

CASE RECORD FILE

#264

KEWANEE OIL COMPANY

MAIL ROOM OFFICE 300

P. O. BOX 8289

TULSA 1, OKLAHOMA

NOV 24 1954

November 24, 1954

Re: Four Mile Unit Agreement
Chaves County, New Mexico
File No. 14-08-001-332

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

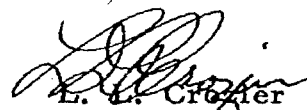
Attention: Mr. W. B. Macey,
Secretary - Director

Dear Sir:

We are in receipt of your letter dated November 16, 1954, approving an extension of time in which to commence drilling operations on a second test well in the above captioned unit providing like approval is obtained from the Director of the United States Geological Survey and the New Mexico Commissioner of Public Lands. Attached please find photo copy of this agreement showing the United States Geological Survey's approval for extension to May 16, 1955. We note on the letter from the New Mexico Commissioner of Public Lands dated November 17, 1954, that you were furnished with a copy of their approval.

We shall be happy to supply you with any additional information or material needed to complete your file in this connection.

Yours very truly,



L. L. Crozier
Exploration Department

/bm
Encl.



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

NOV 19 1954

KEWANEE OIL CO.			
EXPLORATION DEPT.			
NOV 22 1954			
I.R.W.	<input checked="" type="checkbox"/>	S.M.G.	
D.E.R.		Drafting	
L.C.	<input checked="" type="checkbox"/>		
G.F.G.			
I.C.M.		FILE	

Kewanee Oil Company
Kennedy Building
Tulsa 1, Oklahoma

Gentlemen:

On November 17, 1954, Acting Director of the Geological Survey, Arthur A. Baker, approved your application for an extension of time expiring May 16, 1955, within which to commence drilling the second test well under the Four Mile unit agreement, Chaves County, New Mexico, No. 14-08-001-322.

Enclosed are two copies of the approved application for your records. It is assumed that you will furnish the State of New Mexico or any other interested principal with whatever evidence of this approval is deemed appropriate.

Your attention is called to the condition of approval on the face of the application.

Very truly yours,

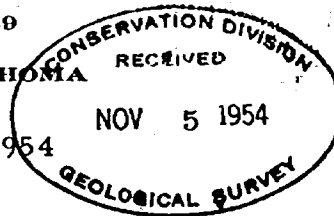
For the Director

Enclosures 2

KEWANEE OIL COMPANY

P. O. Box 2239
TULSA 1, OKLAHOMA

October 29, 1954



Re: Four Mile Unit Agreement
Chaves County, New Mexico
File No. 14-08-001-322

Director of the United States Geological Survey
New Mexico Commissioner of Public Lands
New Mexico Oil Conservation Commission

Gentlemen:

For your consideration, Kewanee Oil Company (Unit Operator of the Four Mile Unit) submits this request for an additional six months extension of time from November 16, 1954, in which to commence a second test well on the subject Unit.

Section nine of the Four Mile Unit Agreement provides that a second test well must be commenced on or before November 16, 1953, in order to continue the Four Mile Unit in force. On October 1, 1953, Kewanee Oil Company, Unit Operator, requested and was granted an extension of time to November 16, 1954.

As was stated in the October 1, 1953, request for an extension of time, Kewanee Oil Company fulfilled and exceeded the initial drilling requirements of the Four Mile Unit. A well was drilled 1062 feet below the required depth to a total depth of 6562 feet. A thorough test, including the cementing of a production string of casing, was made of the most promising potential oil bearing horizon under the location drilled. This particular location was a failure, however, and the test well was plugged and abandoned.

The Four Mile Unit embraces a particularly complex geological problem. One test well cannot serve to evaluate all of its possibilities. Hazardous drilling conditions are the general rule in the area and consequently exploration costs are exceedingly high. An appropriation in excess of \$260,000.00 has already been expended by Kewanee Oil Company as Unit Operator on this project.

KEWANEE OIL COMPANY

- 2 -

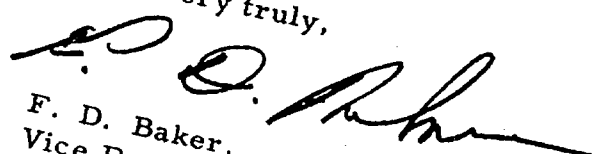
DATE October 29, 1954

A geological study of the Unit is continuing. Its complexity requires much time and effort. The scarcity of geological information in this frontier area requires that time be allotted to the study of new information as it is derived.

The Humble Oil Company is currently drilling a test well several miles southeast of the Four Mile Unit, but along the same geological feature and in anticipation of the same type of trap as we believe exists within the Four Mile Unit. Time is needed to await the outcome of this test and to study its influence on the Four Mile Unit, thus enabling Kewanee Oil Company, as Unit Operator, to continue additional geological study of the area and to attempt a thorough geological evaluation of the Unit in an economical and practical manner.

We wish to thank you for your consideration of this matter.

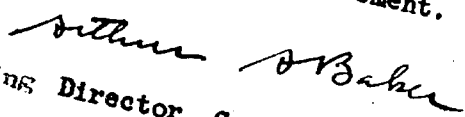
Yours very truly,


F. D. Baker,
Vice President

SDS/bm

Date approved NOV 17 1954

Approved with the warning that further requests for extension of time may not be considered favorably without stronger showings of progress toward the objectives of the unit agreement.


Acting Director, Geological Survey

November 17, 1954

*file
case 264*

Kewanee Oil Company
P.O. Box 2239
Tulsa 1, Oklahoma

Attention: Mr. F. D. Baker, Vice President

Re: Four Mile Unit Agreement
Chaves County, New Mexico
Your File: 14-08-001-332

Gentlemen:

We have your application dated October 29, 1954, requesting six months additional time, from November 16, 1954, in which to commence drilling operations on a second test well in the above captioned unit agreement. Your request is approved on this date provided like approval is obtained from the United States Geological Survey and Oil Conservation Commission.

One approved copy of the application is inclosed herewith.

Very truly yours,

E. B. WALKER
Commissioner of Public Lands

cc: United States Geological Survey
Roswell, New Mexico (3)
Oil Conservation Commission
Santa Fe, New Mexico

C
O
P
Y

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

November 16, 1954

Kewanee Oil Company
P. O. Box 2239
Tulsa 1, Oklahoma

Attention: Mr. F. D. Baker, Vice President

Re: Four Mile Unit Agreement
Chaves County, New Mexico
File No. 14-08-001-332

Gentlemen:

Your application dated October 29, 1954, requesting six months additional time, from November 16, 1954, in which to commence drilling operations on a second test well in the subject unit is this date approved by the New Mexico Oil Conservation Commission, subject to like approval by the Director of the United States Geological Survey and by the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the application is herewith returned.

Yours very truly,

W. B. Macey
Secretary - Director

WBM:jh

encl.

C
O
P
Y

KEWANEE OIL COMPANY

MAIN OFFICE OCC
P. O. BOX 2239

1954 NOV 1 TULSA 1, OKLAHOMA
8:43

October 29, 1954

*approved 11/5/54
file
conceded*

Re: Four Mile Unit Agreement
Chaves County, New Mexico
File No. 14-08-001-322

Director of the United States Geological Survey
New Mexico Commissioner of Public Lands
New Mexico Oil Conservation Commission

Gentlemen:

For your consideration, Kewanee Oil Company (Unit Operator of the Four Mile Unit) submits this request for an additional six months extension of time from November 16, 1954, in which to commence a second test well on the subject Unit.

Section nine of the Four Mile Unit Agreement provides that a second test well must be commenced on or before November 16, 1953, in order to continue the Four Mile Unit in force. On October 1, 1953, Kewanee Oil Company, Unit Operator, requested and was granted an extension of time to November 16, 1954.

As was stated in the October 1, 1953, request for an extension of time, Kewanee Oil Company fulfilled and exceeded the initial drilling requirements of the Four Mile Unit. A well was drilled 1062 feet below the required depth to a total depth of 6562 feet. A thorough test, including the cementing of a production string of casing, was made of the most promising potential oil bearing horizon under the location drilled. This particular location was a failure, however, and the test well was plugged and abandoned.

*5500'
6562'*

The Four Mile Unit embraces a particularly complex geological problem. One test well cannot serve to evaluate all of its possibilities. Hazardous drilling conditions are the general rule in the area and consequently exploration costs are exceedingly high. An appropriation in excess of \$260,000.00 has already been expended by Kewanee Oil Company as Unit Operator on this project.

Ken

KEWANEE OIL COMPANY

DATE October 29, 1954

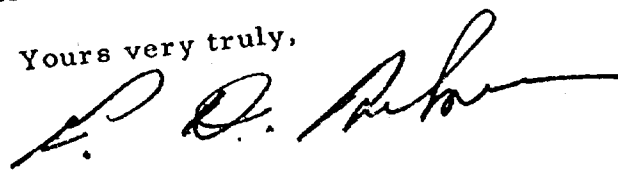
- 2 -

A geological study of the Unit is continuing. Its complexity requires much time and effort. The scarcity of geological information in this frontier area requires that time be allotted to the study of new information as it is derived.

The Humble Oil Company is currently drilling a test well several miles southeast of the Four Mile Unit, but along the same geological feature and in anticipation of the same type of trap as we believe exists within the Four Mile Unit. Time is needed to await the outcome of this test and to study its influence on the Four Mile Unit, thus enabling Kewanee Oil Company, as Unit Operator, to continue additional geological study of the area and to attempt a thorough geological evaluation of the Unit in an economical and practical manner.

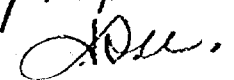
We wish to thank you for your consideration of this matter.

Yours very truly,



F. D. Baker,
Vice President

SDS/bm

APPROVED BY Original approved by W.B. Macey, 11/18/54


February 4, 1954

C
O
P
Y

Kewanee Oil Company
Kennedy Building
P. O. Box 2239
Tulsa 1, Oklahoma

Re: Four Mile Unit Agreement
Chaves County, New Mexico

Gentlemen:

This will acknowledge receipt of your letter of recent date which has reference to your application dated October 1, 1953 requesting a twelve month extension from and after November 16, 1953 for the beginning of a second test well on the above captioned unit agreement. Our office had allowed you a six month extension on December 17, 1953.

We have reconsidered your application and it has been decided to grant you a twelve month extension from November 16, 1953 in accordance with your original request, provided, like consent therefor is obtained from the United States Geological Survey and Oil Conservation Commission and on file with this office.

Very truly yours,

E. S. WALKER
Commissioner of Public Lands

cc: United States Geological Survey
Roswell, New Mexico
Oil Conservation Commission
Santa Fe, New Mexico ✓

264
December 17, 1953

Keweenaw Oil Company
Kennedy Building
P. O. Box 2239
Tulsa 1, Oklahoma

Re: Four Mile Unit Agreement
Chaves County, New Mexico
Your File No. 14-08-001-322

Gentlemen:

I have carefully read your application of October 1, 1953, for extension of time of one-year from November 16, 1953, for the beginning of a second test well on the above captioned Unit Agreement. This office approves a six month extension from November 16, 1953, for a second test well on subject unit, provided, however, like consent therefor is had from the United States Geological Survey and the New Mexico Oil Conservation Commission.

Very truly yours,

E. S. WALKER
Commissioner of Public Lands

cc: U. S. Geological Survey
Roswell, New Mexico (3)
Oil Conservation Commission
Santa Fe, New Mexico (1)

C
O
P
Y

New Mexico
OIL CONSERVATION COMMISSION

GOVERNOR EDWIN L. MECHEM
CHAIRMAN
LAND COMMISSIONER E.S. WALKER
MEMBER
STATE GEOLOGIST R.R. SPURRIER
SECRETARY AND DIRECTOR



P. O. BOX 871
SANTA FE, NEW MEXICO

RS
LW
264

MEMORANDUM:

TO: R. R. Spurrier and W. B. Macey
FROM: Elvis A. Utz
SUBJECT: Four Mile Unit Agreement - Chaves County

Kewanee has asked for a one (1) year extension on the above captioned unit beginning November 16, 1953, during which time they will of course evaluate geological information to determine whether or not they will drill a second well. They state they are concerned with geological information from two wells; the Stanolind #1 Thorn Unit and the Continental #1 East Texas Hill. The first well was temporarily abandoned 9-14-53 at 4646' in lime and shale, which may have been Pennsylvanian, at least it is below the Abo. The Continental well was drilling at 7920' in lime and chert, 10-21-51. In view of this, my first opinion would be ⁷⁶⁴⁷ six months should be sufficient time to evaluate the information on these two wells as well as their well which was completed in May. 512

I am inclined to recommend a one (1) year extension as requested for the following reasons:

1. This unit is located in an area which is expensive in which to operate and which has not shown much promise.
2. By allowing only six months it might cause them to give up the unit rather than drill another well.
3. I have no reason to believe that this is an acreage-holding scheme rather than a sincere desire to further evaluate the area.

Mr. Ed Canfield tentively recommended a one (1) year extension, but is quite willing to go along with either six months or a year. Mr. Rhodes and Mr. Trujillo of the State Land Office are agreeable to one year.

November 4, 1953

ir

14-10-53
Nov 16, 1953 to Nov 16, '54

15-15-19E

T. A. Lums & Blaine, T. D.

③ 3748

T. K. - 610

T. DR - 670
1950

7. Abo - 2450

21. 6310 (cont.)

Cons. 9-14-53

Continental 1, 2 Text Well
1-225-21E

1-225-21E

Drilling 7920. Lin + Chert.
10-21-53

10-21-53

Clare 204
Cable - R-62

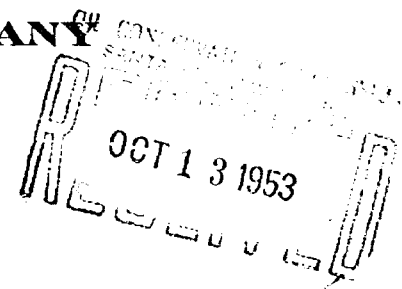
KEWANEE OIL COMPANY

KENNEDY BUILDING

P. O. BOX 2289

TULSA 1, OKLAHOMA

October 1, 1953



Re: Four Mile Unit Agreement
Chaves County, New Mexico
File No. 14-08-001-322

Extended 1 year
ec

Director of the United States Geological Survey
New Mexico Commissioner of Public Lands
New Mexico Oil Conservation Commission

Gentlemen:

Please consider this request by Kewanee Oil Company (Unit Operator, Four Mile Area) for a one-year extension of drilling requirements from November 16, 1953, for a second test well on subject Unit.

Pursuant to the terms of the Four Mile Unit Agreement (Sec. 9) a second test well must be commenced on or before November 16, 1953.

Kewanee Oil Company has fulfilled initial drilling requirements provided for in the Four Mile Unit Agreement by drilling a test well to a total depth of 6562 feet, having tested the primary objective horizon (Fusselman formation). The well was plugged and abandoned on May 16, 1953. Kewanee drilled this test well to a depth 1062 feet below the maximum depth provided for under the Agreement.

The Four Mile Unit is a complex geological problem in a sparsely explored area of hazardous drilling conditions, and as a result, abnormally high development costs. Kewanee has thus far expended monies in excess of \$250,000.00 on this project.

We feel that the area has not been condemned by the initial well, and believe that the Unit should be continued intact pending the interpretation and geological significance of other deep test wells presently drilling in the region. The structural and stratigraphic relationships between these wells will have a regional bearing on the complexities of faulting and folding closely correlative to the Four Mile Unit Area. The wells concerned are (1) the Stanolind No. 1 Thorn Unit, Sec. 15, T-21-S, R-14-E; and (2) the Continental No. 1 East Texas Hill Unit, Sec. 1, T-22-S, R-21-E.

7-14-53 T.D. 4246 P.A. 7-14-53
Edley - 72200 P. 10-1-53

KEWANEE OIL COMPANY

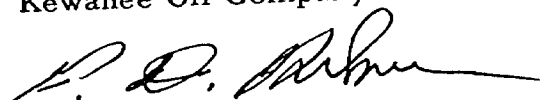
DATE October 1, 1953

-2-

Our request for a one-year extension from November 16, 1953, for the beginning of a second test well is necessary to provide time for Kewanee Oil Company and working interest owners to finish geological work in progress, to contemplate further geological work that may be warranted and to further consider the most economical and practical measures for continuing our conquest of this problem.

Yours very truly,

Kewanee Oil Company



F. D. Baker,
Vice-President

FDB/bm

STATE OF NEW MEXICO
OFFICE OF STATE GEOLOGIST
SANTA FE, NEW MEXICO

March 22, 1951

C
O
P
Y

Mr. John E. Cochran, Jr.
Carper Building
Artesia, New Mexico

RE: Case 264 - Kewanee Oil Company
"Four Mile Unit" Agreement

Dear Mr. Cochran:

We are enclosing signed copy of Order R-62 approving the captioned case, together with Certificate of Approval signed by Guy Shepard, Commissioner of Public Lands of the State of New Mexico as of March 20, 1951.

Very truly yours,

Secretary and Director

bpw

My certificate is attached and forwarded

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 264
ORDER No. R-62

THE APPLICATION OF KEWANEE OIL COMPANY
FOR APPROVAL OF THE "FOUR MILE UNIT" AGREEMENT
COVERING 14,238.96 ACRES OF LAND IN T. 18 S,
R. 18 E AND T. 19 S, R. 18 E, IN ACCORDANCE WITH
PLAT ATTACHED TO THE APPLICATION, ALL
LOCATED IN CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10:00 a. m. on the 20th day of
March 1951 before the Oil Conservation Commission pursuant to notice here-
tofore duly given by said Commission;

The Commission having heard and considered testimony adduced at
said hearing, being fully advised in said premises:

FINDS that the "Four Mile Unit" plan will in principle tend to promote
the conservation of oil and gas, and a prevention of waste;

IT IS THEREFORE ORDERED:

That the order herein shall be known as the:

"FOUR MILE UNIT AGREEMENT ORDER"

Section 1. (a) That the Unit herein shall be known as the "Four Mile
Unit" Agreement, and shall hereinafter be referred to as the Unit.

(b) That the plan by which the unit shall be operated shall be embraced in
in the form of unit agreement for the development and operation of the "Four
Mile Unit" area referred to in the petitioner's petition and filed with said
petition, and such plan shall be known as the "Four Mile Unit" Agreement Plan.

Section 2. That the "Four Mile Unit" Agreement Plan shall be and is
hereby approved in principle as a proper conservation measure; provided,
however, that notwithstanding any of the provisions contained in said Unit
Agreement, this approval of said agreement shall not be considered as
waiving or relinquishing in any manner any rights, duties or obligations
which are now or may hereafter be vested in the New Mexico Oil Conservation
Commission by law relative to the supervision and control of operations for
exploration and development of any lands committed to said "Four Mile Unit"
Agreement or relative to the production of oil and gas therefrom.

Section 3. (a) That the Unit Area shall be:

New Mexico Principal Meridian

T. 18 S, R. 18 E

Section 1, Lots 7, 8, 9 and 10 and S/2;
Section 11, SE/4;
Section 12, 13 and 14, all;
Section 15, SE/4;
Section 21, SE/4;
Secs. 22 and 23, all;
Section 24, N/2, SW/4;
Section 25, W/2;
Sections 26 and 27, all;
Section 28, E/2;
Secs. 34 and 35, all;
Section 36, W/2'

T. 19 S, R. 18 E

Sec. 1, lots 3 and 4, S/2 NW/4, SW/4;
Secs. 2 and 3, all;
Secs. 10 and 11, all;
Sec. 12, W/2, S/2 SE/4;
Secs. 13 and 14, all;
Sec. 15, N/2 NE/4;
Sec. 23, NE/4;
Secs. 24 and 25, all,

in Chaves County, New Mexico, and containing 14,238.96 acres,
more or less.

(b) The Unit area may be enlarged or diminished as
provided in said Plan.

Section 4. That the Unit operator shall file with the Commission an
executed original, or executed counterparts thereof, of the "Four Mile
Unit" Agreement not later than 30 days after the effective date thereof.

Section 5. That any party owning rights in the unitized substances who
does not commit such rights to said Unit Agreement before the effective date
thereof may thereafter become a party thereto by subscribing to such
Agreement or a counterpart thereof. The Unit Operator shall file with the
Commission within 30 days an original of any such counterpart.

Section 6. That the order herein shall become effective on the first
day of the calendar month next following the approval of Commissioner of
Public Lands and the Secretary of the Interior and shall terminate ipso
facto on the termination of said Unit Agreement. The last Unit Operator
shall immediately notify the Commission in writing of such termination.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Edwin L. Mechem
EDWIN L. MECHEM, Chairman

Guy Shepard
GUY SHEPARD, Member

R. R. Spurrier
R. R. SPURRIER, Secretary

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

Case 264

(Kewanee Oil Co. for approval of "Four Mile Unit" Agreement
T. 18S, R. 18E, and T. 19S, R. 18E, Chaves County)

(Mr. Graham reads notice of publication.)

JACK R. HUFFMEIR, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. COCHRANE:

Q. Will you state your name at the Commission, please?

A Jack R. Huffmeir.

Q Where do you live, Mr. Huffmeir?

A Roswell, N. M.

Q. By whom are you employed?

A The Kewanee Oil Co.

Q In what capacity are you employed?

A New Mexico district geologist.

Q Have you testified previously before the Commission?

A No.

Q Where did you study geology?

A At the Texas Technological College at Lubbock, Texas.

Q When did you graduate from that school?

A 1938.

Q Upon your graduation what degrees were you awarded, if any?

A I have a BS degree in geology.

Q Since your graduation have you followed your profession?

A Yes.

Q Where all have you practiced your profession, Mr. Huffmeir?

A In the past five years it has been as a Permian Basin geologist, the past three years of which have been devoted almost entirely to geological problems in the State of New Mexico.

Q Now, the Kewanee Oil Co. has filed a proposed unit agreement for the development and operation of the Four Mile Unit area in Chaves County?

A Yes.

Q Where is the proposed unit located?

A In T. 18 and 19S, R. 18E, in Chaves County.

Q How many acres are involved in this unit?

A 14,238.98 acres.

Q How is the acreage divided as to state or otherwise?

A 5,760.36 acres, state; 8,078.60, federal; and 400 acres of patented acreage.

Q Now, that acreage is shown on the plat attached to the proposed unit agreement?

A Yes.

Q Now, has the proposed unit agreement been submitted to these--to the U.S.G.S. for preliminary approval?

A Yes, and the acting director of the U.S.G.S. on February

19, 1921 designated the Four Mile Unit as a logical unit for the unit plan of operation.

Q Now, in your opinion, is all of the land included in the unit area on the same geological structure?

A Yes.

Q I believe I asked a moment ago if the unit agreement had been submitted. I meant the unit area. Now, has the proposed

unit agreement been submitted to the U.S. G.S.?

A Yes, and on March 15, 1921, the acting director of the U.S.

G.S. granted preliminary approval of the unit with the exception of one suggested change of little consequence, which will

be added to the final agreement.

Q Has this proposed unit agreement been submitted to the

Commissioner of Public Lands for his preliminary approval?

A Yes. On February 28, 1921, the unit agreement was submitted

to the Commissioner of Public Lands and a tentative approval

was secured.

Q Now, in this proposed unit agreement who is designated as

unit operator?

A Kewanee Oil Co.

Q Now, in the unit agreement what, if any, drilling or deve-

lopment requirements devolve upon the unit operator?

A Well, Kewanee Oil Co. proposes to commence a well, a test

well, for oil and gas within six months of the final approval

19, 1951 designated the Four Mile Unit as a logical unit for the unit plan of operation.

Q Now, in your opinion, is all of the land included in the unit area on the same geological structure?

A Yes.

Q I believe I asked a moment ago if the unit agreement had been submitted. I meant the unit area. Now, has the proposed unit agreement been submitted to the U.S. G.S.?

A Yes, and on March 15, 1951, the acting director of the U.S. G.S. granted preliminary approval of the unit with the exception of one suggested change of little consequence, which will be added to the final agreement.

Q Has this proposed unit agreement been submitted to the Commissioner of Public Lands for his preliminary approval?

A Yes. On February 28, 1951, the unit agreement was submitted to the Commissioner of Public Lands and a tentative approval was secured.

Q Now, in this proposed unit agreement who is designated as unit operator?

A Kewanee Oil Co.

Q Now, in the unit agreement what, if any, drilling or development requirements devolve upon the unit operator?

A Well, Kewanee Oil Co. proposes to commence a well, a test well, for oil and gas within six months of the final approval

of the unit agreement; and Kewanee will locate a test within the unit area and on lands situated within the unit, to be drilled to a sufficient depth to test the Ellenberger formation, or at a lesser depth if unitized substances in paying quantities are discovered. But under the terms of the unit agreement, Kewanee, as operator, is not obligated to drill deeper than 5,500 feet.

Q In your opinion, 5,500 feet is a depth sufficient to adequately test the Ellenberger?

A Yes.

Q Mr. Huffmeir, is it your belief that operations under the unit agreement will promote efficient and economic recovery of oil and gas, if oil and gas are discovered?

A Yes.

Q Is it your further belief that development under this unit agreement would be in the interests of conservation?

A Yes.

Q Do you believe that development under the proposed unit agreement would prevent waste as defined and contemplated by the conservation statutes of New Mexico?

A Yes.

MR. COCHRANE: That is all.

CHAIRMAN SHEPARD: Any questions? Anyone have anything to say? Any statement to make?

MR. McCORMICK: This agreement has been extended to all
the owners

MR. COCHRANE: No, sir, it hasn't. (Off the record with
Mr. McCormick.)

7 CHAIRMAN SHEPARD: We will be in recess until nine o'clock
in the morning at which time we will hear Case 149.

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I HEREBY CERTIFY That the foregoing transcript of hearing
in Case 264 before the Oil Conservation Commission in Santa Fe
on March 20, 1951, is a true record to the best of my knowledge,
skill, and ability.

DATED at Albuquerque, N. M., March 28, 1951.



Notary Public

My Commission Expires 8-4-52

Run 5 Mar.
NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated hereunder, of the following public hearing to be held March 20, 1951, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico, in the Council Chamber of the City Hall.
STATE OF NEW MEXICO TO:
All named parties in the following cases and notice to the public:
Case 264
In the matter of the application of Kewanee Oil Company for approval of the "Four Mile Unit" Agreement, covering 14,238.86 acres of land in T. 18S, R. 18E and T. 19S, R. 18E, in accordance with plat attached to the application, all located in Chaves County, New Mexico.
GIVEN under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on February 28, 1951.
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION,
(Seal) R. R. SPURRIER,
Secretary.

AFFIDAVIT OF PUBLICATION

County of Chaves }
State of New Mexico, }

I, Lynn W. Croissant

Bookkeeper

Of the Roswell Daily Record, a daily newspaper published at Roswell, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not in a sup-

plement thereof for a period of.....

One weeks

beginning with the issue dated

5 March, 1951

and ending with the issue dated.....

5 March, 1951

Lynn W. Croissant
Bookkeeper

Sworn and subscribed to before me

this 6th day of.....

March, 1951

Robert H. Beck
Notary Public.

My commission expires

1-22, 1955

(Seal)

February 28, 1951

ROSWELL RECORD
SANTA FE NEW MEXICAN

RE: Notice of Publication - Case 264

Gentlemen:

Please publish the enclosed notice one time immediately on receipt of this request. Please proofread the notice carefully and send a copy of the paper carrying such notice to this office.

Upon completion of the publication, send publisher's affidavit in duplicate.

For payment, please submit statement in duplicate and sign and return the enclosed voucher (do not fill in voucher).

PLEASE PUBLISH NOT LATER THAN MARCH 5, 1951.

Very truly yours,

Secretary and Director

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held March 20, 1951, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico, in the Council Chamber of the City Hall.
STATE OF NEW MEXICO TO:
All named parties in the following cases and notice to the public:
Case 264
In the matter of the application of Kewanee Oil Company for approval of the "Four Mile Unit" Agreement, covering 14,228.46 acres of land in T. 18 S. R. 18 E and T. 19 S. R. 18 E, in accordance with plat attached to the application, all located in Chaves County, New Mexico.
GIVEN under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on February 28, 1951.
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
R. R. SPURRIER
Secretary
(SEAL)
Pub.: March 2, 1951.

Affidavit of Publication

State of New Mexico } ss.
County of Santa Fe }

I, Will Harrison, being first duly sworn, declare and say that I am the (~~Business Manager~~) (Editor) of the Santa Fe New Mexican, a daily newspaper, published in the English Language, and having a general circulation in the City and County of Santa Fe, State of New Mexico, and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 of the Session Laws of 1937; that the publication, a copy which is hereto attached, was published in said paper once ~~each week~~ ~~for 1 time~~ ~~consecutive weeks~~ ~~and on the same day of each week~~ in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement, once ~~each week~~ ~~for 1 time~~ ~~weeks consecutively~~, the first publication being on the 2nd day of March, 19 51, and the last publication on the 5th day of March, 19 51; that payment for said advertisement has been (duly made), or (assessed as court costs); that the undersigned has personal knowledge of the matters and things set forth in this affidavit.

Will Harrison
Editor/Manager

Subscribed and sworn to before me this 5th day of March, A.D., 19 51
Anna K. Ormshaw
Notary Public

My Commission expires
June 14, 1953

PUBLISHER'S BILL

32 lines, one time at \$ 3.20
lines, times, \$
Tax \$
Total \$ 3.20
Received payment,
By

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held March 20, 1951, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico, in the Council Chamber of the City Hall.

STATE OF NEW MEXICO TO:

All named parties in the following cases and notice to the public:

Case 264

In the matter of the application of Kewanee Oil Company for approval of the "Four Mile Unit" Agreement, covering 14,238.96 acres of land in T.18 S, R.18 E and T.19 S, R.18 E, in accordance with plat attached to the application, all located in Chaves County, New Mexico.

GIVEN under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on February 28, 1951.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
R. R. SPURRIER, Secretary

SEAL

LAW OFFICES
JOHN E. COCHRAN, JR.
CARPER BUILDING
ARTESIA, NEW MEXICO

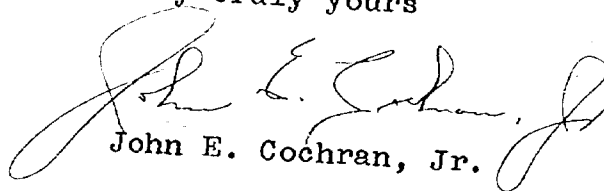
Mr. R. R. Spurrier, Secretary
Oil Conservation Commission of New Mexico
State Capitol Building
Santa Fe, New Mexico

Dear Mr. Spurrier:

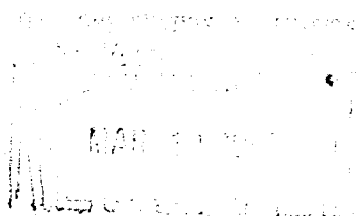
Enclosed herewith, in triplicate, is Application of Kewanee Oil Company for Approval of Unit Agreement for the Development and Operation of the Four Mile Unit Area in Chaves County, New Mexico, attached to which is proposed form of Unit Agreement to be entered into between the interested parties.

It is my understanding that hearing on this Application has been set for March 20, 1951.

Very truly yours


John E. Cochran, Jr.

JEC:rm
Encls.



3429
p. 107

KEWANEE OIL COMPANY
LAND AND GEOLOGICAL DEPARTMENT
P. O. Box 239
ROSWELL, NEW MEXICO

February 21, 1951

Handwritten: 1420-11-20
Oil Conservation Commission
Santa Fe, New Mexico

Re: Proposed Unit Area, Chaves County,
New Mexico

Gentlemen:

The Kewanee Oil Company submits this application for the designation of a Unit Area in Southwest Chaves County, New Mexico. It is suggested that the unit title should be "Four Mile Unit", so named to be identified with Four Mile Canyon, the most prominent topographic feature of the region.

The following described land is considered necessary and adequate to cover the structural and stratigraphic conditions discussed in "Exhibit A". "Exhibit A" being a geologic report and surface maps of the Prospect, also a map and schedule showing extent and nature of ownership within the proposed unit.

New Mexico Principal Meridian
Township 18 South, Range 18 East
Sec. 1, Lots 7, 8, 9 & 10; and $S\frac{1}{2}$
Sec. 11, $SE\frac{1}{4}$ Sec. 24, $N\frac{1}{2}$, $SW\frac{1}{4}$
Sec. 12, All Sec. 25, $W\frac{1}{2}$
Sec. 13, All Sec. 26, All
Sec. 14, All Sec. 27, All
Sec. 15, $SE\frac{1}{4}$ Sec. 28, $E\frac{1}{2}$
Sec. 21, $SE\frac{1}{4}$ Sec. 34, All
Sec. 22, All Sec. 35, All
Sec. 23, All Sec. 36, $W\frac{1}{2}$

Township 19 South, Range 18 East
Sec. 1, Lots 3 & 4; $S\frac{1}{2}NW\frac{1}{4}$; $SW\frac{1}{4}$
Sec. 2, Lots 1, 2, 3 & 4; $S\frac{1}{2}N\frac{1}{2}$; $S\frac{1}{2}$
Sec. 3, Lots 1, 2, 3 & 4; $S\frac{1}{2}N\frac{1}{2}$; $S\frac{1}{2}$
Sec. 10, All
Sec. 11, All
Sec. 12, $W\frac{1}{2}$; $S\frac{1}{2}SE\frac{1}{4}$
Sec. 13, All
Sec. 14, All
Sec. 15, $N\frac{1}{2}NE\frac{1}{4}$
Sec. 23, $NE\frac{1}{4}$
Sec. 24, All
Sec. 25, All

Total Acreage - 14,238.96

Page 2 - Oil Conservation Commission

A map of the proposed unit is included and is marked in distinctive colors to differentiate State, Federal and privately-owned lands.

A test well of this Area should be drilled until fluid in the Ellenburger formation is reached. There are no remaining objective horizons below this formation. The regional dips established on the Ellenburger formation and basement rocks, as determined by cross sections and regional subsurface maps, would recommend a 4650 ft. test or a 5500 ft. maximum.

Copies of the enclosed exhibits have also been forwarded to The Director of the United States Geological Survey, Washington, D. C., for approval of the Unit Area.

The Kewanee Oil Company requests that the geologic report be treated as strictly confidential.

Very truly yours,

KEWANEE OIL COMPANY

By

Jack R. Huffmyer

Encls.

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

264

August 29, 1955

C
O
P
Y

Kewanee Oil Company
P. O. Box 2239
Tulsa 1, Oklahoma

Re: Four Mile Unit
Chaves County, New Mexico

Gentlemen:

This is to advise that your request to terminate the Four Mile Unit Agreement, dated August 10, 1955, has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the Commissioner of Public Lands of the State of New Mexico and by the Director of the United States Geological Survey

One approved copy of the request is returned herewith.

Very truly yours,

W. B. Macey
Secretary-Director

WBM:jh
cc: Commissioner of Public Lands, Santa Fe
U. S. Geological Survey, Roswell

KEWANEE OIL COMPANY

FOUR MILE UNIT
CHAVES COUNTY, NEW MEXICO

GEOLOGICAL REPORT

PROSPECTIVE AREA

CHAVES COUNTY, NEW MEXICO

SUMMARY AND CONCLUSIONS

The area considered in this report demonstrates the necessary qualifications to encourage prospecting. These qualifications are outlined below and describe in detail in the body of the report.

- I. Known surface structural features believed to have closure or displacement with depth.
- II. Stratigraphic section indicates source beds and favorable reservoir conditions. Formations present are productive on the North and East sides of the Delaware Basin.
- III. Preliminary survey indicates availability of large acreage tracts at minimum cost.
- IV. Major companies are already represented in the area and future development can be expected.
- V. The comparative cost of drilling a well to a depth of 5000 to 5500 feet would adequately evaluate the prospect and is not considered prohibitive.

LOCATION

The area discussed in this report embraces a six-township block (Townships 18 and 19 South, Ranges 18 and 19 East), Chaves County, New Mexico. This is approximately 40 miles southwest of the city of Artesia, New Mexico.

HISTORY OF DEVELOPMENT

This area is enclosed by several large surface structural features, only two of which have been tested (Dunken Dome and Black Hills Anticline.)

The Texas Company completed its No. 1 Wilson-State with cable tools on the large surface anticline known as Dunken Dome (November 19, 1927,) located 310 feet from South line and 315 feet from the West line of Section 29, Twp. 17 S., Rge. 18 E. The well was abandoned at total depth of 4900', after having penetrated a complete sedimentary section from San Andres through Mississippian. Only 10 feet of Fusselman (Silurian) had been drilled when abandoned. A hole full of brackish water was encountered at total depth.

The other test in this area is the Magnolia No. 1 Black Hills Unit, located 660 feet from North line and 1980 feet from East line of Section 31, Twp. 17 S., Rge. 20 E., Chaves County. Drilled on the Black Hills Surface Anticline, this well was plugged at a total depth of 6085 feet in pre-Cambrian, after having penetrated a complete sedimentary section including 940 feet of porous dolomites of Fusselman (Silurian), and Ellenburger and Montoya (Ordovician) age. Shows of oil were found at 1650 feet. Several efforts to complete drill stem test in this zone failed because of equipment failures. A drill stem

test of the Fusselman formation from 5110-68 recovered 450 feet of slightly oil cut mud and 630 feet of salty-sulphur water. A second well is now being drilled on the Black Hills Prospect.

STRATIGRAPHY

The surface of this area is a gentle cuesta, dipping easterly. A thin loess type soil mixed with broken rock of the upper and middle San Andres formation covers the surface. Good exposures of the massive San Andres dolomites are found in arroyos throughout this area, however, the massive nature of this dolomite and the soil cover in this specific area restrict surface mapping to strike and dip methods.

The San Andres formation measures 800 feet of porous dolomites and limestones in the Magnolia No. 1 Black Hills Unit.

The Olorietta sandstone measures 50 to 70 feet of very coarse loosely cemented slightly calcareous sandstone. No shows have been known from it in this area.

The Yeso formation (Clear Fork) is marked at the top by a medium grain loosely cemented red sand. The upper 1200 feet is predominately dolomite, although bedded with considerable anhydrite, gypsum and fine sands. This interval has shown oil and gas and is one of our objective horizons. The drinkard sandy member at 2400 feet measures 150 feet of white and red loosely cemented sand with a few thin anhydrite beds. The lower 400 feet of Yeso is a broken section of dolomite, anhydrite and gray and green shales, with fine white and gray sands. The total thickness is 2050 feet.

The Abo formation is approximately 1500 feet thick. This formation in the subject area is predominately red shale with considerable fine arkosic sand and rounded pebbles of chert and granite wash. The basal section of this red shale clastic zone is also marked by coarse conglomerate beds and thin beds of pink to buff finely crystalline and nodular limestones.

PENNSYLVANIAN SYSTEM

The interval from 4150' to 4690' in the log of The Texas Company No. 1 Wilson is a zone of coarse conglomerate bedded with red shale in the upper 200 feet and bedded with black and gray shale in the lower 350 feet. Fusilinids in the upper 100 feet date this succession of shales, conglomerates and thin limestones as upper Pennsylvanian (Virgil). The black shale interval at the base of this interval is probably of lower Pennsylvanian (DeMoines) age.

MISSISSIPPIAN SYSTEM (Rancheria Formation)

This system is represented by 150 feet to 300 feet of light gray to black siliceous and argillaceous limestone with some blue and brown chert beds, especially in the upper 100 feet. Considerable black and gray calcareous and concretionary shales appear throughout this interval.

THE DEVONIAN SYSTEM is not recognized in this region.

THE SILURIAN SYSTEM (Fusselman formation)

In the log of the Magnolia No. 1 Black Hills, 400 feet of white to buff coarsely crystalline very porous rhombic dolomite, and buff sucrose cherty dolomite is recognized as of Fusselman age.

THE ORDOVICIAN SYSTEM (Montoya and Ellenburger formations)

These are recognized as 550 feet of buff, white and tan fine to coarsely crystalline slightly calcareous dolomite with good scattered porosity throughout.

Several conspicuous milky chert beds are found through this deposit.

A basal Ordovician or Cambrian sand, commonly recognized as the Bliss Sandstone of Cambrian age, appears uniformly over this area. This sand is very coarse, well sorted, rounded and frosted.

PRE-CAMBRIAN

The basement in this area is sometimes pink granite, however many wells drill through 50 to 300 feet of a green metamorphic material, commonly described as a chlorite schist.

STRUCTURE

The subject area is located at the apex of a right angle intersection of two large structural units, recognizable from surface deformation. The Y-O overthrust anticline is a marked feature of surface displacement and slight overthrust, that can be traced from the southwest quarter of Township 18 South, Range 18 East, northeastward to Township 14 South, Range 22 East, where the fault is concealed by alluvium of the Pecos Valley.

The Huapache Monocline is a predominant feature that parallels the Guadalupe Mountain front and certainly represents a line of folding or faulting that resulted from the uplift of the Guadalupe Mountains. The rate of dip change from 30° to 120° has been measured. Insufficient evidence is available to positively state that this fault and monocline trend are deep-seated features; however, published reports of the Guadalupe Mountain front show considerable block and step faulting along the escarpment and East of the Guadalupe Range.

It is my opinion that these evidences of faulting exist in the subsurface from the Guadalupe Mountains front to the Huapache Monocline trend, but do not cut the surface beds in the Huapache Monocline and Y-O Fault areas because of the positions of these features North and East of the lines of maximum stress. They could also be shallow compression features that resulted from the uplift of the Sacramento and Guadalupe Mountains. However, there is no definite data to support either reasoning. Considerable evidence is present to suspect that the maximum uplift on the pre-Cambrian in this area occurs between the Guadalupe Mountain front and the Huapache Monocline with a resulting 90° change in the direction of regional dip. (See contoured map).

Further evidence of strong structural influence in this area is shown by the change in strike of two large surface anticlines. Dunker Dome, West of the Y-O Fault trace strikes approximately N 100° W, whereas the Black Hills Anticline, East of the Y-O fault, strikes approximately N 60° E. The reversal in strike of these large surface anticlines is also indicated by subsurface contours on the top of the pre-Cambrian.

If we can assume that displacement or folding occurs with depth along the Huapache Monocline and the Y-O Fault zone, then a favorable fault or anticlinal trap could be expected in the subject area near the junction of these features, and the greatest sub-sea datum on top of the Silurian and Ellenburger members could be anticipated in this area.

RESERVOIR ROCKS

The only important reservoir rocks in this area would be Mississippian or older.

The San Andres is exposed at the surface and is flooded with fresh water in low lying porous areas.

The Yezo formation has shown slight staining in some intervals, however the thinbedded nature of these dolomites with evaporites and silty sandstones do not present a favorable objective.

The Pennsylvanian System in this area contains too much red shales and coarse shaly clastic material to provide favorable reservoirs.

The Mississippian System may have objective horizons in the form of small bioherm reefs. Several small structures of this type are exposed in outcrops on the west scarp of the Sacramento Mountains.

The Fusselman Formation (Silurian) and Montoya and Ellenburger formations (Ordovician) would be the most favorable objective horizons. A test of this area would penetrate as much as 900 feet of massive dolomitic limestone with porosity ranging from pinpoints to cavernous solution channels. The nearest Devonian and Silurian oil production is in the Chisum pool, east of Roswell, 70 miles northeast of the subject area. The Montoya and Ellenburger also produce oil and gas in several fields on the Central Basin Platform.

The formation fluids recovered from drill stem tests of the Fusselman and Ellenburger formations in wells north of the Huisache Monocline and east of the Y-O Fault are salt water and salty-sulphur water.

These same formations have carried brackish water and fresh water in the two wells that have been drilled south and west of these regional features. Namely, Texas No. 1 Wilson-State (Dunken Dome Test), and the Pure No. 1 Hunter, northwest Culbertson County, Texas.

It is believed that this change in formation water characteristics would be strong evidence that deep-seated faulting was present between wells where marked change in water salinity occurs.

DEPTH OF TEST WELL

A proper test of this Prospect should include the porous interval at the top of the Ellenburger formation as observed in the sample logs of the Magnolia No. 1 Black Hills Unit and the Standard Oil Company of Texas No. 1 Blaize (Scarp Unit) wells. Water found in this horizon would adequately condemn the location.

The topographic position of this Prospect, surface dip and the rate of dip of the Fusselman formation as established by the cross sections, included with this report, indicate that the Ellenburger porosity could be expected at or above 4650 feet.

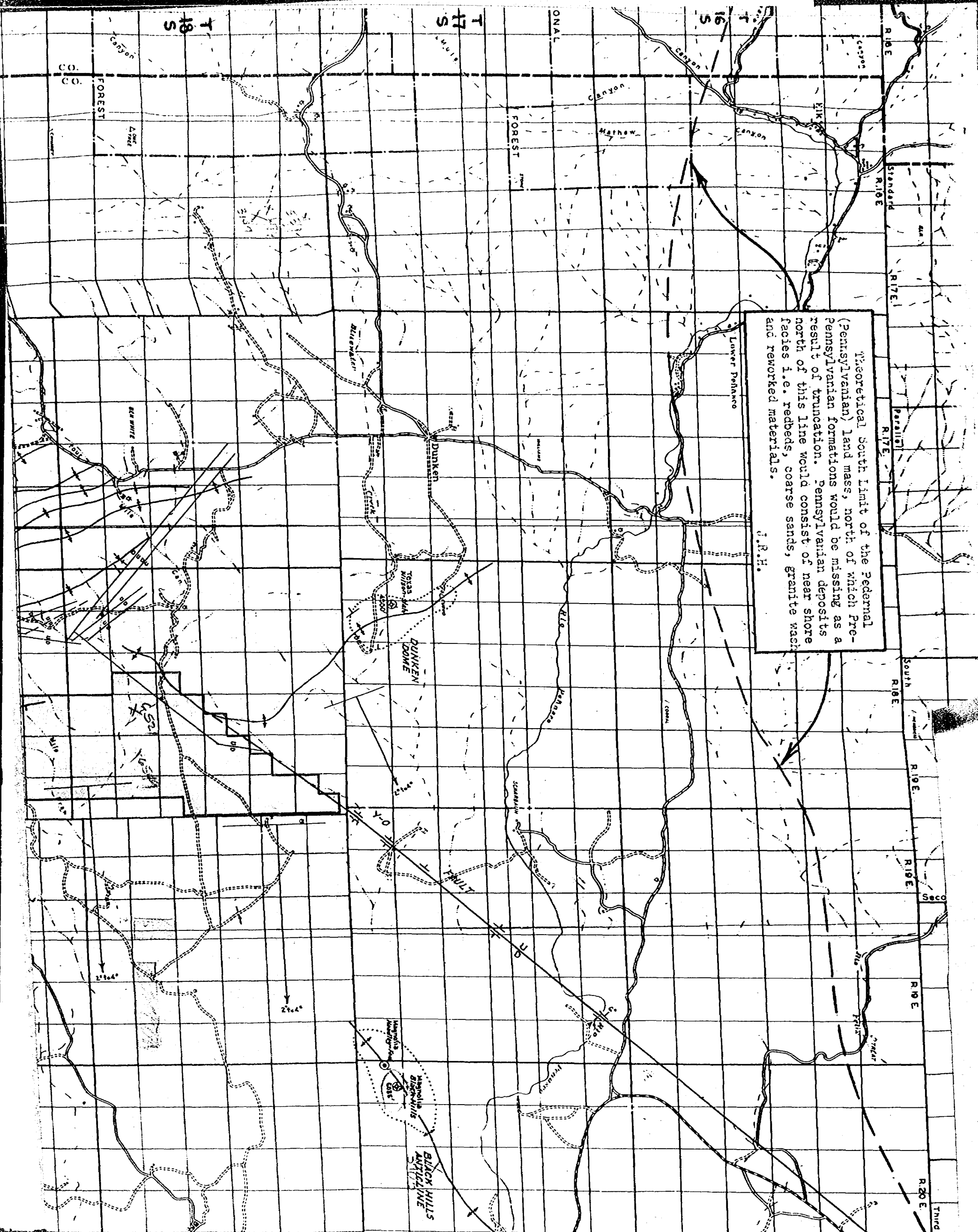
An estimated total depth of 5500 feet would be more than adequate to reach this objective.

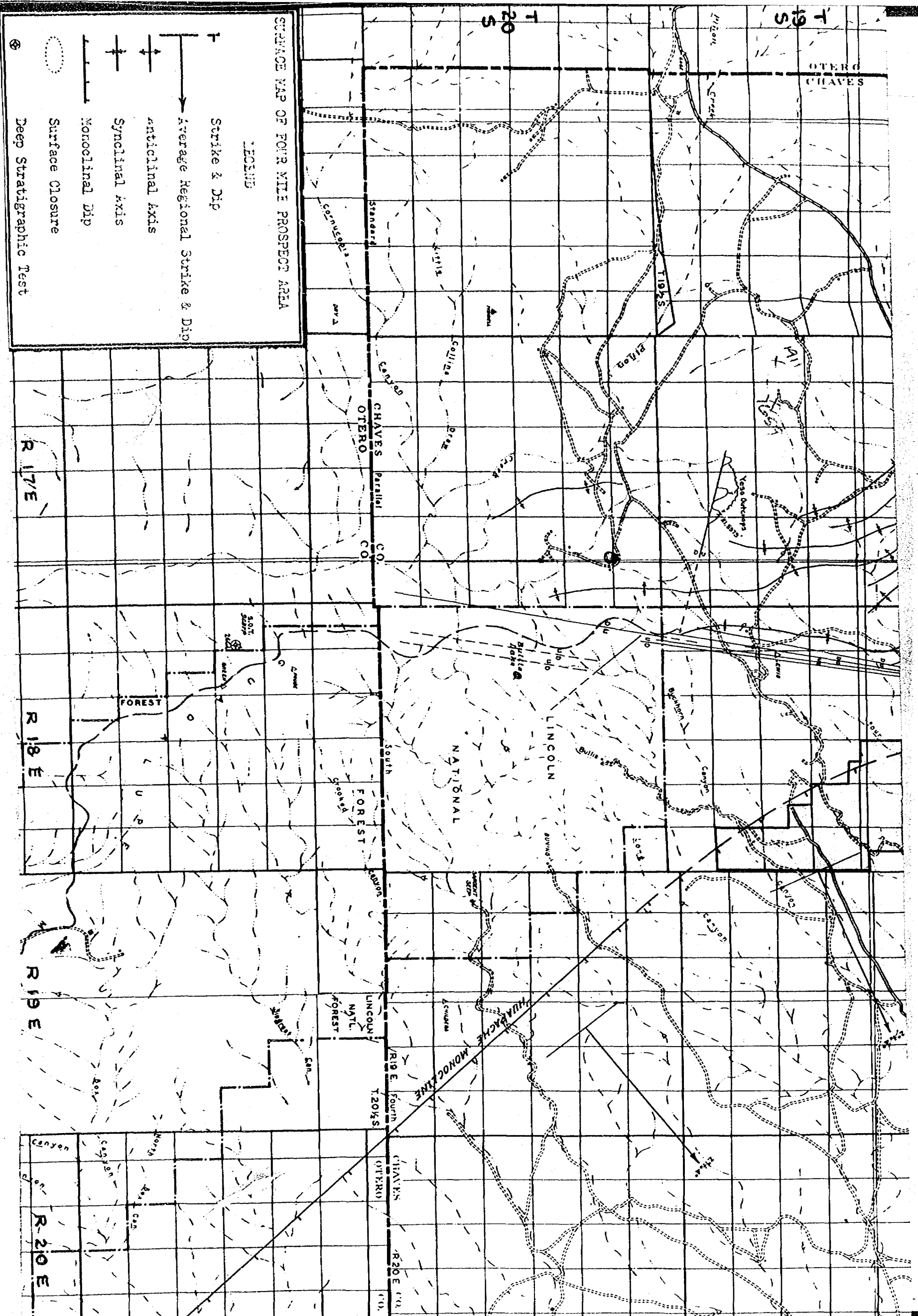
Respectfully submitted,

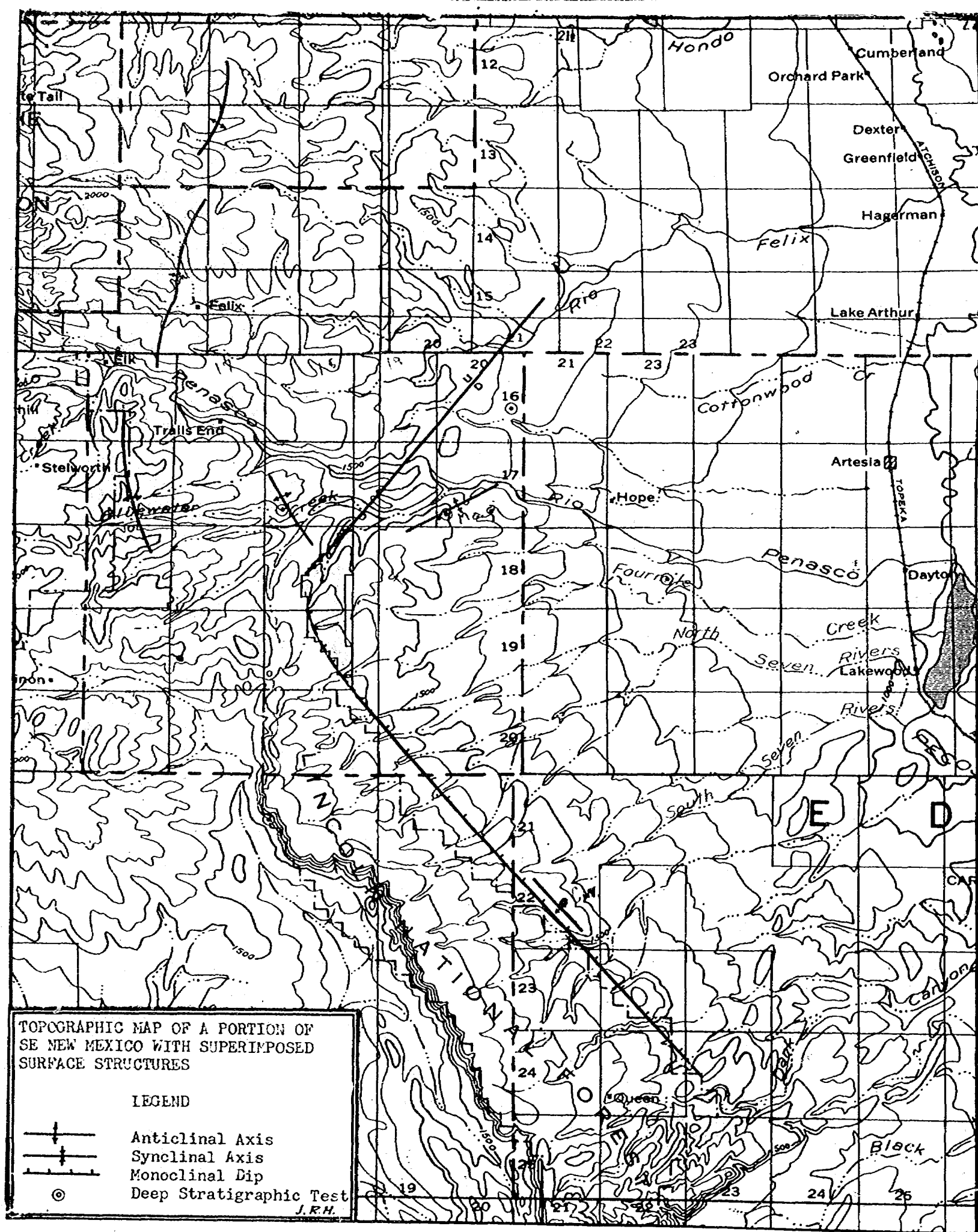
Jack R. Huffmeyer
Jack R. Huffmeyer

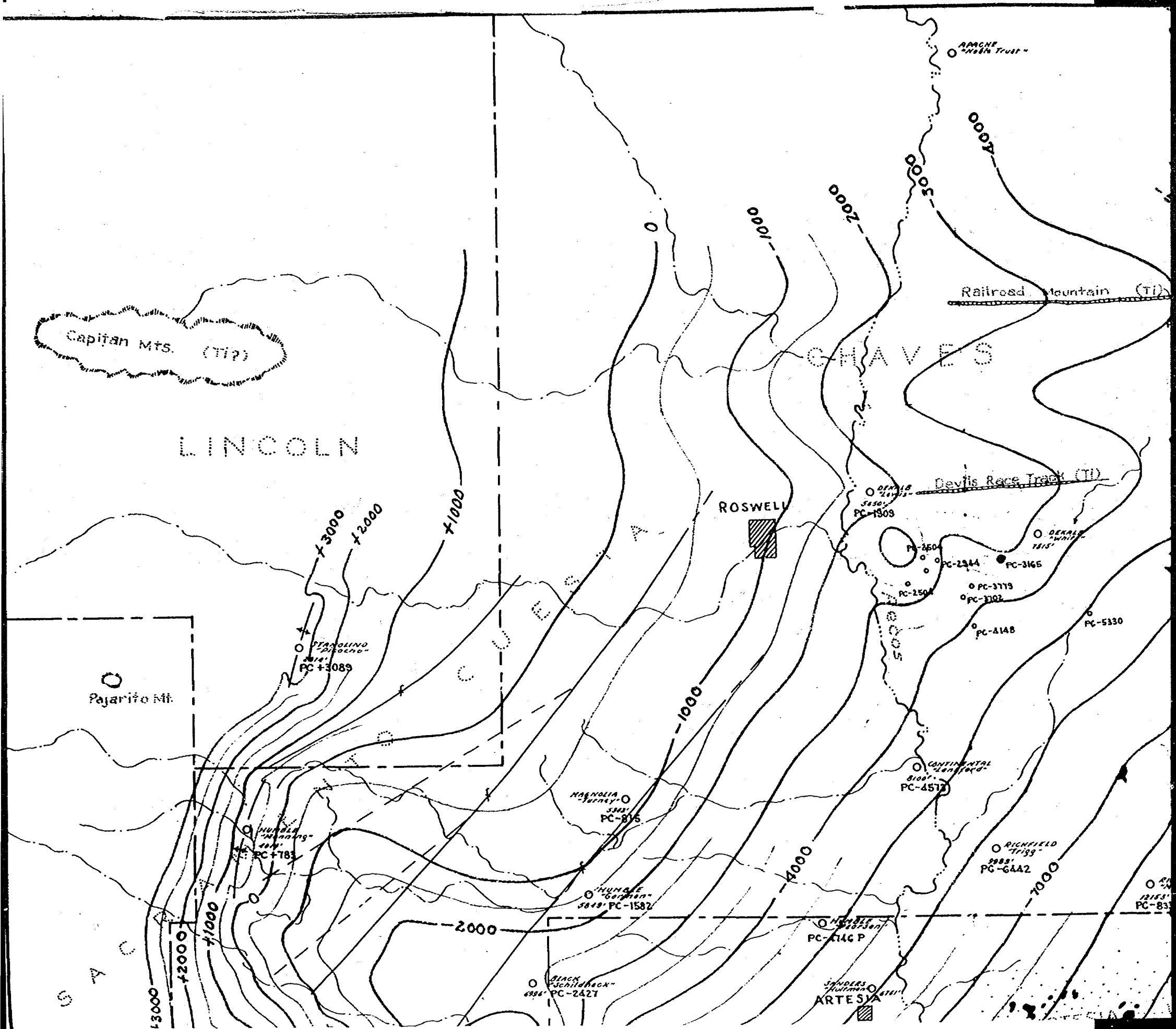
Theoretical South limit of the Pedernal (Pennsylvanian) land mass, north of which Pre-Pennsylvanian formations would be missing as a result of truncation. Pennsylvanian deposits north of this line would consist of near shore facies i.e. redbeds, coarse sands, granite wash and reworked materials.

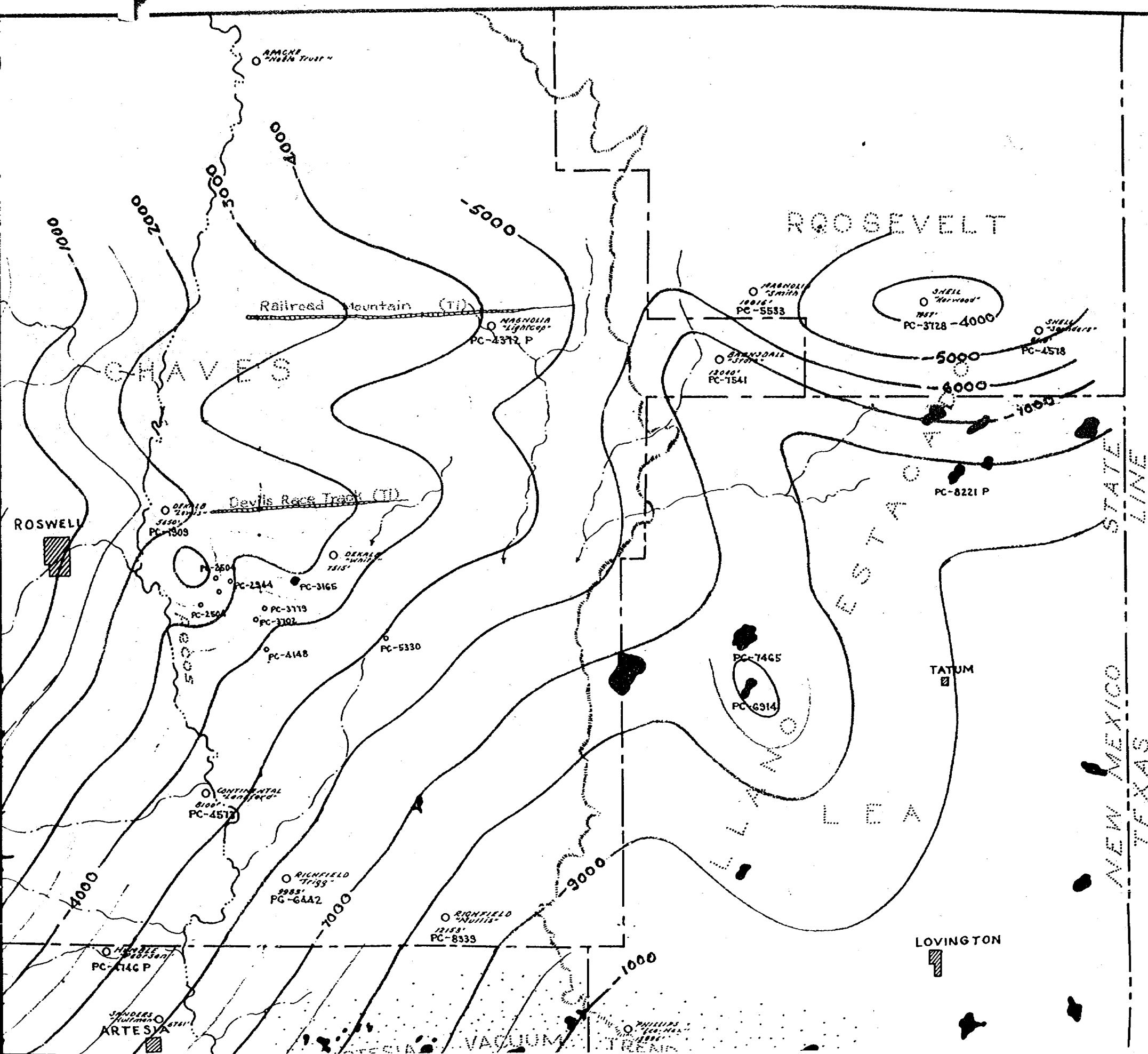
J.R.H.

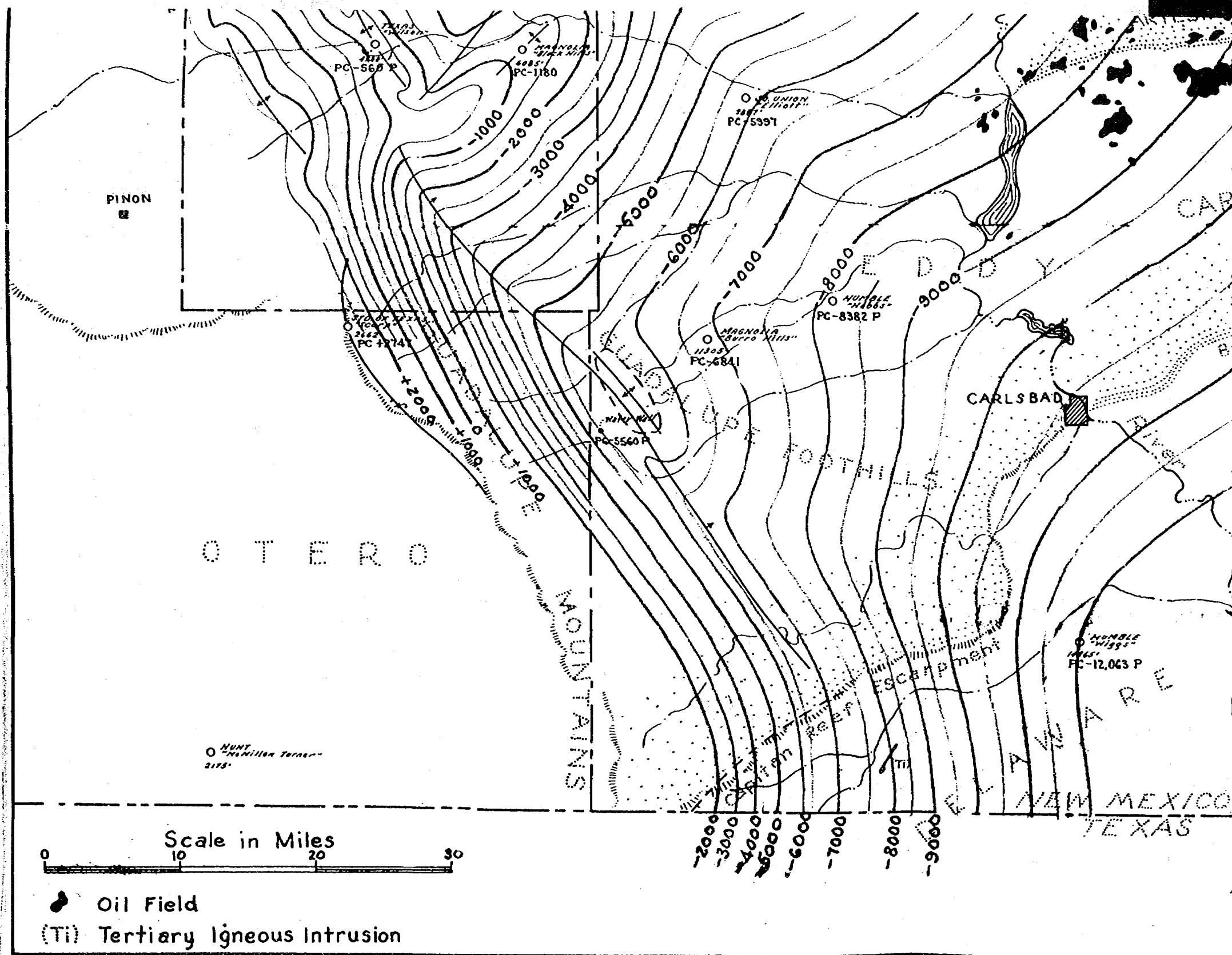


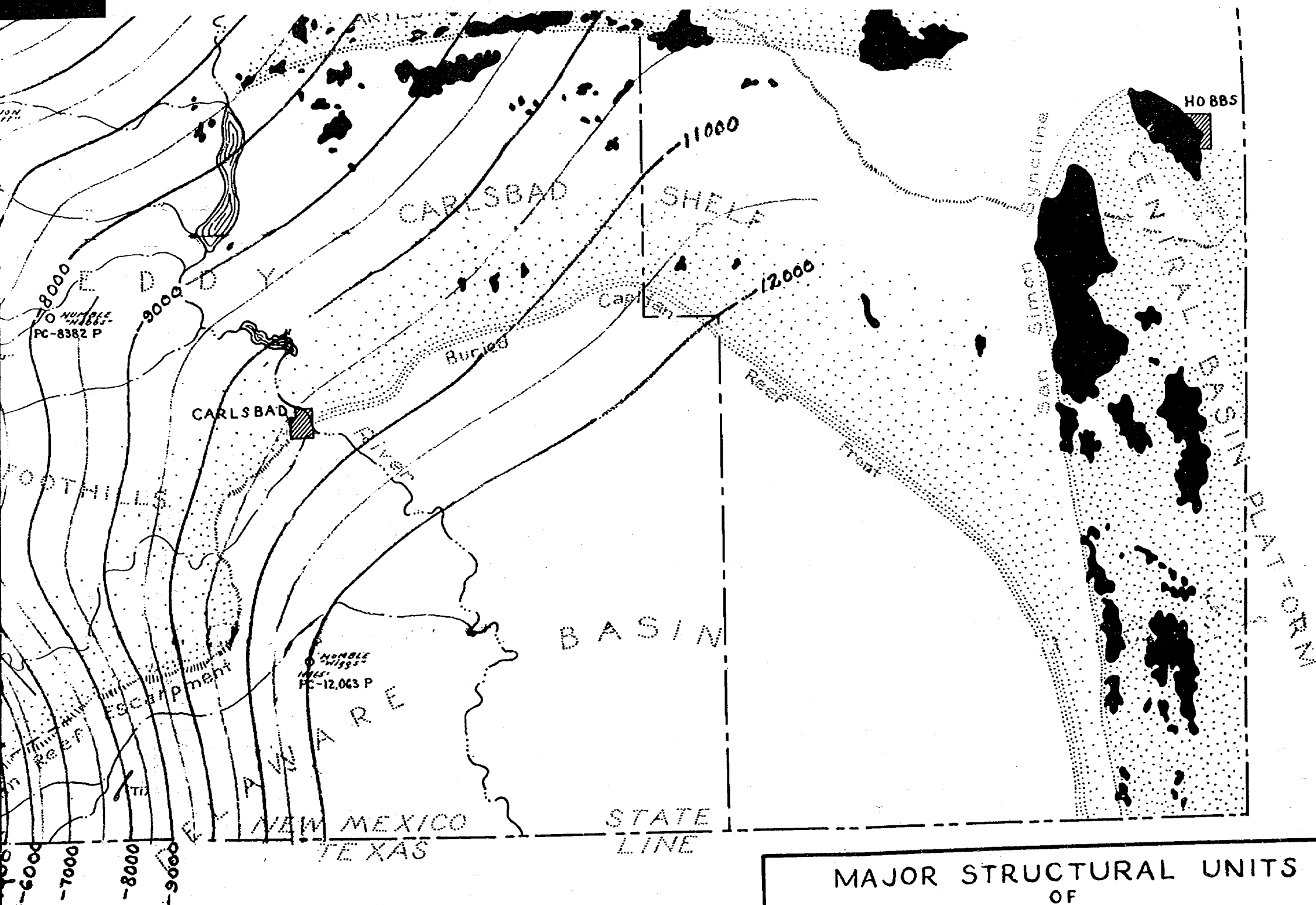












MAJOR STRUCTURAL UNITS
OF
SOUTHEASTERN NEW MEXICO
Pre-CAMBRIAN SURFACE Contour Int 500'

J. E. Hollinger

~~_____~~

KEWANEE OIL COMPANY

P. O. BOX 2289

TULSA 1, OKLAHOMA

October 12, 1955

file #264

TERMINATED

Re: (Four Mile Unit Agreement)
Chaves County, New Mexico
Department Contract No.
14-08-001-322
Dated March 15, 1951
Approved September 23, 1952

Director of the Oil Conservation Commission
State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Dear Sir:

The above captioned Unit Agreement has been terminated effective as of September 1, 1955. In order to complete your files, we are enclosing a photocopy of the termination approved by the Director of the United States Geological Survey, New Mexico Commissioner of Public Lands and New Mexico Oil Conservation Commission.

Yours very truly,

L. L. Crozier
L. L. Crozier

Chief Landman
Exploration Department

LLC

LLC/bm

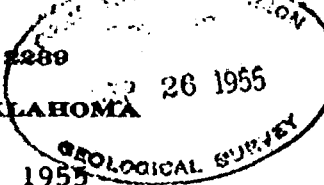
Encl.

RECEIVED
LAND OF **KEWANEE OIL COMPANY**

120 300000

P. O. Box 2289
TULSA 1, OKLAHOMA

August 10, 1955



RECEIVED
AUG 18 1955
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Re: Request to Terminate the
Four Mile Unit Agreement
Chaves County, New Mexico
Department Contract No.
14-08-001-322
Dated March 15, 1951
Approved September 23, 1952

Director of the United States Geological Survey
Department of the Interior
Washington 25, D. C.

Commissioner of Public Lands
State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Director of the Oil Conservation Commission
State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Gentlemen:

Kewanee Oil Company, as operator of the captioned unit and with the concurrence of the other interested members of the unit, hereby requests termination of the Four Mile Unit Agreement. Such termination to be effective on the first day of the month in which this request is approved.

To exhibit that we have acted in good faith concerning the Unit Agreement, we submit the following resume of our efforts toward development of the oil and/or gas possibilities in this area:

Kewanee Oil Company, as operator and at Kewanee's sole expense, drilled two test wells within the confines of the unit. Both tests failed to encounter oil and/or gas in commercial quantities and were subsequently plugged and abandoned.

RECEIVED
SEP 19 1955
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

KEWANEE OIL COMPANY

DATE Aug. 10, 1955

- 2 -

The Number 1 test, located in the SE/4 NW/4 Section 26, Township 18 South, Range 18 East, was drilled to a total depth of 6562 feet. Important geological formations were encountered at the following depths:

Glorietta - -	892 ft.	Pennsylvanian - -	4940 ft.
Drinkard - -	2340 ft.	Mississippian - -	6110 ft.
Abo - - - -	2990 ft.	Silurian - - - -	6538 ft.

All signs of oil and/or gas were adequately tested for possible commercial production; none was obtained.

Further geological studies were made during the period of the two extensions granted the unit. A second test well was drilled one mile west of the Number 1 test and in the SW/4 NE/4 Section 27, Township 18 South, Range 18 East. This test was drilled to a total depth of 6521 feet. Important geological formations were encountered at the following depths:

Glorietta - -	775 ft.	Pennsylvanian - -	4738 ft.
Drinkard - -	2202 ft.	Mississippian - -	6047 ft.
Abo - - - -	2865 ft.	Silurian - - - -	6511 ft.

All signs of oil and/or gas were adequately tested for possible commercial production; none was obtained.

Since the completion of the second test well, further geological investigations have been made. Information derived from the two test wells and from the geological studies indicate it is unlikely that oil and/or gas in commercial quantities exists within the confines of the Four Mile Unit Agreement. Therefore, the Unit Agreement has lost its value as an aid in the development of the petroleum possibilities of this area which prompts us to request its termination.

The concurrence of the other interested members is attached hereto and made a part of this request.

Date: Aug 15 1955

Attest: [Signature]
Secretary

Address: P. O. Box 2239

Tulsa 1, Oklahoma

KEWANEE OIL COMPANY (Unit Operator)

By John F. Church
Vice President [Signature]

KEWANEE OIL COMPANY

DATE Aug. 10, 1955

The Four Mile unit agreement, New Mexico; 3No. 14-08-001-322 is hereby terminated pursuant to the provisions of the last paragraph of section 20 thereof, effective as of September 1 1955

Approved

Date: SEP 29 1955

Thomas B. Dalton
Acting Director, United States Geological Survey

Date: Aug. 29, 1955

ES Walker
Commissioner of Public Lands
State of New Mexico

Date: 8 - 29 - 55

W. B. Macey
Director, Oil Conservation Commission
State of New Mexico

SDS/bm
Encls. (3)



MALCO REFINERIES, INC.

P. O. Box 600
ROSWELL, NEW MEXICO

EXPLORATION AND PRODUCTION DIVISION
DONALD B. ANDERSON
VICE PRESIDENT

DEPARTMENT HEADS
GEOLOGICAL - PHIL D. HELMIG
LAND - H. E. HARRINGTON
PRODUCTION - J. R. MCINN

July 20, 1955

KEWANEE OIL CO.			
EXPLORATION DEPT.			
JUL 22 1955			
J.K.W.		W.E.Z.	
D.E.R.		D.E.R.	
L.L.C.			
C.F.G.			
J.C.M.		FILE	

Kewanee Oil Company
P. O. Box 2239
Tulsa, Oklahoma

Attention: Mr. L. L. Crozier

Gentlemen:

We have been advised by Mr. Smith of your
Roswell office that it is your intent to termi-
nate the Four Mile Unit Agreement, Chaves County,
New Mexico.

Please be advised that Malco Refineries, Inc.
concur with you in this plan.

Very truly yours,

MALCO REFINERIES, INC.

H. E. Harrington
H. E. Harrington

HEH/yw

MAGNOLIA PETROLEUM COMPANY

A SOCONY-VACUUM COMPANY

LAND DEPARTMENT

P. O. BOX 900

DALLAS 21, TEXAS

July 26, 1955

S. A. THOMPSON
VICE PRESIDENT AND MANAGER
HENRY C. CORTES
ASSISTANT MANAGER
PAUL E. HARALSON
SUPERINTENDENT

KEWANEE OIL CO.
EXPLORATION DEPT.

JUL 28 1955

J.K.W.	(12)	W.E.P.		
D.E.R.		D.E.H.		
L.L.C.				
C.F.G.				
J.C.M.		FILE		

Four Mile Unit
T 18 & 19S, R 18E
CHAVES COUNTY, New Mexico

Kewanee Oil Company
P. O. Box 2239
Tulsa, Oklahoma

Attention: L. L. Crozier

Gentlemen:

We are in receipt of your letter of July 19, 1955 requesting that the captioned unit be terminated at the earliest possible date. We concur with your recommendation for this termination and ask that you handle this to conclusion.

Yours very truly,

MAGNOLIA PETROLEUM COMPANY

S. A. Thompson
By: S. A. Thompson
Vice President *msj*

MSJ:ah

THE TEXAS COMPANY

TEXACO PETROLEUM PRODUCTS



PRODUCING DEPARTMENT
WEST TEXAS DIVISION

P. O. BOX 1720
FORT WORTH 1, TEXAS

August 1, 1955

105795 - State of New Mexico Lease E-24
Chaves County, New Mexico
FOUR MILE UNIT

KEWANEE OIL COMPANY
P. O. Box 2239
Tulsa 1, Oklahoma

ATTENTION: Mr. L. L. Crozier

Gentlemen:

Referring to your letter of July 19, 1955 with reference to our above Unit Agreement affecting the lands in Townships 18 and 19 South, Range 18 East in Chaves County, New Mexico.

It is agreeable to us that this Four Mile Unit Agreement be terminated and this letter may be considered by you as our agreement thereto.

Please advise when the Unit Agreement has been terminated so that we may drop our file on this Unit.

With best wishes, I remain

Yours very truly,

E. W. Lewis

Assistant to the Division Manager

EWL-WLH

cc - Magnolia Petroleum Co.,
Roswell, New Mexico

cc - Malco Refineries, Inc.
Roswell, New Mexico

KEWANEE OIL CO.			
EXPLORATION DEPT.			
AUG 2 1955			
J.K.W.		W.E.	
D.E.R.		Drafting	
L.L.C.			
C.T.G.			
J.C.M.		FILE	

C
O
P
Y

TO: DIRECTOR OGC
RECEIVED 10-1-55 8:51

September 19, 1955

file

Kewanee Oil Company
P. O. Box 2239
Tulsa 1, Oklahoma

Re: Request to Terminate the
(Four Mile Unit Agreement)
Chaves County, New Mexico

Gentlemen:

We are enclosing approved copy of concurrence with your request that the above designated Unit Agreement be terminated, effective date according to your letter being August 1, 1955.

We would appreciate your notifying this Office upon your receipt of all signatures necessary for complete termination of this agreement.

Very truly yours,

E. S. WALKER
Commissioner of Public Lands

Encl.
cc: OGC-Santa Fe
USGS-Roswell
MR:m

C
O
P
Y

~~TERMINATED~~

September 16, 1935

264

file

United States Geological Survey
P. O. Box 6721
Roswell, New Mexico

Re: Request for Termination
Four Mile Unit Agreement

Attention: R. E. Canfield

Gentlemen:

As per request by Kewanee Oil Company we are enclosing five copies of request for termination of the above designated Unit Agreement.

All five requests have been approved by the Commissioner of Public Lands and the Director of the Oil Conservation Commission, effective date of termination to be August 1, 1935.

Very truly yours,

E. S. WALKER
Commissioner of Public Lands

cc: OCO-Santa Fe
Kewanee Oil Company

MR

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

August 29, 1955

file

Kewanee Oil Company
P. O. Box 2239
Tulsa 1, Oklahoma

Re: Four Mile Unit
Chaves County, New Mexico
(Termination)

Gentlemen:

This is to advise that your request to terminate the Four Mile Unit Agreement, dated August 10, 1955, has this date been approved by the New Mexico Oil Conservation Commission, subject to like approval by the Commissioner of Public Lands of the State of New Mexico and by the Director of the United States Geological Survey

One approved copy of the request is returned herewith.

Very truly yours,

W. B. Macey
Secretary-Director

WBM:jh
cc: Commissioner of Public Lands, Santa Fe
U. S. Geological Survey, Roswell

C
O
P
Y

MAIL OFFICE CCC
1955 AUG 10 AM 9:25
KEWANEE OIL COMPANY
P. O. Box 2289
TULSA 1, OKLAHOMA

August 10, 1955

Re: Request to Terminate the
Four Mile Unit Agreement
Chaves County, New Mexico
Department Contract No.
14-08-001-322
Dated March 15, 1951
Approved September 23, 1952

Director of the United States Geological Survey
Department of the Interior
Washington 25, D. C.

Commissioner of Public Lands
State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

✓Director of the Oil Conservation Commission
State of New Mexico
Capitol Annex Building
Santa Fe, New Mexico

Gentlemen:

Kewanee Oil Company, as operator of the captioned unit and with the concurrence of the other interested members of the unit, hereby requests termination of the Four Mile Unit Agreement. Such termination to be effective on the first day of the month in which this request is approved.

To exhibit that we have acted in good faith concerning the Unit Agreement, we submit the following resume of our efforts toward development of the oil and/or gas possibilities in this area:

Kewanee Oil Company, as operator and at Kewanee's sole expense, drilled two test wells within the confines of the unit. Both tests failed to encounter oil and/or gas in commercial quantities and were subsequently plugged and abandoned.

KEWANEE OIL COMPANY

DATE Aug. 10, 1955

- 2 -

The Number 1 test, located in the SE/4 NW/4 Section 26, Township 18 South, Range 18 East, was drilled to a total depth of 6562 feet. Important geological formations were encountered at the following depths:

Glorietta - - 892 ft.
Drinkard - - 2340 ft.
Abo - - - - 2990 ft.

Pennsylvanian - - 4940 ft.
Mississippian - - 6110 ft.
Silurian - - - - 6538 ft.

All signs of oil and/or gas were adequately tested for possible commercial production; none was obtained.

Further geological studies were made during the period of the two extensions granted the unit. A second test well was drilled one mile west of the Number 1 test and in the SW/4 NE/4 Section 27, Township 18 South, Range 18 East. This test was drilled to a total depth of 6521 feet. Important geological formations were encountered at the following depths:

Glorietta - - 775 ft.
Drinkard - - 2202 ft.
Abo - - - - 2865 ft.

Pennsylvanian - - 4738 ft.
Mississippian - - 6047 ft.
Silurian - - - - 6511 ft.

All signs of oil and/or gas were adequately tested for possible commercial production; none was obtained.

Since the completion of the second test well, further geological investigations have been made. Information derived from the two test wells and from the geological studies indicate it is unlikely that oil and/or gas in commercial quantities exists within the confines of the Four Mile Unit Agreement. Therefore, the Unit Agreement has lost its value as an aid in the development of the petroleum possibilities of this area which prompts us to request its termination.

The concurrence of the other interested members is attached hereto and made a part of this request.

Date: AUG 15 1955

Attest: *Becky Pauland*
Secretary

Address: P. O. Box 2239

Tulsa 1, Oklahoma

KEWANEE OIL COMPANY (Unit Operator)

By *John F. Church*
Vice President

KEWANEE OIL COMPANY

DATE Aug. 10, 1955

- 3 -

Approved

Date: _____

Director, United States Geological Survey

Date: _____

Commissioner of Public Lands
State of New Mexico

Date: 8-29-55

W B Macey

Director, Oil Conservation Commission
State of New Mexico

SDS/bm
Encls. (3)



MALCO REFINERIES, INC.

P. O. Box 880

ROSWELL, NEW MEXICO

July 20, 1955

EXPLORATION AND PRODUCTION DIVISION
DONALD B. ANDERSON
VICE PRESIDENT

DEPARTMENT HEADS
GEOLOGICAL - PHIL D. HELMIG
LAND - H. E. HARRINGTON
PRODUCTION - J. R. MCMINN

KEWANEE OIL CO.			
EXPLORATION DEPT.			
JUL 22 1955			
J.K.W.		W.E.H.	
D.E.R.		D.E.H.	
L.L.C.			
C.F.G.			
J.C.M.		FILE	

Kewanee Oil Company
P. O. Box 2239
Tulsa, Oklahoma

Attention: Mr. L. L. Crozier

Gentlemen:

We have been advised by Mr. Smith of your
Roswell office that it is your intent to termi-
nate the Four Mile Unit Agreement, Chaves County,
New Mexico.

Please be advised that Malco Refineries, Inc.
concur with you in this plan.

Very truly yours,

MALCO REFINERIES, INC.

H. E. Harrington
H. E. Harrington

HEH/yw

MAGNOLIA PETROLEUM COMPANY

A SOCONY-VACUUM COMPANY

LAND DEPARTMENT

P. O. BOX 900

DALLAS 21, TEXAS

July 26, 1955

S. A. THOMPSON
VICE PRESIDENT AND MANAGER
HENRY C. CORTES
ASSISTANT MANAGER
PAUL E. HARALSON
SUPERINTENDENT

KEWANEE OIL CO.			
EXPLORATION DEPT.			
JUL 28 1955			
J.K.W.	(12)	W.E.	
D.E.R.		D.E.R.	
L.L.C.			
C.F.G.			
J.C.M.		FILE	

Four Mile Unit
T 18 & 19S, R 18E
CHAVES COUNTY, New Mexico

Kewanee Oil Company
P. O. Box 2239
Tulsa, Oklahoma

Attention: L. L. Crozier

Gentlemen:

We are in receipt of your letter of July 19, 1955 requesting that the captioned unit be terminated at the earliest possible date. We concur with your recommendation for this termination and ask that you handle this to conclusion.

Yours very truly,

MAGNOLIA PETROLEUM COMPANY

S. A. Thompson
By: S. A. Thompson
Vice President *msj*

MSJ:ah

THE TEXAS COMPANY
TEXACO PETROLEUM PRODUCTS



PRODUCING DEPARTMENT
WEST TEXAS DIVISION

P. O. BOX 1720
FORT WORTH 1, TEXAS

August 1, 1955

105795 - State of New Mexico Lease E-24
Chaves County, New Mexico
FOUR MILE UNIT

KEWANEE OIL COMPANY
P. O. Box 2239
Tulsa 1, Oklahoma

ATTENTION: Mr. L. L. Crozier

Gentlemen:

Referring to your letter of July 19, 1955 with reference to our above Unit Agreement affecting the lands in Townships 18 and 19 South, Range 18 East in Chaves County, New Mexico.

It is agreeable to us that this Four Mile Unit Agreement be terminated and this letter may be considered by you as our agreement thereto.

Please advise when the Unit Agreement has been terminated so that we may drop our file on this Unit.

With best wishes, I remain

Yours very truly,

E. W. Lewis
E. W. Lewis
Assistant to the Division Manager

EWL-WLH

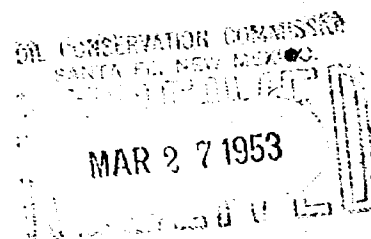
cc - Magnolia Petroleum Co.,
Roswell, New Mexico

cc - Malco Refineries, Inc.
Roswell, New Mexico

KEWANEE OIL CO.			
EXPLORATION DEPT.			
AUG 2 1955			
J.K.W.		W.E.R.	
D.E.R.		Drafting	
L.L.C.			
C.T.G.			
J.C.M.		FILE	

RS
264
KEWANEE OIL COMPANY
LAND AND GEOLOGICAL DEPARTMENT
P. O. Box 239
ROSWELL, NEW MEXICO

March 24, 1953



New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Enclosed find letters from Kewanee Oil Company addressed to the Director of The United States Geological Survey and to The Commissioner of Public Lands approving the commitment of an overriding royalty interest on State Lease No. B-11384, to the Four Mile Unit Agreement.

A copy of the Consent & Ratification application signed by Mrs. Irene Schmidt, was distributed January 2, 1953.

Please acknowledge receipt by returning the extra copy of this letter.

Very truly yours,

KEWANEE OIL COMPANY

Jack R. Huffmyer
Jack R. Huffmyer

JRH/d
Encls.

KEWANEE OIL COMPANY

2317 FIDELITY-PHILADELPHIA TRUST BUILDING

123 SOUTH BROAD STREET

PHILADELPHIA 9, PA.

February 20, 1953

United States Geological Survey
Post Office Building
Roswell, New Mexico

FOUR MILE UNIT AREA
CHAVES COUNTY, NEW MEXICO
NO. 14-08-001-322

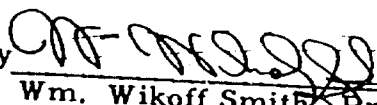
Gentlemen:

Irene Schmidt, sole devisee and legatee, and Executrix of the Last Will and Testament of Patrick Nathaniel Schmidt, also known as Nat P. Schmidt, Deceased, executed, on August 3, 1952, a Consent and Ratification of the Four Mile Unit Agreement in Chaves County, New Mexico, thereby committing the two per cent overriding royalty interest owned by her under State of New Mexico Oil and Gas Lease No. B-11384 insofar as it covers all of Section 23, Township 18 South, Range 18 East, N. M. P. M., in Chaves County, New Mexico, to the Four Mile Unit Agreement.

Kewanee Oil Company, as the working interest owner of State of New Mexico Oil and Gas Lease No. B-11384, covering all of Section 23, Township 18 South, Range 18 East, N. M. P. M., in Chaves County, New Mexico, does hereby consent to the commitment of said overriding royalty interest to the Four Mile Unit Agreement.

Very truly yours,

KEWANEE OIL COMPANY

By 
Wm. Wikoff Smith, President

WWS/es

KEWANEE OIL COMPANY
2317 FIDELITY-PHILADELPHIA TRUST BUILDING
123 SOUTH BROAD STREET
PHILADELPHIA 9, PA.

February 20, 1953

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

FOUR MILE UNIT AREA
CHAVES COUNTY, NEW MEXICO
NO. 14-08-001-322

Gentlemen:

Irene Schmidt, sole devisee and legatee, and Executrix of the Last Will and Testament of Patrick Nathaniel Schmidt, also known as Nat P. Schmidt, Deceased, executed, on August 3, 1952, a Consent and Ratification of the Four Mile Unit Agreement in Chaves County, New Mexico, thereby committing the two per cent overriding royalty interest owned by her under State of New Mexico Oil and Gas Lease No. B-11384 insofar as it covers all of Section 23, Township 18 South, Range 18 East, N. M. P. M., in Chaves County, New Mexico, to the Four Mile Unit Agreement.

Kewanee Oil Company, as the working interest owner of State of New Mexico Oil and Gas Lease No. B-11384, covering all of Section 23, Township 18 South, Range 18 East, N. M. P. M., in Chaves County, New Mexico, does hereby consent to the commitment of said overriding royalty interest to the Four Mile Unit Agreement.

Very truly yours,

KEWANEE OIL COMPANY

By Wm. Wikoff Smith
Wm. Wikoff Smith, President

WWS/es

KEWANEE OIL COMPANY
LAND AND GEOLOGICAL DEPARTMENT
P. O. Box 239
ROSWELL, NEW MEXICO

January 2, 1953

JAN 5 1953

Case 264

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Enclosed find one (1) executed copy of a
Consent & Ratification by Irene Schmidt committing
overriding royalty interest on Tract No. 32, Exhibit "B"
to the Four Mile Unit Agreement.

Please acknowledge receipt by returning the
extra copy of this letter. *done*

Yours very truly,

KEWANEE OIL COMPANY

Jack R. Huffmyer
Jack R. Huffmyer

JRH/d
Encl.

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

Irene Schmidt
Sole Devisee and Legatee and Executrix
of the Last Will and Testament of
Patrick Nathaniel Schmidt, also known
as Nat P. Schmidt, deceased,

STATE OF Iowa)
COUNTY OF Scott) SS.

On this 23rd day of August, 1952, before me personally appeared IRENE SCHMIDT
to me known to be the person described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

WITNESS MY HAND and official seal this 23rd day of August, 1952.

My commission expires:

July 4, 1953

Clark O. French
Notary Public
Davenport, Iowa
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____
to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____
to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

KEWANEE OIL COMPANY
LAND AND GEOLOGICAL DEPARTMENT
P. O. BOX 239
ROSWELL, NEW MEXICO
October 22, 1952

Case 264
Order R-62

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Re: Four Mile Unit Agreement
No. 14-08-001-322
Chaves County, New Mexico

Dear Sir:

Enclosed find one copy of a complete and fully executed unit agreement, unit operating agreement, and supplement to the unit operating agreement of the Four Mile Unit, Chaves County, New Mexico.

Please acknowledge receipt by returning the extra copy of this letter.

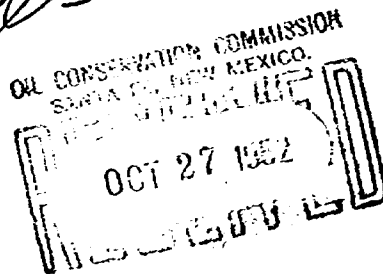
Yours very truly,

KEWANEE OIL COMPANY

Jack R. Huffmyer
Jack R. Huffmyer

Received by
Date

L. R. J. J. J.
10/27/52



Ca. box 239
10-27-52
Huffmyer

3-2191
SUPPLEMENT TO UNIT OPERATING AGREEMENT
FOUR MILE UNIT AREA
CHAVES COUNTY, NEW MEXICO

THIS SUPPLEMENTAL AGREEMENT, Made and entered into this 21st day of August, 1952, by and between KEWANEE OIL COMPANY, a Delaware Corporation, with an office at Tulsa, Oklahoma, party of the first part, hereinafter referred to as Unit Operator, and MALCO REFINERIES, INC., a New Mexico Corporation with its principal office at Roswell, New Mexico, MAGNOLIA PETROLEUM COMPANY, a Corporation with an office at Dallas, Texas, and THE TEXAS COMPANY, a Corporation with an office at Fort Worth, Texas, parties of the second part, hereinafter referred to as Non-operators,

W I T N E S S E T H:

WHEREAS, the parties hereto have entered into a Unit Agreement for the development and operation of the Four Mile Unit Area, hereinafter referred to as "Unit Agreement", embracing the following described land situated in Chaves County, New Mexico, to-wit:

New Mexico Principal Meridian, New Mexico

T. 18 S., R. 18 E.
Sec. 1, Lots 7, 8, 9 and 10 and S/2;
Sec. 11, SE/4;
Secs. 12, 13 and 14, All;
Sec. 15, SE/4;
Sec. 21, SE/4;
Secs. 22 and 23, All;
Sec. 24, N/2, SW/4;
Sec. 25, W/2;
Secs. 26 and 27, All;
Sec. 28, E/2;
Secs. 34 and 35, All;
Sec. 36, W/2.

T. 19 S., R. 18 E.

Sec. 1, Lots 3 and 4, S/2 NW/4, SW/4;

Secs. 2 and 3, All;
Secs. 10 and 11, All;
Sec. 12, W/2, S/2 SE/4;
Secs. 13 and 14, All;
Sec. 15, N/2 NE/4;
Sec. 23, NE/4;
Secs. 24 and 25, All,

and containing 14,238.96 acres, more or less;

and

WHEREAS, the parties hereto have also entered into an Operating Agreement for the Four Mile Unit Area, in accordance with Section 7 of said Unit Agreement, providing for the manner of apportionment of the cost, expenses and benefits on account of operations under said Unit Agreement; and

WHEREAS, the parties hereto are desirous of supplementing said Operating Agreement for the Four Mile Unit Area, insofar as the leasehold interests of the parties hereto committed to said Unit Agreement are concerned.

NOW, THEREFORE, IT IS MUTUALLY AGREED BETWEEN THE PARTIES HERETO, as follows:

1. With the exception of the test well provided for in paragraph 3 of the Operating Agreement, notwithstanding any of the provisions of the Operating Agreement to the contrary, Unit Operator shall submit to each Non-operator an A.F.E. (authority for expenditure) form, in duplicate, for approval by Non-operators of any well to be drilled under the terms of said Agreement and, upon request, shall furnish each Non-operator two copies of any drilling contract entered into with independent well contractors.

2. With the exception of the test well provided for in paragraph 3 of the Operating Agreement, no well shall be drilled for the joint account unless and until mutually agreed upon by all the parties hereto, in writing, and no

expenditure shall be made by Unit Operator for the joint account in excess of Five Thousand (\$5,000.00) Dollars without the consent of Non-operators; provided, however, that when a well has been authorized, Operator shall have full and complete authority to incur any costs and expenses necessary or advisable in connection with the drilling, completing and equipping of such well without securing the consent of Non-operators.

3. Should any party hereto desire to drill any well on said land, said party so desiring to drill (Drilling Party) shall give the other parties (Non-drilling Parties) written notice of its desire to drill, stating the location and projected depth of the proposed well, the objective producing zone or horizon to be tested, manner of drilling, casing program, and the estimated cost of drilling such well. Non-drilling Parties shall have thirty (30) days after receipt of such notice within which to notify Drilling Party whether they elect to participate in the drilling of said well. If Non-drilling Parties elect to participate, the well shall be drilled for the joint account of the parties hereto by the Unit Operator, in accordance with the terms of this Agreement, as a well drilled by mutual agreement. If Non-drilling Parties, or any of them, elect not to participate by so advising Drilling Party, or failing to advise Drilling Party of its desire within the thirty (30) day period, then Drilling Party may, within thirty (30) days, but not thereafter, without further notice to Non-drilling Parties, proceed by commencing operations for the drilling of the well at its own cost and expense, in accordance with the terms of this Agreement, as a well not drilled by mutual agreement. The cost of drilling and completing

any well when not drilled by mutual agreement shall be at the sole cost of Drilling Party and Drilling Party shall advance all moneys therefor. It is provided, however, that if any such well is so commenced and is completed with due diligence as a producing well, then Drilling Party shall be entitled to receive all of the production applicable to the entire working interest and proceeds from the sale thereof and any and all other income or revenue derived from the operation of said well, including proceeds from sale of equipment and material salvaged from said well, until such time as Drilling Party has thus received, after deducting all expenses of operating and maintaining said well, including ad valorem, production, severance, conservation and school taxes, a sum equal to 150% of the cost of drilling and completing said well, whereupon said well and the production therefrom shall be owned jointly by the parties hereto the same as other jointly owned wells under this Agreement.

A complete itemized statement of all costs and expenses incurred in the drilling and completing of such well shall be furnished Non-drilling Parties within ninety (90) days after the completion of such well and thereafter Drilling Party shall furnish Non-Drilling Parties with a complete itemized monthly statement of all costs and expenses of operating and maintaining said well, including taxes and the income or revenue from said well.

4. The provisions hereof shall be considered as supplemental to the above mentioned Unit Operating Agreement insofar as the parties hereto are concerned and said Unit Operating Agreement and this Supplemental Agreement

shall constitute the entire agreement as between the parties hereto with respect to determining their rights and interests in connection with the operation and development of said Unit Area.

5. The provisions hereof shall be binding upon the parties hereto, their successors and assigns, and shall be considered as covenants running with the ownership of the oil and gas leases of the parties hereto committed to said Unit Agreement.

IN WITNESS WHEREOF, This Agreement is executed on the day and year first hereinabove written.

ATTEST:

Frederick C. Gueler
ASSISTANT Secretary

Kewanee Oil Company

By [Signature]
President

PARTY OF THE FIRST PART
UNIT OPERATOR

ATTEST:

E. W. Dineen
Asst. Secretary

MALCO REFINERIES, INC.

By [Signature]
President

ATTEST:

[Signature]
Asst. Secretary
H. W. Clark

MAGNOLIA PETROLEUM COMPANY

By [Signature]
Vice-President

THE TEXAS COMPANY

By [Signature]
Attorney-in-Fact

PARTIES OF THE SECOND PART
NON-OPERATORS

APPROVED	
Legal	[Signature]
Title R	
Exec.	
Gen.	
Land	[Signature]
Prod.	[Signature]

Approved as to form:
W. N. Sands.

Approved as to terms:
[Signature]

COMMONWEALTH OF PENNSYLVANIA)
COUNTY OF PHILADELPHIA) ss.

On this 21 day of August, 1952, before
me personally appeared WM. WIKOFF SMITH to me
personally known, who being by me duly sworn did say that he
is President of KEWANEE OIL COMPANY, a corporation,
and that the seal affixed to said instrument is the corporate
seal of said corporation, and that said instrument was signed
and sealed in behalf of said corporation by authority of its
board of directors, and said WM. WIKOFF SMITH
acknowledged said instrument to be the free act and deed of
said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and
seal the day and year in this certificate above written.

Paul Uetz
Notary Public
PAUL UETZ, NOTARY PUBLIC
2315 FIDELITY-PHILA. TRUST BLDG. PHILA. 9, PA.
My commission expires: COMMISSION EXPIRES FEB. 28, 1955

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

On this 16th day of August, 1952, before
me personally appeared Robert O. Anderson to me
personally known, who being by me duly sworn did say that he
is President of HALCO REFINERIES, INC., a corporation,
and that the seal affixed to said instrument is the corporate
seal of said corporation, and that said instrument was signed
and sealed in behalf of said corporation by authority of its
board of directors, and said Robert O. Anderson
acknowledged said instrument to be the free act and deed of
said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and
seal the day and year in this certificate above written.

James L. Lusk, Jr.
Notary Public
My commission expires: March 8, 1956

STATE OF TEXAS)
 : ss.
COUNTY OF DALLAS)

On this 28th day of August, 1952, before
me personally appeared E. M. Chan to me
personally known, who being by me duly sworn did say that he
is Vice President of MAGNOLIA PETROLEUM COMPANY, a corpora-
tion, and that the seal affixed to said instrument is the
corporate seal of said corporation, and that said instrument
was signed and sealed in behalf of said corporation by auth-
ority of its board of directors, and said E. M. Chan
acknowledged said instrument to be the
free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand
and seal the day and year in this certificate above written.

Deputy Notary Public
Notary Public

My commission expires: 6-1-53

STATE OF TEXAS)
 : ss.
COUNTY OF TARRANT)

On this 29 day of August, 1952, before
me personally appeared C. B. Williams to me
personally known, who being by me duly sworn did say that he
is Attorney-in-Fact of THE TEXAS COMPANY, a corporation, and
that the seal affixed to said instrument is the corporate
seal of said corporation, and that said instrument was signed
and sealed in behalf of said corporation by authority of its
board of directors, and said C. B. Williams
acknowledged said instrument to be the free act and deed of
said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand
and seal the day and year in this certificate above written.

Ernest P. Wiley
Notary Public

My commission expires: 6/1/53

OPERATING AGREEMENT
FOUR MILE UNIT AREA
CHAVES COUNTY, NEW MEXICO

THIS AGREEMENT, Made and entered into this 25th day of JULY, 195 2, by and between KEWANEE OIL COMPANY, a Delaware Corporation, with an office at Tulsa, Oklahoma, party of the first part, and MALCO REFINERIES, INC., a New Mexico Corporation, with its principal office at Roswell, New Mexico, MAGNOLIA PETROLEUM COMPANY, a Corporation, with an office at Dallas, Texas, and THE TEXAS COMPANY, a Corporation, with an office at Fort Worth, Texas, parties of the second part,

W I T N E S S E T H:

WHEREAS, party of the first part is the owner and holder of certain oil and gas leases embracing lands of the State of New Mexico, certain oil and gas leases covering patented or privately owned lands, oil and gas leases and option agreements covering oil and gas leases embracing lands of the United States, situated in Chaves County, New Mexico, the same being more particularly described as follows:

- (a) Oil and Gas Leases issued by the State of New Mexico acting by and through its Commissioner of Public Lands, covering the following:

E/2, SW/4 NW/4 and SW/4 Section 13, All Section 23, N/2 and SW/4 Section 24, NE/4 NW/4, S/2 NW/4, NW/4 NW/4, SW/4 Section 25, NW/4, NW/4 SW/4, E/2 Section 26, All Section 34, NE/4, S/2 NW/4, SW/4 Section 35, W/2 Section 36, all in Township 18 South, Range 18 East, N.M.P.M.; All of Section 2, N/2 NE/4, W/2 SE/4 Section 24, W/2 E/2 Section 25, Township 19 South, Range 18 East, N.M.P.M., and containing 4,800.36 acres, more or less.

- (b) Leases on patented or privately owned lands, covering the following:

W/2 SE/4 Section 21, SW/4 NE/4, SE/4 NW/4, N/2 SE/4, NE/4 SW/4 Section 27, Township 18 South, Range 18 East, N.M.P.M.; SW/4 SE/4, SE/4 SW/4 Section 12, N/2 NW/4, SE/4 SE/4 Section 13, Township 19 South, Range 18 East, N.M.P.M., and containing 480 acres, more or less

- (c) Leases or option agreements covering Oil and Gas
Leases, embracing lands of the United States, as follows:

Geraldine R. Broomfield, Las Cruces 061593 covering
Lots 7, 8, 9, 10, S/2 Section 1, All Section 12, NW/4
NW/4 Section 13, N/2 N/2, SW/4 NW/4, SE/4 NE/4, S/2 S/2
Section 27, Township 18 South, Range 18 East, N.M.P.M.,
and containing 1560 acres, more or less;

R. A. Broomfield, Jr., Las Cruces 064791, covering
SE/4 Section 15, E/2, SW/4 Section 22, Township 18 South,
Range 18 East, N.M.P.M., and containing 640 acres, more
or less;

Gussie Lee Petty, Las Cruces 064794, covering SE/4
Section 11, Township 18 South, Range 18 East, N.M.P.M.,
and containing 160 acres, more or less;

Donald Angle, Las Cruces 064803, covering E/2 SE/4
Section 21, E/2 Section 28, Township 18 South,
Range 18 East, N.M.P.M., and containing 400 acres, more
or less;

Patricia Gaylord Anderson, Las Cruces 064853, covering
NW/4, SE/4 Section 14, Township 19 South, Range 18 East,
N.M.P.M., and containing 320.00 acres, more or less;

John E. Cochran, Jr., Las Cruces 066079, covering
E/2 NW/4 Section 13, N/2 NE/4 Section 14, Township 18
South, Range 18 East, N.M.P.M., and containing 160 acres,
more or less;

Margaret M. Wilder, Las Cruces 067805, covering SE/4 NE/4,
E/2 SE/4 Section 24, W/2, E/2 E/2 Section 25, Township 19
South, Range 18 East, N.M.P.M., and containing 600 acres,
more or less;

R. A. Broomfield, Jr., New Mexico 02902, covering NW/4 SW/4
Section 27, Township 18 South, Range 18 East, N.M.P.M.,
All Section 3, Township 19 South, Range 18 East, N.M.P.M.,
and containing 678.48 acres, more or less;

R. A. Broomfield, Jr., New Mexico 02904, covering S/2 NW/4,
NE/4, SW/4, SW/4 SE/4, N/2 SE/4 Section 13, Township 19
South, Range 18 East, N.M.P.M., and containing 520 acres,
more or less;

R. A. Broomfield, Jr., New Mexico 02923, covering E/2
Section 10, All Section 11, SE/4 SE/4 Section 12, Township 19
South, Range 18 East, N.M.P.M., and containing 1,000 acres,
more or less;

R. A. Broomfield, Jr., New Mexico 02950, covering W/2
Section 10, Township 19 South, Range 18 East, N.M.P.M., and
containing 320 acres, more or less;

and

WHEREAS, Malco Refineries, Inc., one of the parties of the second part, is the owner and holder of certain Oil and Gas Leases embracing lands of the State of New Mexico, and Option Agreements covering Oil and Gas Leases embracing lands of the United States, situated in Chaves County, New Mexico, the same being more particularly described as follows:

- (a) Oil and Gas Lease issued by the State of New Mexico acting by and through its Commissioner of Public Lands, covering the following:

SE/4, N/2 NW/4 Section 35, Township 18 South, Range 18 East, N.M.P.M., and containing 240 acres, more or less;

- (b) Option Agreements covering the following Oil and Gas Leases, embracing lands of the United States, as follows:

Patricia Gaylord Anderson, Las Cruces 064853, covering SW/4 SW/4 Section 12, NE/4, SW/4 Section 14, N/2 NE/4 Section 15, NE/4 Section 23, W/2 Section 24, Township 19 South, Range 18 East, N.M.P.M., and containing 920 acres, more or less;

Joe W. Lackey, Las Cruces 065205, covering NW/4 Section 22, Township 18 South, Range 18 East, N.M.P.M., and containing 160 acres, more or less;

and

WHEREAS, Magnolia Petroleum Company, one of the parties of the second part, is the owner and holder of a certain Oil and Gas Lease issued by the State of New Mexico, acting by and through its Commissioner of Public Lands, embracing the following described land, to-wit:

S/2 SW/4, NE/4 SW/4 Section 26, Township 18 South, Range 18 East, N.M.P.M., and containing 120 acres, more or less;

and

WHEREAS, The Texas Company, one of the parties of the second part, is the owner and holder of a certain Oil and Gas Lease issued by the State of New Mexico, acting by and through its Commissioner of Public Lands, embracing the following described land, to-wit:

S/2, NW/4, S/2 NE/4 Section 14, Township 18 South,
Range 18 East, N.M.P.M., and containing 560 acres, more
or less;

and

WHEREAS, the parties hereto have entered into a unit plan of
operation for the exploration and development of the Four Mile Unit Area,
embracing the following described lands, situated in Chaves County, New
Mexico, to-wit:

Lots 7, 8, 9 and 10 and S/2 Section 1, SE/4 Section 11,
All Section 12, All Section 13, All Section 14, SE/4
Section 15, SE/4 Section 21, All Section 22, All Section
23, N/2, SW/4 Section 24, W/2 Section 25, All Section 26,
All Section 27, E/2 Section 28, All Section 34, All Section
35, W/2 Section 36, Township 18 South, Range 18 East, N.M.P.M.,
and Lots 3 and 4, S/2 NW/4, SW/4 Section 1, All Section 2,
All Section 3, All Section 10, All Section 11, W/2, S/2 SE/4
Section 12, All Section 13, All Section 14, N/2 NE/4 Section
15, NE/4 Section 23, All Section 24, All Section 25, Township
19 South, Range 18 East, N.M.P.M., and containing 14,238.96
acres, more or less,

and all of the above described oil and gas leasehold interests have been, or
are being committed to said Unit Agreement, reference to which Agreement is
hereby made and thereby made a part hereof; and

WHEREAS, the party of the first part is designated as the Unit
Operator in said Unit Agreement, and the same is to be submitted for the
approval of the Secretary of the Interior of the United States, and has here-
tofore been submitted to, and approved by the Commissioner of Public Lands of
the State of New Mexico and the New Mexico Oil Conservation Commission, as
provided by law; and

WHEREAS, upon approval of said Unit Agreement by the Secretary of
the Interior, the party of the first part as Unit Operator, is to have the
exclusive right, privilege and duty of exercising any and all rights of all
parties signatory thereto which are necessary or convenient for prospecting
for, producing, storing and disposing of unitized substances, in accordance
with the terms of said Unit Agreement, however, under the provisions of
Section 7 of said Unit Agreement, the matter of allocation and handling of all

costs and expenses of operation on the unitized lands and drilling exploratory wells, as provided by the terms of said Agreement, is to be left to private arrangement between the Unit Operator and the other working interest owners, and the parties hereto are desirous of entering into a memorandum agreement covering the rights and obligations of the parties hereto with respect to oil and gas leases hereinabove described, which have been or are being committed to said Unit Agreement, and the unitized substances produced pursuant to the provisions thereof.

NOW, THEREFORE, IT IS MUTUALLY AGREED BETWEEN THE PARTIES HERETO, AS FOLLOWS:

1. The party of the first part shall make a diligent effort to have said Unit Agreement approved by the Secretary of the Interior, said Unit Agreement having already been approved by the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission.

2. Upon the approval of said Unit Agreement by the Secretary of the Interior, and upon approval and acceptance of title by the parties hereto, the parties hereto, by cross-assignments made, or caused to be made, each to the other, shall provide for the ownership of said oil and gas leasehold interests as between the parties hereto, to be owned in the following proportions:

Kewanee Oil Company	85.3360%
Magnolia Petroleum Company	.8798%
Malco Refineries, Inc.	9.6733%
The Texas Company	<u>4.1059%</u>
TOTAL	100.0000%

Such cross-assignments shall not, however, be made between the parties hereto until after unitized substances are discovered which can be produced in paying quantities

3. In consideration of the assignments herein provided to be made by parties of the second part to party of the first part, party of the first part shall, within six months from the effective date of the Unit

Agreement, begin operations for the drilling of a test well for oil and gas upon some part of the lands embraced in the Unit Area, at a location duly selected by the party of the first part and approved by the Supervisor of the United States Geological Survey, if said location is upon lands of the United States, or by the New Mexico Oil Conservation Commission if said location is upon lands of the State of New Mexico or privately owned lands, and shall cause said well to be drilled with due diligence and without unnecessary delay to a depth sufficient to test the Ellenburger Formation, or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities, or the Unit Operator shall at any time establish to the satisfaction of the Supervisor or the Commissioner and the Commission that further drilling of said well would be unwarranted or impracticable, provided, however, party of the first part shall not, in any event, be required to drill said well to a depth in excess of 5,500 feet.

Should party of the first part fail to comply with the drilling requirements of this paragraph, then this Agreement shall terminate, and thereupon all parties shall be relieved from all claims and liabilities under this Agreement.

4. The test well provided for in the preceding paragraph shall be drilled in accordance with the terms and conditions of said Unit Agreement and any applicable regulations of the Secretary of the Interior or New Mexico Oil Conservation Commission, and the same shall be drilled at the sole cost, risk and expense of party of the first part and free of cost and liability to the parties of the second part. In the event said well proves to be a dry hole or non-commercial well, said well shall be plugged and abandoned in accordance with applicable rules and regulations, free of any cost or expense to parties of the second part, and in such event, party of the first part shall have the right to salvage all casing, equipment and other materials used in the drilling of said well and the same shall be and remain the property of the party of the first part.

5. In the event oil and gas in paying quantities should be discovered in said test well, it shall be cased and equipped with well head connections, at the sole cost and expense of party of the first part. All other material and equipment necessary to place the well on production shall be charged to the joint account, in accordance with the accounting procedure hereinafter provided.

6. Upon completion of said test well as a well capable of producing oil and gas in paying quantities, the party of the first part shall proceed with further exploration and development of said Unit Area as provided in said Unit Agreement.

The party of the first part, as Unit Operator, shall pay all costs and expenses of operation with respect to the unitized land and shall charge such costs and expenses to a joint account to be kept by party of the first part, and each of the parties hereto shall be charged for such costs and expenses in proportion to their respective interests in and to said oil and gas leases.

7. In the event said first well proves to be a dry hole or non-commercial well, there shall be no obligation on the part of party of the first part to drill a second, or additional wells, and no additional wells shall be drilled without the unanimous consent of the parties hereto, and in the absence of some other agreement between the parties hereto, said Unit Agreement shall be terminated as provided by the terms thereof within six (6) months after completion of the first well, and in connection therewith, party of the first part shall have the right to resign and relinquish its rights as Unit Operator.

8. The party of the first part, as Unit Operator, shall render to the respective parties hereto an account of all operations on unitized lands during the previous calendar month, and shall account for all costs and benefits of operations in conformity to said Unit Agreement, oil and gas leases committed thereto and this Operating Agreement. Attached hereto, made a part hereof, and for purposes of identification, marked Exhibit "A", is an accounting

procedure to govern said joint account, and the same shall be kept in conformity therewith and all charges shall be made, bills and statements rendered, and payments made, materials, supplies and equipment purchased and disposed of in accordance with said accounting procedure. Unless and until otherwise directed by the parties hereto, the Unit Operator shall, during its development and operation of the unitized properties, purchase, if available, the following insurance for the benefit of the parties hereto:

- A. Workmen's Compensation Insurance as required by the laws of the State of New Mexico.
- B. Employer's Liability and Occupational Disease Insurance with a minimum limit of \$100,000 per person.
- C. Public Liability Insurance with limits of \$100,000 as to any one person and \$300,000 as to any one accident and Property Damage Insurance with limits of \$50,000 and \$100,000.
- D. Automobile Public Liability and Property Damage Insurance with limits of \$100,000 as to any one person and \$300,000 as to any one accident and Automobile Property Damage Insurance with a minimum limit of \$50,000 on such automotive units, if any, as owned by the joint account.

The unit shall be self-insured for Fire and Extended Coverage. Paragraph 10 Insurance, of Accounting Procedure hereto attached and marked Exhibit "A", shall apply with reference to premiums paid for insurance carried and for losses sustained for which no insurance is required to be carried as outlined in this Section 8.

8A. It is mutually understood between Unit Operator and Non-operators (or parties of the second part) that certain classes of materials and equipment are in short supply and cannot be obtained except in limited quantities from supply companies at out-of-stock, mill shipment or carload price. Therefore, regardless of any provisions herein contained to the contrary on all materials and equipment furnished in connection with drilling, equipping and operating the lease, Unit Operator shall charge the same at the current prices then prevailing in the open market plus freight and hauling charges and shall not be limited to supply company prices then prevailing. Whenever practical, Nonoperator may furnish and deliver his share of such materials and equipment

in kind provided the same are of such quality as is required and acceptable to Operator.

9. The party of the first part, as Unit Operator, in the event the working interest owners fail to take their proportionate shares of the unitized substances in kind as hereinafter provided, and in the event they fail to individually market their individual shares of the unitized substances, shall, in addition to the powers granted to said operator by the Unit Agreement, have the right to sell on a day-to-day basis all marketable oil produced from the Unit Area provided that said oil shall not be sold by the party of the first part for less than the market value thereof prevailing in the field or area at the time such oil was produced, or if there be no prevailing market price in said area at such time, for not less than the average posted price being paid for oil of like kind and quality in Eddy County, New Mexico.

It is understood and agreed, however, that parties of the second part may each have the right to take its proportionate part of all marketable oil and gas produced from the Unit Area in kind, from time to time, by providing, at its own expense, the necessary equipment for such purpose and paying to the party of the first part any extra expense incurred in the delivery of the same.

In the event any of the parties of the second part should desire to take said oil and gas in kind, such party shall give notice thereof to party of the first part at least ninety (90) days prior to the time said oil and gas is to be taken, and in the event the running or taking of said oil and gas is to be discontinued by any of the parties of the second part the latter shall likewise give ninety (90) days notice thereof to party of the first part. Subject to said notices, the right and option of parties of the second part to take such oil and gas in kind, shall be considered as a continuing right and option during the life of this Agreement.

10. Subject to the provisions of the preceding paragraph (9), party of the first part, as Unit Operator, shall have the right to market on a day-to-day basis all gas produced in the Unit Area and accruing to the parties hereto,

and upon the sale of same, the purchaser thereof shall pay to each respective party hereto its proportionate part of the proceeds from such sales.

11. Upon the sale of any oil or gas produced from the Unit Area, the purchaser thereof shall pay to the respective parties hereto the proceeds of sales in proportion to each party's interest in and to said oil and gas leases, as set forth hereinabove, provided, however, should any working interest owner be in arrears in payments to the Unit Operator as provided by said accounting procedure, the Unit Operator shall have the right upon demand to receive from the purchaser of the production such owner's portion of the proceeds and apply the same on amounts in arrears. In the event any of the parties hereto should fail or refuse to pay their proportionate part of the amounts charged to said joint account in accordance with said accounting procedure within the time and manner therein provided, the party of the first part shall have a lien upon the leasehold interest of any such party to secure the payment of said account and said Operator may at any time after the expiration of sixty (60) days after said account becomes delinquent, foreclose said lien as provided by law for foreclosure of mortgage deeds and cause said interest or so much thereof as may be necessary to be sold to satisfy said account.

12. All rentals which may become due and payable under the terms of any of the oil and gas leases owned by the parties hereto, after cross-assignments are made, shall be paid as they accrue by the party of the first part as Unit Operator, and the amount thereof charged to the joint account and billed to the respective parties hereto as provided by said accounting procedure.

13. The party of the first part, as Unit Operator, subject to the provisions of paragraph 6 hereof, is hereby authorized to drill any and all wells required under the provisions of said Unit Agreement or any plan or modification thereof adopted as provided by Section 10 of the Unit Agreement. Whenever any well is to be drilled, party of the first part shall first obtain bids from at least two responsible independent drilling contractors for the drilling of such wells. After obtaining such bids, party of the first part

shall let the drilling of such well on contract to the lowest responsible bidder.

14. Each of the parties of the second part shall have, but not by way of limitation, the following specific rights and privileges:

- (a) Access to the Unit Area at all reasonable times to inspect the operations hereunder.
- (b) The right to inspect the logs, samples and cuttings from any and all wells drilled hereunder, and to receive copies of the logs.
- (c) The right to inspect and audit at all reasonable times the Unit Operator's books, records and invoices pertaining to any matter of accounting arising hereunder.

15. The Unit Area shall not be operated hereunder as a partnership venture, and the liability of the parties hereto shall be several and not joint or collective. Each party shall be responsible only for its obligations as set out herein and shall be liable only for its proportionate share of the cost of operation hereunder.

16. Any of the parties hereto shall have the right at any time while not in default of any provisions hereof, or indebted to the joint account, to be relieved of all further obligations, except the obligation to pay such party's proportionate part of the cost of any well then drilling under this Agreement, by assigning, subject to the approval of the Secretary of the Interior and/or the Commissioner of Public Lands, to the other parties hereto in proportion to the interests then severally held by them in the Unit Area, all of the committed working interests in the Unit Area of the party desiring to be relieved of such obligations, such interest to be assigned free and clear of all liens and encumbrances. In such event the party of the first part, as Unit Operator, shall pay to the party desiring to be relieved of such further obligations, the fair secondhand value, less the cost of salvaging same, of such party's proportionate interest in all casing, material, equipment, fixtures and personal property belonging to the joint account.

17. Should any of the parties hereto desire at any time to sell all or any of their interests in and to said oil and gas leases, the other parties

18. This Operating Agreement shall become effective as of the effective date of the Four Mile Unit Agreement hereinabove referred to, and shall remain in full force and effect during the life of such Unit Agreement, and the provisions shall be considered as covenants running with the ownership of said oil and gas leases and binding upon the successors and assigns of the parties hereto.

ATTEST:

Thos. Rowland
Secretary

By [Signature]
President

ATTEST:

ATTEST:
Joe W. Lasker
Secretary

By Donald L. Will President

ATTEST:

~~Asst. Secretary~~ *[Signature]* S. Edge

By E. L. Symon
Vice-President

ATTEST:

Secretary

By [Signature]
 [Signature] ~~President~~ ATTORNEY-IN-FACT

-12-

Approved ~~as to type~~

800-368-1313 in print

was

APPROVED	
Legal	<i>[Signature]</i>
Title &	<i>[Signature]</i>
Eng.	
Gen.	
Card	<i>[Signature]</i>
Proj.	<i>[Signature]</i>

COMMONWEALTH OF PENNSYLVANIA)
 : SS.
COUNTY OF PHILADELPHIA)

On this 25th day of JULY, 1952, before me personally
appeared WM. WIKOFF SMITH to me personally
known, who being by me duly sworn did say that he is _____ President of
KEWANEE OIL COMPANY, a corporation, and that the seal affixed to said instru-
ment is the corporate seal of said corporation, and that said instrument was
signed and sealed in behalf of said corporation by authority of its board of
directors, and said WM. WIKOFF SMITH acknowledged said
instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and
year in this certificate above written.

My commission expires: 2315 FIDELITY-PHILA. TRUST BLDG. PHILA. 9, PA.
COMMISSION EXPIRES FEB. 23, 1955
PAUL UETZ, NOTARY PUBLIC *Paul Uetz*
Notary Public

STATE OF NEW MEXICO)
 : SS.
COUNTY OF CHAVES)

On this 8th day of August, 1952, before me personally
appeared Donald B. Anderson to me personally
known, who being by me duly sworn did say that he is Vice President of
MALCO REFINERIES, INC., a corporation, and that the seal affixed to said instru-
ment is the corporate seal of said corporation, and that said instrument was
signed and sealed in behalf of said corporation by authority of its board of
directors, and said Donald B. Anderson acknowledged said
instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and
year in this certificate above written.

My commission expires: June 30, 1956
H. E. Harrington
Notary Public

STATE OF TEXAS)
 : SS.
COUNTY OF DALLAS)

On this 5th day of August, 1952, before me personally appeared E. C. Seymour to me personally known, who being by me duly sworn did say that he is Vice President of MAGNOLIA PETROLEUM COMPANY, a corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said E. C. Seymour acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Walter D. Walters
Notary Public

My commission expires: 6-1-53

STATE OF TEXAS
COUNTY OF TARRANT

On this 4th day of August, 1952, before me personally appeared C. B. Williams, to me personally known, who being by me duly sworn did say that he is Attorney-in-Fact of THE TEXAS COMPANY, a corporation, and that the seal affixed to said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said C. B. Williams acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Erna C. Wells
Notary Public

My commission expires: 6/1/53

Notary Public

My commission expires: _____

Attached to and made a part of OPERATING AGREEMENT
FOUR MILE UNIT AREA, CHAVES COUNTY, NEW MEXICO

ACCOUNTING PROCEDURE (UNIT AND JOINT LEASE OPERATIONS)

I. GENERAL PROVISIONS

1. Definitions

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

The term "Operator" as herein used shall be construed to mean the party designated to conduct the development and operation of the leased premises for the joint account.

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

2. Statements and Billings

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

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

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

C. Statements, as follows:

(1) Detailed statement of material ordinarily considered controllable by Operators of oil and gas properties;

(2) Statement of all other charges and credits to the joint account summarized by appropriate classifications indicative of the nature thereof; and

(3) Statement of any other receipts and credits.

3. Payments by Non-Operator

Each party shall pay its proportion of all such bills within fifteen (15) days after receipt thereof. If payment is not made within such time, the unpaid balance shall bear interest at the rate of six per cent (6%) per annum until paid.

4. Audits

Payment of any such bills shall not prejudice the right of Non-Operator to protest or question the correctness thereof. All statements rendered to Non-Operator by Operator during any calendar year shall be conclusively presumed to be true and correct after eighteen months following the close of any such calendar year, unless within said eighteen months period Non-Operator takes written exception thereto and makes claim on Operator for adjustment. Failure on the part of Non-Operator to make claim on Operator for adjustment within such period shall establish the correctness thereof and preclude the filing of exceptions thereto or the making of claims for adjustment thereon. A Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit Operator's accounts and records relating to the accounting hereunder, within eighteen months next following the close of any calendar year. Non-Operator shall have six months next following the examination of the Operator's records within which to take written exception to and make any and all claims on Operator. The provisions of this paragraph shall not prevent adjustments resulting from the physical inventory of property as provided for in Section VI, Inventories, hereof.

II. DEVELOPMENT AND OPERATING CHARGES

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

1. Rentals and Royalties

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

2. Labor, Transportation, and Services

Labor, transportation, and other services necessary for the development, maintenance, and operation of the joint property. Labor shall include (A) Operator's cost of vacation, sickness and disability benefits of employees, and expenditures or contributions imposed or assessed by governmental authority applicable to such labor, and (B) Operator's current cost of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of like nature, applicable to Operator's field payroll; provided that the charges under Part (B) of this paragraph shall not exceed five per cent (5%) of the total of such labor charged to the joint account.

3. Material

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

4. Moving Material to Joint Property

Moving material to the joint property from Vendor's or from Operator's warehouse in the district or from the other properties of Operator, but in either of the last two events no charge shall be made to the joint account for a distance greater than the distance from the nearest reliable supply store or railway receiving point where such material is available, except by special agreement with Non-Operator.

5. **Moving Surplus Material from Joint Property**
Moving surplus material from the joint property to outside vendees, if sold f.o.b. destination, or minor returns to Operator's warehouse or other storage point. No charge shall be made to the joint account for moving major surplus material to Operator's warehouse or other storage point for a distance greater than the distance to the nearest reliable supply store or railway receiving point, except by special agreement with Non-Operator; and no charge shall be made to the joint account for moving material to other properties belonging to Operator, except by special agreement with Non-Operator.
6. **Use of Operator's Equipment and Facilities**
Use of and service by Operator's exclusively owned equipment and facilities as provided in Paragraph 4, of Section III, "Basis of Charges to Joint Account."
7. **Damages and Losses**
Damages or losses incurred by fire, flood, storm, or any other cause not controllable by Operator through the exercise of reasonable diligence. Operator shall furnish Non-Operator written notice of damage or losses incurred by fire, storm, flood, or other natural or accidental causes as soon as practicable after report of the same has been received by Operator.
8. **Litigation, Judgments, and Claims**
All costs and expenses of litigation, or legal services otherwise necessary or expedient for the protection of the joint interests, including attorney's fees and expenses as hereinafter provided, together with all judgments obtained against the joint account or the subject matter of this agreement; actual expenses incurred by any party or parties hereto in securing evidence for the purpose of defending against any action or claim prosecuted or urged against the joint account or the subject matter of this agreement.
 - A. If a majority of the interests hereunder shall so agree, actions or claims affecting the joint interests hereunder may be handled by the legal staff of one or more of the parties hereto, and a charge commensurate with the services rendered may be made against the joint account, but no such charge shall be made until approved by the legal department of or attorneys for the respective parties hereto.
 - B. Fees and expenses of outside attorneys shall not be charged to the joint account unless authorized by the majority of the interests hereunder.
9. **Taxes**
All taxes of every kind and nature assessed upon or in connection with the properties which are the subject of this agreement, the production therefrom or the operation thereof, and which taxes have been paid by the Operator for the benefit of the parties hereto.
10. **Insurance**
 - A. Premiums paid for insurance carried for the benefit of the joint account, together with all expenditures incurred and paid in settlement of any and all losses, claims, damages, judgments, and other expenses, including legal services, not recovered from insurance carrier.
 - B. If no insurance is required to be carried, all actual expenditures incurred and paid by Operator in settlement of any and all losses, claims, damages, judgments, and any other expenses, including legal services, shall be charged to the joint account.
11. **District and Camp Expense**
A proportionate share of the salaries and expenses of Operator's District Superintendent and other general district or field employees serving the joint property, whose time is not allocated direct to the joint property, and a proportionate share of maintaining and operating a district office and all necessary camps, including housing facilities for employees if necessary, in conducting the operations on the joint property and other leases owned and operated by Operator in the same locality. The expense of, less any revenue from, these facilities shall include depreciation or a fair monthly rental in lieu of depreciation on the investment. Such charges shall be apportioned ~~to the joint account on the basis of the number of wells on the property to the number of wells in the area served by the District office.~~ ~~to the joint account on the basis of the number of wells on the property to the number of wells in the area served by the District office.~~ in ratio of the number of wells on the property to the number of wells in the area served by the District office.
12. **Overhead**
Overhead charges, which shall be in lieu of any charges for any part of the compensation or salaries paid to managing officers and employees of Operator, including the division superintendent, the entire staff and expenses of the division office located at Odessa, Texas, and any portion of the office expense of the principal business office located at Tulsa, Oklahoma, but which are not in lieu of district or field office expenses incurred in operating any such properties, or any other expenses of Operator incurred in the development and operation of said properties; and Operator shall have the right to assess against the joint property covered hereby the following overhead charges:
 - A. \$ 300.00 per month for each drilling well, beginning on the date the well is spudded and terminating when it is on production or is plugged, as the case may be, except that no charge shall be made during the suspension of drilling operations for fifteen (15) or more consecutive days.
 - B. \$ 40.00 per well per month for the first five (5) producing wells.
 - C. \$ 35.00 per well per month for the second five (5) producing wells.
 - D. \$ 30.00 per well per month for all producing wells over ten (10).
 - E. In connection with overhead charges, the status of wells shall be as follows:
 - (1) In-put or key wells shall be included in overhead schedule the same as producing oil wells.
 - (2) Producing gas wells shall be included in overhead schedule the same as producing oil wells.
 - (3) Wells permanently shut down but on which plugging operations are deferred, shall be dropped from overhead schedule at the time the shutdown is effected. When such wells are plugged, overhead shall be charged at the producing well rate during the time required for the plugging operation.
 - (4) Wells being plugged back or drilled deeper shall be included in overhead schedule the same as drilling wells.
 - (5) Various wells may be shut down temporarily and later replaced on production. If and when a well is shut down (other than for proration) and not produced or worked upon for a period of a full calendar month, it shall not be included in the overhead schedule for such month.
 - (6) Salt water disposal wells shall not be included in overhead schedule.

- F. The above overhead schedule on producing wells shall be applied to individual leases; provided that, whenever leases covered by this agreement are operated as a unitized project in the interest of economic development, the schedule shall be applied to the total number of wells, irrespective of individual leases.
- G. The above specific overhead rates may be amended from time to time by agreement between Operator and Non-Operator if, in practice, they are found to be insufficient or excessive.

13. Warehouse Handling Charges

NONE

14. Other Expenditures

Any other expenditure incurred by Operator for the necessary and proper development, maintenance, and operation of the joint property.

III. BASIS OF CHARGES TO JOINT ACCOUNT

1. Purchases

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

2. Material Furnished by Operator

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

A. New Material (Condition "A")

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

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

- (1) Material which is in sound and serviceable condition and is suitable for reuse without reconditioning shall be classed as Condition "B" and priced at 75% of new price.
- (2) Material which cannot be classified as Condition "B" but which,
 - (a) After reconditioning will be further serviceable for original function as good second hand material (Condition "B"), or
 - (b) Is serviceable for original function but substantially not suitable for reconditioning, shall be classed as Condition "C" and priced at 50% of new price.
- (3) Material which cannot be classified as Condition "B" or Condition "C" shall be priced at a value commensurate with its use.
- (4) Tanks, derricks, buildings, and other equipment involving erection costs shall be charged at applicable percentage of knocked-down new price.

3. Warranty of Material Furnished by Operator

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

4. Operator's Exclusively Owned Facilities

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

- A. Water service, fuel gas, power, and compressor service: At rates commensurate with cost of providing and furnishing such service to the joint account but not exceeding rates currently prevailing in the field where the joint property is located.
- B. Automotive Equipment: Rates commensurate with cost of ownership and operation. Such rates should generally be in line with schedule of rates adopted by the Petroleum Motor Transport Association, or some other recognized organization, as recommended uniform charges against joint account operations and revised from time to time. Automotive rates shall include cost of oil, gas, repairs, insurance, and other operating expense and depreciation; and charges shall be based on use in actual service on, or in connection with, the joint account operations. Truck, tractor, and pulling unit rates shall include wages and expenses of driver.
- C. A fair rate shall be charged for the use of drilling and cleaning-out tools and any other items of Operator's fully owned machinery or equipment which shall be ample to cover maintenance, repairs, depreciation, and the service furnished the joint property; provided that such charges shall not exceed those currently prevailing in the field where the joint property is located.
- D. Whenever requested, Operator shall inform Non-Operator in advance of the rates it proposes to charge.
- E. Rates shall be revised and adjusted from time to time when found to be either excessive or insufficient.

5. Please see the Attached Rider.

Paragraph 5. to Section III.

At such times as tubular goods and equipment can be purchased only at prices in excess of the limitations herein set out or such tubular goods and equipment are not available at the nearest customary supply point, Operator, notwithstanding such limitations, shall be permitted to charge the joint account with such costs and expenses as may be reasonably incurred in purchasing, shopping, and moving the required tubular goods and equipment to said jointly owned premises; provided, however, that each Non-Operator shall be first given the opportunity of furnishing in kind his or its share of such tubular goods and equipment required. This exception to said limitations shall be effective and shall apply only during such periods as the prices for such tubular goods and equipment are in excess of said limitations.

1. Material Purchased by Operator

Material purchased by Operator shall be credited to the joint account and included in the monthly statement of operations for the month in which the material is removed from the joint property.

2. Material Purchased by Non-Operator

Material purchased by Non-Operator shall be invoiced by Operator and paid for by Non-Operator to Operator immediately following receipt of invoice. The Operator shall pass credit to the joint account and include the same in the monthly statement of operations.

3. Division in Kind

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

4. Sales to Outsiders

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

V. BASIS OF PRICING MATERIAL TRANSFERRED FROM JOINT ACCOUNT

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

1. New Price Defined

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

2. New Material

New material (Condition "A"), being new material procured for the joint account but never used thereon, at 100% of current new price.

3. Good Used Material

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

- A. At 75% of current new price if material was charged to joint account as new, or
- B. At 75% of current new price less depreciation consistent with their usage on and service to the joint property, if material was originally charged to the joint property as secondhand at 75% of new price.

4. Other Used Material

Used Material (Condition "C"), being used material which

- A. After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
- B. Is serviceable for original function but substantially not suitable for reconditioning, at 50% of current new price.

5. Bad-Order Material

Used material (Condition "D"), being material which cannot be classified as Condition "B" or Condition "C", shall be priced at a value commensurate with its use.

6. Junk

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

7. Temporarily Used Material

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

VI. INVENTORIES

1. Periodic Inventories

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

2. Notice

Notice of intention to take inventory shall be given by Operator at least ten days before any inventory is to begin, so that Non-Operator may be represented when any inventory is taken.

3. Failure to be Represented

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

4. Reconciliation of Inventory

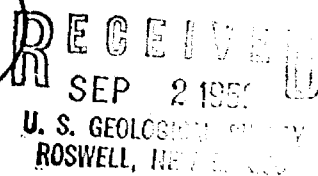
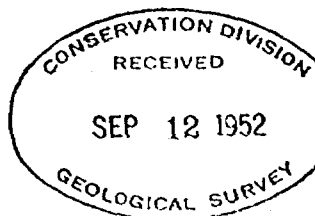
Reconciliation of inventory with charges to the joint account shall be made by each party at interest, and a list of overages and shortages shall be jointly determined by Operator and Non-Operator.

5. Adjustment of Inventory

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

6. Special Inventories

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



UNIT AGREEMENT

FOR THE DEVELOPMENT AND OPERATION OF
THE FOUR HILE UNIT AREA
COUNTY OF CHAVES, STATE OF NEW MEXICO

~~UNIT~~ NO. 14-08-001-322

THIS AGREEMENT, entered into, as of the 15th
day of MARCH, 1951, by and between the parti-
es subscribing, ratifying, or consenting hereto, and here-
in referred to as the "parties hereto",

W I T N E S S E T H:

WHEREAS, the parties hereto are the owners of
working, royalty, or other oil and gas interests in the
unit area subject to this agreement; and

WHEREAS, the Act of February 25, 1920, 41 Stat.
437, as amended by the Act of August 8, 1946, 60 Stat.
950, 30 U. S. C. Secs. 181 et seq., authorizes Federal
lessees and their representatives to unite with each
other, or jointly or separately with others, in collect-
ively adopting and operating a cooperative or unit plan
of development or operation of any oil or gas pool, field,
or like area, or any part thereof, for the purpose of more
properly conserving the natural resources thereof whenever
determined and certified by the Secretary of the Interior
to be necessary or advisable in the public interest; and

WHEREAS, the Commissioner of Public Lands of the
State of New Mexico is authorized, by an Act of Legisla-
ture (Chap. 88, Laws 1943) to consent to or approve this

agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized, by an Act of Legislature (Chap. 72, Laws 1935, as amended by Chap. 168, Laws of 1949) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Four Mile Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste, and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth;

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below-defined unit area, and agree severally among themselves, as follows:

1. ENABLING ACT AND REGULATIONS. The Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid pertinent and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement, as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to non-Federal lands,

the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State of New Mexico, are hereby accepted and made a part of this agreement.

2. UNIT AREA. The following described land is hereby designated and recognized as constituting the unit area:

New Mexico Principal Meridian, New Mexico

T. 18 S., R. 18 E.
Sec. 1, Lots 7, 8, 9 and 10 and S/2;
Sec. 11, SE/4;
Secs. 12, 13 and 14, all;
Sec. 15, SE/4;
Sec. 21, SE/4;
Secs. 22 and 23, all;
Sec. 24, N/2, SW/4;
Sec. 25, W/2;
Secs. 26 and 27, all;
Sec. 28, E/2;
Secs. 34 and 35, all;
Sec. 36, W/2.

T. 19 S., R. 18 E.
Sec. 1, lots 3 and 4, S/2 NW/4, SW/4;
Secs. 2 and 3, all;
Secs. 10 and 11, all;
Sec. 12, W/2, S/2 SE/4;
Secs. 13 and 14, all;
Sec. 15, N/2 NE/4;
Sec. 23, NE/4;
Secs. 24 and 25, all,

in Chaves County, New Mexico, and containing 14,238.96 acres, more or less.

Exhibit "A", attached hereto, is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B", attached hereto, is a schedule showing to the extent known to the Unit Operator the acreage, percentage and kind of ownership of oil and gas interests in all land in the unit area. However, nothing here-

in or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor", or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Commissioner", or when requested by the Oil Conservation Commission of the State of New Mexico, hereinafter referred to as "Commission", and not less than six copies of the revised exhibits shall be filed with the Supervisor, and such number of copies as shall be required shall be filed with the Commissioner and the Commission.

The above described unit area shall, when practicable, be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purposes of this agreement, or shall be contracted to exclude lands not within any participating area whenever such expansion or contraction is necessary or advisable to conform with the purposes of this agreement. Such expansion or contraction shall be effected in the following manner:

(a) Unit Operator, on its own motion or on demand of the Director of the Geological Survey, hereinafter referred to as "Director", or on demand of the "Commissioner" or on demand of the "Commission" shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit area, the

reasons therefor, and the proposed effective date thereof.

(b) Said notice, shall be delivered to the Supervisor, to the Commissioner and to the Commission, and copies thereof mailed to the last known address of each working interest owner, lessee, and lessor whose interests are affected, advising that 30 days will be allowed for submission to the Unit operator of any objections.

(c) Upon expiration of the 30 day period provided in the preceding item (b) hereof, Unit Operator shall file with the Supervisor, the Commissioner and the Commission evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit operator.

(d) After due consideration of all pertinent information, the expansion or contraction shall, upon approval by the Director, the Commissioner and the Commission, become effective as of the date prescribed in the notice thereof.

All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement".

3. UNITIZED SUBSTANCES. All oil and gas in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".

4. UNIT OPERATOR. Kewanee Oil Company, a Corporation, with an office at Tulsa, Oklahoma, is hereby designated as Unit Operator and by signature hereto as Unit Operator agrees and consents to accept the duties and obligations

of Unit Operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interest in unitized substances, and the term "working interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR.

Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six months after notice of intention to resign has been served by Unit Operator on all working interest owners, the Director, and Commissioner, and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment, which ever is required by the Supervisor as to wells on Federal land and whichever is required by the Commission as to wells on State or patented land, unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

Unit Operator shall have the right to resign in like manner and subject to like limitations as above provided at any time a participating area established hereunder is in existence, but until a successor unit operator is

selected and approved as hereinafter provided, the working interest owners shall be jointly responsible for performance of the duties of unit operator, and shall not later than 30 days before such resignation becomes effective, appoint a common agent to represent them in any action to be taken hereunder.

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

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director and Commissioner.

The resignation or removal of Unit Operator under this agreement shall not terminate its right, title or interest as the owner of a working interest or other interest in unitized substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all equipment, materials, and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor Unit Operator or to the owners thereof if no such new Unit Operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equip-

ment and appurtenances needed for the preservation of any wells.

6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or, until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator: PROVIDED, That, if a majority but less than 75 per cent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners shall be required to select a new operator. Such selection shall not become effective until (a) a Unit Operator so selected shall accept, in writing, the duties and responsibilities of Unit Operator, and (b) the selection shall have been approved by the Director and Commissioner. If no successor Unit Operator is selected and qualified as herein provided, the Director and the Commissioner, at their election, may declare this Unit Agreement terminated.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the Unit Operator is not the sole owner of working interests, costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests, all in accordance with the agreement or agreements

entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement". Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any inconsistency or conflict between the unit agreement and the unit operating agreement, this unit agreement shall prevail. One true copy of any unit operating agreement executed pursuant to this section shall be filed with the Supervisor and one true copy thereof shall be filed with the Commissioner.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the unitized substances are hereby delegat-

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

9. DRILLING TO DISCOVERY. Within six months after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor, if such location is upon lands of the United States, and if upon State lands or patented lands, such location shall be approved by the Commission, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Ellenburger formation has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling, and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the Supervisor, the Commissioner and the Commission that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 5500 feet. Until the discovery

of a deposit of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of said Supervisor, the Commissioner and the Commission, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and Commissioner and the Commission may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to comply with the drilling provisions of this section, the Director may, after reasonable notice to the Unit Operator, and each working interest owner, lessee, and lessor at their last known addresses, declare this unit agreement terminated.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION.

Within six months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the Supervisor, the Commissioner and the Commission, an acceptable plan of

development and operation for the unitized land which, when approved by the Supervisor, the Commissioner and the Commission shall constitute the further drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Supervisor, the Commissioner and the Commission, a plan for an additional specified period for the development and operation of the unitized land. Any plan submitted pursuant to this section shall provide for the exploration of the unitized area and for the determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and shall be as complete and adequate as the Supervisor, the Commissioner and the Commission may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall (a) specify the number and locations of any wells to be drilled and the proposed order and time for such drilling; and (b) to the extent practicable specify the operating practices regarded as necessary and advisable for proper conservation of natural resources. Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor, the Commissioner and the Commission. Said plan or plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the approv-

ed plan of development. The Supervisor, the Commissioner and the Commission are authorized to grant a reasonable extension of the six month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of producing any unitized substance in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor, the Commissioner and the Commission, shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable of producing unitized substances in paying quantities or as soon thereafter as required by the Supervisor, the Commissioner and the Commission, the Unit Operator shall submit for approval by the Director a schedule, based on subdivisions of the public-land survey or aliquot parts thereof, of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all lands in said schedule on approval of the Director, the Commissioner and the Commission, to constitute a participating area, effective as of the date of first production. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes

effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director, the Commissioner and the Commission. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, or to exclude land then regarded as reasonably proved not to be productive, and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities; but, regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the revision of the participating area. In the absence of agreement at any time between

the Unit Operator and the Director, the Commissioner and the Commission, as to the proper definition or redifinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor and the Commissioner respectively, and the amount thereof deposited, as directed by the Supervisor and the Commissioner respectively, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sums due as Federal royalty and State royalty on the basis of such approved participating area.

Whenever it is determined, subject to the approval of the Supervisor, the Commissioner and the Commission that a well drilled under this agreement is not capable of production in paying quantities and inclusion of the land on which it is situated in a participating area is unwarranted, production from such well, shall, for the purposes of settlement among all parties other than working interest owners, be allocated to the land on which the well is located so long as such land is not within a participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a well shall be made as provided in the unit operating agreement.

12. ALLOCATION OF PRODUCTION. All unitized substances produced from each participating area established

under this agreement, except any part thereof used in conformity with good operating practices within the unitized area for drilling, operating, camp and other production or development purposes, for repressuring or recycling in accordance with a plan of development approved by the Supervisor, the Commissioner and the Commission, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of unitized land of the participating area established for such production and, for the purpose of determining any benefits accruing under this agreement, each such tract of unitized land shall have allocated to it such percentage of said production as the number of acres of such tract included in said participating area bears to the total acres of unitized land in said participating area. It is hereby agreed that production of unitized substances from a participating area shall be allocated as provided herein regardless of whether any wells are drilled on any particular part or tract of said participating area. If any gas produced from one participating area is used for repressuring or recycling purposes in another participating area, the first gas withdrawn from such last-mentioned participating area for sale during the life of this agreement shall be considered to be the gas so transferred until an amount equal to that transferred shall be so produced for sale and such gas shall be allocated to the participating area from which initially produced as constituted at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS. Any party hereto owning or controlling

the working interest in any unitized land having thereon a regular well location may with the approval of the Supervisor, if such location be on lands of the United States and with the approval of the Commission if such well be located on State or patented lands, at such party's sole risk, cost, and expense, drill a well to test any formation for which a participating area has not been established or to test any formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such well in like manner as other wells are drilled by the Unit operator under this agreement.

If any well drilled as aforesaid by a working interest owner results in production such that the land upon which it is situated may properly be included in a participating area, such participating area shall be established or enlarged as provided in this agreement and the well shall thereafter be operated by Unit Operator in accordance with the terms of this agreement and the unit operating agreement.

If any well drilled as aforesaid by a working interest owner obtains production in quantities insufficient to justify the inclusion in a participating area of the land upon which such well is situated, such well may be operated and produced by the party drilling the same subject to the conservation requirements of this agreement. The royalties in amount or value of production from any such well shall be paid as specified in the underlying lease and agreements affected.

14. ROYALTY SETTLEMENT. The United States and the State of New Mexico, and all royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized substances allocated to such tract, the Unit Operator, or in case of the operation of a well by a working interest owner as herein in special cases provided for, such working interest owner, shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws, and regulations. Settlement for royalty interest not taken in kind shall be made by working interest owners responsible therefor under existing contracts, laws, and regulations, on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessee of any land from their respective lease obligations for the payment of any royalties due under their leases.

If gas obtained from lands not subject to this agreement is introduced into any participating area hereunder, for use in repressuring, stimulation of production or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor, the Commissioner and the Commission, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with due allowance for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to

dry gas, but not as to the products extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the plan of operations or as may otherwise be consented to by the Supervisor, the Commissioner and the Commission, as conforming to good petroleum engineering practice; and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

Royalty due the United States shall be computed as provided in the operating regulations and paid in value or delivered in kind as to all unitized substances on the basis of the amounts thereof allocated to unitized Federal land as provided herein at the rates specified in the respective Federal leases, or at such lower rate or rates as may be authorized by law or regulation; provided, that for leases on which the royalty rate depends on the daily average production per well, said average production shall be determined in accordance with the operating regulations as though each participating area were a single consolidated lease.

Royalty due the State of New Mexico shall be paid in value or delivered in kind to the State of New Mexico, as to all unitized substances, on the basis of the amounts thereof allocated to unitized State land, as provided herein, at the rate specified in the respective State leases.

15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws, and regulations, provided that nothing herein contained shall operate to relieve the lessees of

of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under the leases. Rental or minimum royalty for lands of the United States subject to this agreement shall be paid at the rate specified in the respective leases from the United States unless such rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative. Rental or minimum royalty for lands of the State of New Mexico and patented land, subject to this agreement, shall be paid at the rate specified in the respective leases from the State of New Mexico and the lessors of patented land.

16. CONSERVATION. Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to the laws of the State of New Mexico and applicable regulations, or Federal law or regulation.

17. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement, or pursuant to applicable regulations, pay a fair and reasonable compensatory royalty as determined by the Supervisor, as to Federal interests and as determined by the Commissioner as to State interests, and as determined by agreement between the Unit Operator and royalty owner as to private interests.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED.

The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operation for oil or gas of lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary shall and by his approval hereof, or by the approval hereof by his duly authorized representative, and that the Commissioner shall and by his approval hereof, do hereby establish, alter, change, or revoke the drilling, producing, rental, minimum royalty and royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement, and, without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned tract subject to this agreement, regardless of whether there is any development of any particular part or tract of the unit area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

(b) Drilling and producing operations performed hereunder upon any tract of unitized lands will be accepted

and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

(c) Suspension of drilling or producing operations on all unitized land pursuant to direction or consent of the Secretary or his duly authorized representative, and the Commissioner, shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of unitized land.

(d) Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil or gas of lands other than those of the United States, committed to this agreement, which by its terms might expire prior to the termination of this agreement, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of this agreement.

(e) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the committed land so long as such land remains committed hereto, provided unitized substances are discovered in paying quantities within the unit area prior to the expiration date of the primary term of such lease.

(f) Each sublease or contract relating to the

operation and development of unitized substances from lands of the United States committed to this agreement, which by its terms would expire prior to the time at which the underlying lease, as extended by the immediate preceding paragraph will expire, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of the underlying lease as such term is herein extended.

(g) Any lease having only a portion of its land committed hereto shall be segregated as to the portion committed and the portion not committed, and the terms of such lease shall apply separately to such segregated portions commencing as of the effective date hereof. In the event any such lease provides for a lump sum rental payment, such payment shall be prorated between the portions so segregated in proportion to the acreage of the respective tracts.

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

20. EFFECTIVE DATE AND TERM. This agreement shall become effective on the first day of the calendar month next following the approval by the Secretary, or his duly authorized representatives, and the Commissioner, provided, however, nothing herein shall be construed to waive or limit the right of the Commission to approve this agreement pursuant to applicable State law, and shall terminate on March 1, 1956, unless (a) such date of expiration is extended by the Director and the Commissioner, or (b) it is reasonably determined prior to the expiration of the fixed term or any extension thereof that the unitized land is incapable of production of unitized substances in paying quantities in the formations tested hereunder and after notice of intention to terminate the agreement on such ground is given by the Unit Operator to all parties in interest at their last known addresses, the agreement is terminated with the approval of the Director and the Commissioner, or (c) a valuable discovery of unitized substances has been made on unitized land during said initial term or any extension thereof, in which event the agreement shall remain in effect for such term and so long as unitized substances can be produced in paying quantities, i. e., in this particular instance in quantities sufficient to pay for the cost of producing same from wells on unitized land within any participating area established hereunder and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can be produced as aforesaid, or (d)

it is terminated as heretofore provided in this agreement.

This agreement may be terminated at any time by not less than 75 per centum, on an acreage basis, of the owners of working interests signatory hereto, with the approval of the Director and the Commissioner; notice of any such approval to be given by the Unit Operator to all parties hereto.

21. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. The Director is hereby vested with authority to alter or modify from time to time, in his discretion, the quantity and rate of production under this agreement when such quantity and rate is not fixed pursuant to Federal or State law or does not conform to any state wide voluntary conservation or allocation program, which is established, recognized and generally adhered to by the majority of operators in the State of New Mexico, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time in his discretion, the rate of prospecting and development and the quantity and rate of production under this agreement when such alteration or modification is in the interest of attaining the conservation objectives stated in this agreement and is not in violation of any applicable Federal or State Law.

Powers in this section vested in the Director

shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than fifteen days from notice.

22. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department of the Interior and the New Mexico Oil Conservation Commission, and to appeal from orders issued under the regulations of said Department or said Commission, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior or the Commission or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

23. NOTICES. All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to such other address as any such party may have furnished in writing to party sending the notice, demand or statement.

24. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalid-

ity of any law of the State of New Mexico or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

25. UNAVOIDABLE DELAY. All obligations under this agreement requiring the Unit Operator to commence or continue drilling or to operate on or produce unitized substances from any of the lands covered by this agreement shall be suspended while, but only so long as, the Unit Operator despite the exercise of due care and diligence is prevented from complying with such obligations, in whole or in part, by strikes, acts of God, Federal, State, or municipal law or agencies, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

26. FAIR EMPLOYMENT. The Unit Operator shall not discriminate against any employee or applicant for employment because of race, creed, color or national origin, and an identical provision shall be incorporated in all sub-contracts.

27. LOSS OF TITLE. In the event title to any tract of unitized land shall fail and the true owner cannot be induced to join in this unit agreement, such tract shall be automatically regarded as not committed hereto and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any royalty, work-

ing interest, or other interests subject thereto, payment or delivery on account thereof may be withheld without liability for interest until the dispute is finally settled; provided that, as to Federal land or leases, or State land or leases, no payments of funds due the United States or the State of New Mexico should be withheld, but such funds shall be deposited as directed by the Supervisor and Commissioner to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

28. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the working interest in that tract may withdraw said tract from this agreement by written notice to the Director and the Commissioner and the Unit Operator prior to the approval of this agreement by the Director and the Commissioner. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is

subject to such requirements or approvals, if any, pertaining to such joinder, as may be provided for in the unit operating agreement. After final approval hereof joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. Prior to final approval hereof, joinder by any owner of a non-working interest must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as effectively committed hereto. Except as may otherwise herein be provided subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor, the Commissioner and the Commission, of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within 60 days by the Director, the Commissioner and the Commission.

29. COUNTERPARTS. This agreement may be executed in any number of counterparts no one of which needs to be executed by all parties or may be ratified or consented to by separate instrument in writing specifically referring hereto and shall be binding upon all those parties who have executed such a counterpart, ratification, or consent hereto with the same force and effect as if all such parties had signed the same document and regardless of whether or not it is executed by all other parties owning or claiming an inter-

est in the lands within the above described unit area.

30. SURRENDER. Nothing in this agreement shall prohibit the exercise by any working interest owner of the right to surrender vested in such party in any lease, sublease, or operating agreement as to all or any part of the lands covered thereby, provided that each party who will or might acquire such working interest by such surrender or by forfeiture as hereafter set forth, is bound by the terms of this agreement.

If as a result of any such surrender, the working interest rights as to such lands become vested in any party other than the fee owner of the unitized substances, said party shall forfeit such rights and no further benefits from operations hereunder as to said land shall accrue to such party, unless within ninety (90) days thereafter said party shall execute this agreement and the unit operating agreement as to the working interest acquired through such surrender, effective as though such land had remained continuously subject to this agreement and the unit operating agreement. And in the event such agreements are not so executed, the party next in the chain of title shall be and become the owner of such working interest at the end of such ninety (90) day period, with the same force and effect as though such working interest had been surrendered to such party.

If as the result of any such surrender or forfeiture the working interest rights as to such lands become vested in the fee owner of the unitized substances, such owner may:

- (1) Execute this agreement and the unit operating

agreement as a working interest owner, effective as though such land had remained continuously subject to this agreement and the unit operating agreement.

(2) Again lease such lands but only under the condition that the holder of such lease shall within thirty (30) days after such lands are so leased execute this agreement and the unit operating agreement as to each participating area theretofore established hereunder, effective as though such land had remained continuously subject to this agreement and the unit operating agreement.

(3) Operate or provide for the operation of such land independently of this agreement as to any part thereof of any oil or gas deposits therein not then included within a participating area.

If the fee owner of the unitized substances does not execute this agreement and the unit operating agreement as a working interest owner or again lease such lands as above provided with respect to each existing participating area, within six (6) months after any such surrender or forfeiture, such fee owner shall be deemed to have waived the right to execute the unit operating agreement or lease such lands as to each such participating area, and to have agreed, in consideration for the compensation hereinafter provided, that operations hereunder as to any such participating area or areas shall not be affected by such surrender.

For any period the working interest in any lands are not expressly committed to the unit operating agreement as the result of any such surrender or forfeiture, the benefits and obligations of operations accruing to such lands

under this agreement and the unit operating agreement shall be shared by the remaining owners of unitized working interests in accordance with their respective participating working interest ownerships in any such participating area or areas, and such owners of working interests shall compensate the fee owner of unitized substances in such lands by paying sums equal to the rentals, minimum royalties and royalties applicable to such lands under the lease in effect when the lands were unitized, as to such participating area or areas.

Upon commitment of a working interest to this agreement and the unit operating agreement as provided in this section, an appropriate accounting and settlement shall be made, to reflect the retroactive effect of the commitment, for all benefits accruing to or payments and expenditures made or incurred on behalf of such surrendered working interest during the period between the date of surrender and the date of recommitment, and payment of any moneys found to be owing by such an accounting shall be made as between the parties then signatory to the unit operating agreement and this agreement within thirty (30) days after the recommitment. The right to become a party to this agreement and the unit operating agreement as a working interest owner by reason of a surrender or forfeiture as provided in this section shall not be defeated by the non-existence of a unit operating agreement and in the event no unit operating agreement is in existence and a mutually acceptable agreement between the proper parties thereto cannot be consummated the Supervisor and Commissioner may prescribe such reasonable and equitable agreement as they deem warranted under the circumstances.

Nothing in this section shall be deemed to limit the right of joinder or subsequent joinder to this agreement as provided elsewhere in this agreement. The exercise of any right vested in a working interest owner to reassign such working interest to the party from whom obtained shall be subject to the same conditions as set forth in this section in regard to the exercise of a right to surrender.

WORKING INTEREST OWNERS

Date: February 18, 1952

Artesia, New Mexico

Address:

R. A. Broomfield, Jr.
R. A. Broomfield, Jr.

Geraldine R. Broomfield
Geraldine R. Broomfield

Date:

Address:

May 30, 1952
Roswell, New Mexico

Patricia Gaylord Anderson
Patricia Gaylord Anderson

Donald B. Anderson
Donald B. Anderson

Date:

Address:

June 2, 1952
Roswell, N. M.

Joe W. Lackey
Joe W. Lackey

Naydeen C. Lackey
Naydeen C. Lackey

Date: March 26, 1952

Artesia, New Mexico

Address:

John E. Cochran, Jr.
John E. Cochran, Jr.

Harriett Justice Cochran
Harriett Justice Cochran

Date:

Address:

Wm. J. Mahon
Wm. J. Mahon

Mahon
Mahon

Date: MAR 15 1951

KEWANEE OIL COMPANY

ATTEST:

By *[Signature]* President

[Signature]
Secretary

Address:

2317 Fidelity-Phila. Trust Bldg.
Philadelphia 9, Pennsylvania

Date:

8-5-52

MAGNOLIA PETROLEUM COMPANY

ATTEST:

By *E. L. Seymour*
Vice- President

[Signature]
Asst. Secretary H. S. Edge

Address:

P.O. Box 900
Dallas, Texas

Date:

June 2, 1952

MALCO REFINERIES, INC.

ATTEST:

By *[Signature]* President

[Signature]
Secretary

Address:

Box 660
Roswell, New Mexico

Date:

F. W. Zielke

Address:

Zielke

APPROVED	
Legal	<i>[Signature]</i>
Title R	<i>[Signature]</i>
Engr.	
Gen	
Land	<i>[Signature]</i>
Proc	<i>[Signature]</i>

Date: _____ THE TEXAS COMPANY

ATTEST:

By

[Signature]
~~President~~

ATTORNEY-IN-FACT

Secretary

Address:

P. O. BOX 1720

FORT WORTH 1, TEXAS

Approved as to form

WMB

Approved as to content
[Signature]

UNIT OPERATOR

Date: MAR 15 1951

KEWANEE OIL COMPANY

ATTEST:

By

[Signature]
President

[Signature]
Secretary

Address:

2317 Fidelity-Phila. Trust Bldg.
Philadelphia 9, Pennsylvania

*WMB
SAH*

This Unit Agreement re-executed by KEWANEE OIL COMPANY, as working interest owner, for the purpose of committing to the Four Mile Unit Agreement any leases described in Exhibit "B" assigned to it subsequent to March 15, 1951.

DATE: FEB 15 1952

KEWANEE OIL COMPANY

By

[Signature]
President

WHP
CUB

ATTEST:

[Signature]
Secretary

Address:

2317 Fidelity-Phila. Trust Bldg.
Philadelphia 9, Pennsylvania

Page 36 on bottom

STATE OF NEW MEXICO)
 : ss.
COUNTY OF EDDY)

On this 18 day of February, 1952, before me personally appeared R. A. BROOMFIELD, JR, and GERALDINE R. BROOMFIELD, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

James Street
Notary Public

My commission expires: May 31 1953

STATE OF NEW MEXICO)
 : ss.
COUNTY OF CHAVES)

On this 2 day of June, 1952, before me personally appeared PATRICIA GAYLORD ANDERSON and DONALD B. ANDERSON, her husband, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Hubb. Forey
Notary Public

My commission expires: Feb. 21, 1956

STATE OF NEW MEXICO)
 : ss.
COUNTY OF CHAVES)

On this 2 day of June, 1952, before me personally appeared JOE W. LACKEY and NAYDEEN C. LACKEY, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Hubb. Forey
Notary Public

My commission expires: Feb. 21, 1956

STATE OF NEW MEXICO)
 : ss.
COUNTY OF EDDY)

On this 26 day of March, 1952, before me personally appeared JOHN E. COCHRAN, JR. and HARRIETT JUSTICE COCHRAN, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

James Street
Notary Public

My commission expires: May 31 1953

STATE OF _____)
: ss.
COUNTY OF _____)

On this _____ day of _____, 195____, before me personally appeared WM. J. MAHON and _____
MAHON, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Notary Public

My commission expires: _____

COMMONWEALTH OF PENNSYLVANIA)
: ss.
COUNTY OF PHILADELPHIA)

On this 15 day of FEBRUARY, 1952, before me personally appeared _____

WM. WIKOFF SMITH to me personally known, who being by me duly sworn did say that he is _____ President of KEWANEE OIL COMPANY, a corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said

WM. WIKOFF SMITH acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Frederick C. Huber
Notary Public

My commission expires: My Commission Expires January 4, 1953

STATE OF TEXAS)
: ss.
COUNTY OF DALLAS)

On this 5th day of August, 1952, before me personally appeared _____

E. C. Seymour to me personally known, who being by me duly sworn, did say that he is Vice President of MAGNOLIA PETROLEUM COMPANY, a corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said

E. C. Seymour acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Walter J. Walters
Notary Public

My commission expires: 6-1-53

STATE OF NEW MEXICO)
) ss.
COUNTY OF CHAVES)

On this 2 day of June, 1952, before me personally appeared Robert O. Anderson to me personally known, who being by me duly sworn did say that he is President of MALCO REFINERIES, INC., a corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said Robert O. Anderson acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

My commission expires: Feb. 21, 1956
W. C. Loe
Notary Public

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 195____, before me personally appeared F. W. ZIELKE and ZIELKE, his wife, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Notary Public

My commission expires: _____

STATE OF TEXAS
COUNTY OF TARRANT

On this 4th day of August, 1952, before me personally appeared C. B. Williams, to me personally known, who being by me duly sworn did say that he is Attorney-in-Fact of THE TEXAS COMPANY, a corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said C. B. Williams acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Ernest D. Willis
Notary Public

My commission expires: 6/1/53

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

R. A. Broomfield John E. Cochran, Jr.
Geraldine R. Broomfield Harriett Justice Cochran

STATE OF NEW MEXICO)
COUNTY OF EDDY) SS.

On this 21st day of July, 1952, before me personally appeared JOHN E. COCHRAN, JR. and HARRIETT JUSTICE COCHRAN, his wife, to me known to be the person s described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this 21st day of July, 1952.

My commission expires:
April 15, 1954

Leah Marshall
Notary Public
Artesia, New Mexico
Post Office

STATE OF NEW MEXICO)
COUNTY OF EDDY) SS.

On this 21st day of July, 1952, before me personally appeared R. A. BROOMFIELD, JR. and GERALDINE R. BROOMFIELD, his wife, to me known to be the person s described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this 21st day of July, 1952.

My commission expires:
April 15, 1954

Leah Marshall
Notary Public
Artesia, New Mexico
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person _____ described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

Donald D. Angle Gussie Lee Petty
Glady M. Angle Ralph Petty

STATE OF New Mexico)
COUNTY OF Eddy) SS.

On this 26th day of August, 1952, before me personally appeared Gussie Lee Petty, and Ralph Petty to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this 26th day of August, 1952.

My commission expires:
December 14, 1955

Georgia Crawford
Notary Public
Artesia, New Mexico
Post Office

STATE OF New Mexico)
COUNTY OF Eddy) SS.

On this 26th day of August, 1952, before me personally appeared Donald D. Angle and Glady Angle to me known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this ____ day of _____, 1952.

My commission expires:
December 14, 1955

Georgia Crawford
Notary Public
Artesia, New Mexico
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this ____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this ____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION
OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned, MARGARET M. WILDER, a widow, hereby acknowledges receipt of an identical copy of the Unit Agreement for the Four Mile Unit area, dated March 15, 1951, embracing land situated in Chaves County, New Mexico, and acknowledges that she has read the same and is familiar with the terms and conditions thereof.

The undersigned, also being the owner of the leasehold, royalty or other interests in the lands or minerals, as indicated on the Schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of her said interests to the Four Mile Unit Agreement and does hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned this 24 day of June, 1952.

Margaret M. Wilder
Margaret M. Wilder

STATE OF Texas)
COUNTY OF El Paso) SS.

On this 24 day of June, 1952, before me personally appeared MARGARET M. WILDER, a widow, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Eva Bauer
Notary Public

My commission expires:

EVA BAUER, Notary Public, 1st and 2nd District
County of El Paso, My commission expires June 1, 1953

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

Mrs. Kathryn E. Barker La Harpe, Ill.
J. S. Barker La Harpe, Ill.

STATE OF Illinois)
COUNTY OF Henderson) SS.

On this 31 day of July, 1952, before me personally appeared Mrs. Kathryn E. Barker and J. S. Barker, her husband to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this 31 day of July, 1952.

My commission expires:
October 4, 1953

Ramond B. Farguhar
Notary Public
Lomax, Illinois
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

_____ Alvin Reynolds (single)

STATE OF Pennsylvania)
COUNTY OF Dauphin) SS.

On this 29 day of July, 1952, before me personally appeared Alvin D. Reynolds to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

WITNESS MY HAND and official seal this 29 day of July, 1952.

My commission expires:
Jan. 15, 1955

G. B. Bunkle
Notary Public
Harrisburg, Penna.
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

Ruric N. Sampson
Marion E. Sampson

STATE OF Tennessee)
COUNTY OF Carter) SS.

On this 28th day of July, 1952, before me personally appeared Ruric N. Sampson to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

WITNESS MY HAND and official seal this 28th day of July, 1952.

My commission expires:
4-11-54

Bernice E. Bowers
Notary Public
Elizabethton, Tennessee
Post Office

STATE OF Tennessee)
COUNTY OF Carter) SS.

On this 28th day of July, 1952, before me personally appeared Marion E. Sampson to me known to be the person described in and who executed the foregoing instrument and acknowledged that she executed the same as her free act and deed.

WITNESS MY HAND and official seal this 28th day of July, 1952.

My commission expires:
4-11-54

Bernice E. Bowers
Notary Public
Elizabethton, Tennessee
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

KNOW ALL MEN BY THESE PRESENTS:

IN WITNESS WHEREOF, this instrument is executed by the under-
signed, as of the date set forth in their respective acknowledgements.

R. G. Broomfield
Geraldine R. Broomfield

On this 26th day of August, 1952, before me personally appeared R. A. BROOMFIELD, JR. and GERALDINE R. BROOMFIELD, his wife, to me known to be the person s described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

My commission expires:
April 15, 1954

On this _____ day of _____, 1952, before me personally appeared _____
to me known to be the person _____ described in and who executed the
foregoing instrument and acknowledged that _____ executed the same
as _____ free act and deed.

My commission expires:

On this _____ day of _____, 1952, before me personally appeared _____, known to me to be the person _____ described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

STATE OF Washington)
COUNTY OF Pierce) SS.

On this 29th day of July, 1952, before me personally appeared Dominik Fuchs (Single) to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as a free act and deed.

WITNESS MY HAND and official seal this 29th day of July, 1952.

My commission expires:
July 4 1953

John J. Mulvey
Notary Public
Okema Wash.
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledges receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledges that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owner of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interest to the Four Mile Unit Agreement and does hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in the acknowledgment.

ATTEST:

ROBERT E. MCKEE,
GENERAL CONTRACTOR, INC.

[Signature]
Secretary

By [Signature]
President

STATE OF TEXAS)
COUNTY OF EL PASO) SS.

On this 4 day of AUGUST, 1952, before me personally appeared ROBERT E. MCKEE to me personally known, who being by me duly sworn did say that he is _____ President of ROBERT E. MCKEE, GENERAL CONTRACTOR, INC., a corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said ROBERT E. MCKEE acknowledged said instrument to be the free act and deed of said corporation.

WITNESS my hand and official seal this 4 day of AUGUST, 1952.

My commission expires:
R. L. HAZELTON, Notary Public
My commission expires June 1, 1959

[Signature]
Notary Public
EL PASO, TEXAS
Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

Frank H. Telle
Mary B. Telle

STATE OF California)
COUNTY OF Los Angeles) SS.

On this 1st day of August, 1952, before me personally appeared Frank H. Telle and Mary B. Telle, (husband & wife), to me known to be the person s described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this 1st day of August, 1952.

My commission expires:
March 4, 1953

Dennis Capeland
Notary Public
Los Angeles, Calif.
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person _____ described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person _____ described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

Ray J. Watkins
Thelma Sue Watkins

STATE OF New Mexico)
COUNTY OF Eddy) SS.

On this 5 day of Sept., 1952, before me personally appeared Ray J. Watkins to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

WITNESS MY HAND and official seal this 5 day of Sept., 1952.

My commission expires:

5/3/54

William L. Howard
Notary Public
Carlsbad, N.M.
Post Office

STATE OF New Mexico)
COUNTY OF Eddy) SS.

On this 5 day of Sept., 1952, before me personally appeared Thelma Sue Watkins to me known to be the person described in and who executed the foregoing instrument and acknowledged that she executed the same as her free act and deed.

WITNESS MY HAND and official seal this 5 day of Sept., 1952.

My commission expires:

5/3/54

William L. Howard
Notary Public
Carlsbad, N.M.
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

Minnie M. Larson

STATE OF ILLINOIS)
COUNTY OF KNOX) SS.

On this 15th day of September, 1952, before me personally appeared MINNIE M. LARSON to me known to be the person described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

WITNESS MY HAND and official seal this 15th day of September, 1952.

My commission expires:
March 10, 1955

Edna Weaver
Notary Public
Galesburg, Illinois
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

C. L. Jalving John Vander Broek
E. A. Jalving Bertine K. Vander Broek

STATE OF Michigan)
COUNTY OF Ottawa) SS.

On this 1st day of Aug, 1952, before me personally appeared John Vander Broek & Bertine K. Vander Broek to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this 1st day of Aug, 1952.

My commission expires:
3-6-53

Clarence L. Jalving
Notary Public CLARENCE L. JALVING
Holland Mich. Notary Public, Ottawa County, Mich.
Post Office Commission Expires Mar. 6, 1953

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the Development and Operation of the Four Mile Unit Area dated the 15th day of March, 1951, embracing lands situated in Chaves County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the Schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Four Mile Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgements.

STATE OF California)
COUNTY OF Los Angeles) SS.

On this 17th day of September, 1952, before me personally appeared A. C. Scott and Lena M. Scott to me known to be the person a described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

WITNESS MY HAND and official seal this 17th day of September, 1952.

My commission expires:
February 7, 1954

Notary Public
Whittier, California
Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person _____ described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

STATE OF _____)
COUNTY OF _____) SS.

On this _____ day of _____, 1952, before me personally appeared _____ to me known to be the person _____ described in and who executed the foregoing instrument and acknowledged that _____ executed the same as _____ free act and deed.

WITNESS MY HAND and official seal this _____ day of _____, 1952.

My commission expires:

Notary Public

Post Office

CONSENT AND RATIFICATION OF
THE FOUR MILE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned, KEWANEE OIL COMPANY, does hereby consent to and ratify all the terms and provisions of the Unit Agreement for the Development and Operation of the Four Mile Unit Area in Chaves County, New Mexico, dated March 15, 1951, as fully and to the same extent as if the undersigned had re-executed, on the date hereof, the original of said Unit Agreement or a counterpart thereof.

This Consent and Ratification of the Unit Agreement dated March 15, 1951, for the Development and Operation of the Four Mile Unit Area in Chaves County, New Mexico is executed for the purpose of committing thereto and to all of the terms and provisions of said Unit Agreement, that certain Oil and Gas Lease, made and entered into on June 18, 1942, by and between the State of New Mexico, acting by and through its Commissioner of Public Lands and Harry S. Wright, bearing State of New Mexico Oil and Gas Lease No. B-9702, insofar as said lease covers the following described land, situated in Chaves County, New Mexico, to-wit:

NE/4 NW/4 Section 26, Township 18 South, Range 18 East, N.M.P.M., and containing 40 acres, more or less,

and which Oil and Gas Lease, covering the above described lands, Kewanee Oil Company acquired by Assignment of Oil and Gas Lease executed by R. A. Broomfield, Jr. and Geraldine R. Broomfield, his wife, on April 18, 1951, and which said Assignment of Oil and Gas Lease was approved by Guy Sheppard, Commissioner of Public Lands on the 23rd day of May, 1952.

IN WITNESS WHEREOF, This instrument is executed on

behalf of the undersigned this 2 day of June, 1952.

KEWANEE OIL COMPANY

By *Wm. Wikoff Smith*
President

ATTEST:

Joseph Pauland
Secretary

COMMONWEALTH OF PENNSYLVANIA)

COUNTY OF PHILADELPHIA)

) ss.
)

On this 2 day of June, 1952, before me personally appeared *Wm. Wikoff Smith*, to me personally known, who being by me duly sworn, did say that he is _____ President of KEWANEE OIL COMPANY, a corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said *Wm. Wikoff Smith* acknowledged said instrument to be the free act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year in this certificate above written.

Fredrick G. Gruber
Notary Public

My commission expires:

Jan. 4 1953

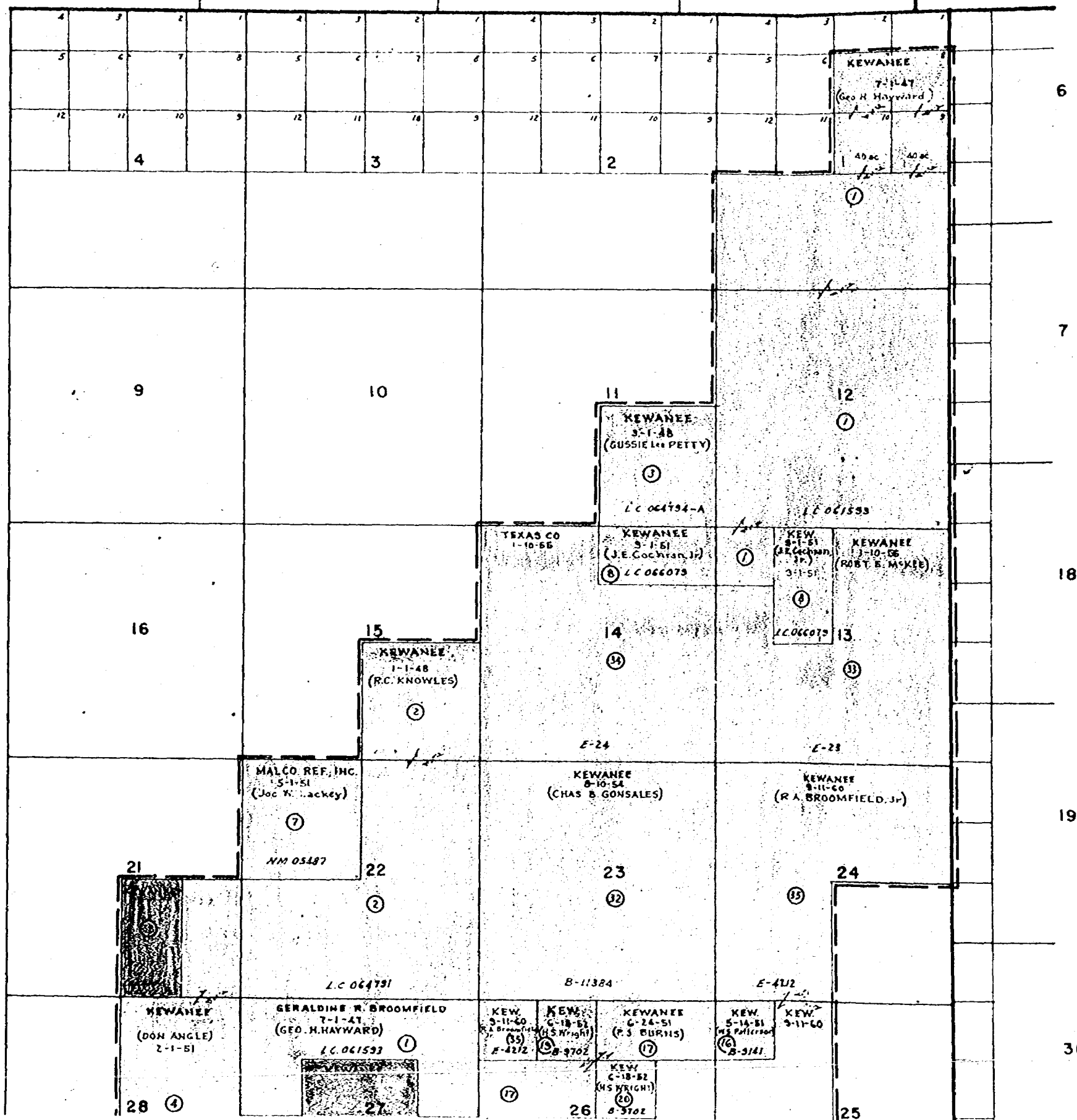
R 18 E

R 19 E

34

35

36



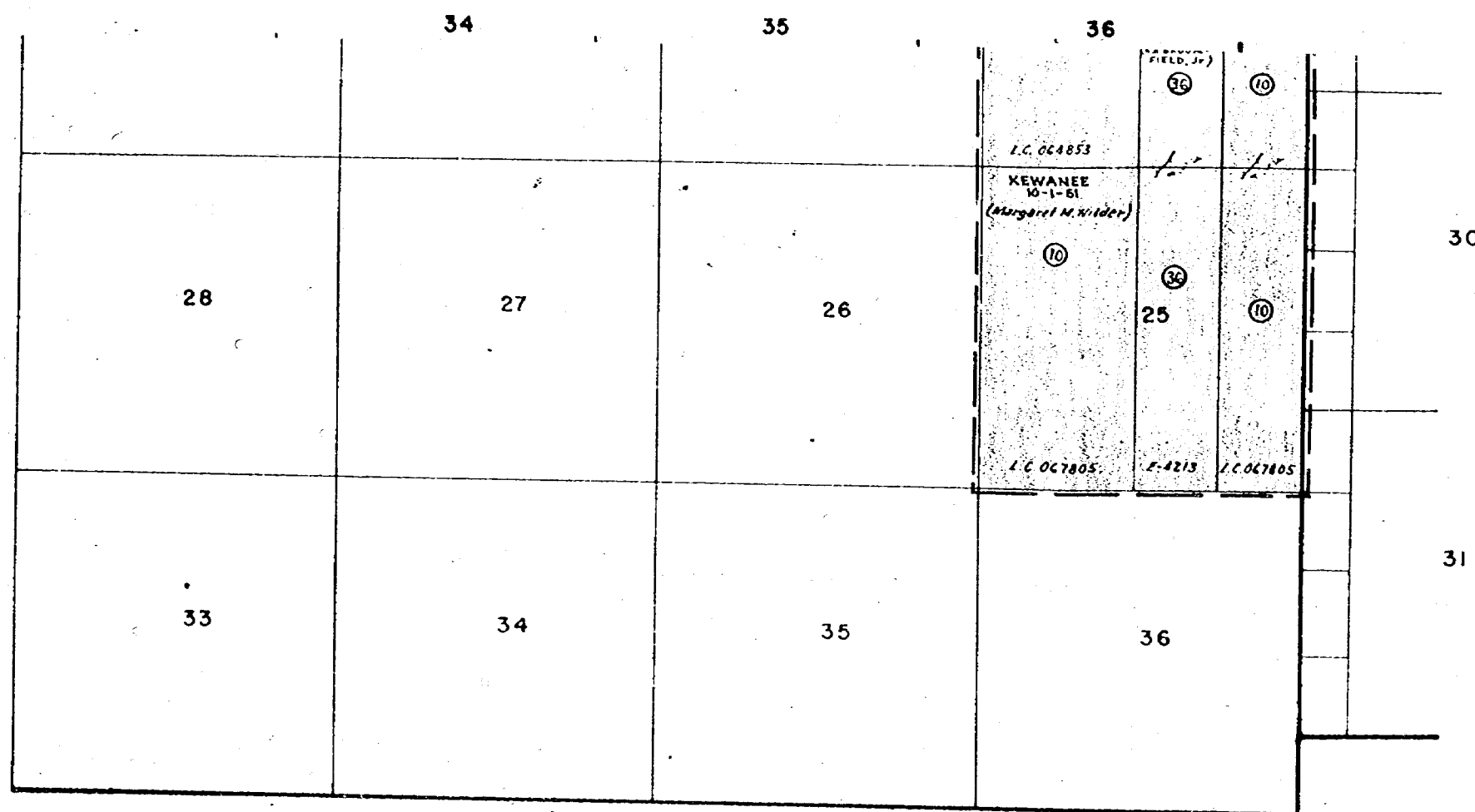
The map displays a grid of land sections, each identified by a number (e.g., 33, 36, 4, 3, 11, 9, 10, 11, 12, 16, 15, 14, 13, 21, 22, 23, 24). Each section contains information about land ownership and acreage. Key details include:

- Section 33:** GERALDINE R. BROOMFIELD (7-1-47), (GEO. H. HAYWARD), L.C. 061533. Acreage: 33.26 ac.
- Section 36:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 4:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.
- Section 3:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 11:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.
- Section 9:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 10:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.
- Section 11:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 12:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.
- Section 16:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 15:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.
- Section 14:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 13:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.
- Section 21:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 22:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.
- Section 23:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.03 ac.
- Section 24:** KEWANEE (4-26-53), (CHAS. B. GONSALES), L.C. 061533. Acreage: 40.01 ac.

The map also includes a legend and a scale bar. The legend identifies the symbols used for land ownership and acreage. The scale bar indicates distances in feet and miles.

R 18 E

R 19 E



R 18 E

R 19 E

Federal acreage total 7998.60
State acreage total 5760.36
Fee acreage total 480.00
 Unit total 14,238.96 ac.

KEWANEE OIL CO.			
LAND & GEOLOGICAL DEPT. ROSWELL DISTRICT			
EXHIBIT "A"			
FOUR MILE UNIT AREA			
TWPS. 18 & 19 SOUTH			
RNG. 18 EAST			
CHAVES COUNTY, NEW MEXICO			
SCALE	DATE	APPROVED	DR BY J.R.H.
2 in. = 1 mi.			CK BY

EXHIBIT "B"

FOUR MILE UNIT AREA
COUNTY OF CHAVES, STATE OF NEW MEXICO

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	APPLICATION OR SERIAL NO. AND EFFECTIVE OR EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
1.	Lots 7, 8, 9, 10, S/2 Sec. 1; All Sec. 12; NW/4 NW/4 Sec. 13; N/2 N/2, SW/4 NW/4, SE/4 NE/4, S/2 S/2 Sec. 27, T. 18 S., R. 18 E.	1560.00	LC061593 7-1-47	US-All	Geraldine R. Broomfield	Geo. H. Hayward 2.63%	Kewanee Oil Co. All
2.	SE/4 Sec. 15; E/2, SW/4 Sec. 22, T. 18 S., R. 18 E.	640.00	LC064791 1-1-48	-do-	Kewanee Oil Co.	R. C. Knowles 2% R. A. Broomfield, Jr. 1%	Kewanee Oil Co. All
3.	SE/4 Sec. 11, T. 18 S., R. 18 E.	160.00	LC064794-A 3-1-48	-do-	Kewanee Oil Co.	Gussie Lee Petty 3%	Kewanee Oil Co. All
4.	E/2 SE/4 Sec. 21; E/2 Sec. 28, T. 18 S., R. 18 E.	400.00	LC064803 2-1-51	-do-	Kewanee Oil Co.	Donald Angle-2% Geraldine R. Broomfield-1%	Kewanee Oil Co. All
5.	NW/4, SE/4 Sec. 14, T. 19 S., R. 18 E.	320.00	LC064853 2-1-51	-do-	Patricia Gaylord Anderson	Malco Refiner-ies, Inc. 5%	Kewanee Oil Co. All
6.	SW/4 SW/4 Sec. 12; NE/4, SW/4 Sec. 14; N/2 NE/4 Sec. 15; NE/4 Sec. 23; W/2 Sec. 24, T. 19 S., R. 18 E.	920.00	LC064853 2-1-51	-do-	Patricia Gaylord Anderson	None	Malco Ref., Inc. All
7.	NW/4 Sec. 22, T. 18 S., R. 18 E.	160.00	NM05487 5-1-51	-do-	Joe W. Lackey	None	Malco Ref., Inc. All

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	APPLICATION OR SERIAL NO. AND EFFECTIVE OR EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
8.	E/2 NW/4 Sec. 13; N/2 NE/4 Sec. 14, T. 18 S., R. 18 E.	160.00	LC066079 9-1-51	-do-	John E. Cochran, Jr.	John E. Cochran, Jr. -3%	Kewanee Oil Co. All
9.	Lots 3 and 4, S/2 NW/4, SW/4 Sec. 1, NW/4, N/2 SW/4 Sec. 12, T. 19 S., R. 18 E.	560.12	LC066124 9-1-48	-do-	Wm. J. Mahon	None	Wm. J. Mahon
10.	SE/4 NE/4, E/2 SE/4 Sec. 24; W/2, E/2 E/2 Sec. 25, T. 19 S., R. 18 E.	600.00	LC067805 10-1-51	-do-	Margaret M. Wilder	Margaret M. Wilder 1/2 of 1% \$400.00 ac. O.P. out of 2% B. H. Matlock	Kewanee Oil Co. All
11.	NW/4 SW/4 Sec. 27, T. 18 S., R. 18 E., All Sec. 3, T. 19 S., R. 18 E.	678.48	NM02902 Applica- tion	-do-	R. A. Broom- field, Jr.	R. A. Broom- field, Jr. 1.5625%	Kewanee Oil Co. All
12.	S/2 NW/4, NE/4, SW/4, SW/4 SE/4, N/2 SE/4 Sec. 13, T. 19 S., R. 18 E.	520.00	NM02904 Applica- tion	-do-	R. A. Broom- field, Jr.	R. A. Broom- field, Jr. 1.5625%	Kewanee Oil Co. All
13.	E/2 Sec. 10; All Sec. 11; SE/4 SE/4 Sec. 12, T. 19 S., R. 18 E.	1000.00	NM02923 Applica- tion	-do-	R. A. Broom- field, Jr.	R. A. Broom- field, Jr. 1.5625%	Kewanee Oil Co. All
14.	W/2 Sec. 10, T. 19 S., R. 18 E.	320.00	NM02950 Applica- tion	-do-	R. A. Broom- field, Jr.	R. A. Broom- field, Jr. 1.5625%	Kewanee Oil Co. All

14 Federal tracts, 7998.60 acres, or 56.174% of Unit Area.

State Land

15.	SE/4 NW/4, SE/4 NE/4 Sec. 2, T. 19 S., R. 18 E.	80.00	B-9093 4-15-51	State of New Mexico -All	Kewanee Oil Co.	John Vander Broek 2%	Kewanee Oil Co. All
-----	---	-------	-------------------	-----------------------------------	--------------------	-------------------------------	---------------------------

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	APPLICATION OR SERIAL NO. AND EFFECTIVE OR EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
16.	NW/4 NW/4 Sec. 25, T. 18 S., R. 18 E.	40.00	B-9141 5-14-51	State of New Mexico	Kewanee Oil Co.	Kathryn E. Barker 2%	Kewanee Oil Co.-All
17.	N/2 NE/4, S/2 NW/4, NW/4 SW/4 Sec. 26; NE/4, S/2 NW/4 Sec. 35, T. 18 S., R. 18 E.	440.00	B-9201 6-24-51	-do-	Kewanee Oil Co.	Alan D. Reynolds 2%	Kewanee Oil Co. -All
18.	S/2 SW/4, NE/4 SW/4 Sec. 26, T. 18 S., R. 18 E.	120.00	B-9543 2-20-52	-do-	Magnolia Petroleum Company	None	Magnolia Petroleum Company All
19.	NE/4 NW/4 Sec. 26, T. 18 S., R. 18 E.	40.00	B-9702 6-18-52	-do-	Kewanee Oil Co.	Minnie M. Larson 2%	Kewanee Oil Co. All
20.	SW/4 NE/4 Sec. 26, T. 18 S., R. 18 E.	40.00	B-9702 6-18-52	-do-	Kewanee Oil Co.	Ruric N. Sampson 2%	Kewanee Oil Co. All
21.	SW/4 Sec. 35; NW/4 Sec. 36, T. 18 S., R. 18 E.	320.00	B-9835 9-14-52	-do-	Malco Refineries, Inc.	Malco Refineries, Inc. 5%	Kewanee Oil Co. All
22.	SE/4 Sec. 35; N/2 NW/4 Sec. 35, T. 18 S., R. 18 E.	240.00	B-9835 9-14-52	-do-	Malco Refineries, Inc.	None	Malco Refineries, Inc. -All
23.	Lot 2 of Sec. 2, T. 19 S., R. 18 E.	40.09	B-10063 2-8-53	-do-	Kewanee Oil Co.	<i>R.A. Broomfield, Jr.</i> Henry Hanisch 2%	Kewanee Oil Co. All
24.	NW/4 SE/4 Sec. 2, T. 19 S., R. 18 E.	40.00	B-10063 2-8-53	-do-	Kewanee Oil Co.	Peter Opsahl 2%	Kewanee Oil Co. All
25.	E/2 NE/4 Sec 34, T. 18 S., R. 18 E.	80.00	B-10256 4-26-53	-do-	Kewanee Oil Co.	Dominick Fuchs 3%	Kewanee Oil Co. All
26.	NW/4 NE/4 Sec 34, T. 18 S., R. 18 E.	40.00	B-10256 4-26-53	-do-	Kewanee Oil Co.	H. Oberfeld and Leonie Oberfeld 4%	Kewanee Oil Co. All

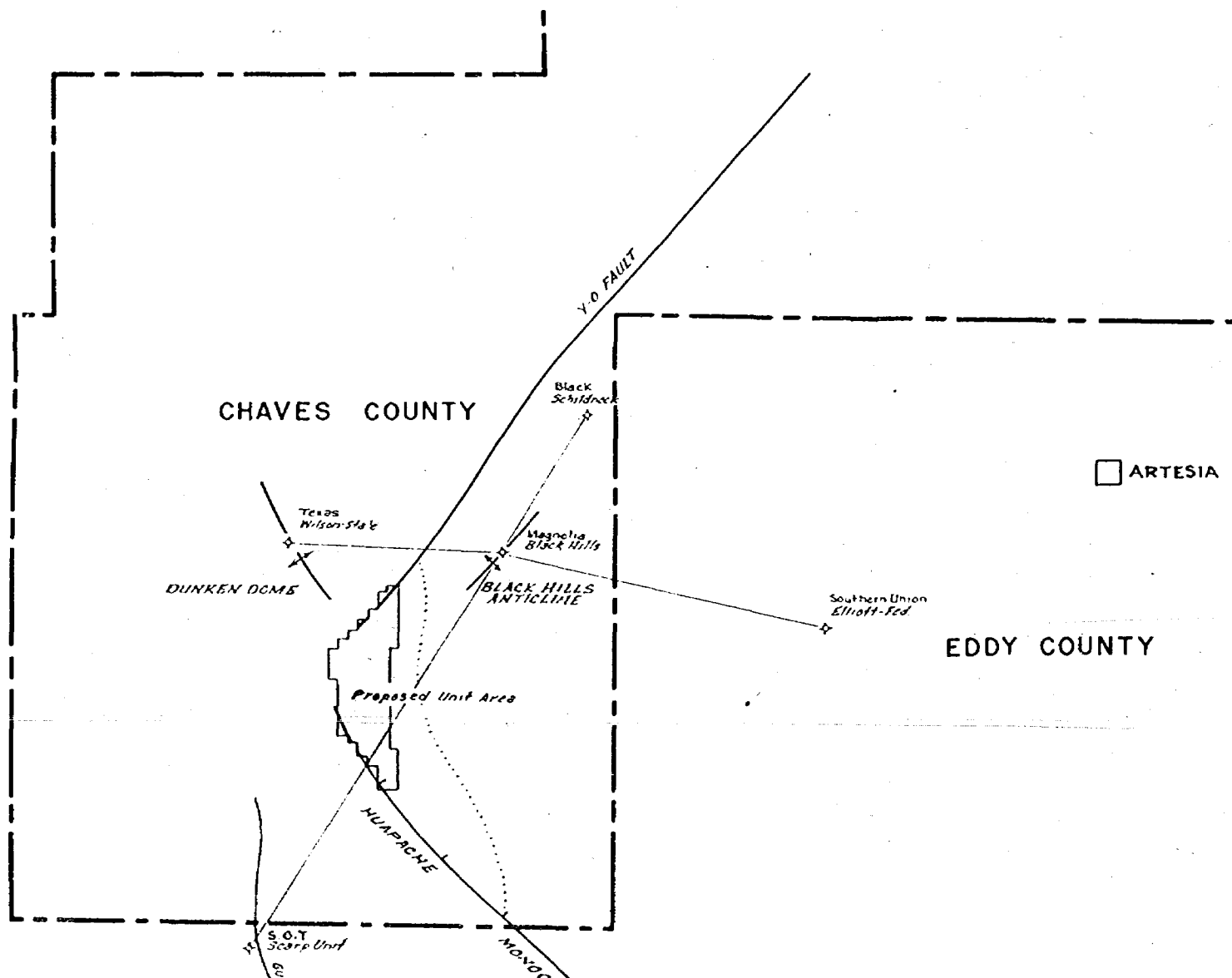
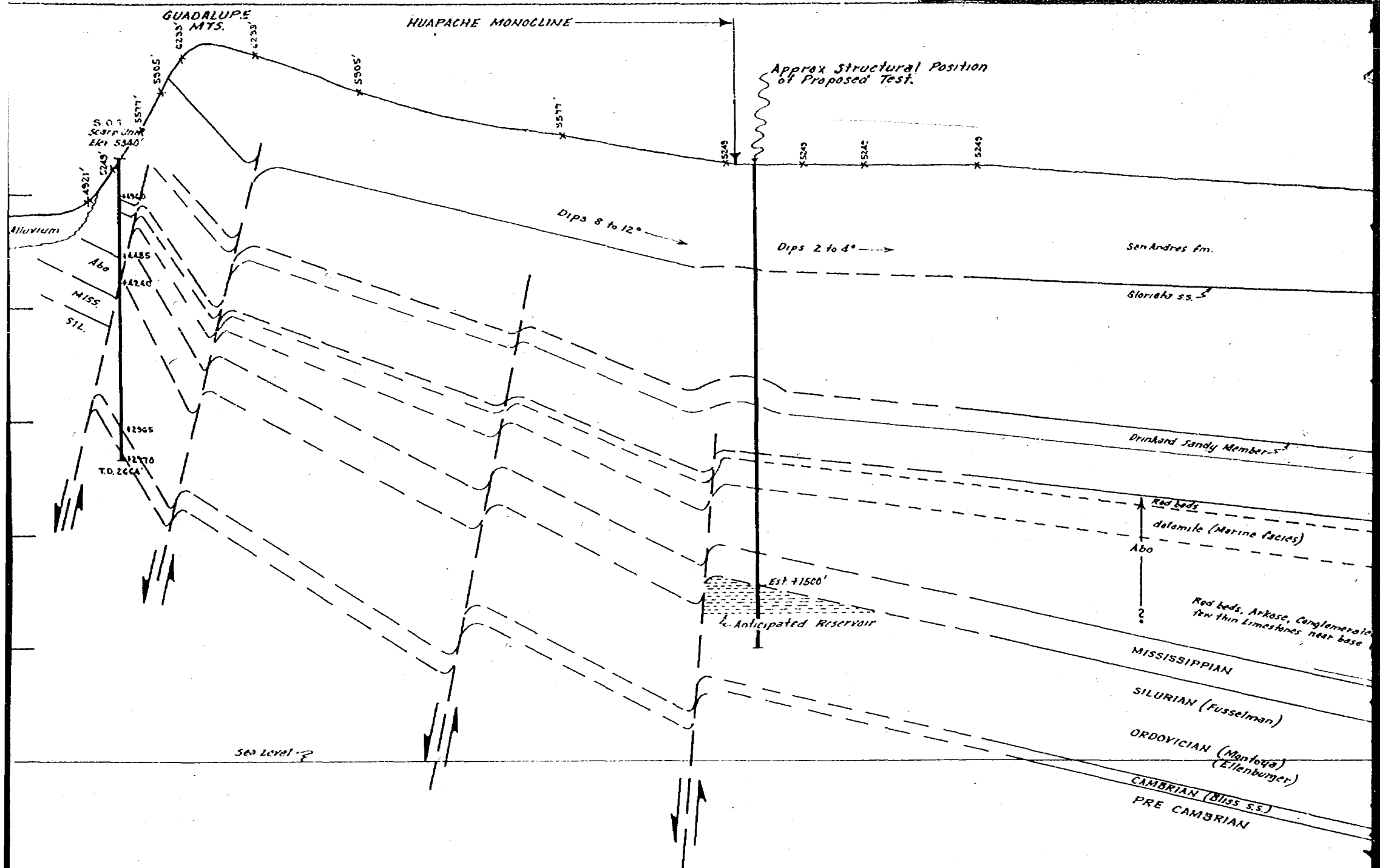
TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	APPLICATION OR SERIAL NO. AND EFFECTIVE OR EXPIRATION DATE OF LEASE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
27.	NW/4 Sec. 34, T. 18 S., R. 18 E.	160.00	B-10259 4-26-53	State of New Mexico-All	Kewanee Oil Co.	Robt. E. McKee, General Contractor, Inc. 5%	Kewanee Oil Company All
28.	SW/4 NE/4 Sec. 34, T. 18 S., R. 18 E	40.00	B-10946 1-31-54	-do-	Kewanee Oil Company	Frank H. Tolle 2%	Kewanee Oil Company All
29.	N/2 NE/4 Sec. 24, T. 19 S., R. 18 E.	80.00	B-11038 3-2-54	-do-	Kewanee Oil Company	A. C. Scott 2%	Kewanee Oil Company All
30.	SW/4 NE/4 Sec. 24, T. 19 S., R. 18 E.	40.00	B-11038 3-2-54	-do-	F. W. Zielke	None	F. W. Zielke All
31.	SW/4 SW/4 Sec. 34, T. 18 S., R. 18 E.	40.00	B-11109 3-4-54	-do-	Kewanee Oil Company	E. B. Hobart 2%	Kewanee Oil Company All
32.	All Sec. 23, T. 18 S., R. 18 E.	640.00	B-11384 8-10-54	-do-	Kewanee Oil Company	Nat P. Schmidt 2%	Kewanee Oil Company All
33.	NE/4, S/2, SW/4 NW/4 Sec. 13, T. 18 S., R. 18 E.	520.00	E-23 1-10-55	-do-	Kewanee Oil Company	Robt. E. McKee General Contractor, Inc. 5%	Kewanee Oil Company All
34.	S/2, NW/4, S/2 NE/4 Sec. 14, T. 18 S., R. 18 E.	560.00	E-24 1-10-55	-do-	The Texas Company	None	The Texas Company All
35.	W/2, NE/4 Sec. 24; SW/4, S/2 NW/4, NE/4 NW/4 Sec. 25; NW/4 NW/4, SE/4, SE/4 NE/4 Sec. 26; N/2 S/2, S/2 SE/4, SE/4 SW/4 Sec. 34; SW/4 Sec. 36, T. 18 S., R. 18 E.	1440.00	E-4212 9-11-60	-do-	Kewanee Oil Company	None	Kewanee Oil Company-All

EXHIBIT "B"

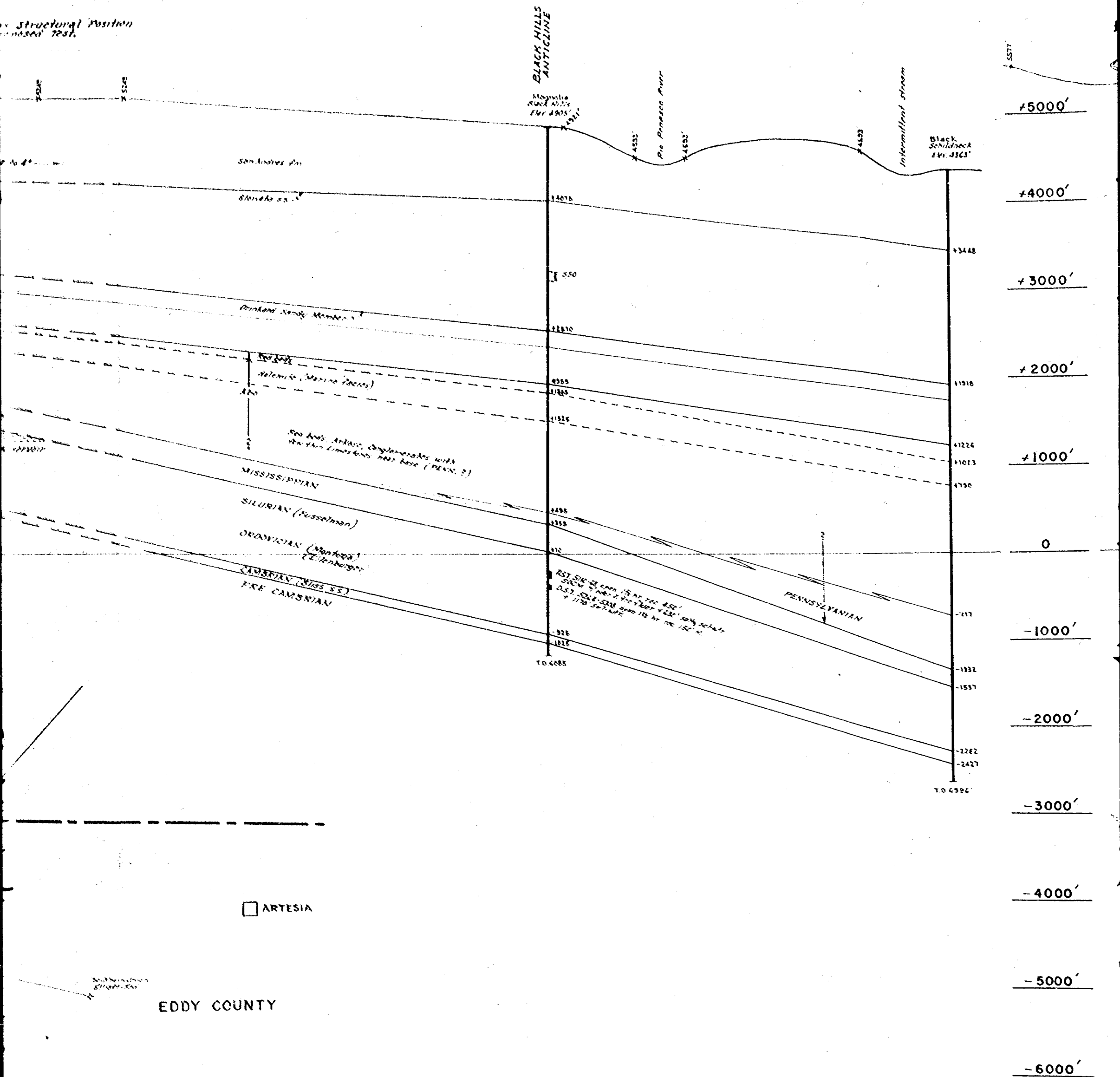
TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	APPLICATION OR SERIAL NO. AND EFFECTIVE OR EXPIRATION DATE OF LEASE	BASIC ROYALTY LESSEE AND PERCENTAGE OF RECORD	OVERRID-ING ROY-ALTY AND PERCENT-AGE	WORKING INTEREST AND PER-CENTAGE
36.	Lots 3 & 4, SW/4 NW/4, SW/4, NE/4 SE/4, S/2 SE/4, Lot 1, SW/4 NE/4 Sec. 2; W/2 SE/4 Sec. 24; W/2 E/2 Sec. 25, T. 19 S., R. 18 E.	720.27	E-4213 9-11-60	State of New Mexico Kewanee Oil Company	None	Kewanee Oil Company-All
22 State Tracts, 5760.36 acres, or 40.455% of Unit Area						

Patented Land						
37.	SW/4 NE/4, SE/4 NW/4, NE/4 SW/4, NW/4 SE/4, NE/4 SE/4 Sec. 27, T. 18 S., R. 18 E.; SE/4 SW/4, SW/4 SE/4 Sec. 12; SE/4 SE/4, N/2 NW/4 Sec. 13, T. 19 S., R. 18 E.	400.00		Cauhape Estate 12 1/2%	Kewanee Oil Company	None Kewanee Oil Company All
38.	W/2 SE/4 Sec. 21, T. 18 S., R. 18 E.	80.00		Ray T. Watkins 6 1/4% Cauhape Estate 6 1/4%	Kewanee Oil Company	None Kewanee Oil Company All
2 Patented Tracts, 480.00 acres, or 3.371% of Unit Area						

TOTAL: 38 Tracts-14,238.96 acres in entire Unit Area.

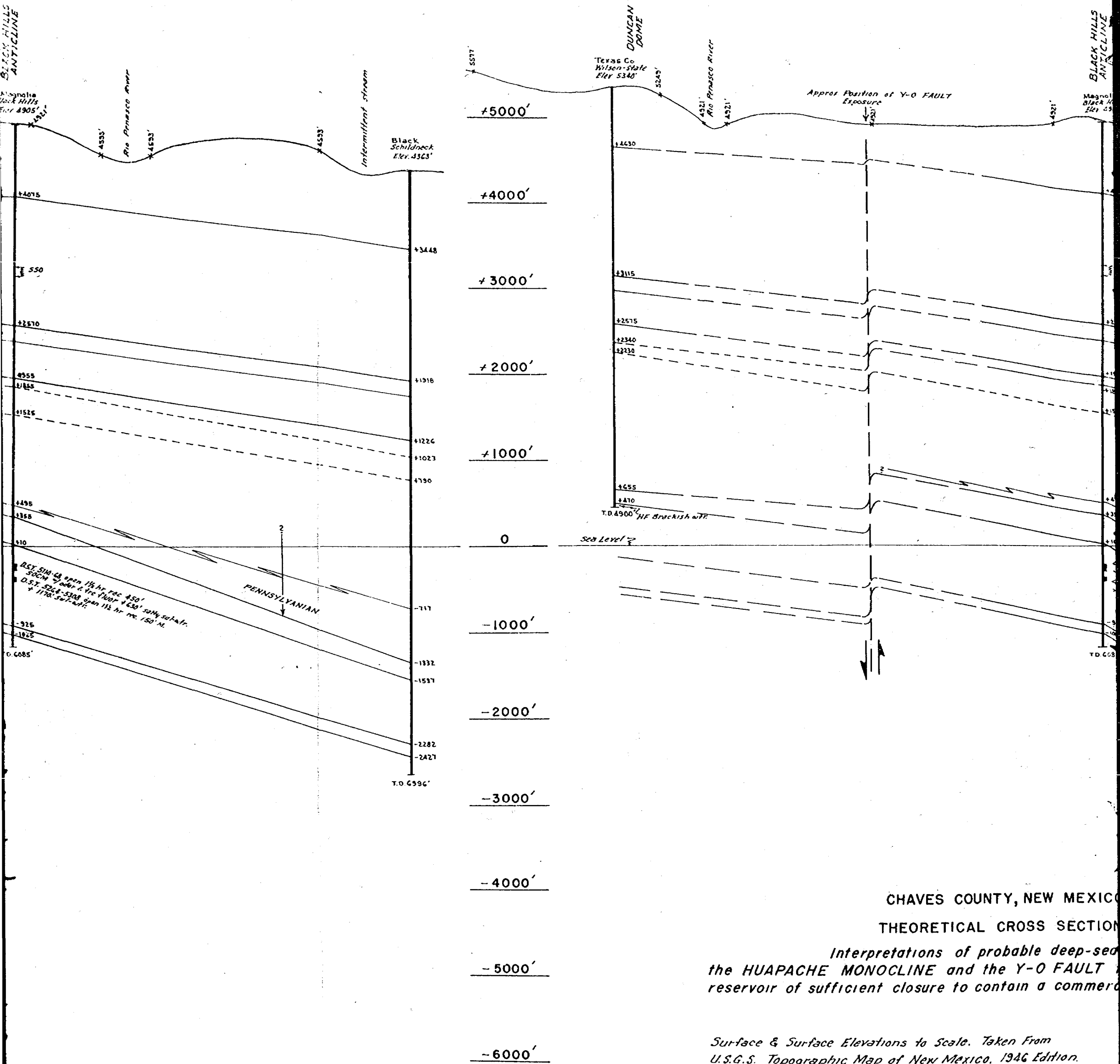


by structural position
and used test.



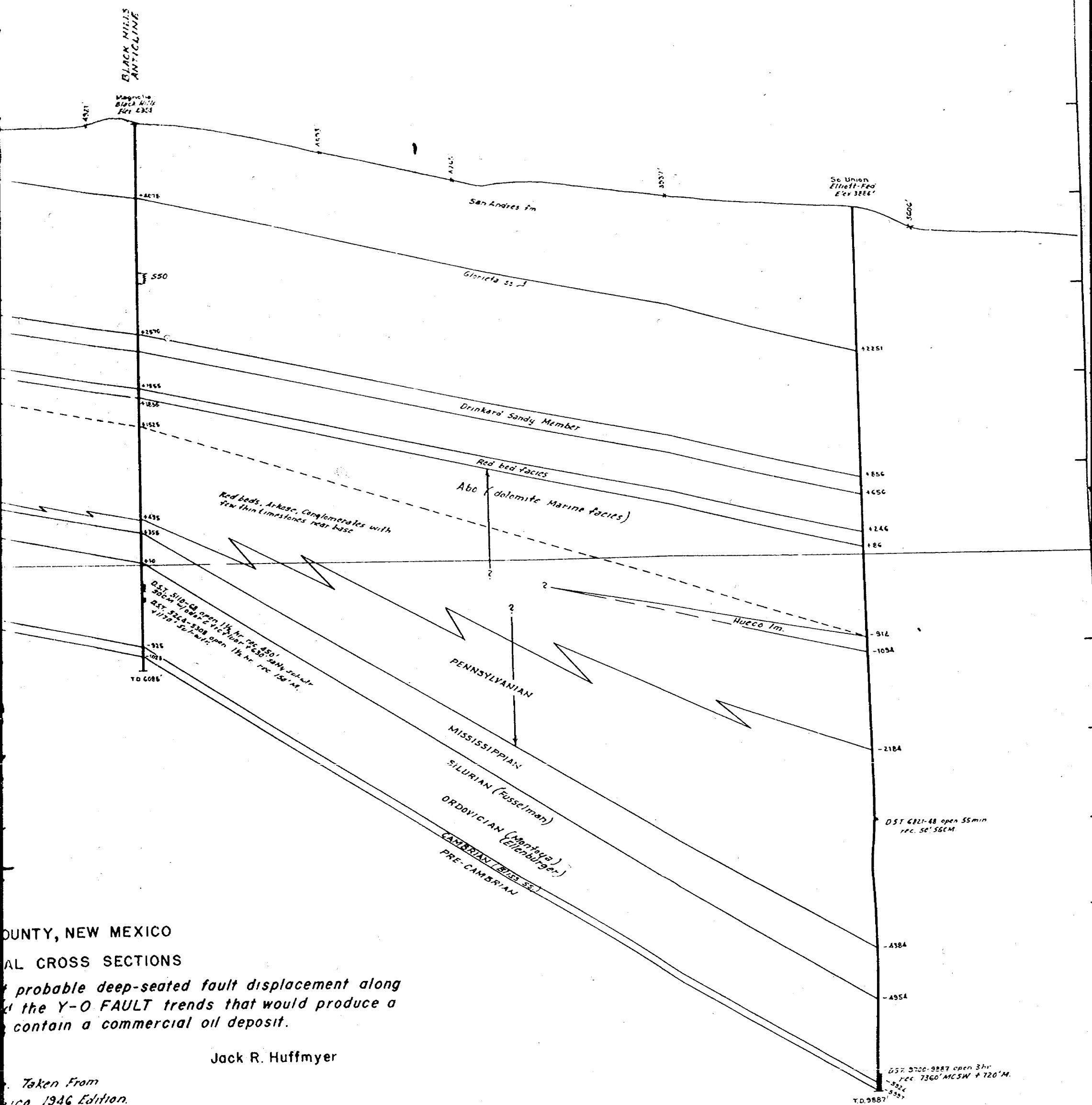
SCALE:

Horizontal 1 inch =
Vertical 1 inch =



SCALE:

Horizontal 1 inch = 2 miles
Vertical 1 inch = 1000 feet



COUNTY, NEW MEXICO
AL CROSS SECTIONS

probable deep-seated fault displacement along
the Y-O FAULT trends that would produce a
contain a commercial oil deposit.

Jack R. Huffmyer

Taken From
ico, 1946 Edition.
J.R.H.

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

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

**CASE No. 264
ORDER No. R-62**

**THE APPLICATION OF KEWANEE OIL COMPANY
FOR APPROVAL OF THE "FOUR MILE UNIT" AGREEMENT
COVERING 14,238.96 ACRES OF LAND IN T. 18 S,
R. 18 E AND T. 19 S, R. 18 E, IN ACCORDANCE WITH
PLAT ATTACHED TO THE APPLICATION, ALL
LOCATED IN CHAVES COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

**This cause came on for hearing at 10:00 a. m. on the 24th day of
March 1951 before the Oil Conservation Commission pursuant to notice here-
tofore duly given by said Commission;**

**The Commission having heard and considered testimony adduced at
said hearing, being fully advised in said premises;**

**FINDS that the "Four Mile Unit" plan will in principle tend to promote
the conservation of oil and gas, and a prevention of waste;**

IT IS THEREFORE ORDERED:

That the order herein shall be known as the:

"FOUR MILE UNIT AGREEMENT ORDER"

**Section 1. (a) That the Unit herein shall be known as the "Four Mile
Unit" Agreement, and shall hereinafter be referred to as the Unit.**

**(b) That the plan by which the unit shall be operated shall be embraced in
in the form of unit agreement for the development and operation of the "Four
Mile Unit" area referred to in the petitioner's petition and filed with said
petition, and such plan shall be known as the "Four Mile Unit" Agreement Plan.**

**Section 2. That the "Four Mile Unit" Agreement Plan shall be and is
hereby approved in principle as a proper conservation measure; provided,
however, that notwithstanding any of the provisions contained in said Unit
Agreement, this approval of said agreement shall not be considered as
waiving or relinquishing in any manner any rights, duties or obligations
which are now or may hereafter be vested in the New Mexico Oil Conservation
Commission by law relative to the supervision and control of operations for
exploration and development of any lands committed to said "Four Mile Unit"
Agreement or relative to the production of oil and gas therefrom.**

Section 3. (a) That the Unit Area shall be:

New Mexico Principal Meridian

T. 18 S., R. 18 E

Section 1, Lots 7, 8, 9 and 10 and S/2;
Section 11, SE/4;
Section 12, 13 and 14, all;
Section 15, SE/4;
Section 21, SE/4;
Secs. 22 and 23, all;
Section 24, N/2 SW/4;
Section 25, W/2;
Sections 26 and 27, all;
Section 28, E/2;
Secs. 34 and 35, all;
Section 36, W/2'

T. 19 S., R. 18 E

Sec. 1, lots 3 and 4, S/2 NW/4, SW/4;
Secs. 2 and 3, all;
Secs. 10 and 11, all;
Sec. 12, W/2, S/2 SE/4;
Secs. 13 and 14, all;
Sec. 15, N/2 NE/4;
Sec. 23, NE/4;
Secs. 24 and 25, all,

in Chaves County, New Mexico, and containing 14,238.96 acres,
more or less.

(b) The Unit area may be enlarged or diminished as
provided in said Plan.

Section 4. That the Unit operator shall file with the Commission an
executed original, or executed counterparts thereof, of the "Four Mile
Unit" Agreement not later than 30 days after the effective date thereof.

Section 5. That any party owning rights in the untitled substances who
does not commit such rights to said Unit Agreement before the effective date
thereof may thereafter become a party thereto by subscribing to such
Agreement or a counterpart thereof. The Unit Operator shall file with the
Commission within 30 days an original of any such counterpart.

Section 6. That the order herein shall become effective on the first
day of the calendar month next following the approval of Commissioner of
Public Lands and the Secretary of the Interior and shall terminate ipso
facto on the termination of said Unit Agreement. The last Unit Operator
shall immediately notify the Commission in writing of such termination.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Edwin L. Mechem
EDWIN L. MECHEM, Chairman

Guy Shepard
GUY SHEPARD, Member

R. R. Spurrer
R. R. SPURRIER, Secretary


CERTIFICATE OF APPROVAL
BY COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO
OF UNIT AGREEMENT FOR DEVELOPMENT AND OPERATION OF
FOUR MILE UNIT AREA, CHAVES COUNTY, N.M.

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, an agreement for the development and operation of the Four Mile Unit Area, Chaves County, New Mexico, dated March 15, 1951, in which the Kewanee Oil Company is designated as Operator, and upon examination of said Agreement, the Commissioner finds:

- (a) That such Agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said field;
- (b) That under the operations proposed, the State will receive its fair share of the recoverable oil or gas in place under its land in the area affected;
- (c) That the agreement is in other respects for the best interest of the State;
- (d) That the Agreement provides for the unit operation of the field, for the allocation of production, and the sharing of proceeds from a part of the area covered by the agreement on an acreage basis as specified in the agreement.

NOW THEREFORE, by virtue of the authority conferred upon me by Chapter 88 of the Laws of the State of New Mexico, 1943, as amended, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, as to the lands of the State of New Mexico included in said Four Mile Unit Agreement, and all leases embracing lands of the State of New Mexico committed to said Unit Agreement 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 Chapter 88 of the New Mexico Session Laws of 1943, as amended.

EXECUTED THIS 20th day of March, 1951.



Commissioner of Public Lands of the
State of New Mexico

(5281)

CERTIFICATION--DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior, under the act approved February 25, 1920, 41 Stat. 437, 30 U. S. C. Secs. 181, et seq., as amended by the act of August 8, 1946, 60 Stat. 950, and delegated to the Director of the Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, 43 CFR Sec. 4.611, 12 F. R. 6784, I do hereby:

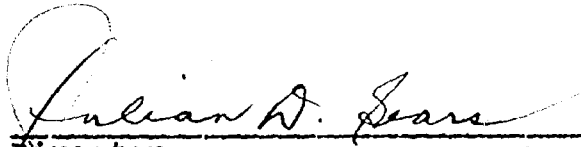
A. Approve the attached agreement for the development and operation of the Four Mile Unit Area, State of New Mexico.

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

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

Dated: SEP 23 1952

Acting


Director,
United States Geological Survey

BEFORE THE COMMISSIONER OF PUBLIC
LANDS OF THE STATE OF NEW MEXICO

APPLICATION OF KEWANEE OIL COMPANY FOR APPROVAL OF
UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF
THE FOUR MILE UNIT AREA, CHAVES COUNTY, NEW MEXICO

Comes KEWANEE OIL COMPANY, a Corporation, with an office at Roswell, New Mexico, and files herewith copy of proposed Unit Agreement for the development and operation of the Four Mile Unit Area in Chaves County, New Mexico, and respectfully requests that said Unit Agreement be approved, and in support thereof, shows:

1. That the Unit Area comprises 14,238.96 acres, situated in Townships 18 and 19 South, Range 18 East, N.M.P.M., as will more particularly appear by the plat attached to the copy of the proposed Unit Agreement, filed herewith, as Exhibit "A", and by reference made a part hereof. That of the lands embraced in the proposed Unit Area, 8,078.60 acres are Federal lands, 5,760.36 acres are State lands, and 400 acres are Fee lands. The location of the lands of the State of New Mexico, which are included within the Unit Area, is set out in particular detail and by distinctive markings on said plat, attached to the proposed Unit Agreement.

2. That the lands embraced in the Unit Area were designated by the Acting Director of the United States Geological Survey on February 19, 1951, as logical for inclusion in a unit plan of operation, and that there is filed herewith copy of geological report and structural map, which are to be treated as confidential, as provided by the

regulations of the Commissioner of Public Lands. That it is believed that all of the lands situated in the Unit Area are located upon the same geological structure and said Unit Agreement, if approved, will give effective control of all, or substantially all, of the geological structure or feature involved.

3. That said Unit Agreement has been approved as to form by the Acting Director of the United States Geological Survey and complies with the regulations of the Secretary of the Interior relative to unit agreements, but contains appropriate provisions for joint control by the Secretary of the Interior and the Commissioner of Public Lands in substantially the same form as unit agreements heretofore approved by the Commissioner of Public Lands, the Secretary of the Interior and the New Mexico Oil Conservation Commission. Said proposed Agreement is made subject to the approval of the Commissioner of Public Lands, the Secretary of the Interior and to the approval of the New Mexico Oil Conservation Commission, after hearing, as provided by law.

4. That Kewanee Oil Company, Applicant herein, is designated as Unit Operator under the terms of said Agreement, and as such Operator, will have the right to carry on exploration and development work in accordance with the terms of said Unit Agreement. The Applicant, as Unit Operator, proposes to commence, within six (6) months from the effective date of the Unit Agreement, a test well for oil and gas upon some part of the lands embraced in the Unit Area, selected by the Unit Operator, and to drill said well in accordance with the terms of said Unit Agreement to

a depth sufficient to test the Ellenburger formation, or until at a lesser depth unitized substances shall have been discovered which can be produced in paying quantities, but that as Unit Operator, Applicant shall not be required to drill said well in excess of a depth of 5500 feet.

5. That Applicant believes, in the event oil or gas in paying quantities is discovered in said test well or by reason of any subsequent development carried on pursuant to the terms of said Unit Agreement, that said Agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy.

6. That under the terms of the proposed Unit Agreement, the State of New Mexico will receive its fair share of the recoverable oil and gas in place under its lands embraced in the Unit Area.

7. That the respective institutions of the State of New Mexico having lands within the Unit Area, or which may later be included therein, in accordance with the provisions of said Unit Agreement, will participate in rentals due as to said lands, in accordance with the terms of oil and gas leases covering said respective tracts, and will also participate in royalties in the proportion that their acreage bears to the total acreage included in the participating area from time to time, under the Unit Agreement.

8. That said Unit Agreement is believed to be in all respects for the best interest of the State of New Mexico, with respect to the lands of the State of New Mexico embraced in said Unit Area.

9. That Applicant is committing to said Unit Agreement its leases issued by the Commissioner of Public

Lands of the State of New Mexico, covering the following lands:

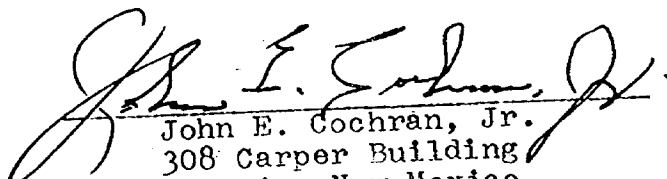
<u>TWP.</u>	<u>RGE. N.M.P.M.</u>	<u>SECTION</u>
18 S	18 E	13; NE/4, S/2, SW/4 NW/4 23; All 24; N/2, SW/4 25; W/2 26; E/2, NW/4, NW/4 SW/4 34; W/2, SE/4, S/2 NE/4, NE/4 NE/4 35; SW/4, S/2 NW/4, NE/4 36; W/2
19 S	18 E	2; All 24; W/2 SE/4, N/2 NE/4 25; W/2 E/2

and that said Agreement is satisfactory to Applicant. All of the other parties owning State oil and gas leases embracing lands within the Unit Area will be afforded an opportunity to join in said Unit Agreement.

10. That a petition has been filed for approval of said Unit Agreement with the New Mexico Oil Conservation Commission and that upon approval thereof by order of the Oil Conservation Commission, executed copies of said Agreement will be submitted for approval by the Commissioner of Public Lands and by the Secretary of the Interior or his duly authorized representative.

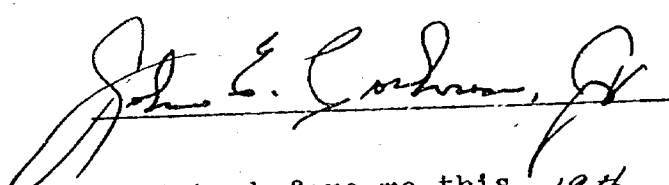
11. That the Commissioner of Public Lands of the State of New Mexico has heretofore, on February 28, 1951, granted tentative approval of said Unit Agreement, in substantially the same form as herewith submitted and at the time such tentative approval was granted, Applicant paid to the Commissioner of Public Lands the sum of \$115.00 to cover filing fee, being at the rate of \$5.00 for each section or fraction thereof of the lands embraced in the proposed Unit

Area, as provided by the rules and regulations of the Commissioner of Public Lands.


John E. Cochran, Jr.
308 Carper Building
Artesia, New Mexico
Attorney for Applicant
Kewanee Oil Company

STATE OF NEW MEXICO)
 : ss.
COUNTY OF EDDY)

JOHN E. COCHRAN, JR., being first duly sworn upon his oath, deposes and states: That he is attorney for the Applicant in the above and foregoing Application and that he has read the same and from personal knowledge knows the matters therein contained to be true and correct, except such statements as are alleged upon information and belief and as to those, he verily believes them to be true; that this verification is made by him on behalf of KEWANEE OIL COMPANY because a representative or agent of Kewanee Oil Company is not available to sign this Application.


SUBSCRIBED AND SWORN to before me this 19th
day of March, 1951.


Notary Public

My commission expires:
April 15, 1954

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF KEWANEE OIL COMPANY
FOR APPROVAL OF UNIT AGREEMENT FOR
THE DEVELOPMENT AND OPERATION OF
THE FOUR MILE UNIT AREA IN CHAVES
COUNTY, NEW MEXICO

NO. _____

Applicant, KEWANEE OIL COMPANY, is a Delaware Corporation licensed to transact business in the State of New Mexico and has an office in Roswell, New Mexico, and files herewith three copies of a proposed Unit Agreement for the development and operation of the Four Mile Unit Area in Chaves County, New Mexico, and respectfully requests that said Unit Agreement be approved, and in support thereof shows:

1. That the unit area comprises 14,238.96 acres situated in Townships 18 and 19 South, Range 18 East, N.M. P.M., as will more particularly appear by the map attached to the copy of the proposed unit agreement filed herewith, as Exhibit "A", and by reference made a part hereof. That of the lands embraced in the proposed unit area, 8,078.60 acres are Federal lands, 5,760.36 acres are State Lands and 400 acres are Fee lands. The location of the lands of the State of New Mexico which are included within the unit area is set out in particular detail and by distinctive markings on said plat attached to the proposed unit agreement.

2. That the lands embraced in the unit area were designated by the Acting Director of the United States Geological Survey on February 19, 1951, as logical for inclusion in a unit plan of operation and all of the lands situated in the unit area are believed to be located upon

the same geological structure.

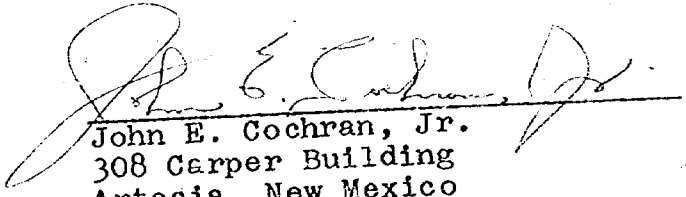
3. That said unit agreement, as to form, has been submitted to the Director of the United States Geological Survey for preliminary approval, and complies with the regulations of the Secretary of the Interior relative to unit agreement, but contains appropriate provisions for joint control between the Secretary of the Interior and the Commissioner of Public Lands, and is in substantially the same form as unit agreement heretofore given preliminary approval by the Commissioner of Public Lands. Said proposed agreement is made subject to the approval of the Commissioner of Public Lands, the Secretary of the Interior and to the approval of the New Mexico Oil Conservation Commission, after hearing, as provided by law.

4. That the undersigned applicant is designated as Unit Operator under the terms of said unit agreement and as such Unit Operator will have the right to carry on exploration and development work in accordance with the terms of said unit agreement. That applicant, as Unit Operator, proposes to commence, within six (6) months from the effective date of the unit agreement, a test well for oil and gas upon some part of the lands embraced in the unit area selected by the Unit Operator, and to drill said well in accordance with the terms of said unit agreement to a depth sufficient to test the Ellenburger formation, or until at a lesser depth unitized substances shall have been discovered which can be produced in paying quantities, but that as Unit Operator, Applicant shall not be required to drill said well in excess of a depth of 5500 feet.

5. That it is believed that operations to be carried on under the terms of said unit agreement will promote the economic and efficient recovery of oil and gas to the end that the maximum yield may be obtained from the field or area, if oil or gas should be discovered in paying quantities and it is further believed that such agreement will be in the interest of conservation of oil and gas and the prevention of waste as contemplated by the Oil Conservation Statutes of the State of New Mexico.

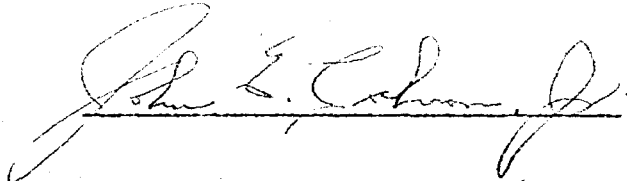
6. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement and after approval thereof by the Commissioner of Public Lands of the State of New Mexico and the Secretary of the Interior of the United States, or his duly authorized representative, an approved copy of said agreement will be filed with the Oil Conservation Commission of New Mexico.

WHEREFORE, Kewanee Oil Company, Applicant herein, respectfully requests that a public hearing be held on the matter of the approval of said Unit Agreement, as provided by the Statutes of the State of New Mexico and the regulations of the Oil Conservation Commission of New Mexico, and that upon said hearing said Unit Agreement be approved by the Oil Conservation Commission of New Mexico.

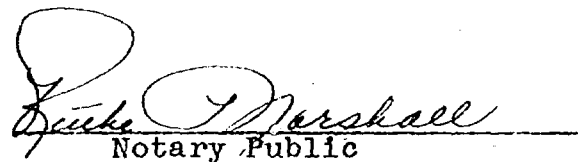

John E. Cochran, Jr.
308 Carper Building
Artesia, New Mexico
Attorney for Applicant,
Kewanee Oil Company

STATE OF NEW MEXICO)
 : ss.
COUNTY OF EDDY)

JOHN E. COCHRAN, JR., being first duly sworn upon his oath, deposes and states: That he is attorney for the Applicant in the above and foregoing Application and that he has read the same and from personal knowledge knows the matters therein contained to be true and correct, except such statements as are alleged upon information and belief and as to those, he verily believes them to be true; that this verification is made by him on behalf of KEWANEE OIL COMPANY because a representative or agent of Kewanee Oil Company is not available to sign this Application.



SUBSCRIBED AND SWORN to before me this 15th day of February, 1951.


Notary Public

My commission expires:

April 15, 1954