Date March 23, 1966

PRODUCT	
Oil	<input checked="" type="checkbox"/>
Gas	<input checked="" type="checkbox"/>
Water	<input checked="" type="checkbox"/>
Other	<input checked="" type="checkbox"/>



ANADARKO PRODUCTION COMPANY

 3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76109
 CABLE ADDRESS: ANDARK

March 14, 1966

 Working Interest Owners
 Langlie-Mattix Penrose Sand Unit
 Lea County, New Mexico

PRODUCTION	
DATE	MAR 20 1966
TIME	
BY	
SALES	
FILE	

 Re: Entry of Texas Pacific Oil Company
 Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

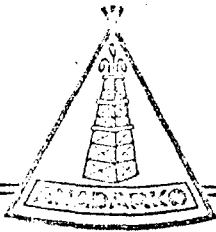
We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

 E. A. Riley
 Superintendent
 Secondary Recovery Div.

MES/hb

 I ✓ We ✓ Approve ✓
 disapprove of Texas Pacific Oil
 Company's entry into the Langlie-Mattix Unit
 as set out above.
Name J. W. RichCompany Date MAR 23 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

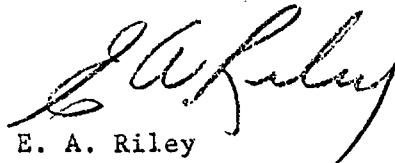
1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

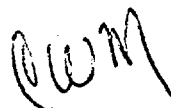
We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

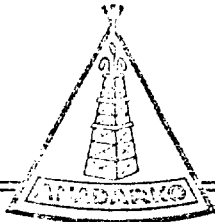
Very truly yours,


E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

☒ We Approve
 disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.
Name E. E. Layke
Company SAMEDAN OIL CORP
Date 4-4-66





ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We _____ Approve _____
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name *W. F. Langlie*
Regional Manager Production Dept.

Company SINCLAIR OIL & GAS COMPANY

Date March 21, 1966

RECEIVED	
MAR 17 1966	
PRODUCTION	
FILE / PROD. ENG.	
RFS	3-17
NFG	
CDG	
REP	✓
CHW	3-21



SKELLY OIL COMPANY

TULSA, OKLAHOMA 74102

PRODUCTION DEPARTMENT

C. L. BLACKSHER, VICE PRESIDENT

W. P. WHITMORE, MGR. PRODUCTION

W. D. CARSON, MGR. TECHNICAL SERVICES

ROBERT G. HILTZ, MGR. JOINT OPERATIONS

GEORGE W. SELINGER, MGR. CONSERVATION

March 21, 1966

File: Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Enlargement

Texas Pacific Elliott B-29 Federal Lease

PRODUCTION	
APR 24 1966	
✓	A
✓	ne
<input type="checkbox"/> FILE	

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Attention: Mr. E. A. Riley

Gentlemen:

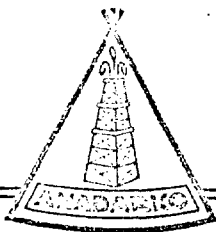
Your letter ballot of March 14, 1966, is acceptable to Skelly Oil Company as to the tract participation to be assigned to the Elliott B-29 lease. However, since other conditions of entry are not mentioned, we cannot execute the ballot as submitted.

Under the following conditions, Skelly Oil Company approves the enlargement of captioned unit to include the Elliott B-29 lease:

- (1) Tract participation assigned to the tract will be 1.050026%;
- (2) Texas Pacific will assume its full share (1.050026%) of the original inventory adjustment as revised to include the Elliott B-29 tract, and be charged 1.050026% of all tangible and intangible development cost for installation of the waterflood project from and after the effective date of the unit; and
- (3) After enlargement, the tract participations of those tracts which were included in the unit prior to the enlargement will remain in the same ratio one to another.

Very truly yours,

AHH: SW



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANDARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:

1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

E. A. Riley
Superintendent
Secondary Recovery Div.

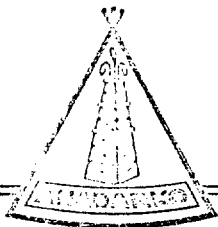
MES/hb

I _____ We ☒ Approve ☒
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name _____

Company SOHIO PETROLEUM CO.

Date APR 4 1966



ANADARKO PRODUCTION COMPANY

3189 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANADARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:


1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

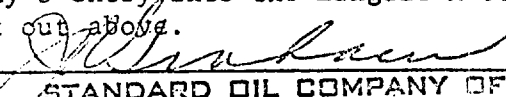
We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

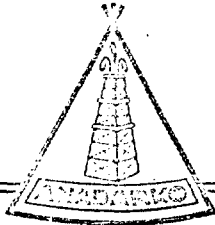
Very truly yours,


E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We _____ Approve _____
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name 
STANDARD OIL COMPANY OF TEXAS
Company A DIVISION OF CHEVRON OIL CO.
Date APR 29 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE

P. O. BOX 9317

FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANADARK

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:


1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,

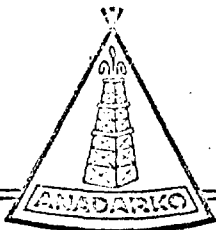

E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We _____ Approve: L
_____ disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.

Name M. J. [Signature]

Company TEXAS PACIFIC OIL COMPANY
Date MAR 25 1966



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE P. O. BOX 9317 FORT WORTH, TEXAS 76107
CABLE ADDRESS: ANDARK

PRODUCTION	
MAY 6 1966	
Exp:	
Rev:	
Int:	
Net:	
File:	

March 14, 1966

Working Interest Owners
Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Re: Entry of Texas Pacific Oil Company
Elliott B-29 Federal Lease into
Langlie-Mattix Penrose Sand Unit

Gentlemen:

As a result of the last Operators' Committee meeting in Midland, Texas and subsequent negotiations by the Unit Operator with Texas Pacific Oil Company a basis has been determined for entry of the above tract into the Unit upon approval of the Working Interest Owners.

The results of these negotiations are as follows:


1. The Unit primary production as of February 1, 1966 was determined to be 6,261,492 barrels of oil. This total includes the production from Texaco Inc.'s "CD" lease which will be brought into the Unit prior to entry of Texas Pacific's Elliott B-29 Federal lease.
2. Primary production from Texas Pacific's Elliott B-29 Federal lease was determined to be 66,445 barrels as of July 1, 1965.
3. The participation factor for this lease would therefore be:

$$\frac{66,445}{6,261,492 + 66,445} = 1.050026\%$$

If this percentage participation meets with your approval please indicate in the space provided below and return one copy of this letter to us.

We urge you to approve this recommendation as soon as possible in order that we may proceed with development of this Unit.

Very truly yours,


E. A. Riley
Superintendent
Secondary Recovery Div.

MES/hb

I _____ We X Approve _____
X disapprove of Texas Pacific Oil
Company's entry into the Langlie-Mattix Unit
as set out above.
Name E. A. Riley

Company TIDEWATER OIL COMPANY
Date 5/9/66

RATIFICATION OF UNIT AGREEMENT
AND
UNIT OPERATING AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

65 NOV 21 1966

The undersigned Working Interest Owner in the captioned Unit Agreement and Unit Operating Agreement, which embrace certain lands in Lea County, New Mexico, for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement, each dated April 1, 1963 (each of which is incorporated herein by reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title, and interest in and to the Unitized Substances to the terms and provisions of said Unit Agreement and said Unit Operating Agreement.


The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and delivered at the date shown hereon.

~~ATTEST:~~ (WITNESS):

WORKING INTEREST OWNER

TEXAS PACIFIC OIL COMPANY
a Division of Joseph E. Seagram & Sons Inc.

Date: September 20³⁰, 1966


ATTORNEY-IN-FACT

Address: P. O. Box 747

Dallas, Texas 75221

(Individual)

STATE OF TEXAS)

COUNTY OF DALLAS)

Be it remembered, that on this 20th day of September, 1966, before me, a Notary Public in and for said County and State, personally appeared R. M. Brackbill, to me known to be the identical person(s) described in and who executed the within and foregoing instrument, and acknowledged to me that (s)he (they) executed the same as his (her, their) free and voluntary act and deed for the uses and purposes therein set forth.

In witness whereof, I have hereunder set my official signature and affixed my notarial seal the day and year first above written.

My Commission Expires:

June 1, 1967

Notary Public in and for Dallas
County, Texas

(Corporate)

STATE OF TEXAS)

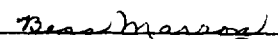
COUNTY OF DALLAS)

Before me, the undersigned, a Notary Public in and for said County and State, on this 20th day of September, 1966, personally appeared R. M. Brackbill, to me known to be the identical person who subscribed the name of the maker thereof to the within and foregoing instrument as its **Attorney-in-Fact** and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

In testimony whereof, I have hereunto set my hand and official seal the day and year last above written.

My Commission Expires:

June 1, 1967


Notary Public in and for Dallas
County, Texas

RATIFICATION OF UNIT AGREEMENT
AND
UNIT OPERATING AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

The undersigned Working Interest Owner in the captioned Unit Agreement and Unit Operating Agreement, which embrace certain lands in Lea County, New Mexico, for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement, each dated April 1, 1963 (each of which is incorporated herein by reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title, and interest in and to the Unitized Substances to the terms and provisions of said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and delivered at the date shown hereon.

~~ATTEST~~: (WITNESS):

A. A. Dan Gault
Date: Sept. 14, 1966

WORKING INTEREST OWNER
SOHIO PETROLEUM COMPANY
By: [Signature]
Agent and Attorney in Fact

Address: 970 First Nat'l Office Bldg.
Oklahoma City, Oklahoma 73102

(Individual)

STATE OF _____)

COUNTY OF _____)

Be it remembered, that on this _____ day of _____, 1966, before me, a Notary Public in and for said County and State, personally appeared _____, to me known to be the identical person(s) described in and who executed the within and foregoing instrument, and acknowledged to me that (s)he (they) executed the same as his (her, their) free and voluntary act and deed for the uses and purposes therein set forth.

In witness whereof, I have hereunder set my official signature and affixed my notarial seal the day and year first above written.

My Commission Expires:

Notary Public in and for _____
County, _____

(Corporate)

STATE OF Oklahoma)

COUNTY OF Oklahoma)

Before me, the undersigned, a Notary Public in and for said County and State, on this 4th day of October, 1966, personally appeared _____, to me known to be the identical person who subscribed the name of the maker thereof to the within and foregoing instrument as its AGENT AND ATTORNEY-IN-FACT and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

In testimony whereof, I have hereunto set my hand and official seal the day and year last above written.

My Commission Expires:

Notary Public in and for _____
County, _____

RATIFICATION OF UNIT AGREEMENT
AND
UNIT OPERATING AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

The undersigned Working Interest Owner in the captioned Unit Agreement and Unit Operating Agreement, which embrace certain lands in Lea County, New Mexico, for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement, each dated April 1, 1963 (each of which is incorporated herein by reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title, and interest in and to the Unitized Substances to the terms and provisions of said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and delivered at the date shown hereon.

ATTEST: (WITNESS):

Katharine G. Tarkes
Secretary
Date: SEP 15 1966

WORKING INTEREST OWNER

BROSECO CORPORATION

By James B. Rich
President
Address: Mercantile Trust Bldg.
Baltimore 2, Maryland

(Individual)

STATE OF _____)

COUNTY OF _____)

Be it remembered, that on this _____ day of _____, 1966, before me, a Notary Public in and for said County and State, personally appeared _____, to me known to be the identical person(s) described in and who executed the within and foregoing instrument, and acknowledged to me that (s)he (they) executed the same as his (her, their) free and voluntary act and deed for the uses and purposes therein set forth.

In witness whereof, I have hereunder set my official signature and affixed my notarial seal the day and year first above written.

My Commission Expires:

Notary Public in and for _____
County, _____

(Corporate)

STATE OF Maryland)

CITY OF Baltimore)

Before me, the undersigned, a Notary Public in and for said County and State, on this 16th day of September, 1966, personally appeared John B. Rich, to me known to be the identical person who subscribed the name of the maker thereof to the within and foregoing instrument as its President and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

In testimony whereof, I have hereunto set my hand and official seal the day and year last above written.

My Commission Expires:

July 1, 1967

Helen Steg
Notary Public in and for Baltimore
County, Maryland

RATIFICATION OF UNIT AGREEMENT
AND
UNIT OPERATING AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

The undersigned Working Interest Owner in the captioned Unit Agreement and Unit Operating Agreement, which embrace certain lands in Lea County, New Mexico, for valuable consideration paid, ratifies, confirms and joins in the execution of said Unit Agreement and said Unit Operating Agreement, each dated April 1, 1963 (each of which is incorporated herein by reference) to the same extent and effect as if the undersigned had executed the original of said Unit Agreement and said Unit Operating Agreement, or respective counterparts thereof. The undersigned does further commit all of the undersigned's right, title, and interest in and to the Unitized Substances to the terms and provisions of said Unit Agreement and said Unit Operating Agreement.

The undersigned acknowledges the receipt of a copy of said Unit Agreement and said Unit Operating Agreement, and further acknowledges that this instrument has been signed and delivered at the date shown hereon.

WORKING INTEREST OWNER

~~ATTEST~~: (WITNESS):

Katharine G. Parks
Date: SEP 15 1966

James B. Rich
Address: Mercantile Trust Bldg.
Baltimore 2, Maryland

(Individual)

STATE OF Maryland)
CITY
COUNTY OF Baltimore)

Be it remembered, that on this 16th day of September, 1966, before me, a Notary Public in and for said County and State, personally appeared John B. Rich, to me known to be the identical person(s) described in and who executed the within and foregoing instrument, and acknowledged to me that ~~(s)he~~ ~~(they)~~ executed the same as his ~~(her, their)~~ free and voluntary act and deed for the uses and purposes therein set forth.

In witness whereof, I have hereunder set my official signature and affixed my notarial seal the day and year first above written.

My Commission Expires:

July 1, 1967

John B. Rich
Notary Public in and for Lea County
County, Maryland

(Corporate)

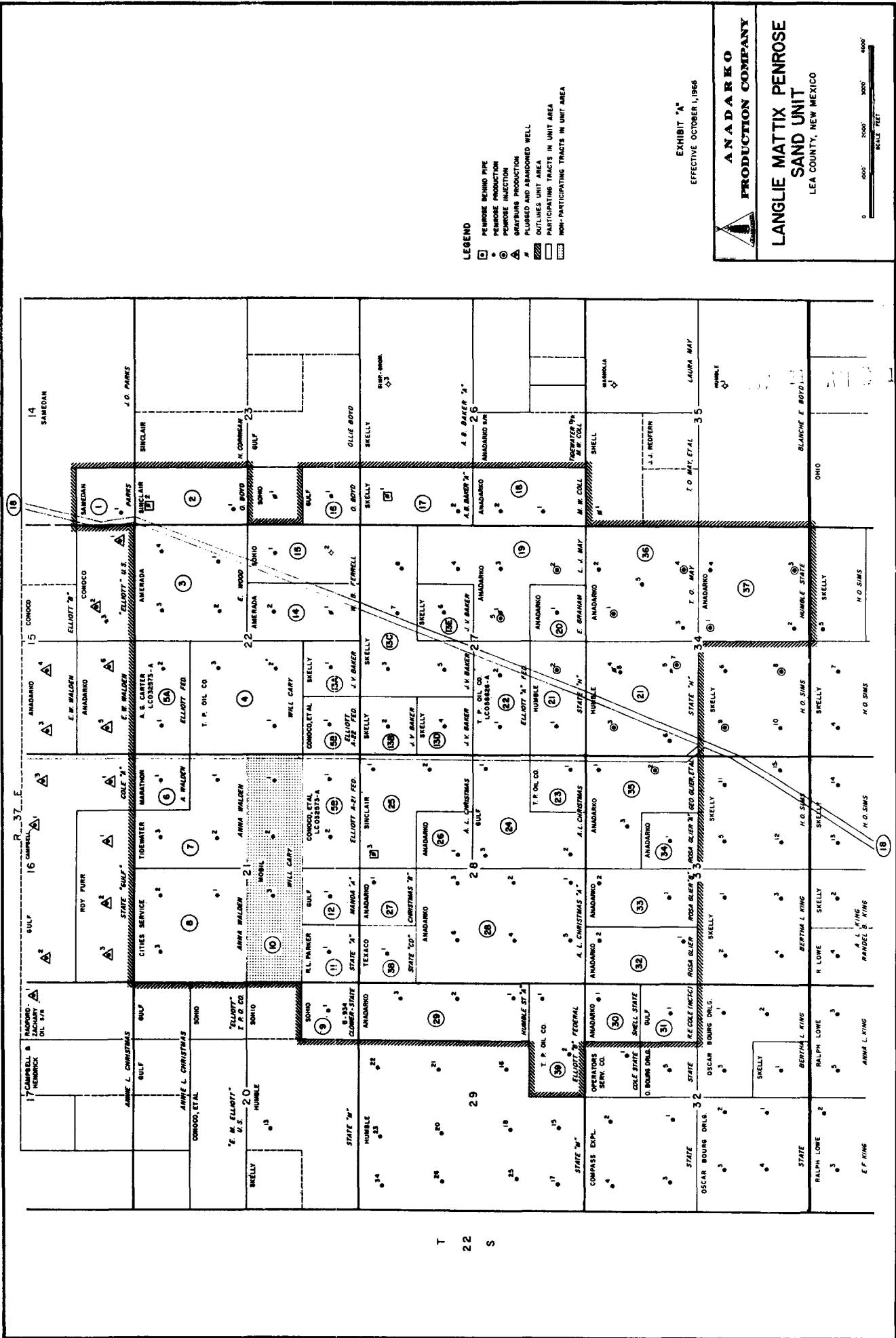
STATE OF _____)
COUNTY OF _____)

Before me, the undersigned, a Notary Public in and for said County and State, on this _____ day of _____, 1966, personally appeared _____, to me known to be the identical person who subscribed the name of the maker thereof to the within and foregoing instrument as its _____ and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

In testimony whereof, I have hereunto set my hand and official seal the day and year last above written.

My Commission Expires:

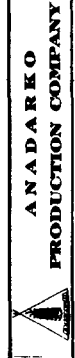
Notary Public in and for _____
County, _____



LEGEND

- PERMITS BEHIND PIPE
- PERMITS PRODUCTION
- PERMITS INJECTION
- PERMITS GRAYBURN PRODUCTION
- PLUGGED AND ABANDONED WELL
- OUTLINES UNIT AREA
- PARTICIPATING TRACTS IN UNIT AREA
- NON-PARTICIPATING TRACTS IN UNIT AREA

EXHIBIT "A"
EFFECTIVE OCTOBER 1, 1968



ANADARKO
PRODUCTION COMPANY
LANGLIE MATTIX PENROSE
SAND UNIT
LEA COUNTY, NEW MEXICO



EXHIBIT "B"

LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: October 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY		WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
						OWNER AND AMOUNT			
T-22S, R-37E - FEDERAL LANDS									
5-A	N/2 NW/4 Sec. 22	80	LC-032573-A Dated 8-1-56	12½% 25%	E. M. Elliott Marion M. Leonard Trustees of Harry M. Leonard Estate Midwest Oil Corp. First National Bank of Nevada, Trustee U/W of Allie M. Lee, Deceased	- 0.83% - 0.835% - 0.835% - 1.67%	Carter Foundation Production Co.	-100%	2.091029
5-B	S/2 SE/4 Sec. 21 and SW/4 SW/4 Sec. 22	120	LC-032573-A Dated 8-1-56	12½% 25%	E. M. Elliott	15 or More Barrels Per Well Per Day Sunshine Royalty - 1/6 of 7.5% Estate of Harry Leonard, Deceased - 1/6 of 7.5% First National Bank of Nevada, Exec. of Est. or Allie M. Lee, Deceased - 1/6 of 7.5% Midwest Oil Corp. - 1/3 of 7.5% Mable F. Leonard - 1/6 of 7.5%	Continental Oil The Atlantic Refining Co. Pan American Petroleum Corp. Standard Oil Co. of Texas, A Div. of California Oil Company	-25% -25% -25% -25%	3.224652
					15 or Less Barrels Per Well Per Day Sunshine Royalty - 1/6 of 5.0% Estate of Harry Leonard, Deceased - 1/6 of 5.0% First National Bank of Nevada, Exec. of Est. of Allie M. Lee, Deceased - 1/6 of 5.0% Midwest Oil Corp. - 1/3 of 5.0%				

Page 1

Revised: 8-10-65

Revised: January 6, 1966

Revised: April 1, 1966

Revised: July 19, 1966

Page 1

Revised: 8-10-65

Revised: January 6, 1966

Revised: April 1, 1966

Revised: July 19, 1966

EXHIBIT "B"

Effective: October 1, 1966

Tract No.	Description	Acres	Number of Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
22	N/2 SW/4 Sec. 27	80	LC-058626-A	12 1/2% 25	Texas Pacific	Sunshine Royalty Mabel Leonard First National Bank of Roswell, Trustee of Harry Leonard Est. First National Bank of Nevada Midwest Oil Corp.	-1.25% Texas Pacific Oil Company Sohio Petroleum Company Broseco Corp. John B. Rich	-5/8 2.522007 -1/4 -95% x 1/8 -5 % x 1/8
39	S/2, SE/4 Sec. 29	80	LC-058625B	*(See below)	Rowan Oil Co. et al Neville G. Penrose Inc. Broseco Corp. John B. Rich	None	Texas Pacific Sohio Broseco John B. Rich	62.500% 1.050026 25.000% 11.875% 0.625%

*

Oil:

1. Oil over 30° Baume (30.2° API)

- (a) 20 bbls. or less 12 1/2%
- (b) 20 to 50 bbls. 16 2/3%
- (c) 50 to 100 bbls. 20%
- (d) 100 to 200 bbls. 25%
- (e) Over 200 bbls. 33 1/3%

Gas:

- 3 MM or less 12 1/2%
- Over 3 MM 16 2/3%

2. Oil less than 30° Baume (30.2° API)

- (a) 20 bbls. or less 12 1/2%
- (b) 20 to 50 bbls. 14 2/7%
- (c) 50 to 100 bbls. 16 2/3%
- (d) 100 to 200 bbls. 20%
- (e) Over 200 bbls. 25%

Page 2

Revised: 8-10-65

Revised: 1-6-66

Revised April 1, 1966

Revised: July 19, 1966

EXHIBIT "B"
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: October 1, 1966

Tract No.	Description	Number of acres	Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
T-22S, R-37 STATE LANDS								
9	SE/4 SE/4 Sec. 20	40	B-934 6-6-32	1/8	Humble Oil & Refining Co.	Humble Working Interest Owners Langlie-Mattix Penrose Sand Unit 1/16 x 8/8	Sohio Petroleum Co. Anadarko Production Co. Texas Pacific Oil Broseco Corp. John B. Rich (To 4,000 Ft.)	1/4 1/4 1/4 23.75% 1.25%
11	SW/4 SW/4 Sec. 21	40	B-148 8-14-36	1/8	Parker Drilling Company	The Texas Company 1/8 Under 50 BOPD 3/32 Over 50 BOPD	Robert L. Parker	100% 1.104876
21	S/2 SW/4 Sec. 27 & NW/4 Sec. 34	240	B-934 6-6-32	1/8	Humble Oil & Refining Co.	None	Humble Oil & Refining Co.	100% 7.049175
29	E/2 NE/4 NE/4 SE/4 Sec. 29	120	B-934-8 6-6-32	1/8	Humble Oil & Refining	Humble Oil & Refining 1/16	Anadarko Production Texas Pacific Oil (To 4,000 Ft.)	1/2 1/2 4.372018
30	NE/4 NE/4 Sec. 32	40	B-1167	1/8	Shell Oil Co.	(1) Shell Oil 1/16 of 1 - 40 bbls per day 1/8 of 40-150 bbls. per day 1/4 of 150 bbls. or more per day (2) Gulf Coast Western Oil Co. Prod. Pay of 1,132 bbls. out of 4.6875% of Production (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil (To 4,000 Ft.)	1/2 1/2 0.418974

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY		WORKING INTEREST		PERCENT PARTICIPATION IN UNIT
						OWNER AND AMOUNT	OWNER AND AMOUNT	OWNER AND AMOUNT	OWNER AND AMOUNT	
31	SE/4 NE/4 Sec. 32	40	B-3480 12-13-34	1/8	Gulf Oil Corp.	None		Gulf Oil	- 100%	0.787591
37	SE/4 Sec. 34	160	B-934-19 6-6-32	1/8	Humble Oil & Refining Co.	(1) Humble - 1/8 x 7/8 of Prod. (2) Gulf Coast Western Oil Co. - Prod. Pay. of 7,818 Bbls. Out of 4.6875% of Production. (3) Same as (3) Under Tract 18		Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	- 1/2 - 1/2	2.794839
38	NW/4 NW/4 Sec. 28	40	B-148-6 8-14-31	1/8	Texaco	None		Texaco	- 100%	0.749975

T-22-S, R-37-E - FEE LANDS										
1	SW/4 SW/4 Sec. 14	40	Fee Land 12-23-35	1/8	Samedan Oil Corp. Sam Noble E. E. Noble Ann Noble Brown Michael F. Cusack John P. Cusack, Jr. J. P. Cusack	None	-74.25% - 0.25% - 0.25% - 0.25% - 4.00% - 4.00% - 17.00%	Samedan Oil Corp. Sam Noble E. E. Noble Ann Noble Brown Michael F. Cusack John P. Cusack, Jr. J. P. Cusack	- 74.25% - 0.25% - 0.25% - 0.25% - 4.00% - 4.00% - 17.00%	2.011355
2	W/2 NW/4 Sec. 23	80	Fee Land 5-30-26	1/8	Sinclair	None		Sinclair	- 100%	2.369783
3	NE/4 Sec. 22	160	Fee Land 3-15-27	1/8	F.S.Blackmar	Humble O & R	- 6.25%	Amerada	- 100%	5.548071
4	N/2 SW/4 S/2 NW/4 Sec. 22	160	Fee Land	1/8	Texas Pacific Oil Company	None		Broseco Corp. John B. Rich Sohio Pet. Co. Texas Pacific Oil Co.	- 10.555555% - 0.555555% - 55.555557% - 33.333333%	4.779781

Page 4

Revised: 8-10-65
Revised January 6, 1966
Revised: April 1, 1966

Revised: July 19, 1966

EXHIBIT "B" - CONTINUED

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
6	NE/4 NE/4 Sec. 21	40	Fee Land 9-20-28	1/8	Marathon Oil Co.	None	Marathon Oil Co.	- 100% 1.004421
7	NW/4 NE/4 & S/2 NE/4 Sec. 21	120	Fee Land 10-5-26	1/8	Tidewater	None	Tidewater Oil Co.	- 100% 3.183169
8	NW/4 Sec. 21	160	Fee Land 10-5-26	1/8	Cities Service	None	Cities Service Petroleum Co.	- 100% 3.025898
12	SE/4 SW/4 Sec. 21	40	Fee Land 4-20-28	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	- 100% 0.851203
13-A	SE/4 SW/4 Sec. 22	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 1.689071
13-B	NW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 2.160110
13-C	NE/4 NW/4 N/2 NE/4 & SE/4 NW/4 Sec. 27	160	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 6.088833
13-D	SW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 1.242811
13-E	SW/4 NE/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 1.418332
14	W/2 SE/4 Sec. 22	80	Fee Land 3-15-27	1/8	F.S.Blackmar	Humble Oil & Refining Co.	Amerada Pet. Corp.	- 6.25% - 100% 0.923610
15	E/2 SE/4 Sec. 22	80	Fee Land	1/8	F.S.Blackmar	Humble Oil & Refining Co.	Sohio Pet. Co. Brosco Corp. John B. Rich (To 4,000 Ft.)	2/3 - 95% of 1/3 - 5 % of 1/3 0.839766

Revised: January 6, 1966
Revised: July 19, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
16	SW/4 SW/4 Sec. 23	40	Fee Land 5-14-27	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	- 100% 0.994604
17	W/2 NW/4 Sec. 26	80	Fee Land 4-19-35	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 2.023667
18	W/2 SW/4 Sec. 26	80	Fee Land 9-20-28	1/8	Anadarko Production Co.-1/2 Texas Pacific Oil Co. -1/2	(1) Tidewater Oil Co. - 1/8 of 7/8 on 50 Bbls. or Over Per Well Per Day and 1/16 of 7/8 on Less Than 50 Bbls. Per Well Per Day. (2) Gulf Coast Western Oil Co. - Prod. Pay of 5,671 Bbls. out of 4.6875% of Production. (3) Fidelity National Bank & Trust Co. of Oklahoma, as Trustee Under Trust Indenture	Anadarko Production Co. - 50% Texas Pacific Oil Co. - 50% (To 4,000 Ft.)	2.043038
19	SE/4 SE/4; N/2 SE/4; SE/4 NE/4 Sec. 27	160	Fee Land 7-25-30	1/8	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Gulf Oil Corp. -1/8 (2) Gulf Coast Western Oil Co. - Prod. Pay of 16,592 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. - 50% Texas Pacific Oil Co. - 50% (To 4,000 Ft.)	5.919020
20	SW/4 SE/4 Sec. 27	40	Fee Land 10-15-34	1/8	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Gulf Coast Western Oil Co. - Prod. Pay of 5,291 Bbls. Out of 5.46875% of Prod. (2) Same as (3) Under Tract 18	Anadarko Production Co. - 1/2 Texas Pacific Oil Co. - 1/2 (To 4,000 Ft.)	1.631884

Revised. April 1, 1966

Revised: July 19, 1966

TRACT NO.	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
23	SE/4 SE/4 & Sec. 28	40	1/8	Texas Pacific	None	Texas Pacific Oil Co. Sohio Petroleum Co. Broseco Corp. John B. Rich - 1/2 - 1/3 - 95% x 1/6 - 5% x 1/6	1.080347
24	N/2 SE/4 & SW/4 SE/4 Sec. 28	120	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	- 100% 3.565785
25	N/2 NE/4 & SE/4 NE/4 Sec. 28	120	1/8	Sinclair	None	Sinclair Oil & Gas Company	- 100% 2.385226
26	SW/4 NE/4 Sec. 28	40	1/8	Anadarko Prod. Co. - 1/2 Texas Pacific Oil Co. - 1/2	(1) Sinclair O & G - 1/16 (2) Gulf Coast Western Oil Co. - Prod. Pay of 2,084 Bbls. Out of 5,078 1/25% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 3,900 Ft.)	- 1/2 - 1/2 0.681796
27	NE/4 NW/4 Sec. 28	40	1/8	Anadarko Prod. Co. - 1/2 Texas Pacific Oil Co. - 1/2	(1) Gulf Oil Corp. - 1/16 To 46 Bbls. Per Well Per Day 3/32 on 46 - 200 Bbls. Per Well Per Day. 1/6 Over 200 Bbls. Per Well Per Day.	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	- 1/2 - 1/2 0.618897
28	S/2 NW/4 & SW/4 Sec. 28	240	1/8	Anadarko Production Co. - 1/2 Texas Pacific Oil Co. - 1/2	Same as Tract 27	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	- 1/2 - 1/2 5.381287
32	W/2 NW/4 Sec. 33	80	1/8	Anadarko Prod. Co. - 1/2 Texas Pacific Oil Co. - 1/2	(1) Shell Oil Co. - 1/16 of 1 - 40 Bbls. Per Day; 1/8 of 40 - 150 Bbls. Per Day; 1/4 of 150 Bbls. or More Per Day.	Anadarko Production Co. Texas Pacific Oil Co.	- 1/2 - 1/2 1.120563

TRACT NO.	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
33	E/2 NW/4 Sec. 33	80 Fee Land 4-19-28	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(2) Gulf Coast Western Oil Co. - Prod. Pay of 2,616 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Prod. Co. Texas Pacific Oil Co. (To 4,200 Ft.)	- 1/2 1.445749 - 1/2
34	SW/4 NE/4 Sec. 33	40 Fee Land 4-19-28	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	Shell Oil Co. - 1/16 of 1-40 Bbls. Per Day 3/32 of 41-200 Bbls. Per Day 1/6 of More Than 200 Bbls. Per Day.	Anadarko Production Co. Texas Pacific Oil Co. (To 4,200 Ft.)	- 1/2 0.920299 - 1/2
35	N/2 NE/4 & SE/4 NE/4 Sec. 33	120 Fee Land 4-25-28	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Shell Oil Co. - 1/16 When Daily Average Prod. is 35 Bbls. or Less 1/8 When Daily Average Prod. is 36 to 150 Bbls. 1/4 When Daily Average Prod. is 151 Bbls. or More. (2) Gulf Coast Western Oil Co. - Prod. Pay of 6,429 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	- 1/2 2.279821 - 1/2
36	NE/4 Sec. 34	160 Fee Land	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Sinclair Oil & Gas 1/16 When Daily Average Prod. is 15 Bbls. or Less 1/8 When Daily Average Prod. is 16 Bbls. or More.	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	- 1/2 4.364781 - 1/2

Revised: April 1, 1966
Revised: July 19, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
					(2) Gulf Coast Western Oil Co. - Prod. Pay of 12,905 Bbls. Out of 4.6875% of Prod.		
					(3) Same as (3) Under Tract 18		
3	Federal Tracts			(9 Wells)	360 Acres	8.89% of Unit Area	
8	State of New Mexico Tracts			(18 Wells)	720 Acres	17.52% of Unit Area	
31	Fee Land Tracts			(63 Wells)	2,760 Acres	73.59% of Unit Area	
TOTALS							
42	Tracts			(90 Wells)	3,840 Acres	100.00% of Unit Area	

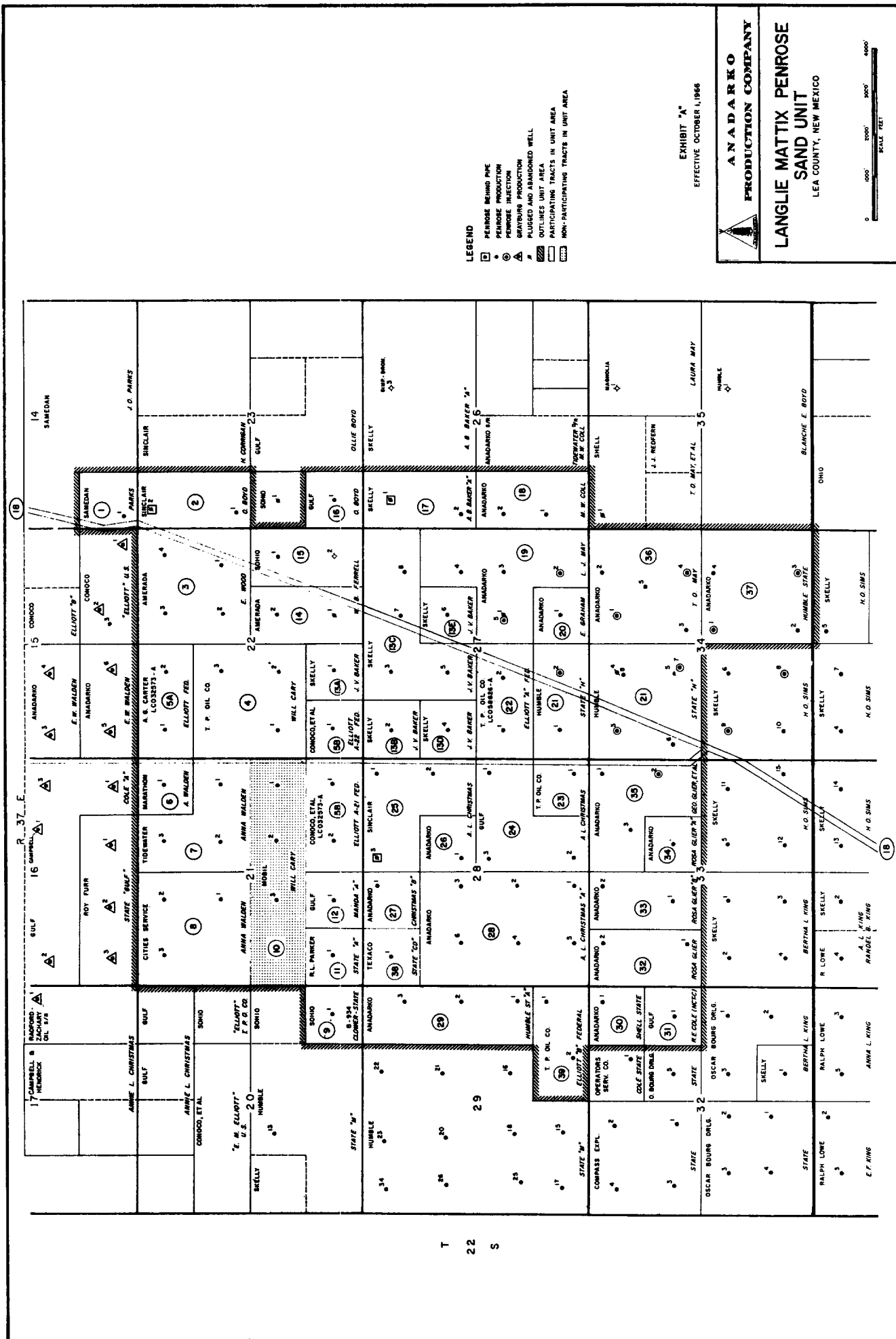
LANGLIE-MATTIX PENROSE SAND UNIT - LEA COUNTY, NEW MEXICO

EXHIBIT "C"
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: 10-1-66

<u>WORKING INTEREST OWNERS</u>	<u>PERCENT TOTAL UNIT</u>
Anadarko Production Company	17.056949
Amerada Petroleum Corporation	6.471680
Atlantic Oil & Refining Company	0.806163
Broseco Corporation	1.298443
Ann Noble Brown	0.005028
Carter Foundation Production Company	2.091029
Cities Service Petroleum Company	3.025898
Continental Oil Company	0.806163
J. P. Cusack	0.341931
John P. Cusack, Jr.	0.080454
Michael F. Cusack	0.080454
Gulf Oil Corporation	6.199184
Humble Oil & Refining Co.	7.049173
Marathon Oil Company	1.004421
E. E. Noble	0.005029
Sam Noble	0.005028
Pan American Petroleum Corporation	0.806163
R. L. Parker	1.104876
John B. Rich	0.068341
Samedan Oil Corporation	1.493431
Sinclair Oil & Gas Company	4.755010
Skelly Oil Company	14.622821
Sohio Petroleum Company	4.266360
The Standard Oil Company of Texas, a Division of California Oil Company	0.806163
Texaco, Inc.	0.749975
Texas Pacific Oil Company	21.816663
Tidewater Oil Company	3.183169


TOTAL	100.000000
Effective:	
Revised 8-10-65	
Revised: January 6, 1966	
Revised: April 1, 1966	
Revised: April 27, 1966	
Revised: July 19, 1966	



LEGEND

- PERMITS BEHIND PHE
- PERMITS PRODUCTION
- PERMITS INJECTION
- PERMITS PRODUCTION
- PLUGGED AND ABANDONED WELL
- OUTLINES UNIT AREA
- PARTICIPATING TRACTS IN UNIT AREA
- NON-PARTICIPATING TRACTS IN UNIT AREA

EXHIBIT "A"
EFFECTIVE OCTOBER 1, 1966



ANADARKO
PRODUCTION COMPANY

LANGLIE MATTIX PENROSE
SAND UNIT
LEA COUNTY, NEW MEXICO



EXHIBIT "B"

LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: October 1, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY		WORKING INTERST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
						OWNER AND AMOUNT			
T-22S, R-37E - FEDERAL LANDS									
5-A	N/2 NW/4 Sec. 22	80	LC-032573-A Dated 8-1-56	12½% 25%	E. M. Elliott Marion M. Leonard	- 0.83% - 0.835%	Carter Foundation Production Co.	-100%	2.091029
					Trustees of Harry M. Leonard Estate Midwest Oil Corp. First National Bank of Nevada, Trustee U/W of Allie M. Lee, Deceased	- 0.835% - 1.67%			
5-B	S/2 SE/4 Sec. 21 and SW/4 SW/4 Sec. 22	120	LC-032573-A Dated 8-1-56	12½% 25%	E. M. Elliott	- 0.83%	Continental Oil The Atlantic Refining Co. Pan American Petroleum Corp. Standard Oil Co. of Texas, A Div. of California Oil Company	-25% -25% -25%	3.224652
					Sunshine Royalty - 1/6 of 7.5%				
					Estate of Harry Leonard, Deceased - 1/6 of 7.5% First National Bank of Nevada, Exec. of Est. or Allie M. Lee, Deceased - 1/6 of 7.5% Midwest Oil Corp. - 1/3 of 7.5% Mable F. Leonard - 1/6 of 7.5%				
					15 or Less Barrels Per Well Per Day				
					Sunshine Royalty - 1/6 of 5.0% Estate of Harry Leonard, Deceased - 1/6 of 5.0% First National Bank of Nevada, Exec. of Est. of Allie M. Lee, Deceased - 1/6 of 5.0% Midwest Oil Corp. - 1/3 of 5.0%				

Page 1

Revised: 8-10-65

Revised: July 19, 1966

Page 1

Revised: 8-10-65

Revised: January 6, 1966

Revised: April 1, 1966

Revised: July 19, 1966

EXHIBIT "B"

Effective: October 1, 1966

Tract No.	Description	Acres	Number of and Lease Date	Serial No.	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
22	N/2 SW/4 Sec. 27	80	LC-058626-A		12 1/2% 25	Texas Pacific	Sunshine Royalty Mabel Leonard First National Bank of Roswell, Trustee of Harry Leonard Est. First National Bank of Nevada Midwest Oil Corp.	-1.25% Texas Pacific Oil -1.25% Company Schio Petroleum Company Broseco Corp. John B. Rich -1.25% -2.50%	-5/8 -1/4 -95% x 1/8 -5% x 1/8 2.522007
39	S/2, SE/4 Sec. 29	80	LC-058625B		*(See below)	Rowan Oil Co. et al Neville G. Penrose Inc. Broseco Corp. John B. Rich	None	Texas Pacific Sohio Broseco John B. Rich	62.500% 25.000% 11.875% 0.625% 1.050026

*

Oil:

1. Oil over 30° Baume (30.2° API)

- (a) 20 bbls. or less 12 1/2%
 (b) 20 to 50 bbls. 16 2/3%
 (c) 50 to 100 bbls. 20%
 (d) 100 to 200 bbls. 25%
 (e) Over 200 bbls. 33 1/3%

Gas:

- 3 MM or less
 Over 3 MM 12 1/2%
 16 2/3%

2. Oil less than 30° Baume (30.2° API)

- (a) 20 bbls. or less 12 1/2%
 (b) 20 to 50 bbls. 14 2/7%
 (c) 50 to 100 bbls. 16 2/3%
 (d) 100 to 200 bbls. 20%
 (e) Over 200 bbls. 25%

Page 2

Revised: 8-10-65

Revised: July 19, 1966

Revised: 1-6-66

Revised April 1, 1966

EXHIBIT "B"

Effective: October 1, 1966

LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Tract No.	Description	Number of acres	Serial No. and Lease Date	Royalty	Lessee of Record	Overriding Royalty Owner and Amount	Working Interest Owner and Amount	Percent Participation of Tract in Unit
T-22S, R-37 STATE LANDS								
9	SE/4 SE/4 Sec. 20	40	B-934 6-6-32	1/8	Humble Oil & Refining Co.	Humble Working Interest Owners Langlie-Mattix Penrose Sand Unit 1/16 x 8/8	Sohio Petroleum Co. Anadarko Production Co. Texas Pacific Oil Broseco Corp. John B. Rich (To 4,000 Ft.)	1/4 1/4 1/4 23.75% 1.25%
11	SW/4 SW/4 Sec. 21	40	B-148 8-14-36	1/8	Parker Drilling Company	The Texas Company 1/8 Under 50 BOPD 3/32 Over 50 BOPD	Robert L. Parker	100% 1.104876
21	S/2 SW/4 Sec. 27 & NW/4 Sec. 34	240	B-934 6-6-32	1/8	Humble Oil & Refining Co.	None	Humble Oil & Refining Co.	100% 7.049175
29	E/2 NE/4 NE/4 SE/4 Sec. 29	120	B-934-8 6-6-32	1/8	Humble Oil & Refining	Humble Oil & Refining 1/16	Anadarko Production Texas Pacific Oil (To 4,000 Ft.)	1/2 1/2 4.372018
30	NE/4 NE/4 Sec. 32	40	B-1167	1/8	Shell Oil Co.	(1) Shell Oil 1/16 of 1 - 40 bbls per day 1/8 of 40-150 bbls. per day 1/4 of 150 bbls. or more per day (2) Gulf Coast Western Oil Co. Prod. Pay of 1,132 bbls. out of 4.6875% of Production (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil (To 4,000 Ft.)	1/2 1/2 0.418974

Page 3

Revised 8-10-65

Revised: January 6, 1966

Revised: April 1, 1966

Revised: July 19, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PERCENT PARTICIPATION OF TRACT IN UNIT
31	SE/4 NE/4 Sec. 32	40	B-3480 12-13-34	1/8	Gulf Oil Corp.	None	Gulf Oil	- 100% 0.787591
37	SE/4 Sec. 34	160	B-934-19 6-6-32	1/8	Humble Oil & Refining Co.	(1) Humble - 1/8 x 7/8 of Prod. (2) Gulf Coast Western Oil Co. - Prod. Pay. of 7,818 Bbls. Out of 4.6875% of Production. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	- 1/2 - 1/2 2.794839
38	NW/4 NW/4 Sec. 28	40	B-148-6 8-14-31	1/8	Texaco	None	Texaco	- 100% 0.749975

T-22-S, R-37-E - FEE LANDS

1	SW/4 SW/4 Sec. 14	40	Fee Land 12-23-35	1/8	Samedan Oil Corp. - 74.25% Sam Noble - 0.25% E. E. Noble - 0.25% Ann Noble Brown - 0.25% Michael F. Cusack - 4.00% John P. Cusack, Jr. - 4.00% J. P. Cusack - 17.00%	None	Samedan Oil Corp. Sam Noble E. E. Noble Ann Noble Brown Michael F. Cusack John P. Cusack, Jr. J. P. Cusack	- 74.25% - 0.25% - 0.25% - 0.25% - 4.00% - 4.00% - 17.00%	2.011355
2	W/2 NW/4 Sec. 23	80	Fee Land 5-30-26	1/8	Sinclair	None	Sinclair	- 100%	2.369783
3	NE/4 Sec. 22	160	Fee Land 3-15-27	1/8	F.S.Blackmar	Humble O & R	Amerada	- 100%	5.548071
4	N/2 SW/4 S/2 NW/4 Sec. 22	160	Fee Land	1/8	Texas Pacific Oil Company	None	Broseco Corp. John B. Rich Sohio Pet. Co. Texas Pacific Oil Co.	- 10.555555% - 0.555555% - 55.555557% - 33.333333%	4.779781

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
6	NE/4 NE/4 Sec. 21	40	Fee Land 9-20-28	1/8	Marathon Oil Co.	None	Marathon Oil Co.	- 100% 1.004421
7	NW/4 NE/4 & S/2 NE/4 Sec. 21	120	Fee Land 10-5-26	1/8	Tidewater	None	Tidewater Oil Co.	- 100% 3.183169
8	NW/4 Sec. 21	160	Fee Land 10-5-26	1/8	Cities Service	None	Cities Service Petroleum Co.	- 100% 3.025898
12	SE/4 SW/4 Sec. 21	40	Fee Land 4-20-28	1/8	Gulf Oil Corp.	None	Gulf Oil Corp.	- 100% 0.851203
13-A	SE/4 SW/4 Sec. 22	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 1.689071
13-B	NW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 2.160110
13-C	NE/4 NW/4 N/2 NE/4 & SE/4 NW/4 Sec. 27	160	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 6.088833
13-D	SW/4 NW/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 1.242811
13-E	SW/4 NE/4 Sec. 27	40	Fee Land 4-1-26	1/8	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 1.418332
14	W/2 SE/4 Sec. 22	80	Fee Land 3-15-27	1/8	F.S.Blackmar	Humble Oil & Refining Co.	Amerada Pet. Corp.	- 6.25% 0.923610
15	E/2 SE/4 Sec. 22	80	Fee Land	1/8	F.S.Blackmar	Humble Oil & Refining Co.	Sohio Pet. Co. 2/3 Broseco Corp. - 95% of 1/3 John B. Rich - 5 % of 1/3 (To 4,000 Ft.)	0.839766

Revised: January 6, 1966
Revised: July 19, 1966

TRACT NO.	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
16	SW/4 SW/4 Sec. 23	Fee Land 5-14-27	Gulf Oil Corp.	None	Gulf Oil Corp.	- 100% 0.994604
17	W/2 NW/4 Sec. 26	Fee Land 4-19-35	Skelly Oil Co.	None	Skelly Oil Co.	- 100% 2.023657
18	W/2 SW/4 Sec. 26	Fee Land 9-20-28	Anadarko Production Co.-1/2 Texas Pacific Oil Co. -1/2	(1) Tidewater Oil Co. - 1/8 of 7/8 on 50 Bbls. or Over Per Well Per Day and 1/16 of 7/8 on Less Than 50 Bbls. Per Well Per Day. (2) Gulf Coast Western Oil Co. - Prod. Pay of 5,671 Bbls. out of 4.6875% of Production.	Anadarko Production Co. - 50% Texas Pacific Oil Co. - 50% (To 4,000 Ft.)	2.043038
19	SE/4 SE/4; N/2 SE/4; SE/4 NE/4 Sec. 27	Fee Land 7-25-30	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Gulf Oil Corp. -1/8 (2) Gulf Coast Western Oil Co. - Prod. Pay of 16,592 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. - 50% Texas Pacific Oil Co. - 50% (To 4,000 Ft.)	5.919020
20	SW/4 SE/4 Sec. 27	Fee Land 10-15-34	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Gulf Coast Western Oil Co. - Prod. Pay of 5,291 Bbls. Out of 5.46875% of Prod. (2) Same as (3) Under Tract 18	Anadarko Production Co. - 1/2 Texas Pacific Oil Co. - 1/2 (To 4,000 Ft.)	1.631884

Revised. April 1, 1966

Revised: July 19, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
23	SE/4 SE/4 & Sec. 28	40	Fee Land	1/8 Texas Pacific	None	Texas Pacific Oil Co. Sohio Petroleum Co. Broseco Corp. John B. Rich - 1/2 - 1/3 - 95% x 1/6 - 5% x 1/6	1.080347
24	N/2 SE/4 & SW/4 SE/4 Sec. 28	120	Fee Land 5-6-25	1/8 Gulf Oil Corp.	None	Gulf Oil Corp.	- 100% 3.565785
25	N/2 NE/4 & SE/4 NE/4 Sec. 28	120	Fee Land 5-6-26	1/8 Sinclair	None	Sinclair Oil & Gas Company	- 100% 2.385226
26	SW/4 NE/4 Sec. 28	40	Fee Land 5-6-26	1/8 Anadarko Prod. Co. - 1/2 Texas Pacific Oil Co. - 1/2	(1) Sinclair O & C - 1/16 Gulf Coast Western Oil Co. - Prod. Pay of 2,084 Bbls. Out of 5,078 1/25% of Prod. (2) Same as (3) Under Tract 18 (3)	Anadarko Production Co. Texas Pacific Oil Co. (To 3,900 Ft.)	- 1/2 0.681796 - 1/2
27	NE/4 NW/4 Sec. 28	40	Fee Land 4-20-28	1/8 Anadarko Prod. Co. - 1/2 Texas Pacific Oil Co. - 1/2	(1) Gulf Oil Corp. - 1/16 To 46 Bbls. Per Well Per Day 3/32 on 46 - 200 Bbls. Per Well Per Day. 1/6 Over 200 Bbls. Per Well Per Day.	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	- 1/2 0.618897 - 1/2
28	S/2 NW/4 & SW/4 Sec. 28	240	Fee Land 5-6-26	1/8 Anadarko Production Co. - 1/2 Texas Pacific Oil Co. - 1/2	Same as Tract 27	Anadarko Production Co. Texas Pacific Oil Co. (To 3,800 Ft.)	- 1/2 5.381287 - 1/2
32	W/2 NW/4 Sec. 33	80	Fee Land 4-19-28	1/8 Anadarko Prod. Co. - 1/2 Texas Pacific Oil Co. - 1/2	(1) Shell Oil Co. - 1/16 of 1 - 40 Bbls. Per Day; 1/8 of 40 - 150 Bbls. Per Day; 1/4 of 150 Bbls. or More Per Day.	Anadarko Production Co. Texas Pacific Oil Co.	- 1/2 1.120563 - 1/2

TRACT NO.	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
33	E/2 NW/4 Sec. 33	80 Fee Land 4-19-28	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(2) Gulf Coast Western Oil Co. - Prod. Pay of 2,616 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Prod. Co. Texas Pacific Oil Co. (To 4,200 Ft.)	- 1/2 1.445749 - 1/2
34	SW/4 NE/4 Sec. 33	40 Fee Land 4-19-28	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	Shell Oil Co. - 1/16 of 1-40 Bbls. Per Day 3/32 of 41-200 Bbls. Per Day 1/6 of More Than 200 Bbls. Per Day.	Anadarko Production Co. Texas Pacific Oil Co. (To 4,200 Ft.)	- 1/2 0.920299 - 1/2
35	N/2 NE/4 & SE/4 NE/4 Sec. 33	120 Fee Land 4-25-28	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Shell Oil Co. - 1/16 When Daily Average Prod. is 35 Bbls. or Less 1/8 When Daily Average Prod. is 36 to 150 Bbls. 1/4 When Daily Average Prod. is 151 Bbls. or More. (2) Gulf Coast Western Oil Co. - Prod. Pay of 6,429 Bbls. Out of 4.6875% of Prod. (3) Same as (3) Under Tract 18	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	- 1/2 2.279821 - 1/2
36	NE/4 Sec. 34	160 Fee Land	Anadarko Prod. Co. -1/2 Texas Pacific Oil Co. -1/2	(1) Sinclair Oil & Gas 1/16 When Daily Average Prod. is 15 Bbls. or Less 1/8 When Daily Average Prod. is 16 Bbls. or More.	Anadarko Production Co. Texas Pacific Oil Co. (To 4,000 Ft.)	- 1/2 4.364781 - 1/2

Revised: April 1, 1966
Revised: July 19, 1966

TRACT NO.	DESCRIPTION	NUMBER OF ACRES	SERIAL NO. AND LEASE DATE	ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY OWNER AND AMOUNT	WORKING INTEREST OWNER AND AMOUNT	PER CENT PARTICIPATION OF TRACT IN UNIT
						(2) Gulf Coast Western Oil Co. - Prod. Pay of 12,905 Bbls. Out of 4.6875% of Prod.		
						(3) Same as (3) Under Tract 18		
					(9 Wells)	360 Acres	8.89% of Unit Area	
3	Federal Tracts				(18 Wells)	720 Acres	17.52% of Unit Area	
8	State of New Mexico Tracts				(63 Wells)	2,760 Acres	73.59% of Unit Area	
31	Fee Land Tracts							
TOTALS								
					(90 Wells)	3,840 Acres	100.00% of Unit Area	
42	Tracts							

LANGLIE-MATTIX PENROSE SAND UNIT - LEA COUNTY, NEW MEXICO

EXHIBIT "C"
LANGLIE-MATTIX PENROSE SAND UNIT
LEA COUNTY, NEW MEXICO

Effective: 10-1-66

<u>WORKING INTEREST OWNERS</u>	<u>PERCENT TOTAL UNIT</u>
Anadarko Production Company	17.056949
Amerada Petroleum Corporation	6.471680
Atlantic Oil & Refining Company	0.806163
Broseco Corporation	1.298443
Ann Noble Brown	0.005028
Carter Foundation Production Company	2.091029
Cities Service Petroleum Company	3.025898
Continental Oil Company	0.806163
J. P. Cusack	0.341931
John P. Cusack, Jr.	0.080454
Michael F. Cusack	0.080454
Gulf Oil Corporation	6.199184
Humble Oil & Refining Co.	7.049173
Marathon Oil Company	1.004421
E. E. Noble	0.005029
Sam Noble	0.005028
Pan American Petroleum Corporation	0.806163
R. L. Parker	1.104876
John B. Rich	0.068341
Samedan Oil Corporation	1.493431
Sinclair Oil & Gas Company	4.755010
Skelly Oil Company	14.622821
Sohio Petroleum Company	4.266360
The Standard Oil Company of Texas, a Division of California Oil Company	0.806163
Texaco, Inc.	0.749975
Texas Pacific Oil Company	21.816663
Tidewater Oil Company	3.183169
TOTAL	<u>100.000000</u>

Effective:

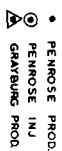
Revised 8-10-65

Revised: January 6, 1966

Revised: April 1, 1966

Revised: April 27, 1966

Revised: July 19, 1966



20
2954
February 15, 1964

Ambassador Oil Corporation
P. O. Box 9338
Fort Worth 7, Texas

Re: Langlie-Mattix Penrose Sand Unit
Lea County, New Mexico

Attention: Mr. E. A. Riley

Gentlemen:

Pursuant to my conversation with Mr. Riley, as of this date the Commissioner of Public Lands has approved your Langlie-Mattix Penrose Sand Unit Agreement, subject to like approval by the United States Geological Survey.

Mr. Riley assured me he would send us an originally executed Unit Agreement, with a change made in Section 9 as previously agreed.

Therefore, we are returning the conformed copy which was received by us on February 11, as requested by Mr. Riley.

We are enclosing six originally signed Certificates of Approval also Official Receipt No. G-4300 in the amount of Sixty (\$60.00) Dollars.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

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

ESW/mmz/v

cc: Oil Conservation Commission

United States Geological Survey

MAIL OFFICE 000

1963 NOV 21 AM 9 05

November 20, 1963

Mr. James T. Jennings
Attorney at Law
1012 Security National Bank Building
Roswell, New Mexico

Dear Mr. Jennings:

Reference is made to the application which you submitted to the Oil Conservation Commission on November 8, 1963 for Ambassador Oil Corporation seeking approval of the Langlie-Mattix Penrose Sand Unit, Township 22 South, Range 37 East. I would appreciate having the following information concerning this proposed project:

- (1) The location of the water source well with regard to unit, section, township and range which will produce from the Santa Rosa formation at 800 feet.
- (2) An analysis of the Santa Rosa water.
- (3) Cement tops on each string of casing in each well.
- (4) Date each well was completed.
- (5) Specifications on the casing used and a statement as to whether casing was new or used.
- (6) Is injection to be through tubing and packer?

If you can supply this information I feel confident that it will appreciably reduce the time required for the hearing which you have requested before the Commission.

Sincerely yours,

S. E. Reynolds
State Engineer

By:

Frank E. Irby, Chief
Water Rights Division

FEI/ma
cc-A. L. Porter, Jr. ✓
P. H. Hennighausen

C
O
P
Y

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

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

December 10, 1963

Mr. James T. Jennings
Attorney at Law
Post Office Box 1180
Roswell, New Mexico

Re: Case No. 2954
Order No. R-2617
Applicant:
Ambassador Oil Corporation

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.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC

Astec OCC

OTHER Mr. Howard Bratton

JAMES T. JENNINGS
ATTORNEY AT LAW
1012 SECURITY NATIONAL BANK BUILDING
ROSWELL, NEW MEXICO

ROGER L. COPPLE

NOV 11 PM 5 11

MAIN 2-8432

November 8, 1963

*Admitted for
approval
JTW*

See 245

James M. Durrett, Chief Counsel
Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

RE: Application of Ambassador
Oil Corporation for the
Approval of the Langlie-Mattix
Penrose Sand Unit

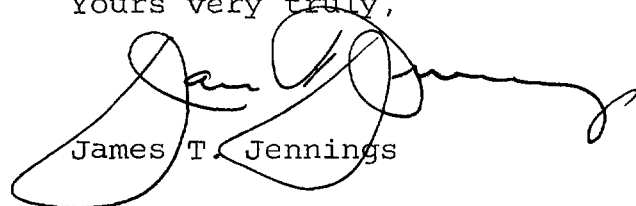
Dear Jim:

Confirming our telephone conversation of earlier to-day, I am enclosing herewith an Application for Approval of the Langlie-Mattix Penrose Sand Unit which I am filing on behalf of Ambassador Oil Corporation. The Application is in duplicate, with the exception that I have only included one copy of the Unit Agreement and Unit Operating Agreement. Additional copies of the Application, Exhibits and Unit Agreement will be available at the time of hearing, and if you need them in the meantime, please so advise me.

I am also enclosing herewith a copy of my letter transmitting a copy of the Application to the State Engineer, which is in accordance with your regulations.

It is my understanding that the hearing will probably be scheduled for December 4, and if you need any additional information or if you find that the Application is not in proper form, please so advise me.

Yours very truly,


James T. Jennings

JTJ/mb

Encl.

cc: Ambassador Oil Corporation

DOCKET MADE
1-22-63
Date
[Signature]

ROGER L. COPPLE

JAMES T. JENNINGS
ATTORNEY AT LAW
1012 SECURITY NATIONAL BANK BUILDING
ROSWELL, NEW MEXICO
MAIN 2-8432
November 8, 1963

Q 3954

State Engineer
P. O. Box 1079
Santa Fe, New Mexico

RE: Application of Ambassador
Oil Corporation for Approval
of the Langlie-Mattix Penrose
Sand Unit, Township 22 South,
Range 37 East, N.M.P.M.

C
O
P
Y

Dear Sir:

Pursuant to the provisions of Section 5 of Rule 701-B
of the Oil Conservation Commission, I am enclosing herewith a
copy of the Application which Ambassador Oil Corporation has
filed simultaneously with the Oil Conservation Commission.

If there are any problems or questions concerning this,
please feel free to call on me.

Yours very truly,

James T. Jennings

JTJ/mb

Encl.

cc: Oil Conservation Commission ✓
Ambassador Oil Corporation



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
April EXHIBIT NO. D
CASE NO. 2954

Ambassador Oil Corporation
P. O. Box 9338
Fort Worth 7, Texas

Attention: Mr. E. A. Riley *HA*

Gentlemen:

Your undated application, filed November 20, 1962, with the Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of 3,880 acres, more or less, in Lea County, New Mexico, as logically subject to operation under unitization provisions of the Mineral Leasing Act, as amended. The unit area contains 280.00 acres (7.21 percent) of Federal land, 680.00 acres (17.53 percent) of State of New Mexico lands, and 2,920.00 acres (75.26 percent) of patented lands.

Unitization will be limited to the Langlie-Mattix zone as identified in section 2 (h) of the proposed unit agreement form. The unit area has been developed by 95 oil wells completed in the formation to be unitized of which 75 are currently on producing status. Participation will be based upon ultimate primary recovery as defined by section 2(k) of the unit agreement form. You estimate that the proposed water flood project under unitized operations will result in the recovery of 5 million barrels of oil over and above that recoverable by primary methods.

The land outlined on your plat marked "Langlie-Mattix Unit Area, Lea County, New Mexico", will be acceptable as a logical unit area for secondary recovery operations with the addition of the NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 22 S., R. 37 E., N.M.P.M., which will increase the unit area to 3,920 acres, more or less. The location of this tract requires its inclusion in the unit area hereby designated.

Your proposed form of unit agreement will be acceptable if modified as marked in colored pencil and/or attached rider. One copy of the marked form is returned herewith, and the remaining copies are retained for distribution to the appropriate offices of the Geological Survey. Please contact the State of New Mexico before soliciting joinders.

In the absence of any type of land requiring special provisions or any objection not now apparent, a duly executed agreement conformed to the marked copy, approved by the appropriate officials of the State of New Mexico, and accompanied by an acceptable allocation schedule calculated in accordance with the basic participation formula, will be approved if submitted in approvable status within a reasonable time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have 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 format of the sample exhibits attached to the 1961 reprint of the standard form of unit agreement should be followed closely in preparation of Exhibits A and B.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "John B. Baker". The signature is fluid and cursive, with the first name "John" and last name "Baker" clearly distinguishable.

Acting Director

State of New Mexico



Commissioner of Public Lands

E. S. JOHNNY WALKER
COMMISSIONER



September 21

Ambassador Oil Corporation
P. O. Box 9338
Ft. Worth 7, Texas

OPERATIONS	
SEP 24 1952	
<input type="checkbox"/> Exec:	
<input type="checkbox"/> Plan:	
<input checked="" type="checkbox"/> Sec:	
<input type="checkbox"/> Acq:	
<input type="checkbox"/> Adm:	
<input type="checkbox"/> Prod:	
<input type="checkbox"/> Mat:	
<input type="checkbox"/> Per:	
FILE	

BOX 791
SANTA FE, NEW MEXICO

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Agul EXHIBIT NO. E
CASE NO. 2754

Re: Proposed Langlie-Mattix
Penrose Sand Unit, Lea
County, New Mexico

Attention: Mr. E. A. Riley

Gentlemen:

We have received Proposed Langlie-Mattix Penrose Sand Unit Agreement, Lea County, New Mexico, together with Exhibits "A", "B", and "C".

This office has not received a letter of designation on the proposed unit area from the United States Geological Survey nor have we received the \$60.00 filing fee for this Unit.

We must request that the selection of a successor Unit Operator, under Sec. 10, require approval by the Commissioner of Public Lands.

We do not approve the Operating Agreement.

We will approve this proposed unit form as to form and content if the aforementioned change is made, our approval being subject to like approval by the United States Geological Survey.

Ambassadpr Oil Corporation
P. O. Box 9338
Ft. Worth 7, Texas
September 21, 1962
(page 2)

When this unit is presented for final approval we will require a statement from Ambassador Oil Corporation as to the tracts qualified together with an original ratified copy of the Unit Agreement and one originally signed copy of the Operating Agreement. We will require one other copy of the Unit Agreement which may be a fully conformed copy submitted after approval by the United States Geological Survey.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

Marian M. Rhea

BY:

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

ESW/mmrv

NEW MEXICO OIL AND GAS COMMISSION
WATERFLOOD APPLICATION DATA

FIELD LANGLIE-MATTIX COUNTY LEA
OPERATOR AMBASSADOR OIL CORPORATION
LEASES LANGLIE-MATTIX PENROSE SAND UNIT
RESERVOIR PENROSE SAND (QUEEN) DISCOVERY DATE SEPTEMBER, 1935

I. RESERVOIR AND FLUID CHARACTERISTICS

A. INFORMATION ON ENTIRE RESERVOIR

1. NAME OF FORMATION PENROSE SAND
2. ESTIMATED PRODUCTIVE AREA OF ENTIRE RESERVOIR 20,000 ACRES
3. COMPOSITION (SAND, LIMESTONE, DOLOMITE, ETC.) SAND
4. TYPE OF STRUCTURE STRATIGRAPHIC TRAP
(INCLUDE CROSS-SECTION AND STRUCTURAL MAPS)
5. TYPE DRIVE DURING PRIMARY PRODUCTION SOLUTION GAS
6. ORIGINAL RESERVOIR PRESSURE 1500 PSI
7. WAS GAS CAP PRESENT ORIGINALLY No AT PRESENT? No

B. INFORMATION ON PROPOSED PROJECT AREA

(INCLUDE PLAT OF LEASE (S) TO BE FLOODED, SHOWING PRODUCING WELLS, PROPOSED INJECTION WELLS, AND OFFSET WELLS.)

1. NUMBER OF PRODUCTIVE ACRES IN LEASE (S) TO BE FLOODED, 3,920
2. AVERAGE DEPTH TO TOP OF PAY (FEET) 3,400
3. AVERAGE EFFECTIVE PAY THICKNESS (FEET) 25
4. AVERAGE POROSITY (%) 13
5. AVERAGE HORIZONTAL PERMEABILITY (MDS.) 5 RANGE 1-20
6. CONNATE WATER CONTENT (% OF PORE SPACE) 40
7. GRAVITY OF OIL (API) 37 VISCOSITY NO AVAILABLE

II. PRIMARY PRODUCTION HISTORY

1. DATE FIRST WELL COMPLETED ON LEASE (S) JANUARY, 1936
2. OIL, GAS, WATER PRODUCTION BY MONTHS SINCE DISCOVERY. (GRAPHICALLY AS WELL AS IN TABULAR FORM.)
3. STATE OF DEPLETION OF PROJECT AREA STRIPPER
4. NUMBER OF PRODUCING WELLS ON EACH LEASE IN PROJECT AREA 78
5. AVERAGE DAILY OIL PRODUCTION PER WELL AT PRESENT TIME 4 BARRELS
6. CUMULATIVE OIL PRODUCTION TO DATE FROM LEASE (S) 6,363,944

III. RESULTS EXPECTED

1. ESTIMATED ORIGINAL OIL IN PLACE (BBLs.) 49,000,000
2. ESTIMATE OIL SATURATION AT PRESENT TIME (% OF PORE SPACE) 43
3. ESTIMATED RESIDUAL OIL SATURATION AT ABANDONMENT 31%
4. ESTIMATE ULTIMATE ADDITIONAL OIL THAT WILL BE RECOVERED AS A DIRECT RESULT OF INJECTION (BBLs.) 5,000,000

IV. INJECTION

1. SOURCE OF INJECTED WATER (FORMATION, DEPTHS) SANTA ROSA @ 800'
2. FRESH OR SALT WATER BRACKISH (NOT POTABLE)
3. FLOOD PATTERN AND SPACING 80 ACRE 5 SPOT
4. INITIAL INJECTION PRESSURE TO BE USED (PSI) 1850
5. ESTIMATE INITIAL PER WELL RATE OF INJECTION (BBLs.) 300
6. SEE EXHIBIT "D" FOR INJECTION WELL CASING AND CEMENTING PROGRAM.

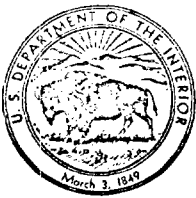
The map displays the Gulf of Mexico and its surrounding landmasses, including the United States, Mexico, and Central America. Key features include:

- Oil Fields:** Numerous oil fields are labeled, such as Samedon, Cont'l, Amerasia, A.G. Carter, Fed, B. Oil, Gulf, and others. Some fields are marked with numbers (1-10) and letters (A, B, C).
- Pipelines:** Several pipelines are shown, including the T.P. Coal & Oil, and others connecting different regions.
- Infrastructure:** The map shows various infrastructure elements, including roads, railways, and ports.
- Geographical Features:** The Gulf of Mexico is the central body of water, with the Yucatan Peninsula and Central America visible to the south.
- Grid System:** The map is divided into sections by a grid, with labels for each section (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100).

AMBASSADOR OIL CORPORATION
LANGLIE MATTIX UNIT AREA
LEA CO. NEW MEXICO

- PENROSE PROD.
- PENROSE INJ
- GRAYBURG PROD
- PROPOSED INJ.

FLOOD NO. 36



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

245
FEB - 4 1963

Ambassador Oil Corporation
P. O. Box 9338
Fort Worth 7, Texas

Attention: Mr. E. A. Riley *HA*

Gentlemen:

Your undated application, filed November 20, 1962, with the Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of 3,880 acres, more or less, in Lea County, New Mexico, as logically subject to operation under unitization provisions of the Mineral Leasing Act, as amended. The unit area contains 280.00 acres (7.21 percent) of Federal land, 680.00 acres (17.53 percent) of State of New Mexico lands, and 2,920.00 acres (75.26 percent) of patented lands.

Unitization will be limited to the Langlie-Mattix zone as identified in section 2 (h) of the proposed unit agreement form. The unit area has been developed by 95 oil wells completed in the formation to be unitized of which 75 are currently on producing status. Participation will be based upon ultimate primary recovery as defined by section 2(k) of the unit agreement form. You estimate that the proposed water flood project under unitized operations will result in the recovery of 5 million barrels of oil over and above that recoverable by primary methods.

The land outlined on your plat marked "Langlie-Mattix Unit Area, Lea County, New Mexico", will be acceptable as a logical unit area for secondary recovery operations with the addition of the NW $\frac{1}{4}$ sec. 28, T. 22 S., R. 37 E., N.M.P.M., which will increase the unit area to 3,920 acres, more or less. The location of this tract requires its inclusion in the unit area hereby designated.

Your proposed form of unit agreement will be acceptable if modified as marked in colored pencil and/or attached rider. One copy of the marked form is returned herewith, and the remaining copies are retained for distribution to the appropriate offices of the Geological Survey. Please contact the State of New Mexico before soliciting joinders.

In the absence of any type of land requiring special provisions or any objection not now apparent, a duly executed agreement conformed to the marked copy, approved by the appropriate officials of the State of New Mexico, and accompanied by an acceptable allocation schedule calculated in accordance with the basic participation formula, will be approved if submitted in approvable status within a reasonable time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have 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 format of the sample exhibits attached to the 1961 reprint of the standard form of unit agreement should be followed closely in preparation of Exhibits A and B.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "John B. Baker".

Acting Director

State of New Mexico



Commissioner of Public Lands



E. S. JOHNNY WALKER
COMMISSIONER

2954 B

OPERATIONS	
SEP 24 1962	
<input type="checkbox"/> Exec:	
<input type="checkbox"/> Print:	
<input type="checkbox"/> Sec:	
<input type="checkbox"/> Acq:	
<input type="checkbox"/> Adm:	
<input type="checkbox"/> Prod:	
<input type="checkbox"/> Mat:	
<input type="checkbox"/> Per:	
<input type="checkbox"/> FILE	

BOX 791
SANTA FE, NEW MEXICO

September 21, 1962

Ambassador Oil Corporation
P. O. Box 9338
Ft. Worth 7, Texas

Re: Proposed Langlie-Mattix
Penrose Sand Unit, Lea
County, New Mexico

Attention: Mr. E. A. Riley

Gentlemen:

We have received Proposed Langlie-Mattix Penrose Sand Unit Agreement, Lea County, New Mexico, together with Exhibits "A", "B", and "C".

This office has not received a letter of designation on the proposed unit area from the United States Geological Survey nor have we received the \$60.00 filing fee for this Unit.

We must request that the selection of a successor Unit Operator, under Sec. 10, require approval by the Commissioner of Public Lands.

We do not approve the Operating Agreement.

We will approve this proposed unit form as to form and content if the aforementioned change is made, our approval being subject to like approval by the United States Geological Survey.

Ambassador Oil Corporation
P. O. Box 9338
Ft. Worth 7, Texas
September 21, 1962
(page 2)

When this unit is presented for final approval we will require a statement from Ambassador Oil Corporation as to the tracts qualified together with an original ratified copy of the Unit Agreement and one originally signed copy of the Operating Agreement. We will require one other copy of the Unit Agreement which may be a fully conformed copy submitted after approval by the United States Geological Survey.

Very truly yours,

E. S. JOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

Marian M. Rhea

BY:

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

ESW/mmr/v