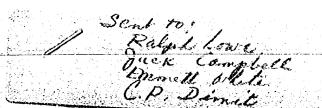


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Application, Transcript, Small Exhibits, Etc.



STATE OF NEW MEXICÓ

E OF STATE GEOLOGIST

SANTA FE, NEW MEXICO

November 15, 1951

 $\mathbb{C}$ 

Mr. Jack Cempbell Atwood, Melone & Campbell ROSWELL, NEW MEXICO

Dear Jack:

NEI Cases 31/ and 319

P

The Amerada Petroleum Corporation has indicated it will file a motion for continuance of Cases 314 and 319, which are set for hearing November 20. These cases, as you will recall, relate to spacing and pressure maintenance in the Knowles and Hightower pools. We have been informed that Amerada will make formal motion for a continuance to the regular January (1952) hearing in order to give them time to assemble necessary data.



I cannot, of course, forecast what action the Commission will take, but it is probable in the absence of any objection that the continuance will be granted. I am merely writing this for preparation for the November 20 hearing.

Very truly yours,

JKing

Jason Kellahin

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

November 15, 1951

Mr. Ralph Lowe, Oil Operator Hidland Tower Hidland, Texas

Dear Mr. Lowe:

### IE1 Cases 314 and 319

The Amerada Petroleum Corporation has indicated it will file a motion for continuance of Cases 314 and 319, which are set for hearing November 20. These cases, as you will recall, relate to spacing and pressure maintenance in the Knowles and Hightower pools. We have been informed that Amerada will make formal motion for a continuance to the regular January (1952) hearing in order to give them time to assemble necessary data.

I cannot, of course, forecast what action the Commission will take, but it is probable in the absence of any objection that the continuance will be granted. I am merely writing this for your information with the thought that it might affect your preparation for the November 20 hearing.

Very truly yours,

Jason Kellahin, Attorney

JKing

BEFORE THE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

TRANSCRIPT OF PROCEEDINGS

CASE NO. 319 Hightower

Regular Hearing April 15, 1952

### BEFORE THE

### OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF:

(,)

(From October 23, 1951 hearing)
Similar in principle to Cases 314
and 319, this deals with spacing
in the Bagley-Siluro-Devonian
pool also. In it, the Oil Conservation Commission asks for order
directed to Amerada, Texas and
Pacific Coal and Oil Company, et al.,
setting forth approved spacing regulations.

CASE NO. -315--

TRANSCRIPT OF PROCEEDINGS

April 15, 1952 Regular Hearing

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12. CROWWELL BLDG.
PHONES 7-9845 AND 8-9846
ALBUQUERQUE, NEW MEXICO

MR. SPURRIER: Mr. Kellough, are you ready?

MR. KELLOUGH: Yes, sir.

MR. SPURRIER: The meeting will come to order, please.

MR. KELLOUGH: The last case is the Hightower 80 acre spacing case. The history of Hightower is not quite as lenghty as in the other pools.

In November, 1949, Amerada filed its application for the establishment of 80 acre spacing units for the Hightower Devonian pool.

At that time the State BTB #1 well (NW/4 NW/4 Sec. 26-12S-33E) had been completed in the Devonian formation at a depth of 10,090 to 10,200 feet.

The Roach well (nW/4 SW/4 Sec. 26-12S-33E) and the Gulf N.M.M.I. #1 well (SE/4 SE/4 Sec. 22-12S-33E) were then drilling, but not yet completed. Both of these wells resulted in dry holes in the Devonian.

The application asked that four sections be covered (Secs. 22, 23, 26, 27-12S-33E) and that all wells be located in the center of the NW and SE quarter of each governmental quarter section.

### 1. ORDER NO. 846

The application was heard by the Commission on November 1, 1949. There was no opposition. Evidence was offered in support of the allegations of the application.

On November 18, 1949, the Commission entered its Order

846 establishing 80 acre proration units comprising the E/2 and W/2 of each governmental quarter section. The order provided for wells to be located in the center of the NW and SE quarter of each quarter section with 150 feet tolerance. All wells were on the pattern locations.

The allowable for each 80 acre unit was a single top allowable with deep well adaption as for a regular 40 acre unit, "until such time as the Commission may issue such further and additional orders as may be deemed necessary herein."

Paragraph 9 of the order provided:

"That the Commission retains jurisdiction of this case for the purpose of issuing such further and additional orders as may seem necessary to meet changed conditions, preclude inequities and preserve correlative rights; all upon the motion of the Commission or upon the petition of any interested operator upon public hearing, after notice as provided by law."

Exhibit 1 is a copy of Order 846.

### 2. ADDITIONAL DEVELOPMENT

Since the entry of the order one additional oil well has been completed in the Devonian formation. That is State BTE #1 (SE/4 SW/4 Sec. 23-12S-33E). Five other Devonian dry holes have been drilled:

- (1) Gulf N.M.M.I. (SE/4 SE/4 Sec. 22)
- (2) State BTF #1 (SE/4 NW/4 Sec. 23)
- (3) State BTH #1 (NW/4 NE/4 Sec. 26)

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ROOM 12, CROWWELL BLDG, PHONES 7-9645 AND 6-9846 ALBUQUERQUE, NEW MEXICO

- (4) Roach (NW/4 SW/4 Sec. 26)
- (5) BTB #2 (SW/4 NW/4 Sec. 26)

Exhibit 2 is a map showing the present Devonian development.

### 3. ISSUES INVOLVED IN PRESENT HEARING

The Commission has now, on its own motion, requested that Amerada show cause why the 80-acre spacing order now in effect for the Hightower pool should not be revoked.

Exhibit 3 is a copy of the Notice for the present hearing.

The order expressly provides that the Commission retains jurisdiction to make such further orders "as may seem necessary to meet changed conditions, preclude inequities and preserve correlative rights." Thus the Commission has itself defined the scope of this hearing.

The order is final except for changed conditions. There is no inference that the Commission intended to reconsider the same issues heretofore presented.

Therefore, the question now properly before the Commission is whether there is a change of condition by reason of subsequent development which justifies the revocation of the 80 acre proration units or which is causing inequities.

The question of the allowable was temporary in the order and subject to review at any time.

Also, there is before the Commission the question of whether a pressure maintenance program is feasible at this time.

MR. KELLOUGH: We now offer into evidence Exhibit No. 1, which is the original 80-acre spacing order; Exhibit No. 2, which is the map of the Hightower Devonian; and Exhibit No. 3, which is a Notice of the present hearing.

JOHN A. VEEDER,

having been first duly sworn, testified as follows:

### DIRECT EXAMINATION

### By MR. KELLOUGH:

- Q You are the Mr. Veeder who testified in a previous case before this Commission?
  - A That is right.
  - Q You are a Geologist for Amerada Petroleum Corporation?
  - A That is right.

MR. KELLOUGH: Are the 'qualifications of this witness acceptable?

MR. SPURRIER: Yes.

- Q Mr. Veeder, since the last hearing on the Hightower case, will you state how many additional oil wells or dry holes have been drilled?
- A Since the last hearing, one additional oil well has been completed and five Devonian dry holes have been drilled.
- Q Are these oil wells and dry holes shown on the map which is Exhibit 2?
  - A All of these wells are shown on the map, Exhibit 2.
- Q I hand you Exhibit 4 and ask you to state what that is.

- A Exhibit 4 is Schlumberger and Amerada No. 1 State BTE.
- Q Exhibit 5?
- A Schumberger on the Amerada No. 1 Roach.
- Q Exhibit 6?
- A Schlumberger on Amerada No. 1 State BTF.
- Q Exhibit No. 7?
- A Schlumberger on the No. 1 State BTH.
- Q Exhibit No. 8.
- A Amerada No. 2 State BTB.
- Q Have all of the electric logs now been offered in evidence that effect the Devonian Hightower?
  - A All of Amerada's Schlumberger have been submitted.
    - MR. KELLOUGH: We offer in evidence Exhibits 4 through 8.
    - MR. SPURRIER: Without objection, they will be received.
  - Q I hand you Exhibit 9 and please state what that is.
- A This is the tabulation of the pertinent drilling data. This will cover all the wells drilled in the Devonian in the Hightower field.
  - Q Including the original BTB No. 1 well? A That is right.
  - Q What data does that show?
- A The sheet shows the well number, lease name, top of the Devonian with datum, top of Devonian pay with datum, Devonian cap and the Devonian completion history.

MR. KELLOUGH: We offer in evidence Exhibit No. 9.

MR. SPURRIER: Without objection it will be received.

Q Mr. Veeder, I hand you Exhibit No. 10 and ask you to state what that exhibit is and what it shows.

A No. 10 is a structural map on top of the Devonian of the Hightower Devonian Pool. Contour interval, 100 feet.

MR. KELLOUGH: We offer in evidence Exhibit No. 10.

MR. SPURRIER: Without objection it will be received.

Q From a study of all the available geological data, what is your opinion with reference to the porosity and permeability at Hightower Devonian Pool?

A The Hightower Devonian Pool has good porosity and good permeability.

Q Mr. Veeder, do you know of any change in the condition, from a geological point of view, which should require or justify a revocation or modification of the existing 80-acre spacing order for this pool?

- A There has been no change.
- Q Have you read the statement which has been prepared in connection with the Hightower Pool?
  - A Yes, sir, I have.
- Q And are the facts which are set forth in that statement true and correct to the best of your knowledge and belief?
  - A That is right.

MR. KELLOUGH: That is all for this witness.

ADA DEARNLEY & ASSOCIATES

COURT REPORTERS

ROOM 12, CROMWELL BLDG.
PHONES 7.9845 AND 5.9848
ALBUQUERQUE, NEW MEXICO

MR. SPURRIER: Any questions of this witness?

By MR. MACEY:

Q These dry holes on the map pertain only to the Devonian?

A If you look on the bottom of the map, the pay wells are spotted.

MR. KELLOUGH: He doesn't have that map. That is Exhibit 2. This is the structural map.

- A This map contains only the devonian wells.
- Q Actually this 2 BTB is a plug-back?
- A That is right.

MR. MACEY: That is all.

(Witness excused.)

### R. S. CHRISTIE,

having been first duly sworn, testified as follows:

### DIRECT EXAMINATION

### By MR. KELLOUGH:

- Q You are Mr. R. S. Christie?
- A Yes, sir.
- Q Petroleum Engineer for Amerada Petroleum Corporation who testified this morning?
  - A Yes, sir.

MR. KELLOUGH: ARe the qualifications of this witness acceptable?

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COURT REPORTERS
ROOM 12, CROMWELL BLDG,
PHONES 7-9845 AND 5-9546
ALBUQUERQUE, NEW MEXICO

MR. SPURRIER: Certainly.

Q I hand you Exhibit No. 11, and ask that you state to the Commission what this exhibit is.

A Exhibit 11 is a graph showing the number of wells completed and monthly oil production, monthly water production and cumulative oil production, bottom hole pressure of the Hightower Pool.

- Q To what date?
- A To April 1, 1952.
- Q What does the pressure information which is depicted on this map indicate to you as a petroleum engineer?

A The bottom hole pressure declined very little from the beginning up until October of 1951. For the last six months period, the bottom hole pressure has declined approximately 76 pounds. That is attributed to a higher withdrawals. The withdrawals for the last six months average was 1567 barrels per day, as against 577 barrels per day for the preceeding six months.

- Q Does that indicate a uniform withdrawal?
- A Yes, sir, I believe it does.
- Q Would you say that the draw down had been excessive or not excessive?

A The draw down has not been excessive. I might, for the record, state that PI tests were taken on both producing was wells and one case it/ producing at a rate of 1,000 barrels per day. The PI was approximately 32. The pressure drop at that rate of 1,000 barrels per day was 31 pounds. That was on State BTB

- No. 1. Test on State BTE No. 1, producing at a rate of 967 barrels, had a drop of only 4 pounds and had a PI of infinity.
- Q What is your opinion as to the permeability of this reservoir?
  - A Those tests would indicate a very good permeability.
- Q Considering the withdrawals and the draw down, what would your opinion be as to whether there is any likelihood of channelling in the Hightower Devonian Pool?
- A My opinion is there is no appreciable amount of channelling, if any.
- Q Does the pressure information indicate good communication in all parts of this reservoir?
  - A Yes, it does.
  - Q Is it your opinion that this is a water drive pool?
  - A It is.
- Q What is your opinion as to whether one well in the Hightower Devonian Pool is capable of draining 80 acres?
- A It is my opinion that one well will drain in excess of 80 acres.
- Q Do you know of any waste which is now being committed under the present spacing order of the Commission?
  - A No, I do not.
- Q Do you know of any change in the conditions from the view point of reservoir performance that would justify or require a revocation or a modification of the original order?
  - A No, sir I do not.

- Q What has been the average cost of the producing Devonian well in the Hightower Pool?
- A The average cost of the two producing wells has been \$227,000.00.
- Q Amerada owns the full lease and interest in all the area within the productive limits of this pool?
  - A Yes, sir.
  - Q The State of New Mexico owns all their oil?
  - A Yes, sir.
- Q Do you know of -- from an engineering point of view -- of any inequities that are now existing in this pool?
  - A No, sir, I do not.
- Q What is your opinion as to what the allowable should be?
  - A My opinion is the allowable should not be changed.
- Q Have you considered the question of whether a pressure maintenance program of any kind is advisable, necessary, at Hightower?
- A Yes, sir, we have, and we do not think it would be advisable or necessary or would recover any additional oil.
- Q You have read the statement which we prepared in connection with the Hightower case?
  - A Yes, sir.
- Q With the exception of the date to which the pressure graph is made, which in the statement was March 1st, I believe our testimony was April 1, 1952.

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COURT REPORTERS
ROOM 12, CROMWELL BLDG.
PHONES 7-9645 AND 8-9548
ALBUQUERQUE, NEW MEXICO

- A I will correct that. It is to March 1st on the graph.
- Q In 1952?
- A 1952, yes, sir.
- Q Well, there seems to be an error in the statement wherein it is given as March 1st of 1951, but the date shown on the graph of March 1, 1952.
  - A Yes.
- Q With that exception, are the statements in this true to your knowledge and belief?
  - A Yes.
- MR. KELLOUGH: That is all the evidence we have from this witness. However, we offer into evidence Exhibit No. 11.
  - MR. SPURRIER: Without objection it will be received.
- MR. KELLOUGH: We wish to offer the facts contained in this statement into evidence and argument by way of a brief.

That concludes our case at the Hightower. Mr. Oliver Seth and Mr. Justin Reed appear with Amerada as co-counsel in this case. Do either of you have any further statements you wish to make?

MR. SETH: I don't believe we do. We believe the matter has been adequately covered and we couldn't add anything further to it.

### By MR. WHITE:

- Q Mr. Christie, how many wells do you have producing in this pool?
  - A Two wells.

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PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

- Your bottom hole pressures were taken on both wells?
- A Yes, sir.

MR. SPURRIER: Any further question of the witness?

If not the witness may be excused.

(Witness excused.)

MR. SPURRIER: We would like to have Mr. Veeder again, Mr. Kellough.

JOHN A. VEEDER,

having been previously duly sworn, recalled as a witness, testified as follows:

#### EXAMINATION

### By MR. MACEY:

- Q On Exhibit No. 10 I notice you have a complete closure. Isn't it entirely possible that structurally it should be drawn higher?
- A It is possible it could be higher or else it could be about the same datum that you have here.
  - Q You have no evidence, of course?
- A And of course, this is down the southeast side. This is not closed.
- Q Is it entirely possible that it could be completely closed?
  - A Yes, I believe so, because of the --
- Q (Interrupting) In the event you had migration of water up-dip to the point where the area in the middle of your closure was structurally high enough so that these two producing wells were drowned out, you could still have oil trapped in there?

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COURT REPORTERS
ROCM 12, CROMWELL BLOG.
PHONES 7-9846 AND 5-9546
ALBUQUERQUE, NEW MEXICO

- A If you did have enough relief in the central part, yes. Of course, if the area is a rather flat area, it is possible it could be obtained.
- Q The only way you could ever prove or disprove the presence of that would be drilling, wouldn't it? There is no other way.
  - A That would be the only definite proof.

MR. MACEY: That is all.

MR. KELLOUGH: In connection with Mr. Macey's examination,
I would like to ask Mr. Veeder another question or two.

By MR. KELLOUGH:

- Q Mr. Veeder, Amerada is now in the process of drilling a well located in the southwest-northeast of 26, projected to the Pennsylvanian formation, is that right?
  - A That is right.
- Q Will that well give information which may be of use geologically in evaluating the structure?
- A Yes, sir, it will give very pertinent information, I would say, although Pennsylvanian and Devonian structures do not exactly conform. A high well on the Pennsylvanian would indicate accordingly high well on Devonian. That information would be very pertinent.
- Q That will possibly throw some light upon the relief which you may have on top of the structure. That would give you an indication, of course, whether you did have closure.
  - A Out here, yes.

MR. KELLOUGH: That is all.

MR. SPURRIER: Anymore testimony in this case?

MR. KELLOUGH: That is all.

MR. SPURRIER: If not, the witness may be excused.

(Witness excused.)

MR. SPURRIER: These cases will be taken under advisement and the next case on the Docket is Case 333.

STATE OF NEW MEXICO ) : SS.

I, ADA DEARNLEY, hereby certify that the foregoing and attached transcript of proceedings in Cases No. 314 & 319, before the Oil Conservation Commission, State of New Mexico, at Santa Fe, taken on April 15, 1952, is a true and correct record to the best of my knowledge, skill and ability.

DATED AT ALBUQUERQUE, this 24th day of April, 1952.

NOTARY PUBLIC COURT REPORTER

My Commission Expires:
June 19, 1955.

ADA DEARNLEY & ASSOCIATES

COURT REPORTERS

ROOM 12, CROMWELL BLDG.
PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

# BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

TRANSCRIPT OF HEARING
Case No. 314 + 319

November 20, 1951

E. E. BREESON
ADA DEARNLEY
COURT REPORTERS
BOX 13-03
PHONES 5-9422 AND 5-9546
ALBUQUERQUE, NEW MEXICO

# BEFORE THE OIL CONSERVATION COMMISSION STATE OF NEW MEXICO

In Re:

Cases concerned with the Knowles (Devonian) pool and the Hightower (Devonian) pool, Lea County, respectively. In both the Commission is considering advisability of pressure maintenance or other secondary recovery methods, or advisability of 40-acre spacing for the prevention of waste and the protection of correlative rights. In both cases, Amerada Petroleum Corporation is principal operator.

Case No. 314 and 319

TRANSCRIPT OF HEARING

November 20, 1951

ADA DEARNLEY, COURT REPORTER

(Notices of publication read by Mr. Kellahin.)

MR. SETH: If the Commission please, on behalf of the Amerada we request that the cases be continued until the January hearing. The Knowles case, I don't know what the number is, while pressures are continuing there is a decline in production and they are doing remedio work on Well No. 2 and it will take 30 to 60 days. In the Hightowers they are drilling a well and it will be completed in 30 or 60 days and may furnish further information in the matter.

CHAIRMAN SPURRIER: Thank you. Does anyone have any comment or testimony to present in these two cases? If not, without objection, they will be continued to the regular hearing, which date has not yet been definitely set. The next case and the final case is Case No. 254.

STATE OF NEW MEXICO ) ss COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached Transcript of Proceedings in Case No. 314 and 319, before the Oil Conservation Commission, taken on November 20, 1951, is a true and correct record of the same to the best of my knowledge, skill and ability.

REPORTER

ADA DEARNLEY, COURT REPORTER

### OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

\*\*\*\*\*

Transcript of Hearing CASES 314 AND 319

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January 22, 1952

Henrickson's Reporting Service 2224 - 47th Street Los Alamos, New Mexico

#### BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

January 22, 1952

Case 314 and 319: If the Commission please, cases 314 and 319 have been continued. Case 314 refers to spacing in the Knowles Pool in Lea County and Case 319 to the Hightower (Devonian) Pool in Lea County.

MR. SHEPARD: I'd like the record to show that the advertisement has been read.

VOICE: Mr. Oliver Seth representing Seth and Montgomergy, appearing for Amerada. We would like, if the Commission please, to continue these two cases until sometime after February 27th or 28th.

MR. SHEPARD: Would you like to have them continued until the March hearing?

VOICE: That would be satisfactory.

MR. SHEPARD: Are there any objections? Without objection, cases 314 and 319 will be continued until the regular March hearing.

STATE OF NEW MEXICO > 88.
COUNTY OF LOS ALAMOS >

I hereby certify that the foregoing and attached transcript of hearing in Cases 314 and 319 before the Oil Conservation Conmission on January 22, 1952, at Santa Fe is a true record of the same to the best of my knowledge, skill and ability.

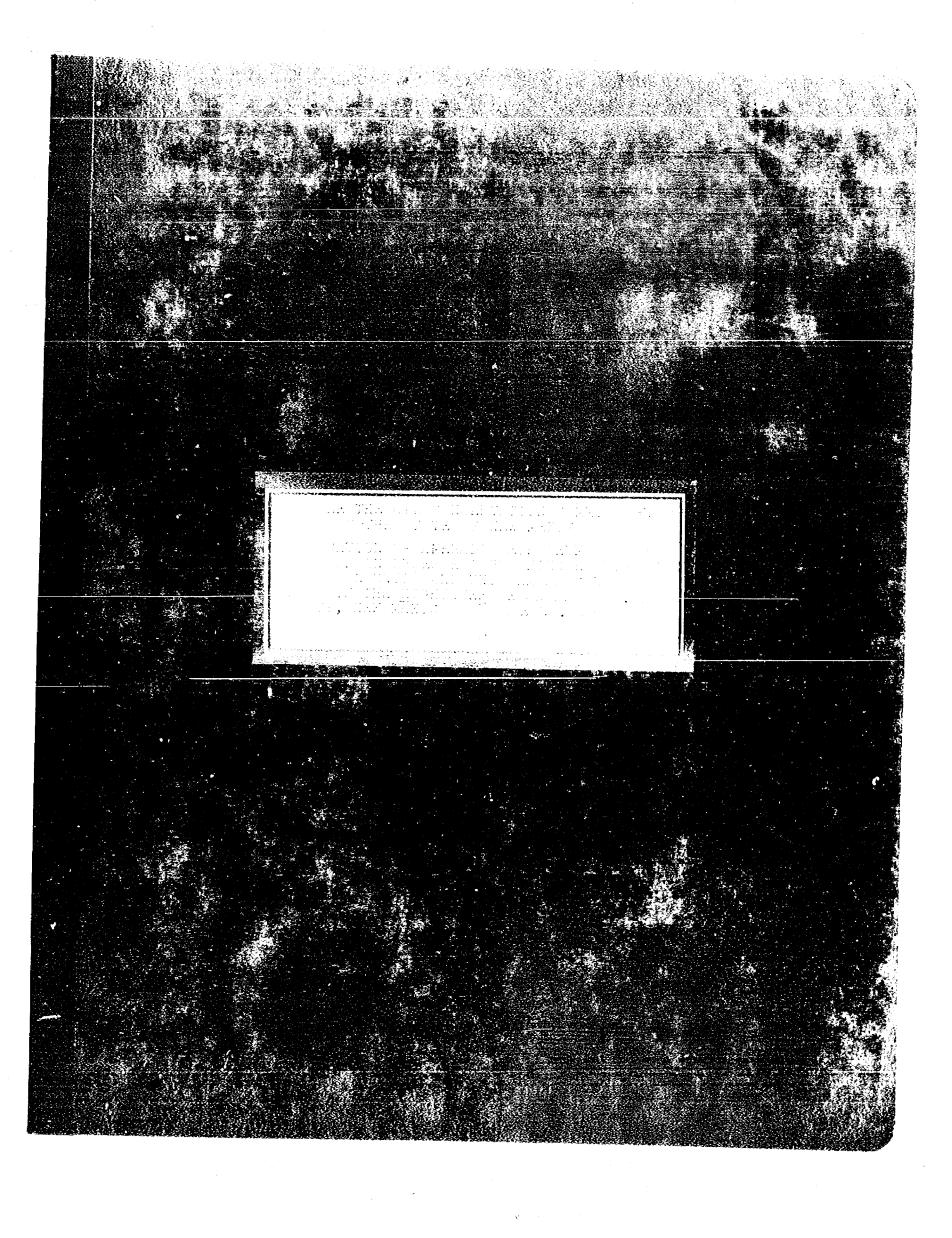
DATED at Los Alamos, this 28th day of January, 1952.

Abdrey W. Henrickson

My commission expires September 20, 1955.

.....f ...

Feb March April may June Sucy 14 Jan allowable by nomination one normal allava oc. Production Hightown Park 10-11,000 (4.67)



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

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN ORDER ESTABLISHING EIGHTY ACRE PRORATION UNITS AND UNI-FORM SPACING OF WELLS IN THE HIGHTOWER DEVONIAN POOL, LEA COUNTY, NEW MEXICO

CASE NO.  $198 \rightarrow 3/9$ 

### STATEMENT OF FACTS

In November, 1949, Amerada filed its application for the establishment of 80 acre spacing units for the Hightower Devonian pool.

At that time the State BTB #1 well (NW/4 NW/4 Sec. 26-12S-33E) had been completed in the Devonian formation at a depth of 10,090 to 10,200 feet.

The Roach well (NW/4 SW/4 Sec. 26-12S-33E) and the Gulf N.M.M.I. #1 well (SE/4 SE/4 Sec. 22-12S-33E) were then drilling, but not yet completed. Both of these wells resulted in dry holes in the Devonian.

The application asked that four sections be covered (Secs. 22, 23, 26, 27-12S-33E) and that all wells be located in the center of the NW and SE quarter of each governmental quarter section.

### 1. ORDER NO. 846

The application was heard by the Commission on November 1, 1949. There was no opposition. Evidence was offered in support of the allegations of the application.

On November 18, 1949, the Commission entered its Order 846 establishing 80 acre proration units comprising the E/2 and W/2 of each governmental quarter section. The order provided for wells to be located in the center of the NW and SE quarter of each quarter section with 150 feet tolerance. All wells were on the pattern locations.

The allowable for each 80 acre unit was a single top

allowable with deep well adaption as for a regular 40 acre unit, "until such time as the Commission may issue such further and additional orders as may be deemed necessary herein."

Paragraph 9 of the order provided:

"That the Commission retains jurisdiction of this case for the purpose of issuing such further and additional orders as may seem necessary to meet changed conditions, preclude inequities and preserve correlative rights; all upon the motion of the Commission or upon the petition of any interested operator upon public hearing, after notice as provided by law."

Exhibit 1 is a copy of Order 846.

### 2. ADDITIONAL DEVELOPMENT

Since the entry of the order one additional oil well has been completed in the Devonian formation. That is State BTE #1 (SE/4 SW/4 Sec. 23-12S-33E). Five other Devonian dry holes have been drilled:

- (1) Gulf N.M.M.I. (SE/4 SE/4 Sec. 22)
- (2) State BTF #1 (SE/4 NW/4 Sec. 23)
- (3) State BTH #1 (NW/4 NE/4 Sec. 26)
- (4) Roach (NW/4 SW/4 Sec. 26)
- (5) BTB #2 (SE/4 NW/4 Sec. 26)

Exhibit 2 is a map showing the present Devonian development.

### 3. ISSUES INVOLVED IN PRESENT HEARING

The Commission has now, on its own motion, requested that Amerada show cause why the 80-acre spacing order now in effect for the Hightower pool should not be revoked.

Exhibit 3 is a copy of the Notice for the present hearing.

The order expressly provides that the Commission retains jurisdiction to make such further orders "as may seem necessary to meet changed conditions, preclude inequities and preserve correlative rights." Thus the Commission has itself defined the scope of this hearing.

The order is final except for changed conditions. There is no inference that the Commission intended to reconsider the same issues heretofore presented.

Therefore, the question now properly before the Commission is whether there is a change of condition by reason of subsequent development which justifies the revocation of the 80 acre proration units or which is causing inequities.

The question of the allowable was temporary in the order and subject to review at any time.

Also, there is before the Commission the question of whether a pressure maintenance program is feasible at this time.

### 4. TESTIMONY OF JOHN A. VEEDER, GEOLOGIST

Mr. John A. Veeder is a geologist for Amerada Petroleum Corporation and is qualified to testify as an expert witness. The substance of his testimony is as follows:

(1) Since the last hearing one additional oil well and four Devonian dry holes have been drilled. One dry hole was drilled by Gulf. Exhibits 4, 5, 6, 7 and 8 are copies of Schlumberger logs of the following wells, respectively:

<sup>4 -</sup> BTE #1

<sup>5 -</sup> Roach #. 6 - BTF #1

<sup>7 -</sup> BTH #1

<sup>8 -</sup> BTB #2

- (2) Exhibit 9 is a tabulation of the pertinent drilling data for the additional wells.
- (3) Exhibit 10 is a structure map of the Hightower Devonian pool.
- (4) From a study of all available geological data, it is my opinion that the Hightower-Devonian Pool has good porosity and apparently good permeability.
  - 5. TESTIMONY OF R. S. CHRISTIE, PETROLEUM ENGINEER
- Mr. R. S. Christie is Petroleum Engineer for Amerada Petroleum Corporation and is qualified to testify as an expert witness. The substance of his testimony is as follows:
- (1) Exhibit 11 is a graph showing monthly oil and water production and bottom hole pressures of the Hightower-Devonian Pool to March 1, 1951.
- (2) The pressure information indicates uniform withdrawals and that the drawdown has not been excessive. This means that there is little likelihood of channeling.
- (3) It is my opinion that this pool has good permeability for this type of reservoir. The wells have high potential and the uniformity of the reservoir pressure indicates good communication.
- (4) It is my opinion that this pool is under an effective water drive.
- (5) It is my opinion that a Devonian well in this reservoir is capable of effectively draining an area of 80 acres.
- (6) No waste is now being committed. There is no change in condition which justifies a revocation of the eighty acre spacing order.

- (7) The average cost of the Devonian producing wells at Hightower has been approximately \$227,000 per well.
- (8) The state is the only lessor and Amerada is the only lessee in the entire Hightower pool and no inequities now exist.
- (9) It is my opinion that the allowable should remain as now provided.
- (10) It is my opinion that a pressure maintenance program at this time would not increase the ultimate recovery and would not be economical.

Respectfully Submitted

SETH & MONTGOMERY

By At

Mary 1) Page

Booth Kellough

ATTORNEYS FOR AMERADA PETROLEUM CORPORATION

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

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN ORDER ESTABLISHING EIGHTY AGRE PRORATION UNITS AND UNI-FORM SPACING OF WELLS IN THE HIGHTOWER DEVONIAN POOL, LEA COUNTY, NEW MEXICO

CASE NO. 198

### STATEMENT OF PACTS

In November, 1949, merada filed its application for the establishment of 80 acre spacing units for the Hightower Devonian pool.

At that time the State BTB #1 well (NW/4 NW/4 Sec. 26-128-33E) had been completed in the Devonian formation at a depth of 10,090 to 10,200 feet.

The Roach well (NW/4 SW/4 Sec. 26-128-33E) and the Gulf N.M.M.I. #1 well (SE/4 SE/4 Sec. 22-128-33E) were then drilling, but not yet completed. Both of these wells resulted in dry holes in the Devonian.

The application asked that four sections be covered (Secs. 22, 23, 26, 27-128-33E) and that all wells be located in the center of the NV and SE quarter of each governmental quarter section.

### 1. ORDER NO. 846

The application was heard by the Commission on November 1, 1949. There was no opposition. Evidence was offered in support of the allegations of the application.

On November 18, 1949, the Commission entered its Order 846 establishing 80 agre proration units comprising the E/2 and W/2 of each governmental quarter section. The order provided for wells to be located in the center of the NW and SE quarter of each quarter section with 150 feet tolerance. All wells were on the pattern locations.

The allowable for each 80 acre unit was a single top

allowable with deep well adaption as for a regular 40 acreunit, "until such time as the Commission may issue such further and additional orders as may be deemed necessary herein."

Paragraph 9 of the order provided:

"That the Commission retains jurisdiction of this case for the purpose of issuing such further and additional orders as may seem necessary to meet changed conditions, preclude inequities and preserve correlative rights; all upon the motion of the Commission or upon the petition of any interested operator upon public hearing, after notice as provided by law."

Exhibit 1 is a copy of Order 846.

### 2. ADDITIONAL DEVELOPMENT

Since the entry of the order one additional oil well has been completed in the Devonian formation. That is State BTE #1 (SE/4 SW/4 Sec. 23-128-33E). Five other Devonian dry holes have been drilled:

- (1) Gulf N.M.M.I. (SE/4 SE/4 Sec. 22)
- (2) State BTF #1 (SE/4 NW/4 Sec. 23)
- (3) State BTH #1 (NW/4 NE/4 Sec. 26)
- (4) Roach (NW/4 SW/4 Sec. 26)
- (5) BTB #2 (SE/4 NW/4 Sec. 26)

Exhibit 2 is a map showing the present Devonian development.

### 3. ISSUES INVOLVED IN PRESENT HEARING

The Commission has now, on its own motion, requested that Amerada show cause why the 80-acre spacing order now in effect for the Hightower pool should not be revoked.

Exhibit 3 is a copy of the Notice for the present hearing.

The order expressly provides that the Commission retains jurisdiction to make such further orders "as may seem necessary to meet changed conditions, preclude inequities and preserve correlative rights." Thus the Commission has itself defined the scope of this hearing.

The order is final except for changed conditions. is no inference that the Commission intended to reconsider the same issues heretofore presented.

Therefore, the question now properly before the Commission is whether there is a change of condition by reason of subsequent development which justifies the revocation of the 80 acre proration units or which is causing inequities.

The question of the allowable was temporary in the order and subject to review at any time.

Also, there is before the Commission the question of whether a pressure maintenance program is feasible at this time.

# TESTIMONY OF JOHN A. VEEDER, GEOLOGIST

Mr. John A Veeder is a geologist for Amerada Petroleum Corporation and is qualified to testify as an expert witness. The substance of his testimony is as follows:

(1) Since the last hearing one additional oil well and four Devonian dry holes have been drilled. One dry hole was drilled by Gulf. Exhibits 4, 5, 6, 7 and 8 are copies of Schlumberger logs of the following wells, respectively:

<sup>4 -</sup> BTE #1

<sup>5 -</sup> Roach #1 6 - BTF #1

<sup>-</sup> BTH #1 - BTB #2

- (2) Exhibit 9 is a tabulation of the pertinent drilling data for the additional wells.
- (3) Exhibit 10 is a structure map of the Hightower De-vonian pool.
- (4) From a study of all available geological data, it is my opinion that the Hightower-Devonian Pool has good porosity and apparently good permeability.
  - 5. TESTIMONY OF R. S. CHRISTIE, PETROLEUM ENGINEER
- Mr. R. S. Christie is Petroleum Engineer for Amerada Petroleum Corporation and is qualified to testify as an expert witness. The substance of his testimony is as follows:
- (1) Exhibit 11 is a graph showing monthly oil and water production and bottom hole pressures of the Hightower-Devonian Pool to March 1, 1951.
- (2) The pressure information indicates uniform withdrawals and that the drawdown has not been excessive. This means that there is little likelihood of channeling.
- (3) It is my opinion that this pool has good permeability for this type of reservoir. The wells have high potential and the uniformity of the reservoir pressure indicates good communication.
- (4) It is my opinion that this pool is under an effective water drive.
- (5) It is my opinion that a Devonian well in this reservoir is capable of effectively draining an area of 80 acres.
- (6) No waste is now being committed. There is no change in condition which justifies a revocation of the eighty acrespacing order.

- (7) The average cost of the Devonian producing wells at Hightower has been approximately \$227,000 per well.
- (8) The state is the only lessor and Amerada is the only lessee in the entire Hightower pool and no inequities now exist.
- (9) It is my opinion that the allowable should remain as now provided.
- (10) It is my opinion that a pressure maintenance program at this time would not increase the ultimate recovery and would not be economical.

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# EXHIBIT NO. 3

# NOTICE

In the matter of the application of the Oil Conservation Commission upon its own motion for an order directed to Amerada Petroleum Corporation, Ralph Lowe, and all other operators and persons having an interest in the subject matter hereof, directing that pressure maintenance or other secondary recovery projects be instituted in the Hightower (Devonian) Pool in Lea County, New Mexico, within six months from October 23, 1951, or that 80-acre spacing as provided for in Commission Order No. 846, issued November 18, 1949, be rescinded and 40-acre spacing be instituted for the prevention of waste and the protection of correlative rights, and directing Amerada Petroleum Corporation, Ralph Lowe, and all other operators or persons interested to show cause at Santa Fe, New Mexico, why such order should not be entered.

EXHIBIT NO. 1

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. 198
ORDER NO. 846

THE APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR AN ORDER ESTABLISHING
EIGHTY ACRE PRORATION UNITS; ESTABLISHING A UNIFORM PATTERN FOR THE SPACING
AND DRILLING WITH ALLOWANCE FOR TOLERANCE

THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN ORDER ESTABLISHING EIGHTY ACRE PRORATION UNITS; ESTABLISHING A UNIFORM PATTERN FOR THE SPACING AND DRILLING WITH ALLOWANCE FOR TOLERANCE FOR SURFACE OBSTRUCTIONS; AND FOR AN ORDER FIXING AND ESTABLISHING ALLOWABLES FOR WELLS DRILLED OR TO BE DRILLED IN THE HIGHTOWER POOL TO THE COMMON SOURCE OF SUPPLY DISCOVERED IN AMERADA-STATE BTB NO. 1 WELL (DEVONIAN), LEA COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 10:00 o'clock A.M., November 1, 1949 at Santa Fe, New Mexico, before the Oil Conservation Commission of the State of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 18th day of November, 1949, the Commission having before it for consideration the testimony adduced at the hearing of said cause and being fully advised in the premises.

### FINDS:

- 1. That the Applicant, Amerada Petroleum Corporation has drilled and completed Amerada-State BTB No. 1 well located in the approximate center of NW/4 NW/4 of Section 26, Township 12 south, Range 33 east, N.M.P.M. and discovered a new common source of supply at the approximate depth of 10,090-10,200 ft., in the Devonian formation.
- 2. That the initial production from said well was 781 barrels of 56.9 gravity pipe line oil in 19 3/4 hours through 1/4 in. tubing choke from 10,155 ft.-10,165 ft. and with a gasoil ratio of 280.
- 3. That the probable area has been delineated and recommended by the Nomenclature Committee and approved by the Commission for Devonian production as discovered by the above described well as follows:

All of sections, 22,23,26 and 27 in Township 12 south, Range 33 east, N.M.P.M.

4. That Gulf Oil Company is now drilling a well in SE/4 SE/4 section 22, and Amerada Petroleum Corporation is also drilling a well in the NW/4 SW/4 of section 26, all in Township 12 south, Range 33 east; both being at a present depth of approximately 9000 ft. and projected to the Devonian pay discovered in Amerada-State BTB No. 1 within the "Hightower" pool as lately designated, and described hereinabove.

- 5. That this order shall cover all wells now or hereafter drilled to the common source of supply (Devonian) to which the discovery well, merada-State BTB No. 1 was drilled and is producing from within the pool described in paragraph 3 above, so as to insure a proper and uniform spacing, developing and producing plan for all wells drilled to the common source of supply.
- 6. That recognizing the conditions indicated by the discovery well, the Commission finds it advisable to amend and supplement its present rules, regulations and orders to properly cover the matter of lease development and well spacing now or hereafter drilled to, into and producing from the Hightower-Devonian formation encountered at a depth between 10,090 ft. and 10,200 ft. in the "Hightower" pool.
- 7. That the present rules and regulations of the Commission are adequate and sufficient to properly cover the drilling, equipping and operation of wells to the newly discovered common source of supply as found in Amerada-State BTB No. 1 well, and therefore, the general statewide rules and the special rules should remain in full force and effect except as hereinafter modified, amended or superceded.
- 8. That the "Hightower" Devonian formation as found in the Amerada-State BTB No. 1 well, is apparently a common source of supply which should be drilled and developed under a special program, other than that ordinarily required in compliance with existing Commission regulations particularly Order No. 637 effective March 1, 1946 with respect to proration units, spacing and assignment of allowables due to the depth of such wells, drilling time required, the high costs attached thereto, in addition to the hazards of deep exploration.
- 9. That the best interest of the State of New Mexico seems to require encouragement of operators in the exploration and development of the States' natural resources, particularly oil and gas, by the authorization of a reasonable, proper and equitable spacing and development pattern for the "Hightower" pool.

## IT IS THEREFORE ORDERED:

1. That the Amerada-State BTB No. 1 well located in the center of NW/4 NW/4 of section 26, Township 12 south, Range 33 east, N.M.P.M. is producing oil from the Devonian formation, a newly discovered common source of supply not heretofore discovered and produced in New Mexico, and that the probable area for such production is as follows:

All of sections 22,23,26 and 27, in Township 12 south, Range 33 east, N.M.P.M. (Hightower pool) Lea County, New Mexico.

- 2. That it is the intent of this order to cover all of the Devonian formation common source of supply within the area designated herein, and upon any regular additions to the Hightower pool which may from time to time be made, and that any well within said designated area to the same common source of supply shall be drilled on the pattern herein provided.
- 3. That 80-acre spacing and drilling units be established as hereinafter provided, for the production of oil and gas from the Devonian formation underlying the area as hereinabove described.
- 4. That each governmental quarter section be divided into two equal rectangular spacing units by a line drawn north-

south through such quarter section, and with wells to be drilled in the center of the northwest and southeast forty acre tracts of each such spacing unit, with a tolerance of not in excess of 150 ft. provided, however, that the units within may be changed by agreement of operators within any quarter section of the designated area upon proper showing before the Commission.

- 5. That allowable shall be assigned on the basis of proration units as herein established, and any proration unit of less than the normal one-half of a governmental quarter section as the result of an exception granted by the Commission after notice and hearing, shall be assigned an allowable in proportion that the acreage thereof bears to the 80-acre spacing unit or one-half of a quarter section.
- 6. That the daily oil allowable for an 80-acre unit provided for herein shall be assigned to the Amerada-State BTB No. 1 well, the discovery well, located in the approximate center of NW/4 NW/4 of section 26, Township 12 south, Range 33 east, N.M.P.M., Lea County, New Mexico and to all other wells hereafter drilled and produced in accordance with the provisions of this order based upon the proportional factor of 4.67 times the regular top allowable until such time as the Commission may issue such further and additional orders as may be deemed necessary herein.
- 7. All rules, regulations and orders heretofore issued by this Commission which may conflict herewith are superceded, only with respect to the Devonian formation production at the approximate depth of 10,090 ft.-10,200 ft. in the Hightower pool.
- 8. That this Order shall be in full force and effect from and after December 1, 1949.
- 9. That the Commission retains jurisdiction of this case for the purpose of issuing such further and additional orders as may seem necessary to meet changed conditions, preclude inequities and preserve correlative rights; all upon the motion of the Commission or upon the petition of any interested operator upon public hearing, after notice as provided by law.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

s/ Thomas J. Mabry THOMAS J. MABRY, CHAIRMAN

(SEAL)

GUY SHEPARD, MEMBER

s/R. R. Spurrier
R. R. SPURRIER, SECRETARY

# HIGHTOWER FIELD - LEA COUNTY, NEW MEXICO:

|   |  | ***                                       |  | Bris #1   |  | BTE #1   |   | BIB #2   | ,  | BTB #1                         | WELL & NO.       |
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| e   | PB 8685 (-4,436)                                   | D & A                                     | D & A  |   | No PB  |  | PB 8768 (-4517)   |  |  | PB 10165 (-5906)               | NIAN COMPLETION  |
| IP: F Nat. 2,640,000 CFGPD plus 153 B Dist. 24 hrs. thru 18/64" ch. GOR 17,028-1 Grav. 69.5 Corr. Spud 9-4-49 Completed 1-20-50 | 5-1/2" Csg. @ 9475 PB 8685<br>Perf. Csg. 8660-8685 | TD 10,189 D & A Completed 10-21-50 C 4253 | TD 11,185 D & A Spud 4-13-50 Completed 7-30-50 | hr. test) GOR 481-1, Grav. 59.2 Corr. Spud 1-5-50 Completed 4-21-50 | 5-1/2" Csg. 10,150 Wash open hole 10,150-10,165 with 500 acid IP: F 2596 BOPD thru 1/2" ch. (Based on 12 | If: F 624 BO 24 hrs. thru 20/64" ch. GOR 875-1, Grav. 44.5 Corr. Spud 9-26-51 Completed 12-16-51 | 5-1/2" Csg. @ 9050 PB 8768 Perf. Csg. 8728-8768 Wash Perf. with 500 acid. | 24/64" ch. GOR 435-1, Grav. 57.0 Corr.<br>Spud 3-28-49 Completed 9-16-49 | rerr. Csg. 10,155-165 Wash Perf. with 250 Acid TP: F 1386 RO Plus 10 Euro) | 5-1/2" Csg. @ 10,270 PB 10,165 |                  |

UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE ANGELS FEAK UNIT AREA, COUNTY OF SAN JUAN STATE OF NEW MEXICO

I Sec. iio.

THIS AGREEMENT, entered into as of the 3<sup>rd</sup> day of <u>May</u>

1951, by and between the parties subscribing, ratifying, or consenting hereto, and herein referred to as the "parties hereto";

WITNESSETH:

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

THEREAS, 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 collectively adopting and operating under 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 the Legislature (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 the Legislature (Chap. 168, Laws 1949) to approve this agreement and the conservation provisions hereof; and

THEREAS, the parties hereto hold sufficient interests in the Angels
Peak 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 in which the non-Federal land is located, are hereby accepted and made a part of this agreement.
- 2. <u>UNIT AREA:</u> The following described land is hereby designated and recognized as constituting the unit area:

# NEW MEXICO PRINCIPAL MERIDIAN

T. 27N., R. 10 W., Sec. 1, Lots 3,  $4 \text{ S} \frac{1}{2} \text{ NW} \frac{1}{4}$ ,  $\text{SW} \frac{1}{4}$ ; Secs. 2 to 6, inclusive; Sec. 7,  $\text{E} \frac{1}{2}$ ,  $\text{E} \frac{1}{2} \text{ W} \frac{1}{2}$ ; Secs. 8 to 11, inclusive; Sec. 12,  $\text{N} \frac{1}{2}$ ; Sec. 13,  $\text{V} \frac{1}{2}$ ; Secs. 14 to 17, inclusive; Sec. 18,  $\text{E} \frac{1}{2}$ ; Secs. 20 to 23, inclusive; Sec. 24,  $\text{W} \frac{1}{2}$ ; Sec. 25,  $\text{N} \frac{1}{4}$ ,  $\text{N} \frac{1}{2} \text{ SW} \frac{1}{4}$ ; Sec. 26,  $\text{N} \frac{1}{2}$ ,  $\text{SW} \frac{1}{4}$ ,  $\text{N} \frac{1}{2} \text{ SE} \frac{1}{4}$ ; Secs. 27 and 28

T. 28N., R. 10 T., Fractional Secs. 7, 8 and 9; Sec. 15,  $SN_2^2$ ; Secs. 16 to 22, inclusive; Sec. 23,  $SN_2^2$ ; Sec. 26  $N_2^2$ ; Sec. 26  $N_2^2$ ; Secs. 27 to 35, inclusive

T. 29N., R. 10 T., Sec. 29,  $SN_4^2$   $SN_4^2$ ; Sec. 30,  $SN_2^2$ ; Secs. 31 and 32

T. 28N., R. 11 W., Sec. 12, Lot 1,  $SN_2^2$   $SN_2^2$ ; Sec. 13,  $N_2^2$   $NN_2^2$   $NN_2^2$ 

Total Unit Area embraces 29,602.17 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 herein 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". Not less than six copies of the revised exhibits shall be filed with the Supervisor, and two copies each with the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Commissioner" and the Oil Conservation Commission, hereinafter referred to as "Commissioner".

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 an demand of the Commissioner, 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 and Commissioner, 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 and Commissioner 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 and Commissioner, 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 below the base of the Pictured Cliffs formation of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".
- 4. UNIT OPERATOR: STANDLIND OIL AND GAS COMPANY is hereby designated as Unit Operator and by signature hereto commits to this agreement all interests in unitized substances vested in it as set forth in Exhibit "B", and agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development and production of unitized substances as herein provided. Thenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as owner of interests 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 it from its duties and obligations and terminate his rights as such for a period of 6 months after notice of intention to resign has been served by him on all working interest owners, the Director, and the Commissioner and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment as may be required by the Supervisor and Commissioner, 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 after a participating area or areas have been established provided a successor unit operator has been selected and approved and has agreed to accept the duties and responsibilities of Unit Operator effective upon the termination of such duties and responsibilities by the retiring Unit Operator. 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 his 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, equipment and appurtenances needed for the preservation of any wells.

- SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator shall resign 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 sufficient additional parties, so as to constitute in the aggregate not less than 75 per cent of the total working interests, 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 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 in conducting unit operations hereunder shall be paid in the first instance by Unit Operator, and such costs and expenses so paid by Unit Operator shall be apportioned among and borne by the owners of working interests and the Unit Operator reimbursed, 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 as between the working interest owners and Unit Operator may provide for such limitations upon the power of the Unit Operator respecting the liability of the working interest

owners for cost of operations hereunder 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. Three true copies of any unit operating agreement executed pursuant to this section shall be filed with the Supervisor and one true copy 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 delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this agreement, shall constitute and define the rights, privileges, and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer 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. DEEP TEST WELL: It is recognized that one productive well in the Dakota formation has been completed within the Unit Area located in the NE/4 NW/4 Section 4, T27N, R10", San Juan County, New Mexico. Within six months after the effective date hereof the Unit Operator shall begin to drill a second adequate test well at a location approved by the Supervisor if such location is upon lands of the United States, and it upon State lands or patented lands such location shall be approved by the Commission, unless on such effective date such a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Dakota formation has been tested or until at a lesser depth but below the base of the Pictured Cliffs formation, 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 as to wells on Federal lands, or the Commissioner as to wells on State lands or patented lands, that further drilling of said well would be unwarranted or impracticable, provided, however, that the Unit Operator shall not in any event be required to drill to a depth in excess of 7000 feet. In the event of discovery and completion of the second or subsequent test wells as a commercial well or wells in formation below the base of the Pictured Cliffs formation above and before reaching the Dakota formation, a test well shall be drilled to the original objective, and it is agreed that such well will be begun at a location approved as above not later than 18 months after the effective date of this agreement.

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 may modify the drilling requirement of this section by granting reasonable extensions of time when, in his opinion, such action is warranted. Upon failure to comply with the drilling provisions of this section, the Director and Commissioner 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 6 months after completion of the second well, which is 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, subject to the test well provisions of Section 9 hereof. 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 approved plan of development. The Supervisor and Commissioner are authorized to grant a reasonable < extension of the 6-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 second well capable of producing oil and gas 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 necessary to comply with Section 9 hereof, or such as may be specifically approved by the Supervisor and the Commissioner shall be drilled except in accordance with a plan of development approved as herein provided.

Participating Area" is hereby established effective as of the first of the month following the effective date of this agreement for all unitized substances produced from the Dakota formation through the existing well described in Section 9 hereof. The following land shall be embraced in the initial Dakota Participating Area:

PRINCIPAL MERIDIAN, NEW MEXICO (SAN JUAN COUNTY)

T. 27N. R. 10 W, W2 NE, MU Sec. 4, and

T. 28N., R. 10 W.,  $S_2^1$  SW, SW/4 SE/4 Sec. 33. containing 361.54 acres, more or less.

The boundaries of the initial Dakota Participating area are shown by a dashed line in Exhibit "A".

Upon completion of any other well capable of producing unitized substances in any formation in paying quantities, which does not cause a revision of an established participating area or areas as heretofore or hereinafter provided, or as soon thereafter as required by the Supervisor and Commissioner, the Unit Operator shall submit for approval by the Director, the Commissioner, and the Commission, a schedule, based on sub-divisions 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 land in said schedule on approval of the Director, the Commissioner, and the Commission to constitute a separate 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, and 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 and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month following the date of first authentic 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 apportionment of any sums accrued or paid for production obtained prior to the effective date of 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 redefinition of a participating area, or until a participating area has, or acreas 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 and the amount thereof deposited as directed by the Supervisor and the Commissioner of Public Lands 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 sum due as Federal and State Royalty on the basis of such approved participating area.

Whenever it is determined, subject to the approval of the Supervisor, as to wells on Federal land, the Commissioner as to wells on State land, and the Commission as to patented land, 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 be allocated to the land on which the well is located so long as that well is not within a participating area established for the pool or deposit from which such production is obtained.

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 tract of unitized land shall have allocated to it such

percentage of said production as the number of acres in such tract 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, any 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.

established in Section 11 hereof shall be apportioned among and allocated to the several tracts of land comprising such participating area effective as of the first of the month following the effective date of this agreement, in accordance with the schedule marked Exhibit "C" attached hereto. Nothing in this agreement shall be construed to affect the disposition of unitized substances, or the proceeds thereof, produced and saved from the unit area prior to the effective date of the establishment of the participating area.

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, the Commissioner, and the Commission 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 transferred to and 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 establishment or the enlargement of a participating area 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.

Mexico and all royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized substances allocated to such tract, and Unit Operator, 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 interests 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 lessees of any land from their respective lease obligations for the payment of any royalties due under their leases.

If Unit Operator introduces gas obtained from sources other than the unitized substances 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 and the Commissioner, a like amount of gas if available, 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.

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 any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their 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, or as otherwise provided by law or regulation. Such rental or minimum royalty may be waived, suspended, or reduced to the extent authorized by law and regulation. Rentals on State of New Mexico lands subject to this agreement shall be paid at the rates specified in the respective leases, or may be reduced and suspended upon the order of the Commissioner of Public Lands of the State of New Mexico pursuant to applicable laws and regulations.

Which would terminate such lease unless drilling operations were within the time therein specified commenced upon the land covered thereby or rentals paid for the priviledge of deferring such drilling operations, the rentals required thereby shall be deemed to accrue and become payable during the primary term thereof and thereafter until the required drilling operations are commenced upon the land covered thereby or some portion of such land is included within a participating area.

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 State 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 for Federal land or as approved by the Commissioner as to State land.
- 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 holding interests in leases embracing unitized land of the United States or of the State of New Mexico hereby consent that the Secretary of the Interior, hereinafter referred to as "Secretary", and the Commissioner, respectively, shall, and said Secretary and Commissioner or their duly authorized representatives by their approval of this agreement do, hereby establish, alter, change or revoke the drilling, producing, rental minimum royalty, and royalty requirements of such 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 horeunder 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 produce wells situated on land therein embraced.

(c) Suspension of drilling or producing operations on all unitized lands of the United States pursuant to direction or consent of the Secretary or his duly authorized representative, and on all unitized lands of the State of New Mexico pursuant to direction or consent of the Commissioner or his duly authorized representative, 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 the lease remains committed hereto, provided a valuable deposit of unitized substances is discovered 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 immediately 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.
- 19. COVENANTS RUN WITH LAND: The covenants herein shall be construed to be covenants running with the land with respect to the interests 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 grantes, transferee, or other successor in interest. No assignment or transfer of any working, 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.

upon approval by the Secretary and the Commissioner or their duly authorized representatives and shall remain in effect so long as unitized substances can be produced from the unitized land in paying quantities, 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 it is terminated as provided in Section 6 or Section 9 hereof.

This agreement may be terminated at any time by not less than 75 percentum, on an acreage basis, of the owners of working interests signatory hereto, with the approval of the Director and the Commissioner.

21. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION: The Director or Commissioner 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 proration program which, prior to the date of this agreement, is established, recognized, and generally adhered to by the majority of operators in such State, 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, within the limits made or fixed by the Commission, to alter or modify 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; provided further that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Commissioner and as to any lands of the State of New Mexico or privately-owned lands subject to this agreement as to the

quantity and rate of production in the absence of specific written approval thereof by the Commission.

- 22. CONFLICT OF SUPERVISION: Neither the Unit Operator nor the working interest owners nor any of them shall be subject to any forfeiture, termination, or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability for delay or failure in whole or in part to comply therewith to the extent that the said Unit Operator, working interest owners or any of them are hindered, delayed, or prevented from complying therewith by reason of failure of the Unit Operator to obtain with the exercise of due diligence the concurrence of the representatives of the United States and the representatives of the State of New Mexico in and about any matters or thing concerning which it is required herein that such concurrence be obtained. The parties hereto, including the Commission, agree that all powers and authority vested in the Commission in and by any provisions of this contract are vested in the Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by laws of the State of New Mexico.
- 23. 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 to appeal from orders issued under the regulations of said Department or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior 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.
- 24. 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.

- 25. 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 invalidity of any law of the State wherein said unitized lands are located, or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.
- 26. 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.
- 27. 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.
- 28. LOSS OF TITLE: In the event title to any tract of unitized land or substantial interest therein shall fail and the true owner cannot be induced to join this unit agreement, so that such tract is not committed to this unit agreement, or the operation thereof hereunder becomes impractical as a result thereof, such tract may be eliminated from the unitized area and there shall be such readjustment of future costs and benefits as may be required on account of the loss of said acreage. In the event of a dispute as to title as to any royalty, working, or other interests subject thereto, the Unit Operator may withhold payment or delivery on account thereof without liability for interest until the dispute is finally settled: provided, that, as to Federal and State land or leases, no payments of funds due the United States or the State of New Nexico shall be withheld, but such funds shall be deposited with the Bureau of Land Management or as directed by the Supervisor

and with the Commissioner of Public Lands of the State of New Mexico, respectively, 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.

- 29. 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 working interest owner in that tract may withdraw said tract from this agreement by notice to the Director, the Commissioner, the 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 of such rights subscribing or consenting to this agreement and, if such owner is also a working interest owner, by subscribing to the Unit Operating Agreement. It is understood and agreed, however, that 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, if any, pertaining to such joinder, as may be provided for in the Unit Operating Agreement, and it is also understood and agreed that after discovery of unitized substances in paying quantities hereunder, a subsequent joinder by a non-working interest owner must be consented to by the working interest owner responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. A subsequent joinder shall be effective as of the first day of the month following the filing with the Supervisor and the Commissioner of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within 60 days by the Director or Commissioner.
- 30. COUNTERPARTS: This agreement may be executed in any number of counter parts 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 interest in the lands within the above-described unit area.

- 31. SURRENDER: During the life of this agreement, no right to surrender any lease or operating agreement reserved in any such instrument shall be exercised as to any lands within a participating area established pursuant to this agreement. There shall be no restriction on the right to surrender any lease or operating agreement embracing nonparticipating lands if that right is reserved in such instrument, subject, however, to the conditions hereinafter prescribed: (a) if a lease or portion thereof embracing nonparticipating lands is terminated as a result of a surrender to the lessor such lands shall not be deemed committed to this agreement unless and until such lands are recommitted hereto by an agreement with the Unit Operator; (b) if operating rights are surrendered to a lessee said lessee shall have the right to become a party to a unit accounting agreement with the Unit Operator, effective as of the date of such surrender, or may with the consent of the lessor withdraw such lease from the unit agreement and operate such lease independently but in accord with the conservation provisions of the unit agreement, provided, that if neither of these alternatives is adopted within a period of six months following the effective date of surrender, the lease shall automatically terminate as to the lands remaining in the unit area.
- their account and the account of the royalty owners all valid taxes on or measured by the unitized substances in and under or that may be produced, gathered and sold from the land subject to this contract after the effective date of this agreement, or upon the proceeds or net proceeds derived therefrom. The working interest owners on each tract shall and may charge the proper proportion of said taxes to the royalty owners having interests in said tract, and may currently retain and deduct sufficient of the unitized substances or derivative products, or net proceeds thereof from the allocated share of each royalty owner to secure reimbursement for the taxes so paid.

  No such taxes shall be charged to the United States or the State of New Mexico or to any lessor who has a contract with his lessee which requires the lessee to pay such taxes.

33. NO PARTNERSHIP: It is expressly agreed that the relation of the parties hereto is that of independent contractors and nothing in this agreement contained, expressed or implied, nor any operations conducted hereunder, shall create or be deemed to have created a partnership or association between the parties hereto or any of them.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and have set opposite their respective names the date of execution.

| · · · · · · · · · · · · · · · · · · ·         |                 | UNIT OPERATOR AND WORKING INTEREST OWNER |
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| ATTEST:                                       | DATE:           | STANOLIND OIL AND GAS COMPANY            |
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| Assistant Secretary                           |                 | Wice-President                           |
|   |                 | WORKING INTEREST OWNERS                  |
| ATTEST:                                       | DATE:           | KUTZ CANON OIL & GAS CO.                 |
| RHumban<br>Assistant Secretary                | 7-7-51          | By Wise President                        |
|   |                 |  |
| Address: 210 U.S. Well 1.                     | rely            |  |
| ADDITON                                       | ).<br>DAMES     | Trat True                                |
| ATTEST:                                       | DATE:           | Kutz DEEP TEST INC                       |
| Athua ha                                      | 7-7-57          | By Anger President                       |
| Address: 210 W.S- Watel A.                    | ledy.           |  |
|   | DATE:<br>8-6-51 | EL PASO NATURAL GAS COMPANY By Elems     |
| Assistant Secretary                           |                 | Vice President                           |
| Address: 1010 Bassett Tower<br>El Paso, Texas |                 |  |

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| HOUSTON, TEXAS   | J, V. COTAIN, VICE PRESIDENT   |
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| Sallys 7.00  | CONGRESS OIL/CO.   |
| attest Time O  | son Huntus   |
| Booleyard  |  |
| 0 200  | 1 / Superior   |
| Address: BurfBldg  |  |
| Dallas Tex   |  |
| Address:   |  |
|  |  |
| Adduses  |  |
| Address:   |  |

|          | ROYALTY INTEREST OWNERS |
|----------|-------------------------|
| Address: |                         |
| Address: |                         |
| Address: |                         |
| Agaress: |                         |
| Address: |                         |
|          |                         |
| Address: |                         |
| Address  |                         |

|  | COUNTY OF July 2)  |
|--|--|
|  | All the same of th |
|  | On this 3 M day of May, 195/, before me appeared, to me personally known, who, being by me duly  |
| , .  | sworn, did say that he is the Uce President of Sun Courants  |
|  | 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 acknowledged said instrument to be the free act and deed of said corporation.  |
|  |  |
| •  | Given under my hand and notarial seal this 3 day of May, 1951.   |
|  | My Commission warresseptember 30, 1951   |
|  | Notary Public  |
| Cetyans  | STATE OF Colorado) COUNTY OF DENVEY  |
|  | 10n this It day of July, 1957, before me appeared  |
| V  | sworn, did say that he, is the President of  |
|  | 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 acknowledged said instrument to be the free act and deed of said corporation.  |
|  | Given under my hand and notarial seal this Its day of July, 195%.  |
| 2  |  |
|  | My Commission expires:  Margarettepp   |
|  | Notary Public /  |
| Out the  | COUNTY OF Deuven)  |
|  | On this 7th day of July, 1957, before me appeared  |
|  | d. J. Meyer /, to be personally known, who, being by me duly sworn, did say that he is the // resident of  |
|  | 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 (1) (1) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2   |
|  | $\sim$ / $\sim$ /  |
|  |  |
|  | My Commission expires:   |
|  | March 1-1955   |
|  | STATE OF Josas ) COUNTY OF El Sago )   |
| The state of the s | On this and day of Chagust, 195/, before me appeared   |
|  | sworn, did say that he is the Vice President of Class Actions  |
| The second secon | 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  |
| (All the same seasons)   | acknowledged said instrument to be the free act and deed of said corporation.  |
|  | Given under my hand and notarial seal this 6th day of leguet, 195/   |
| And delicated  | My Commission expires:   |
| 3.5° (* 3°5).  | June 1,1953 Notary Public  |

(New Mexico)

| STATE OF TEXAS ) COUNTY OF HARRIS  |
|--|
| On this gid day of Avonst, 1957, before me appeared  The way of Av |
| WISTERN NATURAL GAS COMPANY  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 VIVIOUAN acknowledged said instrument to be the free act and deed of said corporation.  |
| Given under my hand and notarial seal this 8th day of August, 195%.  |
| My Commission expires:  RCESRTCE. JINKS  Notary Public in and for Harris County. Texas  My Commission Expires June 1, 1953  Notary Public  |
| STATE OF Lefas COUNTY OF Delas   |
| On this 13 day of Aug., 1951, before me appeared the frost to me personally known, who, being by me duly sworn, did say that he is the like-President of Synd-Frost, Juc.  |
| 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 the free act and deed of said corporation.   |
| Given under my hand and notarial seal this 3 day of aug., 195./.   |
| My Commission expires:  NAOMA WILLIAMS  Notary Public, Dallas County, Texas  Notary Public   |
| My Commission Expires June 1, 1953  STATE OF Sacusaine)  SOUNTY OF Callo  Variab   |
| On this J That day of J., before me appeared N.S. Laurly, to me personally known, who, being by me duly sworn, did say that he is the President of   |
| 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 acknowledged said instrument to be the free act and deed of said corporation.  |
| Given under my hand and notarial seal this 29 day of June, 195   |
| My Commission expires:   |
| STATE OF JUNES COUNTY OF X all 14  |
| on this 13 day of Sleet, 195/, before me appeared Miller The This work, and the is the This President of FOUR CORNERS OIL CORP.  |
| 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  |
| Given under my hand and notarial seal this 13 day of 195/  |
| NAOMA WILLIAMS NAOMA WILLIAMS Notery Public, Palles County, Texas  Notery Public Public County, 1953  My Commission Lights than 1, 1953  |

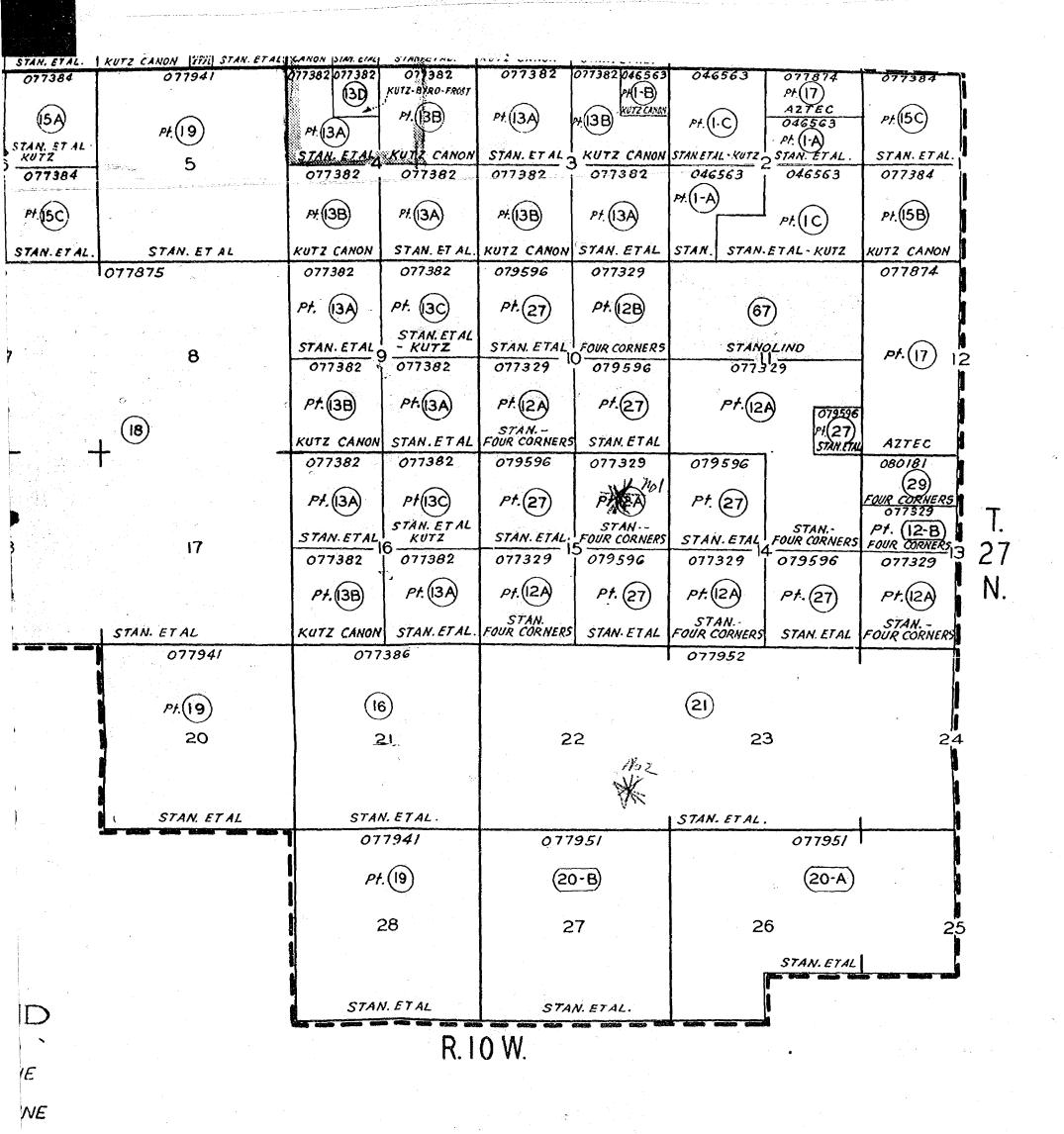
(New Mexico)

| COUNTY OF DATAS   |
|---|
| On this gree day of dentember, 1951, before me appeared, to me personally known, who, being by me duly sworn, did say that he is the Vice President of  |
| 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 J. C. Reid acknowledged said instrument to be the free act and deed of said corporation.  |
| Given under my hand and notarial seal this 27th day of Gentarian, 1971.   |
| My Commission expires:  Mary M. Aren  Notary Public   |
| Notary Public   |
| STATE OF TRUE (   |
| On this <b>27th</b> day of <b>September</b> , 19 <b>51</b> , before me appeared to me personally known, who, being by me duly sworn, did say that he is the <b>Vice</b> President of  |
| 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. Reid   |
| acknowledged said instrument to be the free act and deed of said corporation.   |
| Given under my hand and notarial seal this 27th day of September , 1951.  |
| My Commission expires:  Mary M. Breen  Notary Public  |
| STATE OF THAS ) COUNTY OF DAYLAS )  |
| On this <b>Eith</b> day of <b>September</b> , 19 <b>51</b> , before me appeared by me duly sworn, did say that he is the <b>President</b> of  |
| 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 the said corporation.   |
| Given under my hand and notarial seal this 27th day of september , 1951   |
| Mr. Commission ovnings.   |
| Just 1, 1933 Octary Public  |
| STATE OF TELAS ) COUNTY OF THE STATE OF THE |
| On this that of to me personally known, who, being by me duly   |
| sworn, did say that he is the President of  |
| 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 acknowledged said instrument to be the free act and deed of said corporation.   |
| Given under my hand and notarial seal this day of day of , 1921   |
| My Commission expires:  |
| June 1. 1933 John Modhil  |

(New Mexico)

| STATE OF Lexas)   |
|---|
| COUNTY OF Shallad   |
| On this 13 day of April, 1951, before me personally appeared  |
| to me known to be the persondescribed in and who executed and delivered the foregoing instrument, and acknowledged to me that k executed the same as  |
| GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 13 day of 1951.  |
| My Commission expires:  NAOMA WILLIAMS  Notary Public   |
| Notary Public, Callan County, Texas  My Commission Expires June 1, 1953   |
| STATE OF)   |
| COUNTY OF   |
| to me known to be the persondescribed in and who executed and delivered the foregoing instrument, and acknowledged to me that executed the same as  |
| free act and deed.  GIVEN UNDER MY HAND AND SEAL OF OFFICE, this  |
| My Commission expires:  |
| Notary Public   |
| STATE OF )  |
|   |
| On this day of, 19, before me personally appeared   |
| to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that executed the same as free act and deed.  GIV:N UNDER HY HAND AND SEAL OF OFFICE, this day of , 19. |
| wy Commission expires:  |
| Notary Public   |
|   |
| STATE OF)   |
| COUNTY OF   |
| to me known to be the persondescribed in and who executed and delivered the foregoing instrument, and acknowledged to me that executed the same as free act and deed.   |
| GIVEN UNDER MY HAND AND SEAL OF OFFICE, this day of, 19   |
| My Commission expires:  |
|   |
| STATE OF  |
| COUNTY OF ) On this day of, 19, before me personally appeared   |
| to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that executed the same as   |
| free act and deed.  GIVEN UNDER MY HAND AND SEAL OF OFFICE, this day of, 19   |
| My Commission expires:  |
| Notary Public   |

R.IIW. R:10 W. 29 (63) (66)SCHMIDT (59)STAN. SO. UNION SO.UNION STAT 78674 M. 01772 047020-8 6465 STAN STAN PI. 34) COLVIN (23)(3)CONGRESS (50) (51) (47) (52) NHUNDLE BELL GANN KELLEN e·3149 ph(55) NM 0702 VM03365 NM01772 6I STAN. (35)(34)SO. UNION COLVIN 8-10644-3 8-10644-180-1064434 (57) (56) 32-2149 8-106443 B-10644-1. 54 (45)(49)UNILEASED 6 E-53-2 29 TRUNK 31 (38)E-3149 (41) (32) PH (55) TEXAS (58) FLAGG CAMPBELL APPLEBATE (43) (42) 8-10643 × 8-11303 48 46 COOLEY 7.6 P. E-3149 8-10644-88-10644 M(55) (36)(37) WILSON UNLEASED TEXAS SUNSERI 047039 -C 047039-8 047039-8 080724 Pt. (5-B) **30**9 Pt. (5-A) 12 TAN. ET AL- KUTZ HARRISON 047039-B 047039-B 080781 Pt. (5·C) Pt. (5-C) (6) (31) 18 KUTZ CANON STAN ETAL. KUTZ CANON 13 16 E. 3/49 047039-B 047039-8 047039-8 PH39 TEXAS PF. (5-A) Pt. (5-B) Pt. (5-A) E-955. E-3149 40) STAN. r#(39) CAIN CONGRESS STAN.ETAL-KU12 STAN. ET AL. TEXAS 047039-8 047039-A 065546-A 047039-A 077383 077383 077383 077383 PASC) KUTZ CANON (4A) KUTZ 0.1 STAN. ET AL. P. (14C) \*(4B) Pt. (4.C) P! (14B) 077383 7 Pt. (4.B) Pt. (4C) KUTZ CANON 20 2 -21STAN.ETAL-KUTZOT STAN. ETAL 22STAN. ETAL KUTZOT STAN. ETAL 24 047039-A 047039-A 077383 077383 079634 077383 077383 28 P1. (14E) M.(4C) P1.(14E) Pt:(4.A) Pt. (14C) 065546·B 047039·A (28 N 4(4B) KUTZ CANON STAN. ETAG STAN. ETAL - KUTZ AZTEC KUTZ D.T. STAN. ET AL KUTZ D.T. COOPER Pt. (8) 077383 077084 077383 077383 077383 077085  $\left( \mathbf{\hat{9}}\right)$ AZTEC Pf. (14B) Pt. (4B) Pt. (14C) Pt. (4C) 079583 06554G-B (26) PH 8 AZTEC STAN. ETAL, KUTZ O.T. STAN. ET AL. 28 STAN. ETAL KUTZ D.T. STAN 30 ET AL 25 078715 065546.8 077383 077383 077383 077383 PA 8 AZTEC PI 8 AZTEC Pt. (4C) Pt. (14E) Pt. (14E) Pt (14C) (10) ANGELS PEAK OIL CO. 365546·B (24) PH(8) STANIET AL STAN. ET AL KUTZ D.T. KUTZ D.T. STAN. ET AL 046563 078019 NM 0764 065546-8 077315 046563 046563 046563 046563 046563 ri 8 AZTEC (22) Pf. (I-A) (I-E) Pt.(1-D) Pt(1-C) Pt. (1-A) Pt.(1-C) amer. Betark  $(\Pi)$ 32 STAN. ET AL- KUT (33) STAN. ETAL. TAN. ETAL. 33 STAN. ETAL. KUT STAN. ET AL. 34 STAN ET AL. KUTZ <del>--35</del> 36 31 C65546-8 046563 046563 046563 046563 046563 046563 W(8) Pt. (1-F) AZTEC PH. (I-D) Pt.(1-B) Pt (I·A) PH (I-B) (I-D)



| 1        | 1           | · · · · · · · · · · · · · · · · · · · | ~ · / J U &  | V/1302                  | 011004               | V465               | 63          | U46563               | 077384                         | i                    |
|----------|-------------|---------------------------------------|--|-------------------------|----------------------|--------------------|-------------|----------------------|--------------------------------|----------------------|
|          |             | P. (3B)                               | Pt. (3A)   | P. (13B)                | Pr. (3A)             | PY. (1-A)          |             | Pt.(IC)              | Pt. (15B)                      |                      |
| AL.      | STAN. ET AL | KUTZ CANON                            | STAN. ET AL.   | KUTZ CANON              | STAN. ETAL           | STAN.              | STAN.       | ETAL - KUTZ          | KUTZ CAMON                     | 1                    |
|          | 077875      | 077382                                | 077382   | 079596                  | 077329               |                    | ····        |                      | 077874                         | 1                    |
| :<br>    | *           | Pt. (I3A)                             | Pt. (3C)   | Pt. (27)                | Pt. (2B)             |                    | 67          | )                    |                                | Í                    |
| :        | 8           | STAN. ETAL                            | STAN.ETAL  | STAN. ETAL              | FOUR CORNERS         | ra talah<br>Kanada | STANO       | LIND                 | Pt. (17)                       |                      |
| Þ        | 0           | 077382                                | 077382   | 077329                  | 079596               |                    | 0773        | 29                   |                                | <b>_</b><br><b>!</b> |
| 1        |             | Pt. (3B)                              | PF.(I3A)   | Pt. (2A)                | Pt.(27)              | /                  | ot.(12A     | 079596               |                                |                      |
| <u>}</u> | L (18)      | KUTZ CANON                            | STAN.ETAL  | STAN. ~<br>FOUR CORNERS | STAN ET AL           |                    |             | P1(27)<br>STAN.ETAL  | AZTEC                          | ĺ                    |
|          |             | 077382                                | 077382   | 079596                  | 077329               | 0795               | 596         |                      | 080181                         | Ì                    |
|          |             | Pt. (3A)                              | Pf(13C)  | Pt. (27)                | PARA                 | Pt.                | 27)         | •                    | (29)<br>FOUR CORNERS<br>077329 | ,<br>                |
|          |             | STAN. ET AL                           | STAN. ET AL  | STAN. ETAL.             | STAN<br>FOUR CORNERS | STAN.              | ETAL        | STAN<br>FOUR CORNERS | Pt. (12-B)<br>FOUR CORNERS     | 1.                   |
|          |             | 077382                                | 077382   | 077329                  | 079596               | 0773               | 29          | 079596               | 077329                         | 3 2 1                |
| 1        |             | Pt.(3B)                               | Pt. (3A)   | Pf. (12A)               | Pt. (27)             | Pf. (12            | ノー          | Pt. (27)             | Pt.(12A)                       | N.                   |
|          | STAN. ET AL | KUTZ CANON                            | STAN.ETAL.   | STAN.<br>FOUR CORNERS   | STAN-ET AL           | STAI<br>FOUR CO    | N<br>PRNERS | STAN. ETAL           | STAN<br>FOUR CORNERS           |                      |
|          | 077941      | 077                                   | 386  |                         |                      | 0779               | 52          |                      |                                |                      |
|          |             |                                       | · · · · · · · · · · · · · · · · · · ·  |                         | <i>6.</i>            |                    | ,           |                      |                                | !                    |
| 1        | Pt.(19)     | (16                                   | s)   |                         |                      | (21)               |             | <del>-</del>         |                                |                      |
|          | 20          | 2                                     | 21   | 2                       | 2                    |                    | 23          | 3                    | 24                             | Ļ                    |
|          |             |                                       | e de la companya de l |                         | Maz                  |                    |             |                      |                                |                      |
|          |             |                                       |  |                         | W.                   |                    |             |                      |                                | İ                    |
| •        | STAN, ET AL | d                                     | V. ETAL.   |                         |                      | STAN.              | ET AL.      |                      |                                |                      |
| 1        |             | 07                                    | 7941   | 077                     | 951                  | ÷                  |             | 07795/               | '                              |                      |
| 2        |             | Pf                                    | . (19)   | (20                     | )-B)                 |                    |             | (20-A)               |                                |                      |
|          | . 4.        |                                       | 28   | - 2                     | <b>.7</b> .21        |                    | 26          | 5                    | 2.                             | 5                    |
| !        |             | e<br>e                                |  |                         |                      |                    |             | STAN. ETAL           | į į                            | }                    |
| ,        | 8           |                                       |  |                         |                      |                    | -           |                      |                                |                      |
|          |             | STAI                                  | V. ETAL  | STA                     | N. ETAL.             |                    |             |                      |                                |                      |
|          |             |                                       | D 1  | OW.                     |                      | 11                 |             |                      |                                |                      |
|          |             |                                       | 17. 1  | V VV.                   |                      |                    |             | •                    |                                |                      |

### EXHIBIT "A" TO ACCOMPANY ANGEL PEAK UNIT AGREEMENT

SAN JUAN COUNTY, NEW MEXICO SCALE: 2"=1 MILE

TICIPATING AREA

# EXHIBIT "B" SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTERESTS IN ALL LAND IN THE ANGELS PEAK UNIT AGREEMENT

|   |   | Ċ  | (*************************************                    |   | TRACT<br>NO.  |
|---|---|--|---|---|---|
| st All rights below the Mesa Verde. ** Rights between the base of the Pictured Cliffs and the base of the | Sec. 33-NE/4<br>Sec. 34-NE/4                                  | Sec. 2-Lots 3, 4, S/2 NW/4,<br>SE/4, SE/4 SW/4 | Sec. 3-Lot 1<br>T28N-R10W<br>Sec. 32-SW/4<br>Sec. 34-SH/4 | T28N-R10W Sec. 32-NW/4, SW/4 SW/4 SE/4 Sec. 33-SE/4 Sec. 34-NW/4, and SE/4 T27N-R10W Sec. 2-S/2 NE/4, N/2 SW/4, SW/4 SW/4 SW/4, | DESCRIPTION<br>OF LAND  |
| de.<br>e Pictured C   |   | 681.38   | 360.68  | 850,00  | NO. OF<br>ACRES   |
| liffs and the   | Э   |  |   | 046563<br>12-31-38  | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE                             |
| base of the   |   |  |   | USA 12½%  | LANDOWNERS & PERCENTAGE OF ROYALTY  |
| Mesa Verde.   |   | Fred Feasel                                    | Fred Feasel   | Fred Feasel   | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION  |
| out of 1/8 of 7/8)  | Kutz Canon - 3%**<br>(Flus Oil Payment<br>of \$20.00 per acre | None*  | None  | None  | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST                                    |
| P. B. English (1/16)  | Stanolind (1/2) Byrd-Frost (3/16) El Paso Nat.Gas (1/4)       | Kutz Canon                                     | Kutz Canon  | Stanolind (1/2) Byrd-Frost (3/16) Western Nat.Gas (1/4 of El Paso Nat.Gas (1/4 go P. B. English (1/16)                          | WORKING INTEREST OWNER UNDER OFTION AGREEMENT, LEASE OF ASSIGNMENT AND PERCENTAGE OF INTEREST |
| 5.2813**  | 42.2500**<br>15.8437**<br>21.1250**                           | <b>97</b> .5000*                               | 87.5000   | 43.7500<br>16.4063<br>oil)21.8750<br>gas)   | SASE  |

|                               | <b>₹</b>   |                             |  |                     | * *  |  |
|-------------------------------|--|-----------------------------|--|---------------------|--|--|
| δη                            | ∾.   | म्ब्र <u>ा</u><br>*         |  | য়ে                 |  | TRACT<br>NO.   |
| T29N-R11"<br>Sec. 25-S/2 SE/4 | T28N-R11;<br>Sec. 12-Lot 1, SE/4 SE/4<br>Sec. 13-E/2 E/2<br>Sec. 24-E/2 E/2<br>Sec. 25-E/2 E/2 | Sec. 33-N/2 SW/4, SW/4 SW/4 |  | Sec. 32-NE/4        | T28N-R10W<br>Sec. 32-N/2 SE/4, SE/4 SE/4,<br>E/2 SU/4 SE/4,<br>NU/4 SU/4 SE/4<br>Sec. 33-NU/4, SE/4 SU/4   | DESCRIPTION<br>OF LIND   |
| 80.00                         | 543.19   | 120.00                      |  | 160.00              | 350.00   | NO. OF   |
| 04 <b>7</b> 020-в<br>5-11-31  | 047017-B<br>11-15-35   |                             |  |                     | e, e   | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE  |
| US. 123%                      | US.1 12%   |                             |  |                     |  | LINDOMNERS & PERCENTIGE OF ROYLLTY   |
| Congress Oil Co.              | ingels Peak Oil Co.  | Fred Feasel                 | •  | Fred Feasel         | Fred Feasel  | RECORD OWNER OF<br>LEWSS OR WRPLI-<br>CUTION   |
| None                          | None   | Fred Feasel - 73%           | Kutz Canon - 3%** (Plus Oil Payment of \$20.00 per scre out of 1/8 of 7/8)   | Fred Feasel - 72%** | Fred Feasel - 73%  | OVERRIDING ROYALTY<br>OWNERS & PERCENT—<br>AGE OF INTEREST   |
| Congress                      | ingels Feak  | Kutz Canon                  | Stanolind (1/2) Byrd-Frost (3/16) El Paso Nat.Gas (1/4) P. B. English (1/16) | Kutz Canon          | Stanolind (1/2) Byrd-Frost (3/16) Testern Mat.Gas (1/4 oil) El Paso Nat.Gas (1/4 gas) P. B. English (1/16) | WORKING INTEREST OWNER UNDER OPTION GREEMENT, LEGS OPERCING GREEMENT, LEGS OR INSIGNMENT IND PERCENTLICE OF INTEREST |
| 87.5000                       | 87.5000  | 80.0000                     | 38.5000** 14.4375** 19.2500** 4.8125**                                       | 80,0000*            | 40.0000<br>15.0000<br>1)20.0000<br>5.0000  | NA-  |

<sup>\*</sup> All rights below the Wesa Verde.

\*\* Rights between the base of the Pictured Cliffs and the base of the Mesa Verde.

|   |  |                        | f l   |  |  | •  |  |
|---|--|------------------------|---|--|--|--|--|
|   |  | å<br>m                 | 5.  |  | φ  | 4.A.   | TRACT<br>NO.   |
| ** Rights between the base of the Pictured Cliffs | * All rights below the Mesa Verde  |                        | Sec. 7-Lots 1,2, S/2 SE/4<br>Sec. 8-Lots 3,4, S/2 SW/4<br>Sec. 17-NW/4, SE/4<br>Sec. 18-N/2 SE/4, SE/4 SE/4 | Sec. 20-NE/4, N/2 SW/4,<br>SE/4 SW/4   | T28N-R10W<br>Sec. 20-E/2 NW/4, SW/4 NW/4,<br>SW/4 SW/4 | <u>T28N-R10W</u><br>Sec. 20—SE/4   | DESCRIPTION OF LAND  |
| e Pictured  | <del>С</del><br>Ф  | 287.74                 | 6%.11   | 280.00   | 160.00   | 160.00   | NO. OF<br>ACRES  |
| and   |  | ,e                     | 047039-B<br>9-19-50   |  | -<br>-   | 047039-A<br>8-22-39  | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE  |
| the base of th                                    |  |                        | USA 12}%  | #<br>  |  | USA 5%   | LANDOWNERS & PERCENTAGE OF ROYALIY   |
| he Mesa Verde<br>- 3 -                            | Six design   | Kutz Canon Oil         | Kutz Canon Oil<br>and Gas Company   | Kutz Canon Oil<br>and Gas Company  | Kutz Canon Oil<br>and Gas Company                      | Kutz Canon Oil<br>and Gas Company  | RECORD OWNER OF LEASE OR APPLI- CATION   |
|   | Kutz Canon 3%** (Plus Oil Payment of \$20.00 per acreout of 1/8 of 7/8)      | Alta Day Lachman 23%** | Alta Day Lachman 23%  | Alta Day Lachman 7%  | Alta Day Lachman 73%                                   | Alta Day Lachman 78%** Kutz Canon 3%**/ (Plus Oil Fayment of \$20.00 per acre out of 1/8 of 7/8)     | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST   |
|   | Stanolind (1/2) Byrd-Frost (3/16) El Paso Nat.Gas (1/4) P. B. English (1/16) | Kutz Canon             | Stanolind (1/2) Western Nat.Gas(1/4 oil) Bl Paso Nat.Gas(1/4 gas) Byrd-Frost (3/16) P. B. English (1/16)    | Stanolind (1/2) Western Nat.Gas(1/4 oil) El Paso Nat.Gas(1/4 gas) Byrd-Frost (3/16) P. B. English (1/16) | Kutz Canon   | Kutz Canon<br>Stanolind (1/2)<br>Syrd-Frost (3/16)<br>El Paso Nat. Gas (1/4)<br>P. B. English (1/16) | WORKING INTEREST OWNER UNDER OPTION AGREEMENT, LEASE OPERATING AGREEMENT, LEASE OR ASSIGNMENT AND PERCENTAGE OF INTEREST |
|   | 41.0000*<br>15.3750*<br>20.5300*<br>5.1250*                                  | 85.2000*               | 42.5000<br>21.2500<br>15.9375<br>5.3125   |  | 80.000   | 80.0000*<br>38.5000*<br>14.4375*<br>19.2500*<br>4.8125*  |  |

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|        | 10.  | ဖ   | <b></b>   | 7.   | <u>တ</u>  | ဂ   | TR.CT<br>NO.   |
|        | Sec. 26-W/2<br>Sec. 35-N/2   | Sec. 29-N/2 NH/4, SE/4 NH/4<br>N/2 NE/4                               | Sec. 19-Lot 4, SE/4 SW/4 Sec. 29-SE/4 NE/4, SW/4 SE/4 NW/4 SW/4 Sec. 30-N/2 N/2, NW/4 SE/4 Sec. 31-NW/4 NE/4, NE/4 SE/4 | Sec. 19-Lots 1, 2, 3, E/2 NI/4<br>NE/4 SW/4, E/2 | Sec. 7-Lots 3, 4, 5, SE/4 SII/4 4<br>Sec. 18-Lots 1, 2, 3, 4, E/2 V/2,<br>SW/4 SE/4 | Sec. 17-NE/4<br>Sec. 18-NE/4<br>Sec. 20-NW/4 NW/4 | DESCRIPTION<br>OF LIND   |
|        | 640.00   | 200.00  | 484,59  | 566.52   | 497,86  | 360.00  | NO. OF   |
|        | 077085<br>9 <b>-1-</b> 47  | 077084<br>11 <b>-</b> 1-46  | 065546-B<br>10-26-36  | 065546<br>10-26-36                               | 047039-C<br>8-22-39   | · · · · · · · · · · · · · · · · · · ·             | SERLLL NO. (Santa Fe except as otherwise shown) AND DITE OF LEASE  |
| !<br>4 | USA 12½%   | US 12%  | US.: 12½%   | US 5%  | US. 12½%  |   | LINDOWNERS<br>&<br>PERCENTICE<br>OR ROYLLTY  |
| 1      | Delhi Oil Corporation  | iztec Oil and Gas Co.   | E. H. Newman  | E. H. Newman                                     | Congress Oil Co.  | Kutz Canon Oil<br>and Gas Company                 | RECORD OWNER OF<br>LEASE OR APPLI-<br>CLTION   |
|        | San Juan Basin Pool 2% Delh<br>C. H. Nye 1/4 of 1%<br>Gladys Watford 64%<br>R. E. Beamon 1412/2048 of 1:<br>E. R. Richardson 580/2048 of 1:<br>ircher Romero 200/2048 of 1:<br>R. A. Johnson 1280/2048 of 1:<br>Carl Porterfield 500/2048 of 1%<br>E. W. Ingram 100/2048 of 1% | San Juan Basin Pool 2% R. E. Beamon 1/4 of 1% R. A. Johnson 1/4 of 1% | None  | Nick Brink, et al 72%                            | Reese P. Fullerton & .1ta Day Lachman 23% Kutz Canon 52%                            | lta Day Lachman 23%                               | OVERRIDING, ROYLLTY<br>OWNERS & PERCENT-<br>LGE OF INTEREST  |
|        | ool 2% Delhi Oil Corporation<br>1%<br>2/2<br>2/2048 of 1%<br>580/2048 of 1%<br>5/2048 of 1%<br>500/2048 of 1%<br>500/2048 of 1%  | a patec   | iztec   | iztec  | Congress Oil Co.  | Kutz Canon  | NORKING INTEREST OWNER UNDER OPTION GREEMENT, LEISE OPERITING GREEMENT, LEISE OR ASSIGNMENT AND PERCENTAGE OF INTEREST |
|        | 77.0117  | 85,0000   | 87.5000   | 87.5000  | 79_5000   | 85_0000   | er<br>NT,<br>LE.SE<br>RCENT-   |

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| ·<br>t  | Ŋ                 | ļw<br>b-   | က်                               | 12.A   | 11.  | TRACT<br>NO.  |
| Sec. 4-Lots 1,2,5/2 NE/4, SH/4 Sec. 9-SW/4 Sec. 16-SW/4 |                   | Sec. 3-Lots 3,4, S/2 NW/4,<br>Sec. 4-Lot 4, S/2 NW/4, SE/4<br>Sec. 9-NW/4, SE/4<br>Sec. 16-NW/4, SE/4      | Sec. 10-NE/4<br>Sec. 13-S/2 NW/4 | T27N-R10W<br>Sec. 10-SW/4<br>Sec. 11-SW/4, SW/4 SE/4, N/2 SE/4<br>Sec. 13-SW/4<br>Sec. 15-NE/4, SW/4 | 128N-R10W<br>Sec. 31-NE/4 NE/4, S/2 NE/4,<br>NW/4 SE/4, S/2 SE/4   | DESCRIPTION<br>OF LAND  |
| ,   | 921 /9            | 1241.52  | 2/0.00                           | 1240.00  | 240.00   | NO. OF<br>ACRES   |
| · .   |                   | 077382<br>1-1-44   |                                  | 077329<br>2-1-45   | 077315<br>2-1-45   | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE                                   |
|   |                   | usa 12½\$  | a<br>·                           | USA 12}%   | usa 12½%   | LANDOWNERS & PERCENTAGE OF ROYALTY  |
|   | R. P. Hargrave    | R. P. Hargrave   | Four Gorners                     | Stanolind<br>Four Corners  | Stanolind Oil and Gas<br>Western Natural Gas<br>Byrd-Frost, Inc.   | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION  |
| •   | R. P. Hargrave 2% | R. P. Hargrave 2%  | Sva E. Martin - 12}%             | Eva S. Martin - 12%  | None   | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGS OF INTEREST  |
|   | Kutz Canon        | Stanolind (1/2) Western Nat.Gas (1/4 oil) El Paso Nat.Gas (1/4 gas) Byrd-Frost (3/16) P. B. English (1/16) | Four Corners                     | Stanolind<br>Four Corners  | Stanolind (1/2) Western Nat. Gas (1/4 oil) El Paso Nat. Gas (1/4 gas) Byrd-Frost (3/16) P. B. English (1/16)   | WORKING INTEREST OWNER UNDER OPTION AGREEMENT, LEASE OPERATING AGREEMENT AND PERCENTAGE OF INTEREST |
|   | 85.5000           | 42.7500<br>21.3750<br>16.0313<br>5.3437  | 75,0000                          | 37.5000<br>37.5000   | 43.7500<br>21.8750<br>16.4062<br>5.4688  |   |

|   |  |  | 14.1.  | Ď   | په ښې سو   | c.                  | TRACT<br>NO.   |
|---|--|--|--|---|--|---------------------|--|
| ** Rights between the base of the Pictured Cliffs and the |  |  | T28N-R10W<br>Sec. 21-NE/4 NE/4                                       | Sec. 4-Lot 3  |  | Sec. 9-NE/4         | DESCRIPTION<br>OF LAND   |
| nesa verue.   |  |  |  |   |  |                     |  |
| ictured Cl  |  |  | 40.00  | 40.51   |  | 320.00              | NO. OF<br>ACRES  |
|   | •  |  | 077383<br>1-1-44   | ÷   |  |                     | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE  |
| base of the Me  |  |  | USA 12% to<br>32% sliding<br>scale                                   |   |  |                     | LANDOWNERS<br>&<br>PERCENTAGE  |
| Mesa Verde.   |  |  | Kutz Deep Test Inc.  | R. P. Hargrave  |  | R. P. Hargrave      | RECORD OWNER OF LEASE OR APPLI-CATION  |
|   | Kutz Canon 3%** /<br>(Plus Oil Payment<br>of \$20.00 per acre<br>out of 1/8 of 7/8)              | Jean Davidson )/<br>Yocum )1/8 of 2%<br>Dorothy Gholson)/ each | Frances Cooper) Hartman F. J. Kaspar )1/4 of 2% Wm. J.A. Scott) each | R. P. Hargrave 2%   | Kutz Canon 3%** (Plus Oil Payment of \$20.00 per acre out of 1/8 of 7/8) | R. P. Hargrave 2%** | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST   |
| royalty)  | Stanolind (1/2)  Byrd-Frost (3/16)  El Paso (1/4)  F. B. English (1/16)  (Subject to USA sliding | <b>34</b>  | Kutz Deep Test<br>(Subject to USA sliding royalty)                   | Kutz Canon (1/2) Byrd-Frost (5/16) Western Nat.Gas (1/8 oil) El Paso Nat.Gas (1/8 gas) P. B. English (1/16) | Stanolind (1/2) Byrd-Frost (3/16) El Paso (1/4) P. S. English (1/16)     | Kutz Canon          | WORKING INTEREST OWNER UNDER OPTION AGREEMENT, LEASE OPERATING AGREEMENT, LEASE OR ASSIGNMENT AND PERCENTAGE OF INTEREST |
|   | 41.2500**<br>15.4688**<br>20.6250**<br>5.1562**  |  | 85.5000*   | 42.7500<br>26.7187<br>)10.6875<br>5.3438  | 41.2500**<br>15.4688**<br>20.6250**<br>5.1562**                          | 85.5000*            |  |

|  | ध्य                 | IJ  |   | O  |  | m  | TRACT   |
|--|---------------------|---|---|--|--|--|---|
| Sec. 27-SW/4 *All rig<br>Sec. 22-SW/4 **Rights | · ·                 | Sec. 22-N/2 NW/4  |   | T28N-R10W<br>Sec. 21-NW/4, SE/4<br>Sec. 22-5/2 NW/4, SE/4<br>Sec. 27-NW/4, SE/4<br>Sec. 28-NW/4, SE/4      |  | T28N-R10W<br>Sec. 21-W/2 NE/4, SE/4 NE/4<br>Sec. 22-NE/4 | DESCRIPTION<br>OF LAND  |
| bet:   |                     |   |   |  |  | NE/4   |   |
| ghts below the Mesa<br>between the base o      | 640.00              | 80.00   |   | 1200.00  |  | 600.00   | NO. OF<br>ACRES   |
| sa Verde.<br>of the Pictured                   |                     |   |   |  |  | e e  | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE                             |
| Cliffs:  | USA 123%            | USA 12% to<br>32% sliding<br>scale  |   | us.1 12 <del>}%</del>  |  | USA 12%  | LANDOWNERS & PERCENTAGE OF ROYALTY  |
| - 7 -<br>and the base of the Mesa              | Kutz Deep Test Inc. | Kutz Deep Test Inc.   |   | Kutz Deep Test Inc.  |  | Kutz Deep Test Inc.                                      | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION  |
| Verde.   | Same as Tract 14.C. | Same as Tract 14.C.   | Jean Davidson Yocum 1/8 of 2% Dorothy Gholson 1/8 of 2% | of<br>7 of<br>7 of<br>7 of<br>10 of<br>10 of   |  | Same as Tract 14.A.                                      | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST                                    |
|  | Kutz Deen Test      | Stanolind (1/2) Western Nat.Gas (1/4 oil) El Paso Nat.Gas (1/4 gas) Byrd-Frost (3/16) P. B. English (1/16) (Subject to USA sliding royalty) |   | Stanolind (1/2) Western Nat.Gas (1/4 oil) El Paso Nat.Gas (1/4 gas) Byrd-Frost (3/16) P. B. English (1/16) | Stanolind (1/2) Byrd-Frost (3/16) El Paso (1/4) P. B. English (1/16) | Kutz Deep Test   | WORKING INTEREST OWNER UNDER OFFION AGREEMENT, LEASE OF ASSIGNMENT AND PERCENTAGE OF INTEREST |
|  | 87.5000             | 42.7500<br>21.3750<br>16.0312<br>5.3437   |   | 42.7500<br>21.3750<br>16.0313<br>5.3437  | 41.2500**<br>15.4688**<br>20.6250**<br>5.1562**                      | 85.5000*   | F to  |

|                               | •                    |  | ,   | μ̈                                       |  | 15.A.                                 | TRACT<br>NO.   |
|-------------------------------|----------------------|--|---|--|--|---------------------------------------|--|
|                               | Sec. 12-W/2          | )<br> <br> -<br> -   | Sec. 1-Lots 3,4, S/2 NW/4<br>Sec. 6-Lots 3,4,5, SE/4 NW/4,<br>SE/4  | Sec. 1-SW/4<br>Sec. 6-Lots 6,7, E/2 SW/4 |  | T27N-R10W<br>Sec. 6-Lots 1,2,8/2 NE/4 | DESCRIPTION<br>OF LAND   |
|                               | L01.26               | 00.00  | 486.43  | 325.89                                   |  | 160.51                                | NO. OF<br>ACRES  |
|                               | 077871               | 077386<br>1-7-44   |   |  |  | 077384<br>1-1-44                      | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE  |
|                               | USA 12½%             | USA 12%  |   |  |  | USA 12½%                              | LANDOWNERS<br>&<br>PERCENTAGE<br>OF ROYALTY  |
|                               | Aztec Oil & Gas Co.  | Stanolind Oil & Gas<br>Wm. B. Hardie<br>Byrd-Frost   | Wadeleine N. Galt   | Madeleine N. Galt                        |  | Madeleine N. Galt                     | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION   |
| Dorothy L. Hanks<br>1/2 of 1% | Sunshine Royalty Co. | J. J. Hudson 1%<br>Edward J. Johnson 2%  | madeleine N. Galt 2%  | Madeleine N. Galt 2%                     | Kutz Canon 3%** (Plus Oil Payment of \$20.00 per acre out of 1/8 of 7/8) | Madeleine N. Galt 2%                  | OVERRIDING KOYALTY<br>OWNERS & PERCENT_<br>AGE OF INTEREST   |
|                               | Aztec                | Stanolind (1/2) 42.2500 Western Nat.Gas(1/4 oil) 21.1250 El Paso Nat.Gas(1/4 gas)21.1250 Byrd-Frost (3/16) 15.8438 P. B. English (1/16) 5.2812 | Stanolind (1/2) Western Nat.Gas(1/4 oil) El Paso Nat.Gas(1/4 gas)21.3750 Byrd-Frost (3/16) P. B. English (1/16) 16.0313 | Kutz Canon                               | Stanolind (1/2) Byrd-Frost (3/16) El Paso (1/4) P. B. English (1/16)     | 2%≸* Kutz Canon                       | WORKING INTEREST OWNER UNDER OPTION AGREEMENT, LEASE OPERATING AGREEMENT, LEASE OR ASSIGNMENT AND PERCENTAGE OF INTEREST |
|                               | 85.0000              | 15.8138<br>5.2812  | 42.7500<br>s)21.3750<br>16.0313<br>5.3437   | 85-5000                                  | 11.2500**<br>15.1688**<br>20.6250**<br>5.1562**                          | 85.5000*                              | EASE<br>EASE   |

\* All rights below the Mesa Verde.
\*\* Rights between the base of the Pictured Cliffs and the base of the Mesa Verde.

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|---|--|--|---|---|---|
| 21.   |  | 20 <b>.</b> A.   | 19.   | 18.   | TRACT<br>NO.  |
| Sec. 22-411<br>Sec. 23-411<br>Sec. 24-W/2   | Sec. 27-All  | T27N-R10W<br>Sec. 26-N/2, N/2 S/2, S/2<br>Sw/h<br>Sec. 25-Nw/h, N/2 Sw/h   | Sec. 5-Lots 1,2,3,4, S/2 N/2,1921.84<br>S/2<br>Sec. 20-A11<br>Sec. 28-A11   | Sec. 7-E/2 W/2, E/2<br>Sec. 8-411<br>Sec. 17-411<br>Sec. 18-E/2   | DESCRIPTION<br>OF LAND  |
| 1600.00   | 00.01  | 800.00   | 2,1921.84   | 2080.00   | NO. OF<br>ACRES   |
| 077952<br>2-1-48  | 077951-A<br>2-1-48   | 077951<br>2-1-48   | 077941<br>3-1-48  | 077875<br>5-1-46  | SERIAL NO. (Santa Fe (Santa Fe except as otherwise shown) AND DATE OF LEASE                   |
| USA 12½%  | USA 12½%   | USA 123%   | USA 12½%  | USA 122%  | LANDOWNERS & PERCENTAGE OF ROYALTY  |
| Stanolind Oil & Gas wm. B. Hardie Byrd-Frost, Inc.  | Big Chief<br>Western Drilling<br>Wm. B. Hardie<br>Byrd Frost, Inc.   | Stanolind Cil & Gas<br>Wm. B. Hardie<br>Byrd-Frost, Inc.   | Stanolind Oil & Gas wm. B. Hardie Byrd-Frost, Inc.  | Stanolind Oil & Gas<br>Western Natural Gas<br>Byrd-Frost, Inc.<br>P. B. English                                     | RECURD OWNER OF LEASE OR APPLICATION  |
| J. C. Gordon 1%   | Jack Frost 1% (to be borne Entirely by Byrd-Frost, Inc.)   | Jack Frost 1% (to be borne Entirely by Byrd-Frost, Inc.)   | Note: O.R.R. interests shown on list attached to last page of this exhibit 32%                                    | Pearl O. Pipkin 3%  | OVERHIJING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST                                    |
| Stanolind (1/2) Western Nat.Gas (1011) 21.6250 El Paso Nat.Gas (1288) Byrd-Frost (3/16) 16.2188 P. B. English (1/16) 5.4062 | Stanolind (1/2)  Syrd-Frost (3/15)  (less 1% O.R.R.)  Western Nat.Gas (4011)  El Paso Nat.Gas (42as)  P. B. English (1/16)  5.4688 | Stanolind (1/2)estern Nat.Gas (4011) El Faso Nat.Gas (48as) Byrd-Frost (3/16) Less O.R.I. P. B. English (1/16) 15.4688 | Stanolind (1/2) 42.2500 western Nat.Gas (1011) 20.6250 El Paso Nat.Gas (12as) 15.8438 P. B. English (1/16) 5.2812 | Stanolind (1/2) Western Nat.Gas (2011) 21.1250 El Paso Nat.Gas (4gas) Byrd-Frost (3/16) P. B. English (1/16) S.2813 | WORKING INTEREST OWNER UNDER OFTION AGREEMENT, LEASE OF ASSIGNMENT AND PERCENTAGE OF INTEREST |

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| Ga.                                    | •   | %<br>************************************   | , ,  | •  | ₹   | 24.  | ű                                  | 8                             | TRACT<br>NO.   |
|  | Sec. 30-Lot 2, SE/4 NW/4,<br>S/2 NE/4<br>Sec. 29-SW/4 NW/4            | TORU BION   |  | Sec. 35-S/2                                | Sec. 3C-Lots 3,4, S/2 SE/4, NE/4 SE/4, E/2 SW/4 | T28N-R10W Sec. 29-SW/L NE/L, SW/L SW/L, 56L.75 E/2 SW/L, NW/L SE/L, E/2 SE/L | T29N-R10W<br>Sec. 30-Lot 4         | 128N-R11W<br>Sec. 36-E/2 NE/4 | DESCRIPTION<br>OF LAND   |
|  | 202.31  |   |  | 320.00                                     | 14<br>-   | 564-75   | 39.95                              | 80.00                         | NO. OF<br>ACRES  |
|  | 079583<br>11-1-46   |   |  | 079508<br>9-1-47                           |   | 078715<br>11-1-46  | 07867և<br>2 <b>–</b> 1– <u></u> 48 | 07801 <i>9</i><br>3-1-48      | SERIAL NO. (Santa Fe (Santa Fe except as otherwise shown) AND DATE OF LEASE  |
|  | USA 1238  |   | ,  | USA 12½%                                   |   | USA 12½%   | USA 12½%                           | USA 12½%                      | LANDOWNERS<br>&<br>PERCENTAGE<br>OF ROYALITY   |
| 10 -                                   | Stanolind Oil & Gas<br>Western Natural Gas<br>Byrd-Frost, Inc.        |   |  | Delhi Oil Corp.                            |   | Byrd-Frost, Inc.   | Tom Bolack                         | Potash Company<br>of America  | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION   |
|  | San Juan Basin Pool 2%<br>G. T. Lackey 1/2 of 1%                      | C. A. Porterfield 500/2018 R. A. Johnson 1280/2018 of E. W. Ingram 100/2018 of 1% Gladys Watford 64% of 7/8 | R. E. Beamon 1112/2018 of 1% D. W. Johnson 22% E. R. Richardson 580/2018 of Archar Borgan 200/2019 | San Juan Basin Pool 2% C. H. Nye 1/4 of 1% | R. A. Johnson et al. 1/2 of 1%                  | San Juan Basin Pool 2%   | None                               | Lucille H. Pipkin 5%          | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST   |
| Syrd-Frost (3/16)<br>B. English (1/16) | 及 Stanolind (1/2)<br>Western Nat-Gas(責 oil)<br>El Paso Nat-Gas(責 gas) | 0 of 1%<br>/2016 of 1%<br>18 of 1%<br>0f 1%<br>7/8  | of 1%  | 2% Delhi Oil Corporation                   | Byrd-Frost (3/16) P. B. English (1/16)          | Stanolind (1/2) Western Nat.Gas (4 oil) El Paso Nat.Gas (4 gas)              | Tom Bolack                         | Potash Company<br>of America  | WORKING INTEREST OWNER UNDER OFTION AGREEMENT, OPERATING AGREEMENT, LEASE OR ASSIGNMENT AND PERCENTAGE OF INTEREST |
| 15.9375                                | 42.5000   |   |  |  | 15.9375<br>5.3125                               | h2.5000  | 87.5000                            | 88,5000                       | R<br>T.<br>Jease<br>Jeant L  |

|   | 33<br>•   | 32.  | O.S.  | 30.                                       | 29.   | 28.                       | 27.  | TRACT<br>NO.  |
|---|-----------|--|---|---|---|---------------------------|--|---|
| Sec. 31-rots 1,2 %/ 2 %/ 2 %/ 2                                   | T28N-R10W | 129N-R10W<br>Sec. 31-Lots 1,2,3,4, E/2 W/2, 560.00<br>S/2 NE/4, SE/4 | Sec. 15-517/4<br>Sec. 16-W/2, NE/4, NE/4 SE/4 | T28N-R10W<br>Sec. 9-Lots 1,2,3,4, S/2 S/2 | T27N-R10W<br>Sec. 13-N/2 NW/4               | 128N-R10W<br>Sec. 23-SW/L | T27N-R10W Sec. 10-NW/L, SE/L Sec. 11-SE/L SE/L Sec. 11-NW/L, SE/L Sec. 15-NW/L, SE/L                     | DESCRIPTION<br>OF LAND  |
| 327.00  | 9         | , 560.00   | 680.00  | 256.68                                    | 80.00                                       | 160.00                    | 1000.00  | NO. OF  |
| 5-1-20<br>NW 0/04   | NIK 02/1  | им 0702<br>7-1-50  | 080781<br>1-1-49                              | 080721<br>8-1-49                          | 080181<br>2-1-45                            | 07963h<br>5-1-48          | 079596<br>2-1-45   | SERIAL NO. (Santa Fe except as otherwise shown) AND DATE OF LEASE                             |
| ACD PCO   |           | USA 123%   | USA 12½%                                      | USA 12½%                                  | บรล 12½%                                    | USA 12½%                  | USA 12½%   | LANDOWNERS<br>&<br>PERCENTAGE<br>OF ROYALTY   |
| Walter G. Knauii<br>John L. Brinkman<br>Alec J. Keller            |           | J. Harvey Wilson   | John S. Cain                                  | Raymond C. Harrison                       | Four Corners Oil Cor<br>Stanolind Oil & Gas | Robert L. Cooper          | Stanolind Oil & Gas<br>Western Natural Gas<br>Byrd-Frost, Inc.<br>P. B. English                          | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION  |
| None  |           | None   | None  | None                                      | Oil Corp. Bruce Arbogast 3%<br>l & Gas      | None                      | None   | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST                                    |
| Walter G. Knaur (5/0) John L. Brinkman (1/4) Alec J. Keller (1/8) |           | J. Harvey Wilson   | John S. Cain                                  | Raymond C. Harrison                       | Four Corners                                | Robert L. Cooper          | Stanolind (1/2) Western Nat.Gas(1/4 oil) El Paso Nat.Gas(1/4 gas) Byrd-Frost (3/16) P. B. English (1/16) | WORKING INTEREST OWNER UNDER OFFION AGREEMENT, LEASE OF ASSIGNMENT AND PERCENTAGE OF INTEREST |
| 21.8750   |           | 87.5000  | 87.5000                                       | 87.5000                                   | 84.5000                                     | 87.5000                   | 13.7500<br>1 gas)21.8750<br>16.4062<br>5) 5.4688   | WT-   |
|   |           |  |   |   |   |                           |  |   |

| 35.                                  | <u>4</u>  | TRACT<br>NO.   |
|--------------------------------------|---|--|
| Sec. 31-N'/4 NE/4                    | 129W-R10W<br>Sec. 32-W/2 NE/4<br>Sec. 30-SE/4 ST/4, ST/4 SE/4 | DESCRIPTION<br>OF LAND   |
| 10,00                                | 160.00  | NO. OF<br>ACRES  |
| NH 03369                             | 01772<br>5-1-50   | SERIAL NO. (Santa Te (Santa Te except as otherwise shown) AND DATE OF LEASE  |
| USA 12%                              | USA 12½%  | LANDOWNERS<br>&<br>PERCENTAGE<br>OF ROYALTY  |
| Southern Union Gas Co. Tom Bolack 5% | S. D. Colvin  | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION   |
| o. Tom Bolack 5%                     | San Juan Basin Pool 2% S. D. Colvin                           | OVERRIDING ROYALTY<br>OUNERS & PERCENT-<br>AGE OF INTEREST   |
| Southern Union Gas                   | 2% S. D. Colvin   | WORKING INTEREST OWNER UNDER OPTION AGREEMENT, LEASE OPERATING AGREEMENT, LEASE OR ASSIGNMENT AND PERCENTAGE OF INTEREST |
| 82,5000                              | 85 <b>-50</b> 00  | WER<br>ENT,<br>LEASE<br>PERCENT-   |

TOTAL FEDERAL ACREAGE - 27,811.12 acres

|  | 45                           | •<br>†            | 43.                     | 150                | •<br>[]                               | 40•                        | 39•  | <b>38</b>   | 37•                           | 36•                              |             | TRACT<br>NO.  |
|--|------------------------------|-------------------|-------------------------|--------------------|---------------------------------------|----------------------------|--|---|-------------------------------|----------------------------------|-------------|---|
|  | Sec. 36-SW/1 NW/1            | Sec. 36-NW/L SE/L | Sec. 36-W/2 SW/1        | Sec. 36-E/2 SE/4   | <u>129M-RIIW</u><br>Sec. 35-NE/4 SW/4 | Sec. 16-SH/4 SE/4          | T28N-R1OT<br>Sec. 15-SE/1; SE/4, N7/4 SE/4 | Sec. 32-SW/1 NII/1, SE/1 NII/1;<br>NII/1 SII/1, SII/1 SII/1,<br>NII/1 SII/1 | Sec. 32-SE/4 SE/4             | T29N-R10#<br>Sec. 32-SW/1; SE/1; | STATE LANDS | DESCRIPTION<br>OF LAID  |
|  | 39.66                        | 39.53             | 78.61                   | 78_60              | 39.58                                 | 00.00                      | 80.00                                      | 200.00  | 00.00                         | 00 <b>•</b> 00€                  |             | NO. OF<br>ACRES   |
| ,                                      | B-10644-31                   | 1-10-45<br>1-53-2 | B -106lph-28<br>9-10-43 | E-3149<br>12-10-49 | B-106141-29<br>9-10-43                | 8-10-1 <sup>1</sup> 6      | E-3149<br>12-10-49                         | Unleased  | B-10644-36<br>9-10-43         | 8-106171-8                       |             | SERTAL NO.<br>AND DATE<br>OF LEASE  |
| 13                                     | State 122%                   | State 122%        | 8 State 12%             | State 122%         | State 12%                             | State 12%                  | State 123%                                 |   | State 122%                    | State 12%                        |             | LANDOVNERS<br>&<br>PERCENTAGE<br>OF ROYALTY   |
|  | Tri State Oil & Refining Co. | C. T. Campbell    | Gulf Oil Co.            | The Texas Co.      | A. J. Flagg                           | Stanolind Oil & Gas        | The Texas Co.                              |   | Frank J. and Elizabeth Sunser | O. C. Beck                       | -           | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION  |
|  | None                         | None              | None                    | None               | None                                  | None                       | None                                       |   | None                          | None                             |             | OVERRIDING ROYALTY OUNERS & PERCENT— AGE OF INTEREST  |
| ************************************** | Tri State Oil &              | C. T. Campbell    | Gulf Oil Co.            | The Texas Company  | A. J. Flagg                           | Stanolind Oil & Gas 87.500 | The Texas Company                          |   | Frank J. and Elizabeth Sunser | 0. C. Beck                       |             | FORKING INTEREST OFNER UNDER OFTION AGREEMENT, LEASE OF ASSIGNMENT AND PERCENTAGE OF INTEREST |
|  | 87.500                       | 87.500            | 87.500                  | 87.500             | 87.500                                | 87,500                     | 87.500                                     |   | 87.500                        | 87.500                           |             | NER<br>ENT,<br>LEASE<br>ERCENT-   |
|  |                              |                   |                         |                    |                                       |                            |  |   |                               |                                  |             | 1   |

| 56.                          | 55.   | · 27              | 53.               | 52.               | 51.                  | <b>.</b>             | 49                    | 18.                    | 1.7.              | 16.                                  | TRACT   |
|------------------------------|---|-------------------|-------------------|-------------------|----------------------|----------------------|-----------------------|------------------------|-------------------|--------------------------------------|---|
| Sec. 32-SE/4 NE/4            | 729N-R10W<br>Sec. 32-SE/4 SW/4, NW/4 (<br>NE/4 NW/4 | Sec. 36-SW/4 NE/4 | Sec. 36-SE/L NW/L | Sec. 36-NE/L NE/L | Sec. 36-NE/1; NW/1;  | Sec. 36-NW/L NW/L    | Sec. 36-SE/L NE/L     | Sec. 36-SE/4 SW/4      | Sec. 36-NW/1 NE/1 | Sec. 36-SW/L SE/L                    | DESCRIPTION<br>OF LAND  |
| ήο <b>.</b> 00               | NW/4 SE/4,120.00                                    | 39.54             | 39.65             | 39.54             | 39.65                | 39.65                | 39.54                 | 39.05                  | 39.54             | 39.06                                | NO. OF<br>ACRES   |
| B-106կկ-31<br>9-10-կ3        | E-3149<br>12-10-49                                  | OPEN              | OPEN              | OPEN              | B-106կկ-կ<br>9-10-կ3 | B-10644-5<br>9-10-43 | B-10644-13<br>9-10-43 | B-106114-14<br>9-10-43 | B-10644-18        | B-11303<br>6-10-44                   | SERIAL NO.<br>AND DATE<br>OF LEASE  |
| State 12½%<br>-114           | State 12⅓%  |                   |                   |                   | State 12%%           | State 12½%           | State 12½%            | State 123%             | State 12½%        | State 12½%                           | LANDOWNERS & FERCENTAGE OF ROYALTY  |
| Tr. State Oil &              | The Texas Co.                                       |                   |                   |                   | David H. Bell        | C. S. Hurdle         | Geo. N. Trunk         | Harry Cooley           | Dr. bewell Gann   | The Texas Facific Coal & Oil Company | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION  |
| None                         | None  |                   |                   |                   | None                 | None                 | None                  | None                   | None              | None                                 | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST                                    |
| Tri State Oil & Refining Co. | The Texas Co.                                       |                   |                   |                   | David H. Bell        | C. S. Hurdle         | Geo. M. Trunk         | Harry Cooley, et ux    | Dr. Dewell Gann   | The Texas Pacific Coal & Oil Company | WORKING INTEREST OWNER UNDER OPTION AGREEMENT, LEASE OF ASSIGNMENT AND PERCENTAGE OF INTEREST |
| 87.500                       | 87•500  |                   |                   |                   | 87.500               | 87.500               | 87.500                | 87.500                 | 87.500            | 87.500                               | OWNER<br>SEMENT,<br>SENT, LEASE<br>D PERCENT  |

| •                 | 57.                   | TRACT   |
|-------------------|-----------------------|---|
| Sec. 32-NE/1 SE/1 | Sec. 32-SM/4 NE/4     | DESCRIPTION<br>OF LAND  |
| 00.00             | τυ•00                 | NO. OF<br>ACRES   |
| B-10644-2         | 8-106hh-19<br>9-10-43 | SERIAL NO. AND DATE OF LEASE  |
| State 122%        | State 12½%            | LANDOVINERS<br>&<br>PERCENTAGE<br>OF ROYALTY  |
| A. H. Applegate   | Clarence Rupp         | RECORD O'MER OF LEASE OR APPLICATION  |
| None              | None                  | OVERHIDING ROYALTY<br>OF NERS & PERCENT-<br>AGE OF INTEREST   |
| A. H. applegate   | Clarence Rupp         | WORKING INTEREST OF NER UNDER OPTION AGREEMENT, OPERATING AGREEMENT, LEASE OR ASSIGNMENT AND FERCENT- AGE OF INTEREST |
| 87,500            | 87.500                | EMENT,<br>LEASE<br>PERCENT-   |

TOTAL STATE ACREAGE - 1,271.20 acres

| 67.  |   | λί                      | 64•                     | 63                      | 62.                             | 61.   | 6   | 59.   |                | TRACT   |
|--|---|-------------------------|-------------------------|-------------------------|---------------------------------|---|---|---|----------------|---|
| T27N-R10W<br>Sec. 11-N/2   | 129N-R11W<br>Sec. 25-N/2 SE/U                                   | Sec. 30-E/2 SE/4 SE/4   | Sec. 30-W/2 SE/L SE/L   | Sec. 30-NE/L SE/L       | Sec. 30-W/15 acres of NE/4 SW/4 | Sec. 29-SW/L SW/L<br>Sec. 31-NE/L NE/L<br>Sec. 32-NW/L NW/L | Lec. $30-E/2$ ; acres of NE/L SW/L, NW/L SE/L | T29N-R10W<br>Sec. 30-Lot 3  | PATENTED LAYDS | IESCRIPTION<br>OF LAND  |
| 320.00<br>TOTAL LANES  | 80.00   | 20.00                   | 20.00                   | 40.00                   | 15.00                           | 120.00  | 65-00   | 39.65   |                | NO. OF<br>ACRES   |
| R. Bruce Sullivan )12<br>Marguerite Sullivan)<br>IN ANGELS PEAK UNIT - | RBruce Sullivan )64% Warguerite Sullivan)64% John A. Pierce 64% | Heirs of 12½%           | Luther Manning - 121%   | A. A. Pinkstaff 12½%    | J. F. Rogers ~ 12 3%            | mande Keyes 12½%  |   | H. Bruce Sullivan )64% warguerite Sullivan)64% John A. Pierce 64% |                | ROYALTY OWNERS AND<br>INTEREST  |
| Stanolind Oil & Gas Co. 29,801.97 acres                                | % Southern Union Gas Co.  | Stanolind Oil & Gas Co. | Stanolind Vil & Gas Co. | Stanolind Cil & Gas Co. | Stanolind Vil & Gas Co.         | Stanolind Oil & Gas Co.                                     |   | g Southern Union Gas Co.  |                | RECORD OWNER OF<br>LEASE OR APPLI-<br>CATION  |
| None   | None  | None                    | None                    | None                    | None                            | None  | None  | None  |                | OVERRIDING ROYALTY<br>OWNERS & PERCENT-<br>AGE OF INTEREST                                    |
| Stanolind Oil & Gas Co.  | Southern Union Gas Co.  | Stanolind Oil & Gas Co. | Stanolind Wil & Gas Co. | Stanolind Vil & Gas Co. | Stanolind Vil & Gas Co.         | Stanolind Oil & Gas Co.                                     | Edward M. Schmidt and Fannie May Schmidt      | Southern Union Gas Co.  | •              | WORKING INTEREST OWNER UNDER OPTION AGREEMENT, LEASE OF ASSIGNMENT AND PERCENTAGE OF INTEREST |
| 87.500   | 87.500  | 87.500                  | 87.500                  | 87.500                  | 87.500                          | 87.500  | 000-001                                       | 87.500  |                | AL-<br>SE   |

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## RECAPITULATION

| Total Number of Acres<br>In Angels Peak Unit | Patented Land                   | State Land      | Federal Land • • • • • • • • 27,811.12 acres or 93.3197% of Unit |
|--|---------------------------------|-----------------|--|
| 29,801.97 acres or 100.0000% of Unit         | 719.65 acres or 2.4148% of Unit | 1,271.20        | 27,811,12  |
| acres  | acres                           | acres           | acres  |
| og<br>O                                      | Ŗ                               | 9               | ဒ္   |
| 100,0000%                                    | 2-1116%                         | 4.2655%         | 93.3197%   |
| 0  | P) .                            | ე<br>⊬ <b>ე</b> | Ç,   |
| Unit   | Unit                            | Unit            | Unit   |

19. Sec. 5-Lots 1,2,3,4, 5/2 N/2, 5/2 Sec. 20-All Sec. 28-All

C. V. Lyman - 3/4 of 1% of entire lease
Ben Dansby, Jr., 3/4 of 1% entire lease
J. D. Hancock 100/649.5 of 3/4 of 1% in entire lease Charles J. Nourse, undivided .02000 of 449.5 Charles J. Nourse, undivided .02000 of 449.5 Raymond W. Ellis, undivided .01666 of 449.5 Raymond W. Ellis, undivided .01666 of 449.5 Raymond W. Ellis, undivided .01666 of 449.5 Paul S. Kerr, undivided .03334 of 149.5/ W. Beach Day, undivided .03334 of 1449.5/ Henry R. Labouisse, Jr., undivided .033 Harlan M. Ellis, undivided .01666 of 1419.5, Harlan M. Ellis, undivided .01666 of 1419.5, J. D. Hancock, undivided .15000 of 149.5/649.5 interest in Arthur B. Palmer, undivided .02000 of 449.5/649.5 Geo. Roberts, undivided .02000 of 449.5/649.5 Geo. Roberts, undivided .02000 of 449.5/649.5 Chas. E. Main, undivided .3334 of 449.5/649 Chas. E. Main, undivided .3334 of 449.5/649 Arthur E. Falmer, Jr., undivided .02000 of Stephen Carlton Clark, undivided .33333 Edward D. Lells, undivided .00666 of 111 Chas. E. Main, undivided .3334 of 1119.5 Susan Vanderpool Clark, undivided .06666 o Faul S. Kerr, undivided .03334 of 449.5/ Alfred Corning Clark, an .03; J. D. Hancock, an undivided .. lenry R. Labouisse, undivided .03334 of lfred Corning Clark, undivided .03334 stephen Carlton Clark, Jr. undivided .( '4 of 1% entire lease 5 of 5/8 of 1% in 640 acres 49.5/649.5 of 3/4 of 1% in 1921.84 acres 549.5 of 5/8 of 1% in 640 acres 5 interest in 3/4 of 1% in 1,921.84 acres 19.5 interest in 5/8 of 1% in 640 acres interest in 5/8 of 1% in 640 acres interest in 5/8 of 1% in 640 of 3/4 of 1% in 1,921.84 acres 649.5 of 3/4 of 1% in 1921.84 acres 19.5/649.5 of 5/8 of 1% in 640 acres 3/4 of 1% in 1921.84 acres
5/8 of 1% in 640 acres
5 of 3/4 of 1% in 1921.84 acres
5 of 5/6 of 1% in 1921.84 acres
6 of 3/4 of 1% in 1921.84 acres
6 of 5/6 of 1% in 640 acres
6 of 5/8 of 1% in 1921.84 acres
6 f 5/8 of 1% in 640 acres 5 of 5/8 of 1% in 640 acres % in 1921.84 acres
of 3/4 of 1% in 1921.84 acres
.5 of 3/4 of 1% in 1921.84 acres in 1921.84 acres in 640 acres 1% in 640 acres 8 of 1% in 640 acres 1/4 of 1% in 1921.84 acres t of 1% in 1921.84 acres

of 1% entire lease (to be borne entirely by El Paso - Testern Nat.)

### EXHIBIT "C"

Schedule showing allocation of participation for the Initial Dakota Participating Area in the Angels Peak Unit Agreement.

Lessee:

Fred Feasel

Serial Number:

Santa Fe 046563

Description:

SW/4 SE/4 Sec. 33-T28N-R10W

Amount of Acreage:

40.00

Percentage of

Participation:

11.06378

Overriding Royalty:

None

Operating Rights:

Stanolind Oil and Gas Company

Byrd-Frost Inc.

3/16

Western Natural Gas Company El Paso Natural Gas Company 1/4 (oil only) 1/4 (gas only) 1/16

P. B. English

Lessee:

Fred Feasel

Serial Number:

Santa Fe 046563

Description:

SE/4 SW/4 Sec. 33-T28N-R10W

Amount of Acreage:

40.00

Percentage of

Participation:

11.06378

Overriding Royalty:

Fred Feasel-71%

Operating Rights:

Stanolind Oil and Gas Company

3/16

Byrd Frost Inc. Western Natural Gas Company

1/4 (oil only) 1/4 (gas only)

El Paso Natural Gas Company P. B. English

1/16

Lessee:

Fred Feasel

Serial Number:

Santa Fe 046563

Description:

SW/4 SW/4 Sec. 33-T28N-R10W

Amount of Acreage:

40.00

Percentage of

Participation:

11.06378

Overriding Royalty:

Fred Feasel-75%

Operating Rights:

Kutz Canon Oil & Gas Company - All

Lessee:

R. P. Hargrave

Serial Number:

Santa Fe 077382

Description:

Lot 4, S/2 NW/4 Sec. 4-T27N-R10W

Amount of Acreage:

120.56

Percentage of Participation:

33.34624

Overriding Royalty:

R. P. Hargrave - 2%

Operating Rights:

Stanolind Oil and Gas Company

Western Natural Gas Company El Paso Natural Gas Company

1/4 (oil only)
1/4 (gas only)
3/16

Byrd-Frost, Inc. P. B. English

1/16

Lessee:

R. P. Hargrave

Serial Number:

Santa Fe 077382

Description:

Lot 3, Sec. 4, T27N-R10W

Amount of Acreage:

40.51

Percentage of Participation:

11.20485

Overriding Royalty:

R. P. Hargrave-2%

Operating Rights:

Kutz Canon Oil & Gas Company Byrd-Frost Inc.

1/2 5/16

Western Natural Gas Company El Paso Natural Gas Company

1/8 (oil only)
1/8 (gas only)

P. B. English

1/16

6. Lessee:

R. P. Hargrave

Serial Number:

Santa Fe 077383

Description:

Lot 2, SW/4 NE/4 Sec. 4-27N-10W

Amount of Acreage:

80.47

Percentage of

Participation:

22.25757

Overriding Royalty:

R. P. Hargrave-2%

Operating Rights:

Kutz Canon Oil & Gas Company - All

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior. the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

### SIGNATURES AND ADDRESSES

| Name   | Name (12 highs o   |
|--|--|
| Address  | Address  |
| Thinks the structure of |  |
| Name   | Neme   |
| Address  | Address  |
| Name   | Neme   |
| Address  | Address  |
| STATE OF TEXAS   | Tracta 1, 4,5, 11, 13, 14, 15, 16, 18,   |
| COUNTY OF DALLAS   | 19,20,21,24,26,27.   |
| appearedday of English   | tober , 1951, before me personally to me known to be the uted and delivered the foregoing instrument,              |
| ANG ACKROWLEGGED TO ME THAT "" EYE   | CHARL THE SAME AS 'T' TO SAME AND ASSOCIATION  |
| GIVEN UNDER MY HAND AND S  | EAL OF OFFICE, this day of October, 1951.  |
| My Commission expires:   | EAL OF OFFICE, this day of October, 1951.  Leal Cundif   |
| STATE OF) COUNTY OF)   |  |
| COUNTY OF)   | Notary Public, Dallas County, Texas My Commission Expires June 1, 1953   |
| On this day of to  | , 19, before me appeared me personally known, who, being by me duly resident of                                    |
| sworn, did say that he is the P  | resident of  |
| corporation, and that said instrume corporation by authority of its Boa  | nstrument is the corporate seal of said<br>nt was signed and sealed in behalf of said<br>rd of Directors, and said |
| acknowledged said instrument to be   | the free act and deed of said cornoration.   |
| Given under my hand and ne   | otarial seal thisday of,19   |
| My Commission expires:   |  |
|  | Notary Public  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

| SIGNATUR   | es and addresses Track 4,2  |
|--|---|
| NameAddress  | Name (Ita Day Lachman) Address 11 2 111 151 Bergler 17  |
| NameAddress  | NameAddress   |
| Name<br>Address  | NameAddress   |
| STATE OF New Mexico ) COUNTY OF Santa Fe   | 1   |
| appeared Alta Day Lachman person described in and who executed and acknowledged to me that she execute   | to me known to be the and delivered the foregoing instrument, d the same as herfree act and deed.  OF OFFICE, this 25thlay offoctober ,19 51. |
| My Commission expires: June 9, 1955  | Breese Fuller LOW.  |
| STATE OF ) COUNTY OF)  |   |
| On this day of to me p sworn, did say that he is the Presi   | ersonally known, who, being by me duly dent of  |
| and that the seal affixed to said instruction, and that said instrument we corporation by authority of its Board of acknowledged said instrument to be the | as signed and sealed in behalf of said f Directors, and said  |
| Given under my hand and notar  | ial scal this day of ,19.   |
| My Commission expires:   |   |

Notary Public

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES Name Greese P. Name Address Address Address Santa Fe. N.M. Name Name Address Address STATE OF New Mexico COUNTY OF\_ Santa Fe On this 25thday of October , 19 51, before me personally appeared Reese P. Fullerton & Lorotta T. Fullerton, his wife to me known to be the person s described in and who executed and delivered the foregoing instrument, and acknowledged to me that they executed the same as their ree act and deed. GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 25thay of October ,1951 . Clarity Public My Commission expires: Jan 14, 1954 STATE OF COUNTY OF On this \_\_\_\_day of\_ \_, 19\_\_\_, before me appeared , to me personally known, who, being by me duly sworn, did say that he is the President of 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 acknowledged said instrument to be the free act and deed of said corporation. Given under my hand and notarial scal this day of ,19 . My Commission exoires:

Notary Public

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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| SIGNATUR   | es and addresses Tract   |
|--|--|
| Name Ruth P. Brink   | Nome   |
| Address 205 N orth Behrend<br>Farmington, N.M.   | NameAddress  |
| Name Saul Junion Brink<br>Address 200 B and B  | NameAddress  |
| - Kermit Texas   |  |
| Name his f. duelle<br>Address 202 n. ave. B.   | Name   |
| Kernet, Jefas  | Address  |
| STATE OF NEW MEXICO  |  |
| COUNTY OF SAN JUAN   |  |
| On this 30 day of October appeared Ruth P. Brink person described in and who executed and acknowledged to me that she executed   | to me known to be the and delivered the foregoing instrument, d the same as her free act and deed. |
|  | OF OFFICE, this 30 day of Oct. ,1951.  |
| My Commission expires:   | Havor W Burnhan<br>Notary Public   |
| STATE OF COUNTY OF )   | WOLHRY Public  |
| On this day of to me p   | , 19 , before me appeared ersonally known, who, being by me duly dent of                           |
|  |  |
| and that the seal affixed to said instrument we corporation, and that said instrument we corporation by authority of its Board of acknowledged said instrument to be the | as signed and sealed in behalf of said<br>f Directors, and said                                    |
|  | ial seal thisday of,19   |
| My Commission expires:   |  |
|  | Notana fishlida  |

SS

COUNTY OF WINKLER

on this 7 day of November, 1951, before me personally appeared Iris L. Smith, to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that she executed the same as her free act and deed.

GIVEN UNDER MY HAND AND SIAL OF OFFICE, this 7 day of

Notary Public

My commission expires:

STATE OF TEXAS

SS

COUNTY OF WINKLER

On this day of <u>November</u>, 1951, before me personally appeared Paul Irvin Brink, to me known to be the person described in abd who executed and delivered the foregoing instrument, and acknowledged to me that he executed the same as his free act and deed.

GIVEN UNDER MY HAND AND SHAL OF OFFICE, this Z day of

Notary Public

My commission expires:

June 1, 1953

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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| SIGNAT   | URES AND ADDRESSES   |
|--|--|
| Name_  | Name S. H. Dewman  |
| Address  | Address 3700 Southwestern  |
|  | / <b>X</b>   |
| Name   | Name Jaymond C. Harrison   |
| Address  | Address 6222 Belmont   |
| Extended to comprehensive the comprehensive and any security and any secur | Dallas, Texas  |
| Name   | Name   |
| Address  | Address  |
| STATE OF TEXAS   | )  |
|  |  |
| COUNTY OF DALLAS   | )  |
| GIVEN UNDER MY HAND AND SEAT  My Commission expires: Notice My Commission and My Com | OF OFFICE, this 5thday of October, 1951.                                   |
| and the contract of the contra | Notary Public  |
| STATE OF) COUNTY OF)   |  |
|  | , 19, before me appeared personally known, who, being by me duly sident of |
| and that the seal affixed to said inst   |  |
|  | was signed and sealed in behalf of said                                    |
| acknowledged said instrument to be the   | free act and deed of said cornoration.                                     |
| Given under my hand and nota   | arial scal this day of ,19   |
| My Commission expires:   |  |
|  | Notary Public  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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| or successors in interest.  |  |
|---|--|
| Trest of S  | IGNATURES AND ADDRESSES Tracts 9, 10, 24, 25, 2  |
| Froma Aly   | Name Pour lyan Rasin las   |
| Address Secretary   | Address 3914- ( West Snoth Ove.  |
| <del></del>   | By amasilla, Tyun  |
| Name  | Mand Olice R. Hulbell  |
| Address   | AGETES President   |
| None  | -172/Bastlik   |
| NameAddress   | Mana / / ///////////////////////////////   |
|   |  |
| STATE OF  | )  |
|   |  |
| COUNTY OF   | <del></del>  |
| On thisday of   | , 19, before me personally   |
| appeared  | to me known to be the xecuted and delivered the foregoing instrument,  |
| person described in and who ex                                    | xecuted and delivered the foregoing instrument,  |
| and acknowledged to me that                                       | executed the same asfree act and deed.   |
| GIVEN UNDER MY HAND AN  | D SEAL OF OFFICE, thisday of, 19   |
| My Commission expires:  |  |
|   | Notary Public  |
| STATE OF TEXAS COUNTY OF POTTER                                   | <b>)</b>   |
| JOUNII OF   | <b>)</b>   |
| On this 23 day of   | October , 19 51 , before me appeared to me personally known, who, being by me duly President of SAN JUAN BASIN POOL, |
| ALIVE R. HUMBERS  | to me personally known, who, being by me duly  |
| a co-partnership.   | President of the task today  |
| and that the seal affixed to said                                 | d instrument is the <b>cursum</b> seal of said   |
| Arthur and that said instru                                       | ument was signed and sealed in behalf of said  |
| ourporaceumy oy authority of its lacknowledged said instrument to | Board of Directors, and said Alice R. Hubbel be the free act and deed of said cornoravism.                           |
| =   |  |
| Given under my hand and   | d notarial scal this 23 day of October ,1951   |
| My Commission expires:  | Barbara Brooks   |
|   | Briting Brooks   |

Notary Public Potter County Texas

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the narticular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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| SIGNATUR   | RES AND ADDRESSES — Least 9,10,25  |
|--|--|
| NameAddress  | Name Assamman Address Houseon 2, Toxas   |
| NameAddress  | Name Alma M. Burnan Address Houston P. Texas   |
| NameAddress  | NameAddress  |
| STATE OF TOXOS ) COUNTY OF Harris  |  |
| The state of the s | of Office, this 21 day of Cotober, 1951.   |
| My Commission expires:   | Betty Meade  |
| STATE OF ) COUNTY OF)  | BETTY MEADE  Notary Public in and for Harris County, Taxo  |
| On this day of, to me psworn, did say that he is the Presi   | , 19, before me appeared ersonally known, who, being by me duly dent of  |
| and that the seal affixed to said instr<br>corporation, and that said instrument w<br>corporation by authority of its Board o<br>acknowledged said instrument to be the  | as signed and sealed in behalf of said for Directors, and said   |
|  | ial scal thisday of,19   |
| My Commission expires:   | process and was processed to an arrange of the same and t |

Notary Public

And the first of the second

In consideration of the execution of the Unit Agreement of the Development and Operation of the Angels Poak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates epplied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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| Name By Junta Schult   | Vice President  | ATTEST FILLE SO  |
|--|---|--|
| Address 1315 Pacific Avenue  | N. 11.11.11.11.11.11.11.11.11.11.11.11.11                                 |  |
| Dallas, Yexas  | - water and the same the  | $\mathcal{C}$  |
| Nome   |   |  |
| NameAddress  |   |  |
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| NT.  |   |  |
| Name<br>Address  |   |  |
| Audi 655   |   | •  |
|  |   |  |
| STATE OF   |   |  |
| COUNTY OF  |   |  |
| •  |   |  |
| On thisday of  |   |  |
|  |   | be the persondes-  |
| cribed in and who executed and deli-   | vered the foregoing ins   | trument, and acknowledged  |
| to me thatexecuted the same  | as iree act and de  | eea.   |
|  |   |  |
| ATTITUDE TRANSPORT FOR THE SAME ASS.   | MALE AN ANNTAR III.   | 30 10  |
| GIVEN UNDER MY HAND AND  | SEAL OF OFFICE, this  | day of 19  |
|  | SEAL OF OFFICE, this  | day of, 19   |
|  | SEAL OF OFFICE, this  | day of 19  |
| My Commission expires:   | SEAL OF OFFICE, this  | day of, 19  Notary Public  |
| My Commission expires:   | SEAL OF OFFICE, this  |  |
| My Commission expires:  STATE OF //allas ) COUNTY OF Dallas )  |   | Notary Public  |
| My Commission expires:  STATE OF Affailar  COUNTY OF Ballar  And Adam of A   | October 1951  | Notary Public  , before me appeared Munk   |
| My Commission expires:  STATE OF Affailar  COUNTY OF Ballar  And Adam of A   | October 1951  | Notary Public  , before me appeared Munk   |
| My Commission expires:  STATE OF Alar COUNTY OF Dallar day of a gray that he is the Lar President of the large say that he is the Lar President of the large say that he is the Large say the Large say that he is the Large say the Large say that he is the Large say that he is the Large say that he large say the Large say that he large say the Large say that he large say the Large  | actable , 1951 personally known, who,                                     | Notary Public  , before me appeared Munk being by me duly sworn, did  Minutes  |
| My Commission expires:  STATE OF Addition  COUNTY OF Ballar  And that the seal affixed to said in  | personally known, who, f  | Notary Public  , before me appeared Munk being by me duly sworn, did  Alkantan ate seal of said corpora-   |
| My Commission expires:  STATE OF Salar  COUNTY OF Ballar  And that he is the sala affixed to said interpret was  | personally known, who, f  | Notary Public  , before me appeared Allah  being by me duly sworn, did  at seal of said corpora- half of said/corporation by   |
| My Commission expires:  STATE OF Jalua    COUNTY OF Jalua    And that he is the Jalua    and that the seal affixed to said it tion, and that said instrument was authority of its Board of Directors   | personally known, who, it will be corpor signed and sealed in be and said | Notary Public  , before me appeared Munk being by me duly sworn, did  ate seal of said corpora- half of said corporation by  |
| My Commission expires:  STATE OF COUNTY OF COU | personally known, who, f Link L   | Notary Public  , before me appeared Multiple ing by me duly sworn, did  at seal of said corpora- half of said corporation by  Line components of said corporation by   |
| My Commission expires:  STATE OF ALLANDON COUNTY OF ALLANDON day of Allandon to me say that he is the All President of and that the seal affixed to said it tion, and that said instrument was authority of its Board of Directors instrument to be the free act and design and the said instrument to be the said instrument.   | personally known, who, f Link L   | Notary Public  , before me appeared Multiple ing by me duly sworn, did  at seal of said corpora- half of said corporation by  Line components of said corporation by   |
| My Commission expires:  STATE OF COUNTY OF COU | personally known, who, f Link L   | Notary Public  , before me appeared Multiple ing by me duly sworn, did  at seal of said corpora- half of said corporation by  Line components of said corporation by   |
| My Commission expires:  STATE OF COUNTY OF COU | personally known, who, f Link L   | Notary Public  , before me appeared Multiple ing by me duly sworn, did  at seal of said corpora- half of said corporation by  Line components of said corporation by   |
| My Commission expires:  STATE OF COUNTY OF COU | personally known, who, f Link L   | Notary Public  , before me appeared Multiple ing by me duly sworn, did  at seal of said corpora- half of said corporation by  Line components of said corporation by   |
| My Commission expires:  STATE OF COUNTY OF COU | personally known, who, f Link L   | Notary Public  , before me appeared Much being by me duly sworn, did  all all all all ate seal of said corpora- half of said corporation by  and all all all and all and all and all and all and all and all all and a |
| My Commission expires:  STATE OF COUNTY OF COU | personally known, who, f Link L   | Notary Public  , before me appeared Much being by me duly sworn, did  all all all all ate seal of said corpora- half of said corporation by  and all all all and all and all and all and all and all and all all and a |
| STATE OF Sallar COUNTY OF Sallar day of to me say that he is the sall affixed to said it tion, and that said instrument was authority of its Board of Directors instrument to be the free act and defined to make the said instrument was authority of its board of Directors instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to make the said instrument to be the free act and defined to said instrument.   | personally known, who, f Link L   | Notary Public  , before me appeared Multiple ing by me duly sworn, did  at seal of said corpora- half of said corporation by  Line components of said corporation by   |

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| or successors in interest.   |  |
|--|--|
| SIGNA  | TURES AND ADDRESSES  |
|  | (PAN)  |
| lame   | Name ///   |
| lddress  | Address P. O. Box 427  |
|  | Aztec, New Mexico  |
| Name   | Name Jinda //ye  |
| ddress   | Address P. O. Box 427  |
|  | Aztec, New Mexico  |
| Name   | Name   |
| Address  | Address  |
| entroperation of the state of t |  |
| mine on Mini Wevias  | •  |
| STATE OF NEW MEXICO.   | <del>-</del> {   |
| COUNTY OF SAN JUAN.  |  |
|  |  |
| On this 2 day of Nov   | ember , 1951, before me personally to me known to be the   |
| appeared C. H. NYE and LINDA NY  | to me known to be the  |
| persons described in and who execu   | ted and delivered the foregoing instrument, uted the same as free act and deed.  |
| THE COMMUNICATION OF THE CHIEF   | avod one balle abjusting account   |
| GIVEN UNDER MY HAND AND SE   | AL OF OFFICE, this 2 day of Nov. ,1951.  |
| en er en er er er en   | That a King  |
| ly Commission expires:   | Notary Public  |
| STATE OF)  | in and for San Juan County   |
| COUNTY OF)   | New Mexico.  |
|  |  |
| On this day of   | , 19, before me appeared   |
| years did any that he is the   | e personally known, who, being by me duly esident of   |
| sworn, ard say onat he as therr  | estuene of   |
| and that the seal affixed to said in   | strument is the corporate seal of said   |
| corporation, and that said instrumen   | t was signed and sealed in behalf of said  |
| corporation by authority of its Boar   |  |
| cknowledged said instrument to be t  | he free act and deed of said corporation.  |
| Given under my hand and no   | tarial scal this day of ,19 .  |
| da ton and my mand and no  | The same of the sa |
| y Commission expires:  |  |
|  |  |

Notary Public

In consideration of the execution of the Unit Agreement of the Development and Operation of the Augels Poak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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SIGNATURES AND ADDRESSES

| SIGNATURES AND AD!   | DRESSES  |
|--|--|
| Name Collegnam   |  |
| Address 533 Corpseson Dida   |  |
| Horatestoria   |  |
|  | en e                 |
| Name May woll Imaram   |  |
| Address & 35 & Eaperson   Bedon  |  |
| Mouston + deres  |  |
| Name   |  |
| Address  |  |
| and the distribution of the plants and the had been constructed and the second and the second billion and the second and the s | STEERNATION OF   |
| Manage Ma | No. LESTINED AND   |
| STATE OF Texas   | FEB 11 1952  |
| COUNTY OF Harris   |  |
|  | OLOGIOAL BURNEY  |
| On this 29 day of January  E. W. Ingrem and Mary Doll Ingrem to  | , 19 52, before me personally appeared                   |
| E. W. Ingrem and Mary Doll Ingrem to   | me known to be the personsdes-                           |
| cribed in and who executed and delivered the fo<br>to me that they executed the same astheir fre   | e act and deed.  |
|  | CE, this 29 day of January, 1952.                        |
| My Commission expires:<br>June 1, 1953   | ann Luckel   |
| STATE OF Texas   | Notary Public ARM LUCKEL                                 |
| COUNTY OF Harris   | Notary Public, in and for Harris County,                 |
| On this day of   | , 19 , before me appeared                                |
| . to me personally   | known, who, being by me duly sworn, did                  |
| say that he is the President of  |  |
| and that the seal affixed to said instrument is<br>tion, and that said instrument was signed and s<br>authority of its Board of Directors, and said<br>instrument to be the free act and deed of said  | ealed in behalf of said corporation by acknowledged said |
|  |  |
| Given under my hand and notarial sea   | 1 thisday of, 19   |
| My Commission expires:   |  |
|  | ₹  |
| The state of the s | Notary Public  |
|  | and the grant of the same                                |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

1/2

| SIGNATURES AND ADDRESSES   |   |  |
|--|---|--|
| Name   | Name (R) Sarantu ^  |  |
| Address  | Address P. O. Box 414   |  |
|  | Galveston, Texas  |  |
| Name   | Name  |  |
| Address  | NameAddress   |  |
|  |   |  |
| Name   | Name  |  |
| Address  | Address   |  |
|  |   |  |
| STATE OF Texas   |   |  |
| COUNTY OF Galveston.   |   |  |
| on this 22ndday of October appeared R. P. Hargrave person described in and who execute and acknowledged to me that he execut   | to me known to be the d and delivered the foregoing instrument, ed the same as his free act and deed. |  |
| GIVEN UNDER MY HAND AND SEAL My Commission expires:  | OF OFFICE, this 22nd ay of Oct., 19 51  Notary Public   |  |
| June 1, 1953   | Notary Public   |  |
|  | $\nu$   |  |
| COUNTY OF  |   |  |
| Commission of the commission o |   |  |
| On this day of to me p   | , 19 , before me appeared ersonally known, who, being by me duly ident of                             |  |
| Fres   | Idenc of  |  |
| and that the seal affixed to said instr<br>corporation, and that said instrument w<br>corporation by authority of its Board o<br>acknowledged said instrumet to be the f   | as signed and scaled in behalf of said<br>f Directors, and said                                       |  |
| GIVEN UNDER MY HAND AND NOTAR  | TAL SEAL, this day of, 19   |  |
| My Commission expires:   |   |  |
|  | Notary Public   |  |
|  |   |  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

|                                     | 1 del  |
|-------------------------------------|--|
| SIGNATUR                            | es and addresses Tradit  |
| Name The Shouth Il                  | alon Name  |
| Address Bas 208                     | Address  |
| tras amonas, Calo                   | professional programme and the |
| Name                                | Name   |
| Address                             | Address  |
|                                     |  |
| Name                                | Name   |
| Address                             | Address  |
|                                     |  |
| STATE OF C. L.                      |  |
| STATE OF Colourda COUNTY OF Beat    |  |
|                                     |  |
| On this 26 day of 0                 | cl, 1957, before me personally to me known to be the   |
| person described in and who exe     | to me known to be the cuted and delivered the foregoing instrument,  |
| and acknowledged to me that the ex  | ecuted the same as her free act and deed.  |
|                                     | ***************************************  |
| CIVEN UNDER MY HAND AND S           | EAL OF OFFICE, this 26 day of Oct, 1951  |
| My Commission expires:              | Marca III (1)  |
| Feb 10, 1954                        | Motary Public  |
|                                     |  |
| STATE OF<br>COUNTY OF               | $\rightarrow$  |
| OUGRII OF                           |  |
| On this day of                      | , 19 , before me appeared  |
| $+ \alpha$                          | me nerconally known who hains by maduly  |
| sworn, did say that he is the       | President of   |
| and that the seal affixed to said i | nstrument is the corporate seal of said  |
| corporation, and that said instrume | nt was signed and sealed in behalf of said   |
| corporation by authority of its Boa | rd of Directors, and said  |
| acknowledged said instrumet to be t | he free act and deed of said corporation.  |
| GIVEN UNDER MY HAND AND N           | OTARIAL SEAL, this day of, 19  |
| My Commission expires:              | •  |
|                                     | Notary Public  |
| . :                                 |  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATURES   | AND ADDRESSES Tract 14  |
|--|---|
| Name Frank & K. Lan  | Name  |
| Address 607 Clara  | Address   |
| Rocky Fort Cold  |   |
| Name   | Name  |
| Address  | Address   |
| Name   | Name  |
| Address  | Address   |
| STATE OF Colorado COUNTY OF OTESO  | )   |
| person described in and who execut   | to me known to be the ted and delivered the foregoing instrument, ated the same as his free act and deed. |
| GIVEN UNDER MY HAND AND SEAD<br>My Commission expires:<br>Qof / * - 1952.<br>STATE OF<br>COUNTY OF | Marguette Lobin  Notary Public  |
| On this day of, to me sworn, did say that he is the Pre  | personally known, who, being by me duly esident of  |
| corporation, and that said instrument corporation by authority of its Board                        | was signed and sealed in behalf of said of Directors, and said free act and deed of said corporation.     |
| GIVEN UNDER MY HAND AND NOTA   | ARIAL SEAL, this day of, 19   |
| My Commission expires:   |   |
|  | Notary Public   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATURES A   | ND ADDRESSES Trail 14   |
|--|---|
| Name Danes C Darlinger<br>Address 1587 Danada Ra<br>Waasside Cala  | NameAddress   |
| NameAddress  | NameAddress   |
| NameAddress  | NameAddress   |
| STATE OF California ) COUNTY OF Son I mate.  |   |
| appeared James C. Traits person described in and who executed and acknowledged to me that she executed   | to me known to be the d and delivered the foregoing instrument, ed the same as Les free act and deed. |
| GIVEN UNDER MY HAND AND SEAL OF COUNTY OF  | OF OFFICE, this 16 day of Oot., 1951.  Josephine C. Thorup  Notary Public                             |
| On this day of to me possorn, did say that he is the Press   | , 19 , before me appeared ersonally known, who, being by me duly ident of                             |
| and that the seal affixed to said instruction, and that said instrument we corporation by authority of its Board of acknowledged said instrumet to be the fi | as signed and sealed in behalf of said<br>f Directors, and said                                       |
| GIVEN UNDER MY HAND AND NOTAR My Commission expires:   | IAL SEAL, this day of, 19   |
| mi commence out out the  | Notary Public   |
|  |   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATU  | RES AND ADDRESSES Tract 14  |
|--|---|
| Name Kan Davidon You   | ım Name   |
| Address 3/9 Byane  | Address   |
| allinguerque M.  | my  |
| Name   | Name  |
| Address  | Address   |
|  |   |
| Name   | Name  |
| Address  | Address   |
|  |   |
| STATE OF M. Mex  |   |
| COUNTY OF Bernalilles  |   |
| On this 0.5 day of 0   | 4 . 1957 before me personally   |
| appeared fe an Karudso   | h, 195/ before me personally to me known to be the ecuted and delivered the foregoing instrument, |
| person described in and who ex   | ecuted and delivered the foregoing instrument,  |
| and acknowledged to me that Ale e  | xecuted the same as her free act and deed.  |
| GIVEN UNDER MY HAND AND  | SEAL OF OFFICE, this 25 day of Oct, 1951  |
| My Commission expires:   | Notary Public   |
| ay Commission Arpizes Oct. 25, 1934  | Notary Public   |
| STATE OF   | <b>\</b>  |
| COUNTY OF  | <del></del>   |
|  | mentalistics.   |
| On this day of   | me personally known, who, being by me duly  |
| sworn, did say that he is the  | President of  |
|  |   |
| and that the seal affixed to said  | instrument is the corporate seal of said ent was signed and sealed in behalf of said              |
| corporation by authority of its Bo   | ard of Directors, and said  |
| acknowledged said instrumet to be  | the free act and deed of said corporation.  |
| CLAEN HADES WA HVWD VND  | NOTARIAI SUAI this day of 10  |
| GIVIN ONDER EN NAME AND  | NOTARIAL SEAL, this day of, 19  |
| My Commission expires:   |   |
| But the control of th | Notary Public   |
|  |   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATURES   | AND ADDRESSES Trail 14  |
|--|---|
| Name Hickory Valench   | Name  |
| Address ~ 2 So (many St.<br>Franklingelles, New Vork)  | Address   |
| Name   | Name  |
| Address  | Address   |
| Name   | Name  |
| Address  | Address   |
| STATE OF Your your   | }   |
| appeared Welliam A day of Aug<br>person described in and who execut<br>and acknowledged to me that he execut | to me known to be the ted and delivered the foregoing instrument, uted the same as free act and deed. |
| GIVEN UNDER MY HAND AND SEAR<br>My Commission expires:   | L OF OFFICE, this 2 y day of Cang., 195%  Notary Public   |
| STATE OF COUNTY OF   |   |
| On this day of, to me sworn, did say that he is the Pre  | , 19 , before me appeared personally known, who, being by me duly esident of                          |
| corporation by authority of its Board  | was signed and sealed in behalf of said   |
| GIVEN UNDER MY HAND AND NOTA   | ARIAL SEAL, this day of, 19   |
| My Commission expires:   |   |
| 400-00-10-10-00-00-00-00-00-00-00-00-00-0  | Notary Public   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

Tract 15 SIGNATURES AND ADDRESSES Name\_ Address Name Name Address Address Name Name Address Address\_ STATE OF New Mexico COUNTY OF Santa Fe On this 21 day of August , 1951, before me personally Madeleine N. Galt to me known to be the described in and who executed and delivered the foregoing instrument, appeared Madeleine N. Galt and acknowledged to me that she executed the same as her free act and deed. GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 21 day of August My Commission expires: June 9, 1955 STATE OF COUNTY OF day of \_, 19\_ \_, before me appeared \_, to me personally known, who, being by me duly sworn, did say that he is the \_\_President of 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 acknowledged said instrument to be the free act and deed of said cornoration.

Given under my hand and notarial scal this \_\_\_\_day of

Notary Public

My Commission expires:

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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Tract 16 SIGNATURES AND ADDRESSES Name Name 4 Address Address v Name Name Address Address Name Name Address Address STATE OF CALIFORNIA ALAMEDA COUNTY OF On this 21 day of September , 19 51, before me personally appeared described in and who executed and delivered the foregoing instrument, and acknowledged to me that executed the same as his free act and deed. GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 21 day of Sept. 1951 My Commission expires: 9-25-54 STATE OF COUNTY OF , to me personally known, who, being by me duly sworn, did say that he is the President of \_, 19\_\_\_, before me appeared 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\_ acknowledged said instrument to be the free act and deed of said corporation. Given under my hand and notarial seal this \_\_\_\_day of\_ My Commission expires: Notary Public

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| A A CTOMARUEDING   | and addresses Iract 16   |
|--|--|
| 1/   |  |
| Name // ////////////   | Name   |
| Address Principo Andres Revice   | Address  |
|  |  |
| Name (/  | Name   |
| Address  | Name<br>Address  |
| Mama   | None   |
| Name   | Name   |
| Address  | Address  |
| STATE OF Ker Hexico  | ₹  |
| the control of the co | J  |
| appeared   | to me known to be the stand delivered the foregoing instrument, exted the same as free act and deed. |
| GIVEN UNDER MY HAND AND SEA  | L OF OFFICE, this 25th day of 6ept. ,1991  |
| ly Commission expires:   | Therefore B. Brings.   |
| STATE OF   | •  |
| STATE OF   | <del>,</del>   |
| On this day of   | hafana wa amaanad  |
| to me  | , 19_, before me appeared personally known, who, being by me duly                                    |
| sworn, did say that he is the Pr   | resident of  |
|  |  |
| corporation, and that said instrument<br>corporation by authority of its Board   | trument is the corporate seal of said was signed and sealed in behalf of said of Directors, and said |
| acknowledged said instrumet to be the  | free act and deed of said corporation.   |
| GIVEN UNDER MY HAND AND NOT  | ARIAL SEAL, this day of, 19_   |
| My Commission expires:   |  |
|  | Notary Public  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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SIGNATURES AND ADDRESSES

| Name  | Name 6 miles Milande   |
|---|--|
| Address   | Address 2717 n F Roven Cl  |
|   | - El laso, liga  |
| Name  | Name William B. Harly  |
| Address   | Address 2717 M. Floring  |
| Name  | Name   |
| Address   | Address  |
| STATE OF Jacky COUNTY OF Colaso   |  |
|   | 195/, before me personally milicim kindeto me known to be the ed and delivered the foregoing instrument, ted the same as therefree act and deed. |
| GIVEN UNDER MY HAND AND SEAL  | OF OFFICE, this pet day of extended 95%  |
| My Commission expires:  | Dery Schumacher Notary Public  |
| STATE OF  |  |
| COUNTY OF   |  |
| On this day of  | , 19 , before me appeared personally known, who, being by me duly  |
| sworn, did say that he is the Pre   | personally known, who, being by me duly sident of  |
| and that the seal affixed to said inst<br>corporation, and that said instrument<br>corporation by authority of its Board<br>acknowledged said instrumet to be the | was signed and sealed in behalf of said of Directors, and said   |
| GIVEN UNDER MY HAND AND NOTA  | RIAL SEAL, this day of, 19   |
| My Commission expires:  | •  |
| and commendatour evertion;  | Notary Public  |
|   | •  |

countercare he so parties outling of the re so executed she the binoil or successors in interest.

SIGNATURES AND ADDRESSES

STATE OF A STOTO OF THE COUNTY OF MOSSAS

On this 3rd day of November 19 19 been selected appeared Described Errors

Portion and addressed to me the selected appeared to the selected appea

((TO) Character (Control of the Control of the Cont

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATURES A  | ND ADDRESSES, SUSAN VANDERPOEL CIDARK  |
|---|--|
| Name  | Name By War  |
| Address   | Address AS HER ATTORNEY IN PAGE  |
|   | 149 Broadway, New York 6, New York   |
| Name  | Name   |
| Address   | Address  |
| Name  | Name   |
| Address   | Address  |
| STATE OF YOU YOU ) COUNTY OF her York )   |  |
| On this 27 day of <u>Au</u> appeared W. Buel Day as all, in last In Surar person described in and who execute and acknowledged to me that <u>L</u> execut | the delivered the foregoing instrument, ed the same as he free act and deed. |
| GIVEN UNDER MY HAND AND SEAL  | OF OFFICE, this 27 day of August, 19/1.                                      |
| My Commission expires: ISABEL S. LONGFELLO NOTARY PUBLIC, State of New  | York Notary UPublic  |
| No. 31-7592500  STATE OF Qualified in New York Country OF Country OF Country OF Country OF Country March 30, 19   | :  |
| COUNTY OF COULTER IN N.Y. CO. CISS. KYRE  | g.Off.   |
| Term Expires March 30, 19   | 152  |
| On this day ofto me n   | , 19 , before me appeared ersonally known, who, being by me duly ident of    |
| sworn, did say that he is the Pres  | ident of   |
| corporation by authority of its Board o   | as signed and sealed in behalf of said<br>f Directors, and said              |
| acknowledged said instrumet to be the f   | ree act and deed of said corporation.  |
| GIVEN UNDER MY HAND AND NOTAR   | IAL SEAL, this day of, 19  |
| My Commission expires:  |  |
|   | Not any Public   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same\_conform to the term-of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATURES A   | AND ADDRESSESALFRED CORNING CEARK   |
|--|---|
| Name   | Name Dy (1) Jeach to  |
| Address  | Address / / AS HIS ATTORNEY IN FACE   |
|  | 149 Broadway, New York 6, New York  |
| Name   | Name  |
| Address  | Address   |
| Name See   | None  |
| NameAddress  | NameAddress   |
|  |   |
| STATE OF Tusyole )   |   |
| COUNTY OF TONIS A GOVE   |   |
| On this 27 day of  | i + 195 hafara ma nansanally  |
| appeared by Bear of a steri for Twalker  | Connect to me known to be the and delivered the foregoing instrument, and the same as hi free act and deed. |
| person described in and who execute  | d and delivered the foregoing instrument,   |
| and acknowledged to me that execut   | ed the same as higher free act and deed.  |
| GIVEN UNDER MY HAND AND SEAL   | OF OFFICE, this 27 day of dugut, 1911.  |
| My Commission expired S. Longfellow NOTARY PUBLIC. State of New York   | Notary Public   |
| STATE OF Qualified in New York County COUNTY OF Con thest in N.Y. Co. Cike. 6. Reg. 01 Term Engines March 30, 1852   |   |
| COUNTY OF CONTRICT IN A CONTRICT OF CONTRI |   |
| Torra Espires Match 30, 1952   |   |
| On this day of   | , 19 , before me appeared versonally known, who, being by me duly ident of                                  |
| , to me p  | ersonally known, who, being by me duly  |
| and the second s |   |
| and that the seal affixed to said instr  | ument is the corporate seal of said   |
| corporation, and that said instrument we corporation by authority of its Board of  | as signed and sealed in behalf of said  |
| acknowledged said instrumet to be the f  | ree act and deed of said corporation.   |
| -  | HAL SEAL, this day of, 19   |
| My Commission expires:   |   |
|  | Notary Public   |
|  |   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

Namo

| Address  | Address<br>149 Broadway, New York 6, New York  |
|--|--|
| NameAddress  | Name<br>Address  |
| NameAddress  | Name<br>Address  |
| STATE OF New York ) COUNTY OF New York )                         |  |
| and acknowledged to me that $\frac{1}{2}$ execu                  | to me known to be the ed and delivered the foregoing instrument, ted the same as Li free act and deed.  OF OFFICE, this 27 day of August, 19V. |
|  | Notary Public  Notary Public  Notary Public  Notary Public  Notary Public  |
| On this day of, to me sworn, did say that he is the Pre          | , 19 , before me appeared personally known, who, being by me duly sident of  |
| and that the seal affixed to said inst                           | rument is the corporate seal of said was signed and sealed in behalf of said of Directors, and said  |
| GIVEN UNDER MY HAND AND NOTA                                     | RIAL SEAL, this day of, 19   |
| My Commission expires:   | Notary Public  |
| Autorithment delth fibritesinument-co-dualiti resterraphen-wasa- | novary runtic  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATURES  | AND ADDRESSES STEPHEN CARLTON PLARX, Jr.   |
|---|--|
|   | Name BY Track Have   |
| NameAddress   | Address AS HIS ATTURNEY IN FACT  |
| nuu 600   | 149 Broadway, New York 6, New York   |
|   | 123 Bloadway, New 101k C, New 101k   |
| Name  | Name   |
| Address   | Address  |
|   |  |
| Mama  | Veine  |
| Name<br>Address   | NameAddress  |
| NUUI 633  | Address  |
|   |  |
| STATE OF have york  |  |
| COUNTY OF Tens Green  |  |
| ) see   | auton Clark, 1. to me known to be the ed and delivered the foregoing instrument, |
| On this $\frac{1}{2}$ day of $\frac{2}{3}$  | gust, 191, before me personally  |
| appeared w. Deach Day as atty-in fact for stephen   | Carton Clark, J. to me known to be the   |
| person described in and who execute   | ed and delivered the foregoing instrument,                                       |
| and acknowledged to me that we execu-   | ted the same as ki free act and deed.  |
|   | OF OFFICE, this 27 day of August, 19vi.  |
| My Commission expires:  | 10abil S. Longfellow<br>Notaby Public  |
| ISABEL S. LONGFELLOW  | Notaby Public  |
| NOTABY PUBLIC, State of New Yor<br>No. 31-7592500   | k  |
| STATE OF Qualified in New York Count  |  |
| STATE OF Qualified in New York County COUNTY OF Cout, filed in N.Y. Co. Ciks. & Regio Term Expires Narch 30, 1952 | ff.  |
| Term Repires Narch 30, 1952   |  |
| On this day of  | , 19_, before me appeared  |
| , to me   | , 19 , before me appeared personally known, who, being by me duly sident of      |
| sworn, did say that he is the Pres  | sident of  |
|   |  |
| and that the seal affixed to said instru  | rument is the corporate seal of said   |
| corporation, and that said instrument   | was signed and scaled in behalf of said  |
| corporation by authority of its Board   | of Directors, and said   |
| acknowledged said instrumet to be the   | ree act and deed of said corporation.  |
| GIVEN UNDER MY HAND AND NOTAI   | RIAL SEAL, this day of, 19   |
| My Commission expires:  |  |
|   | Notary Public  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGNATURES A   | ND ADDRESSES  |
|--|---|
| Name   | Name / Jan A au   |
| Address  | Address   |
|  | New York 6. H. K.   |
| Name   | Name  |
| Address  | Address   |
| Name   | Name  |
| Address  | Address   |
| STATE OF Low york  COUNTY OF New York  |   |
| appeared whis 27 day of high   | to me known to be the d and delivered the foregoing instrument,           |
| and acknowledged to me that the execute  | ed the same as the foregoing instrument,                                  |
| GIVEN UNDER MY HAND AND SEAL   | OF OFFICE, this 27 day of August, 1971.                                   |
| ISABEL S. LONGFELD  My Commission expires: MOTARY PUBLIC, State of No. 31-7502500  No. 31-7502500  | Notary Public Notary Public   |
| STATE OF COUNTY OF TOTAL PROPERTY.   | 1952<br>1952  |
| COUNTY OF.   |   |
| On this day of, to me p  | , 19 , before me appeared ersonally known, who, being by me duly ident of |
| sworn, did say that he is the Pres   | ident of  |
| and that the seal affixed to said instr<br>corporation, and that said instrument we<br>corporation by authority of its Board of<br>acknowledged said instrumet to be the f | as signed and sealed in behalf of said of Directors, and said             |
| GIVEN UNDER MY HAND AND NOTAR  | TAL SEAL, this day of, 19   |
| My Commission expires:   |   |
|  | Notary Public   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| or successors in interest.   | Tract 19   |
|--|--|
| SIGNATURES I   | AND ADDRESSES  |
| Name Harlan M. Elly  | Name   |
| Address c/o R. W. Ellis  | Address  |
| 30 State Street, Boston 9, Mass.   |  |
| Name   | Name   |
| Address  | Name<br>Address  |
|  |  |
| Name   | Name   |
| Address  | Address  |
| aminus on  |  |
| STATE OF California  |  |
| COUNTY OF Los Angeles  |  |
| On this 29th day of August   | , 1953, before me personally   |
| appeared Harlan M. Ellis   | to me known to be the  |
| person described in and who execute  | to me known to be the ed and delivered the foregoing instrument,   |
| and acknowledged to me that he execut  | ted the same as his free act and deed.   |
|  |  |
| CIVEN UNDER MY HAND AND SEAL   | OF OFFICE, this 29th day of August ;1951.  |
| A STATE OF THE STA | Halerie T. Lice Notary Public  |
| My Commission expires:   | Valerie J. Accel   |
| October 26, 1951   | Novary Public  |
| STATE OF)  |  |
| COUNTY OF  |  |
|  |  |
| On this day of   | , 19 , before me appeared  |
| , to me p  | personally known, who, being by me duly  |
| sworn, did say that he is the Pres   | personally known, who, being by me duly sident of  |
| and that the seal affixed to said instr  |  |
| corneration and that said instrument   | was signed and sealed in behalf of said  |
| corporation by authority of its Board of   | of Directors and said  |
| acknowledged said instrumet to be the f  | free act and deed of said corporation.   |
| GIVEN UNDER MY HAND AND NOTAF  | RIAL SEAL, this day of , 19  |
| The second secon | The second secon |
| My Commission expires:   |  |
|  | Notary Public  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

mart 19

| SIGNATURES A  | AND ADDRESSES   |
|---|---|
| Name  | Name Kourners W. Cellys   |
| Address   | Name County W. Ellis Address  |
| Name  | Name  |
| Address   | Address   |
| Name  | NameAddress   |
| Address   | Address   |
| STATE OF) COUNTY OF   |   |
| On this 27th day of Aug appeared Raymond W. Ellis person described in and who execute and acknowledged to me that he execut | to me known to be the d and delivered the foregoing instrument, ed the same as his free act and deed. |
| GIVEN UNDER MY HAND AND SEAL  | OF OFFICE, this 27th day of August, 1951  |
| My Commission expires:  May 2 1958  | Mary of Mc Nally Nothery Public   |
| Thay 2, 1958  STATE OF COUNTY OF  |   |
| On this day of , to me p  | , 19 , before me appeared ersonally known, who, being by me duly ident of                             |
| - 1일 등 수의 기계를 보고 있다. 그 사람들은 100 kg (1985) - 10              |   |
| and that the seal affixed to said instruction, and that said instrument we corporation by authority of its Board o          | as signed and sealed in behalf of said<br>f Directors. and said                                       |
| acknowledged said instrumet to be the f   | ree act and deed of said corporation.   |
| GIVEN UNDER MY HAND AND NOTAR   | IAL SEAL, this day of, 19   |
| My Commission expires:  |   |
|   | Notary Public   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| SIGN   | NATURES AND ADDRESSES   |
|--|---|
| Name   | Name  |
| Address  | Address   |
| and the state of t |   |
| Name   | Name  |
| Address  | Address   |
| Name   | Name  |
| Address  | Address   |
|  |   |
| STATE OF Taxas COUNTY OF Dallas  |   |
| On this 28 day of appeared 20, person described in and who and acknowledged to me that   | to me known to be the executed and delivered the foregoing instrument, executed the same as he free act and deed. |
| GIVEN UNDER MY HAND A  | ND SEAL OF OFFICE, this 28 day of Aug ,1951   |
| My Commission expires:   | Notary Public  O. F. SIEVENS  |
| 6:1-53   | Notary Public   |
| STATE OF   | O. F. STEVENS   |
| COUNTY OF  | <del></del>   |
| A. 21.2  | 20  |
| On this day of _   | to me personally known, who, being by me duly   |
| sworn, did say that he is the  | President of  |
| and that the seal affixed to sa<br>corporation, and that said inst<br>corporation by authority of its  | id instrument is the corporate seal of said rument was signed and sealed in behalf of said                        |
| GIVEN UNDER MY HAND A My Commission expires:   | ND NOTARIAL SEAL, this day of, 19   |
| ah commissaton cybrigat  | Notary Public   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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SIGNATURES AND ADDRESSES

| Name  | Name Causter   |
|---|--|
| Address   | Address 149 Broadway,  |
|   | New York 6, N.Y.   |
| Name  | Name   |
| Address   | Address  |
| Name  | Name   |
| Address   | Address  |
| STATE OF New York ) COUNTY OF New North   | + 20\(\int_{1}\) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \   |
| and acknowledged to me that $\underline{\lambda}$ execution   | ed the same as he free act and deed.   |
| GIVEN UNDER MY HAND AND SEAL OF MY Commission expires ISABEL S. LONGFELLOW NOTARY PUBLIC, State of New Y  | OF OFFICE, this 27 day of dugust, 19/1.  Notary Public   |
| 110. 01-100000  | •  |
| Qualified in New York Count STATE OF Cest filed in N.Y. Co. Cles. & Acc.  | . Ott  |
| STATE OF Cert, filed in N.Y. Co. Clks. & Reg COUNTY OF Term Expires March 30, 195   | 2  |
| On this day of, to me possion, did say that he is the Pres  | , 19 , before me appeared ersonally known, who, being by me duly ident of  |
|   | The first of the second of the |
| and that the seal affixed to said instruction, and that said instrument we corporation by authority of its Board of acknowledged said instrumet to be the f | as signed and sealed in behalf of said<br>f Directors, and said  |
| GIVEN UNDER MY HAND AND NOTAR   | IAL SEAL, this day of, 19  |

Notary Public

My Commission expires:

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

|   | IGNATURES AND ADDRESSES HERRY R. Labourssa, Jr.   |
|---|---|
| Name<br>Address                                     | Name Ry Address AS HIS ATTORNEY IN FACT   |
|   | 149 Broadway, New York 6, New York  |
| No.   |   |
| NameAddress   | NameAddress   |
|   |   |
| Name  | Name  |
| Address   | Address   |
| ***************************************             |   |
| STATE OF Their york COUNTY OF New york              | )   |
| COUNTY OF New york                                  |   |
| On this $\lambda \gamma^{r_L}$ day of               | f angust, 1951, before me personally to me known to be the who executed and delivered the foregoing instrument, |
| appeared W. Beach Bay as atty in lad                | In Janual Labourse for to me known to be the  |
| person described in and v                           | who executed and delivered the foregoing instrument,  |
| and acknowledged to me that                         | he executed the same as his free act and deed.  |
| CIVEN UNDER MY HANI                                 | D AND SEAL OF OFFICE, this 2) day of August, 19-71.   |
| ISAREY, S. I  | LONGFELLOW  |
| My Commission expiragant Fill                       | C. State of New York / 2abel S. Longfellow 1-7592500 Notary Public  |
| No. 3 Qualified in N                                | 1-7592500 Notary Public   |
|   |   |
| STATE OF Cert, filed in N.Y. COUNTY OF Term Expires | March 30, 1912  |
|   |   |
| On this day of                                      | f, 19, before me appeared, to me personally known, who, being by me duly e President of                         |
|   | , to me personally known, who, being by me duly   |
| sworn, did say that he is the                       | President of  |
| and that the soal affixed to                        | said instrument is the corporate seal of said   |
| corporation, and that said in                       | nstrument was signed and scaled in behalf of said   |
| corporation by authority of i                       | its Board of Directors, and said  |
|   | to be the free act and deed of said corporation.  |
| CTUEN HUNDER MY UAME                                | D AND MOTARIAL SEAL this down of 20   |
| GIAEM CADEM NI UHME                                 | D AND NOTARIAL SEAL, this day of, 19  |
| My Commission expires:                              |   |
|   | Notary Public   |
|   |   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such Pights or interests do or shall apply, regardless of accual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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SIGNATURES AND ADDRESSES CHARLES E. MAIN

Notary Public

| NameAddress   | Name BY Gauls Kery Address AS HIS ATTORNEY IN FACT 149 Broadway, New York 6, kew York   |
|---|---|
| Name<br>Address   | Name<br>Address   |
| NameAddress   | Name<br>Address   |
| STATE OF LULYONE COUNTY OF Their HAVE   |   |
| appeared P. Sken a atty in fact person described in and who exe and acknowledged to me that L ex          | August, 191, before me personally  In Challe & Main, to me known to be the  detected and delivered the foregoing instrument,  executed the same as he, free act and deed. |
| My Commission expire SABEL S. LONGFER NO. 31-7592500  | SEAL OF OFFICE, this 2) day of August, 19vi<br>LLOW<br>New York last Sknowledow<br>Notary (Public   |
| STATE OF Cert, filed in N.Y. Co. Clks. COUNTY OF Term Expires March 30                                    | & ReAOff.   |
| On this day of, to sworn, did say that he is the  | , 19 , before me appeared me personally known, who, being by me duly President of   |
| and that the seal affixed to said corporation, and that said instrume corporation by authority of its Boa | instrument is the corporate seal of said<br>ent was signed and sealed in behalf of said   |
| GIVEN UNDER MY HAND AND I   | NOTARIAL SEAL, this day of, 19_   |
| My Commission expires:  |   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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SIGNATURES AND ADDRESSES

Lact 19

| Name   | Name Charles 1 home  |
|--|--|
| Address  | CHARLES J. NOURSE  |
| Name<br>Address  | Name NEW YORK CITY 5, N. Y.  |
| Name_Address_  | Name<br>Address  |
| STATE OF New York ) COUNTY OF New York   |  |
|  | to me known to be the ed and delivered the foregoing instrument, ted the same as <b>his</b> free act and deed.                             |
| CIVEN UNDER MY HAND AND SEAL My Commission expires:  | OF OFFICE, this I have a same of the state of New York  Notary Public Qualified in Broax County  |
| STATE OF COUNTY OF   | No. 03-1166500<br>Cerlificates filed in New York Co. Clk's<br>and Bronx and New York Co. Reg's Office<br>Commission Expires March 30, 1953 |
| On this day of, to me page 1.5 me page 2.5 me page 2.5 me page 3.5 m | , 19 , before me appeared personally known, who, being by me duly sident of  |
| and that the seal affixed to said instruction, and that said instrument a corporation by authority of its Board of acknowledged said instrumet to be the f   | was signed and sealed in behalf of said of Directors, and said   |
| GIVEN UNDER MY HAND AND NOTAR  | RIAL SEAL, this day of, 19   |

Notary Public

My Commission expires:

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| or successors in interest.   | Tract 19   |
|--|--|
| SIGNATUR   | ES AND ADDRESSES   |
| and deskey Et alewan   | Name   |
| ddress 40 Wall Street  | Address  |
| New York, N. Y.  |  |
| ame  | Name   |
| ameddress  |  |
| ame  | Name   |
| ddress   |  |
| TATE OF NEW YORK   |  |
| OUNTY OF NEW YORK  | <del></del>  |
|  | cuted and delivered the foregoing instrument, secuted the same as his free act and deed.  EAL OF OFFICE, this Is day of lung, 1957  Thomas P. Ourren |
| y commission expires;  | Notary Public THOMAS P. DUNN Notary Public, State of New Yo  |
| TATE OF  | Qualified in Bronz County No. 03-6118500   |
| OUNTY OF   | Certificates Filed in New York Co. and Bronn & New York Co. Reg's. Commission Expires March 30. 1  |
| On this day of   | me personally known, who, being by me duly   |
| , to   | me personally known, who, being by me duly President of  |
| worm, die ody ondo no is one   | 11 CONCORD OF  |
| corporation, and that said instrume<br>corporation by authority of its Boa |  |
| cknowledged said instrumet to be t   | he free act and deed of said corporation.  |
| GIVEN UNDER MY HAND AND N  | OTARIAL SEAL, this day of, 19  |
| y Commission expires:  |  |
| en e                                   | Notary Public  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| A SIGNATURES A   | ND ADDRESSES Track 19  |
|--|--|
| Name Cuffey Et aleunh<br>Address D Wall Street   | NameAddress  |
| Name Address   | NameAddress  |
| NameAddress  | Name<br>Address  |
| STATE OF NEW YORK ) COUNTY OF )  |  |
| appeared person described in and who execute and acknowledged to me that   | to me known to be the d and delivered the foregoing instrument, ed the same as free act and deed.  |
|  | OF OFFICE, this 28 day of lug, 1957  Thomas P. Dunn  Notary Public Notary Public, State of New York  |
| STATE OF   | Qualified in Bronx County<br>No. 83-6118590<br>Certificates Filed in New York Co. Clk's<br>and Bronx & New York Co. Reg's. Office<br>Commission Expires March 30, 1952 |
| On this day of, to me p sworn, did say that he is the Pres   | , 19 , before me appeared  |
| and that the seal affixed to said instr<br>corporation, and that said instrument w<br>corporation by authority of its Board o<br>acknowledged said instrumet to be the f | as signed and sealed in behalf of said<br>f Directors, and said  |
| GIVEN UNDER MY HAND AND NOTAR  | IAL SEAL, this day of, 19  |
| My Commission expires:   | Notary Public  |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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| SIGNA   | TURES AND ADDRESSES  |
|---|--|
| Name Jeonge Roberts Address 40 wale Street hew york 5, 2.4  | Name<br>Address  |
| NameAddress   | NameAddress  |
| Name<br>Address   | Name<br>Address  |
| STATE OF Lew York COUNTY OF hew York  On this /oth day of A appeared Lenge Retesto person described in and who and acknowledged to me that he | to me known to be the executed and delivered the foregoing instrument, executed the same as his free act and deed.   |
|   | D SEAL OF OFFICE, this 10th day of Jeptenber, 1951.  Collein Jostane ELLEEN J. O'HARE  Notary Public Notary Public, State of New York                              |
| STATE OF COUNTY OF  | Qualified in Kings County  Certificates filed in Kings Co. Regist  N.Y. Co. Clerk, N.Y. Co. Register  Commission Expires March 30, 1953                            |
| On this day of, sworn, did say that he is the   | , 19 , before me appeared<br>to me personally known, who, being by me duly<br>President of   |
| corporation, and that said instriction by authority of its  | d instrument is the corporate seal of said ument was signed and sealed in behalf of said Board of Directors, and said e the free act and deed of said corporation. |
| GIVEN UNDER MY HAND AN  | D NOTARIAL SEAL, this day of, 19   |
| Mr. Commission ownings.   |  |

Notary Public

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

| Name GIVII VIAL SIGNATURES A   | ND ADDRESSES  |
|--|---|
| Address hall street hew Miles, N.V.  | Address   |
| Name   | Name  |
| Address  | Address   |
| Name   | Name  |
| Address  | Address   |
| STATE OF Jew Jork COUNTY OF Jew Jork   | 10/5/ 1-6   |
| appeared Schward & Ch  | d and delivered the foregoing instrument,   |
| GIVEN UNDER MY HAND AND SEAL  My Commission expires:   | OF OFFICE, this / 2th day of August, 1956  You & the Super ONFINER  Notary Public State of New York |
| STATE OF   | No. 03-6440650  Qualified in Bronx County  Certificates filed with                                  |
| COUNTY OF  | Brenn, N.Y., Kings & Queens Co. Clerks<br>Bronn, N.Y., Nings & Queens Rey. Offices                  |
| On this day of   | , 19 , before me appeared ersonally known, who, being by me duly                                    |
| sworn, did say that he is the Pres   | ident of  |
| and that the seal affixed to said instruction, and that said instrument we corporation by authority of its Board of acknowledged said instrument to be the f | as signed and sealed in behalf of said<br>f Directors, and said                                     |
| GIVEN UNDER MY HAND AND NOTAR  | IAL SEAL, this day of, 19   |
| My Commission expires:   |   |
|  | Notary Public   |
|  | •   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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| Name 10 Nordon   | Name   |
|--|--|
| Address 1103 Tower let   | Address  |
| Name   | Name   |
| Address  | Address  |
|  |  |
| Name   | Name   |
| Address  | Address  |
| STATE OF TEX.  | `  |
| COUNTY OF DAMAS  |  |
| and acknowledged to me that ne   | to me known to be the executed and delivered the foregoing instrument executed the same as his free act and deed.  ID SEAL OF OFFICE, this 14 day of his 192   |
| MA-COUNTY STOFF OWN TLGS:  | 7 70110 1 444 (  |
| ary Public, Dallas County, Texas   | Monothy Public Joseph  |
| ary Public, Dallas County, Texas  commission Expires June 1, 1953  | Ndtary Public  |
| ary Public, Dallas County, Texas  Commission Expires June 1, 1953  STATE OF  COUNTY OF   | Ndtary Public  |
| On this day of   | to me personally known, who, being by me duly  |
| ory Public, Dallas County, Texas  Commission Expires June 1, 1953  STATE OF  COUNTY OF  On this day of   | to me personally known, who, being by me duly  |
| ommission Expires June 1, 1953  STATE OF  On this day of  sworn, did say that he is the  and that the seal affixed to sain   | to me personally known, who, being by me duly President of  d instrument is the corporate seal of said   |
| ommission Expires June 1, 1953  STATE OF  COUNTY OF  On this day of  sworn, did say that he is the  and that the seal affixed to said corporation, and that said instrict corporation by authority of its                                      | , 19 , before me appeared to me personally known, who, being by me duly President of dinstrument is the corporate seal of said rument was signed and sealed in behalf of said Board of Directors, and said |
| orm Public, Dallas County, Texas  commission Expires June 1, 1953  STATE OF  COUNTY OF  On this day of  sworn, did say that he is the  and that the seal affixed to said corporation, and that said instrict corporation by authority of its   | to me personally known, who, being by me duly President of  d instrument is the corporate seal of said rument was signed and sealed in behalf of said  |
| ommission Expires June 1, 1953  STATE OF  COUNTY OF  On this day of  sworn, did say that he is the  and that the seal affixed to said corporation, and that said instruction corporation by authority of its acknowledged said instrumet to be | , 19 , before me appeared to me personally known, who, being by me duly President of dinstrument is the corporate seal of said rument was signed and sealed in behalf of said Board of Directors, and said |

Notary Public

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Company of the Compan

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|   | × 0. 20'  |
|---|---|
| Name  | Name Lohn & Bain  |
| Address   | Address Gulf States Building  |
| *CONTRACTOR OF THE OWNER OF THE CONTRACTOR OF THE OWNER OF THE OWNER OWNER OF THE OWNER OWNER OWNER OWNER OWNER | Dallas, Texas   |
| Nomo  | Name Chan B Wood and  |
| Name<br>Address   | Name Address 507 01 amount  |
| 44/CC T C D D   | Address 507 Clermont Dallag Texas   |
|   |   |
| Name  | Name  |
| Address   | Address   |
|   |   |
|   |   |
| STATE OF TEXAS  |   |
| COUNTY OF DAYYAG  | <b>\</b>  |
| COUNTY OF DALLAS  |   |
| On this 12 than so sai  | tohan 1052 hadana na nanganali-   |
| on onis /2 day of Oct   | tober , 1951, before me personally  |
| appeared John S. Cain   | to me known to be the   |
|   | ecuted and delivered the foregoing instrument,                                    |
| and acknowledged to me that ne e  | executed the same as his free act and deed.                                       |
| My Commission expires:  | SEIL OF OFFICE, this 12 day of October, 1951.  Marcelle A. Colenta  Notary Public |
| TE OF TEXAS )   | Modify Public   |
| TEARD   |   |
| NTY OF DALLAS   |   |
|   |   |
| On this 15 th day of Octob  | ber , 19 51 , before me personally  |
| eared Elvan G. Wood   | dard to me known to be  |
| person(s) described in and who exec   | dard to me known to be cuted the foregoing instrument and acknowledged            |
| t he executed the same as   | his free set and deed.  |
|   |   |
| IN WITNESS WHEREOF, I have set my   | hand and seal of office on this 15th day  |
| October 19  |   |
|   |   |
|   |   |
|   |   |
|   | 9   |
|   | Faye Griffin  |
| Commission Expires:   | Notary Public in and for Dallas County, Texas                                     |

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#### SIGNATURES AND ADDRESSES

| Name                                       | Name In   |
|--|---|
| Address                                    | Address " Boy 122   |
|  | Farmington M.m  |
| None                                       | Name Albana I   |
| Name<br>Address                            | Name Address Ti   |
| Audi ess                                   |   |
|  | ( Claus m. 3  |
| Name                                       | Name  |
| Address                                    | Address   |
|  |   |
| STATE OF New Mexico                        |   |
| STATE OF New Mexico ) COUNTY OF San Juan ) |   |
| COUNTY OF DAIL OHAIL                       |   |
| On this 13th day of October                | , 19 <b>51</b> , before me personally to me known to be the |
| appeared S. D. Colvin                      | to me known to be the                                       |
| person described in and who execut         | ed and delivered the foregoing instrument,                  |
| and acknowledged to me that he execu       | ted the same as a free act and deed.                        |
|  | •   |
| GIVEN UNDER MY HAND AND SEAL               | OF OFFICE, this 13th day of October ,1951.                  |
|  | (a)(a) (0)  |
| My Commission expires:                     | XXX Glason IV   |
| October 26, 1953                           | Notary Public   |
| STATE OF New Mexico                        | ( )   |
| COUNTY OF Curry                            |   |
|  |   |
| On this 15 day of Octobe                   | r . 19 <sup>51</sup> before me appeared                     |
| J. H. Wilson to me                         | personally known, who, being by me duly                     |
| sworn, did say that he is the Pre          | personally known, who, being by me duly sident of           |
|  |   |
| and that the seal affixed to said inst     | rument 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                                      |
| acknowledged said instrumet to be the      | free act and deed of said corporation.                      |
| CTUEN HUNDD MY UMMO AND MOTA               | DIAI CDAI this se James Actahom 1681                        |
| OTABLA ONDER WI URBER HAD HOLD             | RIAL SEAL, this 15 day of October, 1951.                    |
| My Commission expires:                     | mayrece & Dilliner  |
| march 17.1955                              | Mayroca & Dilliner/<br>Notary Public                        |

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| SIGNATUR  | ES AND ADDRESSES  |
|---|---|
| Name_OC/Seck  | Name  |
| Address (20/20x 703.  | Address   |
| Wilmington, Calif   |   |
| Name  | Name  |
| Address   | Address   |
| Name  | Nama  |
| Address   | NameAddress   |
|   |   |
| STATE OF California)  |   |
| COUNTY OF ROS Augiles   |   |
| On this /7 day of Stlot   | to me known to be the   |
| appeared Office   | to me known to be the   |
| person described in and who executed and acknowledged to me that ke executed        | and dorriored one reregering rinter among                               |
|   |   |
| GIVEN UNDER MI BAND AND SEAL  | or orrios, ones / day of Say 1.   |
| ly Commission expires:  | OF OFFICE, this 17 day of Oct , 19v7.  Notary Public                    |
| 3/23/5-3<br>STATE OF  | notary Puome  |
| STATE OF COUNTY OF  |   |
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| , to me p   | , 19, before me appeared ersonally known, who, being by me duly dent of |
| sworn, did say that he is the President   | dent of   |
| and that the seal affixed to said instr   | ument is the corporate seal of said                                     |
| corporation, and that said instrument we<br>corporation by authority of its Board o | as signed and sealed in behalf of said                                  |
| acknowledged said instrument to be the  | free act and deed of said corneration.                                  |
| Given under my hand and notar   | ial seal this day of, 19  |
| dy Commission expires:  |   |
|   | Noteny Public   |
|   |   |

In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

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| on this 12 day of October  | to me known to be the and delivered the foregoing instrument,           |
| nerson described in and who executed   | and delivered the foregoing instrument                                  |
| and acknowledged to me that he execute   | d the same as Li free act and deed.                                     |
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| GIVEN UNDER MY HAND AND SEAL   | OF OFFICE, this 12 day of October 195%.                                 |
| My Commission expires:   | Settiset Intilison  |
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| corporation, and that said instrument w  | as signed and sealed in behalf of said                                  |
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| My Commission expires:   |   |
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Notary Public

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In consideration of the execution of the Unit Agreement for the Development and Operation of the Angels Peak Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, as may appear, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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|  | to me known to be the and delivered the foregoing instrument, d the same as his free act and deed. |
| GIVEN UNDER MY HAND AND SEAL   | OF OFFICE, this 24 day of October, 1951.   |
| ty Commission expires:   | Notary Public  |
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|  | , 19 , before me appeared ersonally known, who, being by me duly dent of                           |
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| and that the seal affixed to said instruction, and that said instrument we corporation by authority of its Board of acknowledged said instrument to be the   | as signed and sealed in behalf of said<br>f Directors, and said                                    |
| Given under my hand and notar  | ial scal thisday of,19   |
| ly Commission expires:   |  |
| Anna als friends ye ye als revisions are denoted as all also and also are also assure and assure an | Notary Public  |
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| Eltas                                    | GIGNATURES AND ADDRESSES   | نه ما      |
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| STATE OF New Mexico                      |  |            |
| COUNTY OF san Juan                       |  | •          |
| and acknowledged to me that the          | xecuted and delivered the foregoing instrument, executed the same as their ree act and deed.  D SEAL OF OFFICE, this 27 thay of Sept. , 1951 | .•         |
| My Commission expires:<br>April 12, 1953 | Notary Public  | <u>-lı</u> |
| STATE OF COUNTY OF                       | )  |            |
| COUNTY OF                                | <b>)</b>   |            |
| On thisday of,                           | to me personally known, who, being by me duly President of   |            |
| sworn, did say that he is the            | President of   | -          |
| corporation, and that said instr         | d instrument is the corporate seal of said ument was signed and sealed in behalf of said Board of Directors, and said                        |            |
| acknowledged said instrument to          | be the free act and deed of said cornoration.  |            |
| Given under my hand an                   | d notarial scal thisday of,19  | •          |
| My Commission expires:                   |  |            |

Notary Public

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| STATE OF Sew Mefice<br>COUNTY OF Sean Juan   | 2_{  |
| on this / P day of Se  | at 1957 . before me personally   |
| and acknowledged to me that ke ex  | to me known to be the cutoff and delivered the foregoing instrument, secured the same as 9 free act and deed.  |
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| corporation, and that said instrum<br>corporation by authority of its Bo   |  |
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IN THE MATTER OF THE APPLICATION OF STANOLIND OIL AND GAS COMPANY FOR THE APPROVAL OF THE ANGELS PEAK UNIT AGREEMENT EMBRACING 29,802.17 ACRES OF LAND IN TOWNSHIPS 27, 28, AND 29 NORTH, RANGES 10 AND 11 WEST, N.M.P.W., SAN JUAN COUNTY, NEW MEXICO.

The undersigned, Commissioner of Public Lands of the State of New Mexico, having considered the application of Stanolind Oil and Gas Company for approval of the Angels Peak Unit Agreement covering lands in San Juan County, New Mexico, described in said Agreement, and the undersigned having considered the aforesaid application and the evidence offered by the Petitioner at the hearing before the Oil Conservation Commission on the 23rd day of October , 1951, FINDS:

- 1. That said Angels Peak Unit Agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy.
- 2. That under the operation of the proposed Unit Agreement the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the area affected.
- 3. That the Agreement is in other respects in the best interests of the State of New Mexico.

Said Agreement is hereby approved.

Dated October 23, 1951, at Santa Fe, New Hexico.

Commissioner of Public Lands

#### 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 Urder 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 Angels Peak 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 | JAN | 2 | 2 | 1952 |  |
|-------|-----|---|---|------|--|
|       |     |   |   |      |  |

Acting Director, United States Geological Survey

J.O. SETH
A. K. MONTGOMERY
OLIVER SETH
WH. FEDERICI
JUSTIN T. REID

# SETH AND MONTGOMERY ATTORNEYS AND COUNSELORS AT LAW HI SAN FRANCISCO ST. SANTA FE, NEW MEXICO

February 28, 1952

Oil Conservation Commission Santa Fe New Mexico

Gentlemen:

Please find enclosed an approved copy of the Angel's Peak Unit Agreement located in San Juan County, New Mexico.

Very truly yours,

Olen Set

OS/mds

Enc.