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

October 28, 1952

COPY

Judge W. B. Foster
Phillips Petroleum Company
Box 1751
Amarillo, Texas

Dear Sir:

For your company's records we enclose two signed copies each of orders recently issued by this Commission in your San Juan Basin unit agreement cases heard on October 15, 1952. These are:

Case 417	-	Order R-202
Case 418		Order R-203
Case 419		Order R-204
Case 420		Order R-205

Very truly yours,

W. B. Macey
Chief Engineer

WBM:nr

BEFORE THE OIL CONSERVATION COMMISSION OF
THE STATE OF NEW MEXICO

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

CASE NO. 418
ORDER NO. R-203

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY, A DELAWARE
CORPORATION, FOR APPROVAL OF THE SAN
JUAN 29-5 UNIT AGREEMENT, EMBRACING
TOWNSHIP 29 NORTH, RANGE 5 WEST, NMPM,
RIO ARRIBA COUNTY, NEW MEXICO CONTAINING
22,521.54 ACRES.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on October 15, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 20th day of October, 1952, the Commission, a quorum being present, having considered said application and the evidence introduced in support thereof, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

SECTION 1. That this order shall be known as the

SAN JUAN 29-5 UNIT AGREEMENT ORDER

SECTION 2. (a) That the project herein referred to shall be known as the San Juan 29-5 Unit Agreement, and shall hereafter be referred to as the "Project."

(b) That the plan by which the Project shall be operated shall be embraced in the form of a unit agreement for the development and operation of the San Juan 29-5 Unit Area referred to in the Applicant's Application and filed with said application, and such plan shall be known as the San Juan 29-5 Unit Agreement Plan.

SECTION 3. That the San Juan 29-5 Unit Agreement Plan shall be, and hereby is, approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement this approval shall not be considered as waiving or relinquishing in any manner any rights, duties or obligations which are now, or may hereafter, be vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said San Juan 29-5 Unit Agreement, or relative to the production of oil or gas therefrom.

SECTION 4. (a) That the Unit Area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

All of Township 29 North, Range 5 West

Total unit area: 22,521.80 acres, more or less.

(b) The unit area may be enlarged or contracted as provided in said Plan.

SECTION 5. That the unit operator shall file with the Commission an executed original or executed counterpart of the San Juan 29-5 Unit Agreement within 30 days after the effective date thereof.

SECTION 6. That any party owning rights in the unitized substances who does not commit such rights to said unit agreement before the effective date thereof may thereafter become a party thereto by subscribing to such agreement or counterpart thereof, or by ratifying the same and if the owner of a working interest by joinder in the related unit operating agreement. The Unit operator shall file with the Commission within 30 days a duplicate original of any such counterpart or ratification.

SECTION 7. That this order shall become effective upon approval of said unit agreement by the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall immediately notify the Commissioner in writing of such termination.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

GUY SHEPARD, Member

R. R. SPURRIER, Secretary

BEFORE THE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

Santa Fe, New Mexico.
October 15, 1952

In the Matter of:

Phillips Petroleum Company's application for approval of its 30-5 unit agreement, which includes all of Township 30 N, Range 5 W, Rio Arriba County.

Phillips' application for approval of its 29-5 unit, which includes all of Township 29 N, Range 5 W, Rio Arriba County.

Phillips' application for approval of its 29-6 unit, which includes all of Township 29 N, Range 6 W, Rio Arriba County.

Phillips' application for approval of its 32-7 unit, which embraces 17, 828, 51 acres, more or less, in San Juan County, in Township 31 N, Range 7 W.

Cases No. 417, 418, 419, & 420 Consolidated.

TRANSCRIPT OF HEARING

E. E. GREESON
ADA DEARNLEY
Court Reporters
BOX 1202
PHONES 5-9422 AND 5-9546
ALBUQUERQUE, NEW MEXICO

Moved to:
Rooms 105-106
El Cortez Bldg.
323 So. 3rd St.

BEFORE THE

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

Santa Fe, New Mexico.
October 15, 1952.

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Phillips' application for approval of its 32-7 unit, which embraces 17, 828, 51 acres, more or less, in San Juan County, in Township 31 N. Range 7 W.

Cases No. 417, 418, 419, & 420 Consolidated.

TRANSCRIPT OF HEARING

(Notice of Publication in Cases 417,418,419,420 read by Mr. Graham)

MR. FOSTER: We would like to consolidate these cases.

MR. SPURRIER: You understand that orders issued in the case will be separate orders?

MR. FOSTER: Separate orders. I have some witnesses.

G. L. KNIGHT,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. FOSTER:

MR. FOSTER: I want to make this general statement for the record. We don't propose to go into any great detail about each one of these units. The agreements are all on record here and have been filed, and agreements contain all of the salient provisions. We have these witnesses here and when I finish, if there are any questions that the Commission wants to ask or any question that anybody else wants to ask, if they will just direct their questions why then the witness will be here that will answer the question. I think that will save time and probably bring our the different features better than attempting to put them on in the regular way.

Q State your name to the Commission, please.

A G. L. Knight, Bartlesville, Oklahoma.

Q By whom are you employed?

A Phillips Petroleum Company.

Q In what capacity?

A I am Division Geologist in charge of the San Juan Division and have general supervision of gas problems throughout the company.

Q Have you testified before the New Mexico Commission on other occasions?

A I have not.

Q Briefly state your educational qualifications as a geologist and your experience.

A I received a degree in engineering from the University of Missouri in 1917 and later went to the University of Wisconsin and received a degree of PHD in geology, in 1925. I taught geology at the University of Kansas from 1925 to 1935, at which time I was employed by the Phillips Petroleum Company.

Most of the time from 1935 until the summer of 1950 I was in Amarillo, Texas, as District Geologist in charge of the Panhandle District. The summer of 1950 I was transferred to Bartlesville, and since that time have served as District Geologist in charge of the Southwest Division for about two years, and within the past several months assumed my present position.

MR. FOSTER: Are those qualifications acceptable?

MR. SPURRIER: They are.

Q Mr. Knight, directing your attention there to the board on which five maps appear, will you just tell us what those maps are and what they represent, taking the larger map first and marking it as Phillips Petroleum Company's Exhibit No. 1.

(Witness complies)

(Marked Phillips Petroleum Company's Exhibit No. 1, for identification.)

A This map is a map on scale of about 1 to 16,000, showing the San Juan Basin of New Mexico and Colorado. Through this horizontal line is the State Line between Colorado and New Mexico. Indicated on this map are the units that have been formed in that area.

Q How many of those units are there?

A 11 I believe. Those units are indicated outlined in green and the name of each unit is shown on the map.

Q The proposed units are then shown on the map?

A The proposed units that we are asking for at this time are shown in red, in solid colors. The units that we have in mind for the future are shown outlined in red.

Q Will you tell us whether the areas covered by the proposed units, whether they are probably underlaid with gas formations?

A All the evidence that we have from wells that have been drilled in the area indicate that the gas bearing formations that we propose to unitize under these units are present underlying all these proposed units. There are variations in thickness and characteristics in places, but they are --

Q (Interrupting) Permeability and porosity, perhaps?

A (Continuing) --present throughout.

Q I have heard a good deal of discussion here about the shape of these units being units that cover townships rather than units that follow the geological entrances. Would you explain that for the record?

A It has long been established method by United States Geological Survey of forming units that will approximate in area and shape known geological structures. The structural conditions that exist in this area, of course, we are dealing with a tremendous basin area of which the San Juan Basin is one large part. To

the north of that is the Paradox Basin and they all are a part of the Triassic incline lying south and west of the mountain range. With those conditions we have the blanket deposition of sandstones covering great areas within those big basins.

The presence or absence of local geological structures are very hard to determine because of the fact that much of the area is overlain by formations which do not reflect the deeper structures, if they are present. Furthermore, our experience of drilling and production indicates that the presence or absence of local structures is not necessary for the accummulation of gas in this area, because throughout the greater portion of the San Juan Basin of New Mexico we have obtained gas from these formations.

Therefore, it seems that there is no point in trying to follow the old custom of confining in size and shape a unit to some local geological feature. For that reason, for convenience in description and in size the township type of unit was adopted and in conference with the men at the United States Geological Survey and the State men, the amount of interior drilling take was deemed necessary, was agreed upon and we are asking that these units be granted along these lines.

Q On the so-called township basis?

A Yes, sir.

Q What formations are probably included within the units, Mr. Knight, geological formations --

MR. GRAHAM: In descending order?

A In descending order the question as to whether or not, we do not know whether the Farmington sands, which are shallow sands and which are producing further west will be productive in this area or not. We do know that the Frutone formation will be productive, the Pictured Cliffs, the Mesa Verde; there is a very good possibility that there will be production in part of this area from the Tosato, the Dakota, and we yet have insufficient information about the deeper formations such as the Pennsylvanian and the Mississippian to know whether they will be productive or not. However, they will be present, and given local structures, they probably will be productive of oil or gas.

Q Turning to the smaller maps and going to the San Juan Unit No. 30-5, will you mark that as Phillips Petroleum Company's Exhibit No. 2?

(Marked Phillips Petroleum Company's Exhibit No. 2, for identification.)

Q What information do you have delineated on that map, Mr. Knight?

A This map shows the ownership of land within the Township 30 North, 5 West.

Q That is one of the proposed units?

A It is.

Q Separate units?

A It is. This unit is - we propose to be known by the name of San Juan Unit 30-5.

Q What is the distribution of ownership with respect to Federal and State and Fee and Patented land in that proposed unit?

A On this unit the Federal lands are shown in yellow, the State lands in the light orange, Fee and patented lands in blue.

Q How is that ownership distributed percentage-wise in that unit?

A Federal lands compose 84.03%; State land 8.12%, Fee and Patented land 7.85%.

MR. FOSTER: Just for the record here I want it to be shown that this unit appeare on the Docket Case Number as 417.

Q Now, have you made a determination with respect to this unit as to the amount of the ownership that has been committed to the unit by agreement?

A Do you mean ownership of leases or of the fee?

Q Well, of the leases that have been committed to the proposed unit?

A One hundred percent of the lease owners in this unit have agreed to unitize.

Q What percent of royalty ownership have agreed?

A Our last report, and this figure assumes that the State and Federal royalty will be committed to the unit. It also includes the royalty that are under the leases on the fee and patented land that Phillips Petroleum owns that has been committed. We do not have information upon the amount of the royalty of the fee lands under leases held by the other operators.

Q Will you give us those figures?

A That figure is 92.87%.

Q Give me that again.

A 92.87%.

Q Do you regard this as sufficient interest in the unit area to give reasonable effective control of operations in that proposed unit?

A Yes, sir.

Q Will you turn to the unit 29-5 and mark that small map, Phillips Petroleum Company's Exhibit No. 3?

(Witness complies)

(Marked Phillips Petroleum Company's Exhibit No. 3, for identification.)

MR. FOSTER: For the record I would like the record to show that unit 29-5 appears on the Docket as Case No. 418.

Q What have you delineated on that map, Mr. Knight?

A We have the same information, shown in the same colors on this map as was shown --

Q (Interrupting) On Exhibit 2?

A (Continuing) -- shown on Exhibit 2. That is the Federal land shown in yellow, the State in the light orange, the fee and patented lands in blue.

Q What is the distribution of the lands in that unit, percentagewise?

A Federal ownership is 80.55 percent, State lands 7.85 per-

cent. May I have the figure I - fee and patented lands 11.6 per cent.

Q Have you also broken down the percentage of royalty ownership and working interest that has been exhibited under that unit?

A I have.

Q Will you give us those figures?

A In this unit we have not as yet attained the agreement among all operators, so the figure that I give you on that is our latest report. The men are working on that problem at the present time and this figure will undoubtedly change. The latest report 93.35 percent of the lease owners in this proposed unit had signed the agreement.

Q What percentage of the royalty?

A Again this royalty figure is the State and Federal royalty plus the fee and the royalty under the fee lands owned by Phillips Petroleum Company that has joined the unit - 92.68 percent.

Q Do you regard those interests as sufficient to reasonably bring about effective control of operations in that unit?

A I do.

Q Now, will you turn to the smaller map covering the San Juan Unit 29-6. Mark that as Phillips Petroleum Company's Exhibit No. 4?

(Marked Phillips Petroleum Company's Exhibit No. 4, for identification.)

Q What information do you have appearing on that map, Mr.

Knight?

A On this map, the same as on Exhibits 2 and 3, the Federal lands are shown in yellow, the State lands in light orange, Fee and Patented lands in blue.

Q Percentagewise, what is the ownership in that unit?

A Federal - 84.03 percent, State lands - 8.12 percent, Fee and Patented lands - 7.85 percent.

MR. FOSTER: For the purpose of the record, I would like the record to show that this unit appears on the Docket here as Case No. 419.

Q Will you give us the breakdown on the working interest ownership and the royalty ownership committed that unit?

A Our latest figure on the working ownership - 83.83 percent of the owners of leases on this unit had agreed to the form of the unit. The royalty again consisting of the same figures as pointed out in the other two cases, 91.36 percent.

Q What was that working interest percentage figure again?

A The working interest is 83.83.

Q Do you regard that interest that you have described sufficient to reasonably make effective control of operations in that area?

A I do, and undoubtedly that figure --

Q (Interrupting) Will increase?

A (Continuing) -- will increase as we contact the others.

Q Will you go to the smaller map that is marked Unit 32-7. That will be Exhibit No. 5, Phillips Petroleum Company.

(Marked Phillips Petroleum Company's Exhibit No. 5, for identification.)

Q Just tell us what that map delineates, Mr. Knight.

A The Federal lands are shown in yellow, the State lands in light orange, the Fee and Patented lands in blue, as in the other cases.

Q How is it divided as to ownership, percentagewise?

A Federal lands make up 71.83 percent, State lands 10.27 percent, Fee and Patented lands 17.90 percent.

Q What percentage of the working interest and what percentage of the royalty interest as you have heretofore testified is committed to that unit?

A 99.55 percent of the working interest has been committed to the formation of the unit. The 4.2 percent of the basic royalty had been committed.

Q Regarding all of these units, Mr. Knight, I have heretofore directed your attention to the requisite provisions of the agreements prescribed in the statutes of the State of New Mexico. I am going to ask you to state whether, in your opinion, the agreements covering the proposed four units would tend to promote the conservation of oil and gas and better utilization of reservoir energy.

A In my opinion such agreements and unit operation would

tend to promote such conservation.

Q In your opinion under the operations proposed will the State of New Mexico receive its fair share of recoverable oil or gas in place under its lands in the different units?

A They will.

Q In your opinion, are the agreements in other respects so drawn as to be for the best interest of the State of New Mexico?

A Yes, sir.

MR. FOSTER: I believe that is all. If the Commission wants to ask any questions.

Q (By MR. GRAHAM) Mr. Knight, you listed in descending order the various producing, presumed to produce formations. How deep do you propose this unit to go?

A I believe that plan at the present time, - of course, to answer directly all substances underlying these proposed units will be unitized- -

Q That is all debatable?

A Yes, sir, but I think at this time the operating agreements provide for the development and operation of wells to penetrate and test down to and including the Mesa Verde, with one Dakato test to be drilled somewhere on these four units.

Q There is nothing in the present plan to go down to the Pennsylvanian?

A That is my understanding.

MR. SPURRIER: Any further questions of this witness? If

not this witness may be excused.

MR. CATRON: Just a second, I would like to ask a question. If the Commission please, I would like to ask a few questions, if I may. Do you want to know who I am appearing for? My name is Fletcher Catron, appearing for T. H. MacElvain and Forrest B. Miller.

Q (By MR. CATRON) This is purely an arbitrary set-up, isn't it, Mr. Knight? In other words, just taking a township as a unit is purely arbitrary?

A In what regard do you mean?

Q Taking that area as a square is arbitrary without regard to any structure, as you stated, because there are no, if you want to call them minor structures that have been established and the whole is an entire field?

A Yes, sir.

Q Is there any reason why some other form of unit could not be adopted and would not be equally advantageous?

A You mean form as to areal shape?

Q Yes.

A No, I see no reason why it could not be.

Q Is there any reason why one township could not be broken into more than one unit?

A I wouldn't say that you had to stop at a unit of one township. I do think this, that there is an advantage in not having the units too small because then operations would lose the

advantage of unit operations. If it would again approach, if we keep cutting the operations as it would be under each man operating his own property.

Q Doesn't the advantage to owners of a unit arrangement depend on the probabilities of production within the entire unit?

A Well, I believe in the manner in which this is set up that each man is entitled to the gas that is produced under his own lease.

Q What drilling has there been - taking 20-6 specifically?

A 20-6 is this unit here.

Q Yes, I think that is No. 4.

A Yes. I know that there has been a well completed in Section 6 and there are some other drilling going on there, but whether or not other wells have been completed or not I don't recall without the record.

Q Isn't it true, Mr. Knight, as far as you know, that such drilling as has been done has been limited to the western side of that township?

A I think that is true, yes.

Q Now, taking 29-5, what drilling --

A (Interrupting) I beg your pardon?

Q (Continuing) -- what drilling has been completed in that township?

A I beg your pardon - 29-5?

Q Yes.

A The drilling company drilled some core holes in that township showing that the Fruitland formation is productive.

Q Can you tell me in what part of that township?

A That would be adjacent and near to the town of Governador which is the south central part of the township.

Q So that actually you have an area which in width would be more than the width of the township laying between such drilling as there may have been in the vicinity of the Governador and such drilling as there has been in the westerly side of 29-6, isn't that correct?

A That may be true. I don't recall just the distance between tests there.

Q What I am trying to get at is why the desire or the desirability of blocking off 29-6 as one unit, 29-5 as one unit without regard to what may be disclosed to the west of 29-6 or to the east of 29-5?

A Well, to the east of 29-5 there is a proposal for another unit, and I think there is to be another unit proposed to the west of 29-6.

Q Actually as matters stand there is nothing more than the general thought or belief that this entire area is underlaid by possible oil bearing or gas bearing formations which leads to your beliefs that units should be made of townships as such. That is just the general thought that the whole thing is underlaid, isn't that correct?

A That is true. It is not based, our thinking is not based entirely on the drilling which is done in these two specific townships but the fact that there has been a great amount of drilling within this general area, and we know from deep tests that have been made that these formations do carry through there.

Q But there is nothing definite to outline anything in the way of individual structures within the area?

A That is true.

Q So that actually, when you lay it out this way, by townships, you are going along more or less on the speculative basis, aren't you?

A I think that there is no question that we have to include in any unitizing planned areas that we do not have proven by drilling wells.

Q Is there any need for immediate unitization, at this time, on the basis on which you have outlined it there? What is the particular hurry for it at this time?

A In my opinion, the drilling of wells as proposed under this unit plan will more adequately evaluate the acreage held by the State as well as other owners, than might develop if it were drilled under a plan of each individual drilling his own leases. Furthermore, with the development of the area as a whole we will not create large areas of low pressure that might be created if there was concentrated drilling in any one part of such an area.

Q ~~Going to another point, I gather~~ that ~~referring to 29-6~~

you had committments from 83.83 percent of - were those lease holders?

A Yes, sir.

Q And what form of those committments - are they in writing or by signing of instruments?

A They are by the signing of instruments, my understanding of it.

Q The remaining percentage of little less than 17 percent - have those people been contacted?

A That I can't tell you. That is being handled by the men of our land department.

MR. FOSTER: We have the information here. It will be available.

Q I wanted to know if there were protests and objections to unitization plan?

A I think there have been, in some cases.

Q You have no record as to the percentage of those who have protested?

A I do not, but perhaps it is available.

Q Is that equally true of the remaining units proposed, that there are those of whom you have no record now of whether they have protested or not?

A I, individually, do not know.

MR. CATRON: I think that is all.

RE-DIRECT EXAMINATION

By MR. FOSTER:

Q Anybody that happens to own any land in anyone of these proposed units, he doesn't have to come into the unit unless he wants to, does he?

A That is my understanding.

Q It is a voluntary arrangement?

A Yes, sir.

Q If the size or shape of the unit, or location of the proposed unit doesn't meet with any individuals approval why there is nothing compulsory about coming in?

A None whatever.

Q He can drill his own land if he likes?

A Yes.

Q As a matter of fact, he can drill his own land after he comes in, can he not?

A Yes, sir.

MR. FOSTER: I believe that is all.

MR. CATRON: I think you have covered the point I had in mind. The whole purpose of my questioning here was to lodge a protest in behalf of the two individuals that I represent, insofar as the acreage that they are interested in in that particular unit which is 29-6, except we want to make a record of it before the Commission.

MR. FOSTER: You don't have to come in unless you want to.

MR. SPURRIER: How much land is involved?

MR. CATRON: I would have to find it. I would like to have it appear that they do protest it in order to meet any future eventualities.

MR. GRAHAM: Mr. Foster, would you offer testimony as to the participating feature of the wells?

MR. FOSTER: Yes, sir, we have witnesses.

MR. SPURRIER: Are there any further questions of this witness?

MR. DAVIS: William Davis, representing Southern Union at this time.

EXAMINATION

By MR. DAVIS:

Q Mr. Knight, you testified, I believe, in San Juan Unit 29-6 that 83.83 percent working interest owners had joined that unit?

A That is my latest information.

Q I wanted to get the record straight on that percentage. I assume that includes Southern Union Gas as approximately 10 percent?

MR. FOSTER: No, it does not.

MR. DAVIS: I might state then for the record that Southern Union has approximately 10 percent interest in that particular unit. We have agreed to the unit on certain conditions, which are presently being met, I believe, will be completed within the next

few days. That arises by virtue of the fact that our leases are encumbered by an overriding royalty or payment out of production interest that is effected considerably by this unit operations. That is, the Western Natural Gas Company, Phillips and Southern Union and Western have been negotiating to work out a side arrangement or side agreement to protect the three companies in that instrument, and actually Southern Union has executed the document and delivered them on the condition that Western accept them and sign the document too. That is a condition on which they would be signed.

(Witness excused.)

CHARLES W. BINCKLEY

called as a witness, testified as follows:

DIRECT EXAMINATION

By MR. FOSTER:

Q State your name to the Commission, please.

A Charles W. Binckley.

Q Where do you reside?

A Bartlesville, Oklahoma.

Q By whom are you employed?

A Phillips Petroleum Company.

Q In what capacity, please?

A Chief Production Engineer of the Natural Gas Department.

Q In that capacity do you have some control or supervision over the San Juan Basin?

A Eventually it will have, when the wells are drilled there in the area.

Q Have you ever testified before the New Mexico Oil Conservation Commission?

A No, I have not.

Q For the record will you state what your educational qualifications and your professional experience has been?

A I am a graduate mechanical engineer from the University of Oklahoma, Bachelor of Science Degree, 1936, was awarded a professional enginering degree by - the same University about 1948, am a registered engineer in the State of Oklahoma. My experience since graduation from the University has been entirely with Phillips Petroleum Company in the line of the manufacture of natural gas line, estimation of reserves, reservoir engineering and matters having to do with the engineering of gas proration.

Q Study and development of production and allocation formulas and matters of that nature?

A Studies of the well performance and particularly the availability of gas from our producing areas.

Q I have called your attention heretofore to the statutory provisions of the State of New Mexico regarding the requisites of unit agreements insofar as the State is concerned, have I not?

A Yes, sir.

Q I want you - I will just ask you to state whether or not, in your opinion, the proposed unit agreements here will tend to

promote the conservation of oil or gas and the better utilization of reservoir energy?

A It is my opinion the unitization will do that.

Q In your opinion, under the proposed operation does the State of New Mexico receive its fair share of oil and gas?

A Yes, sir.

Q In your opinion, do these unit agreements in other respects provide for the best interest of the State of New Mexico?

A Yes, sir.

MR. FOSTER: I believe that is all.

MR. SPURRIER: Does anyone have a question of Mr. Bingley? If not the witness may be excused.

(Witness excused.)

R. F. ROUD

called as a witness testified as follows:

DIRECT EXAMINATION

By MR. FOSTER:

Q State your name please?

A R. F. Roud.

Q Where do you reside?

A Bartlesville, Oklahoma.

Q You are employed by the Phillips Petroleum Company?

A Yes, sir.

Q In what capacity?

A Division Landman for the San Juan Basin.

Q In that capacity will you just relate briefly what your relationship to the formation of these proposed units has been? What have you done and what are you supposed to do and what are you going to do in the future?

A In securing the preliminary approvals of the United States Geological Service and the State of New Mexico as to area and drilling requirements, preparation of the unit, and unit operating agreements, submitting these to the various working interest owners, lease owners, overriding royalty owners, royalty owners and carrying the unit through to final completion.

Q Mr. Graham indicated that he wanted to know something about the basis of the participation of the various interests in these different units. Can you enlighten him on that?

A Yes, sir.

Q Will you do so?

A On these four units, the formations to and including the Mesa Verde are on a half section running block, progressive participation basis. That is arrived at by drawing a line north and south through the center of a section, creating the east half and the west half of that particular section. As a well is drilled to one of the formations, to and including the Mesa Verde, and completing as a well, capable of producing in paying quantities, it creates the initial participating area for that zone.

Q That zone of production?

A That formation.

Q Yes.

A As a second well is drilled on another drilling block half section, and it is completed as a producer in paying quantities it comes into the participating area. That is, the ownership of that gas is shared equally between the working interest owners of those two half sections and progressively on for each zone.

Q How about the royalty owners?

A The royalty likewise participates.

Q On what basis does it participate?

A Prorated basis.

Q In proportion of the acreage owned by - bears to the total acreage in the participating area?

A Right.

Q That is true throughout each one of the units, is it not?

A That is a general plan that has been tentatively approved, for not only these but quite a number of other units.

MR. GRAHAM: When a unit is developed, Mr. Rowder, what provisions do you have for elimination of lands that prove non-productive? Will these always remain --

A (Interrupting) No.

MR. GRAHAM: (Continuing) -- in the unit?

A No, there is an automatic elimination provision in the unit agreement which provides that unless a part of each and every lease has production on it and allocated to it by being in a participating area, and the royalty owners under that lease is

drawing royalty, it is within 7 years, after 7 years eliminated from the unit. It is an automatic elimination provision, which obviously tends for rather rapid development of the unit.

Q Do you regard that as an advantage to unit operation?

A I do. It is developed in an orderly fashion and you have a limit there within which to establish production. It will be allocated to each and every lease in it.

MR. GRAHAM: What are your committments to the development? How fast you going to drill those wells?

A We are putting in one string of tools and they are at least on the locations on each one of the units at this very moment. The drilling requirement on the 35, 29-6 and 29-5 is five Mesa Verde tests, with a lapse of no longer than 30 days between the completion of the first well and the commencment of successing wells. In addition to that, with respect to these three units, and I wish to add to a statement that Mr. Knight made in that connection. There is a Dakato requirement within one year from the effective date of the unit on one of these four proposed units. That means five wells on each of these townships. There are seven required in this proposed one which we are now talking about, plus a Dakato well on one of the four units.

On 32-7 the drilling requirement to validate the unit is three Mesa Verde tests. Also spaced as to reason, we prove the production possibilities of these units and to enable the computation of reserves --

MR. GRAHAM: (Interrupting) Then the wells spread out from those?

A After the completion of the obligatory wells, as we call them, the required wells to validate the unit, you follow the normal United States Geological Service plan of unit operation by filing a plan of development, which you will have to approve. Unitization itself requires and looks to continuous development. As I say, we are assigning a string of tools to each of those units.

MR. SPURRIER: Are there any further questions of this witness, if not the witness may be excused.

MR. FOSTER: I believe that is all.

(Witness excused.)

MR. SPURRIER: Any further comments in this case?

MR. HOWELL: Ben Howell, representing El Paso Natural Gas Company. I may state that El Paso Natural Gas has joined these various units which Phillips is submitting here today, and is also organizing some of the nearby units in which El Paso will present a request for approval of unit agreement. We hope that the unit agreements submitted today are approved.

MR. SPURRIER: Anyone else? If not we will move on to the next case.

C E R T I F I C A T E

I HEREBY CERTIFY that the foregoing and attached transcript of hearing before the Oil Conservation Commission, State of New Mexico, at Santa Fe, October 15, 1952, in Cases Nos. 417, 418, 419, 420, is a true and correct record to the best of my knowledge, skill and ability.

Dated at Albuquerque, New Mexico, this_____day of_____, 1952.

_____
Reporter.

Case 4'8

September 23, 1948

COPY

Judge E. H. Foster
P.O. Box 1751
Amarillo, Texas

Re: San Juan 29-5 Unit
San Juan 29-6 Unit
San Juan 30-5 Unit
San Juan 32-7 Unit

Dear Sir:

This is to advise that I have examined the proposed Unit Agreements indicated in the caption hereof. Due to the general geological nature of the area involved see no objection to the form of the respective proposals.

Since I am an ex-officio member of the New Mexico Oil Conservation Commission, I shall withhold formal approval of the proposed Unit Agreements until the same are heard by the Oil Conservation Commission, and approved by that Commission on the basis of testimony adduced.

Very truly yours,

GUY SHEPARD
Commissioner of Public Lands

cc: Oil Conservation Commission

GLS:ca
9/16/52
8c

Case 418

APPLICATION FOR APPROVAL OF
SAN JUAN 29-5 UNIT AREA
RIO ARRIBA COUNTY, NEW MEXICO

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Comes the undersigned, Phillips Petroleum Company, a Delaware corporation with an operating office at Bartlesville, Oklahoma, and files herewith three copies of a proposed Unit Agreement for the development and operation of the San Juan 29-5 Unit Area, Rio Arriba County, New Mexico, and hereby makes application for the approval of said Agreement and Plan by the New Mexico Oil Conservation Commission as provided by law, and in support thereof shows:

1. That the Unit Area designated in said Unit Agreement covers all of Township 29 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, containing 22,521.54 acres, more or less. That 18,141.20 acres, or 80.55%, of the lands in said proposed Unit Area are lands of the United States and that 1,768.84 acres, or 7.85% of the Unit Area are lands of the State of New Mexico and that 2,611.5 acres, or 11.6%, of the Unit Area are patented or fee lands. That the Unit Area is more particularly described by the plat and schedule of ownership attached to the said Unit Agreement and made a part thereof as Exhibits A and B, respectively.

2. That lands in the State of New Mexico within the Unit Area are leased for oil and gas and the lessees thereof have consented to the said Unit Agreement. Applicant believes that all of the owners of interests in lands within the Unit Area will agree within a reasonable time to commit the same to the Unit Agreement. That said Unit Agreement is an agreed plan for the development and operation of said Unit Area which will tend to promote the conservation of oil or gas, prevention of waste and that said plan is fair to the royalty owners in said Unit Area.

3. That the Unit Area described in the proposed Unit Agreement has heretofore been designated by the Director of the United States Geological Survey as one proper for unitization and that all lands embraced therein are believed to be situated within the boundaries of the Blanco Gas Field.

4. That the undersigned, Phillips Petroleum Company, is designated as the Unit Operator in said Agreement and the Unit Operator is given the authority under the terms of said Agreement to carry on all operations which are necessary

for the exploration and development of the Unit Area for oil and gas, subject to the regulations of the Secretary of the Interior, the Commissioner of Public Lands of the State of New Mexico, the New Mexico Oil Conservation Commission and the terms of the respective leases. That said Unit Agreement requires that within sixty (60) days from the effective date thereof the Unit Operator shall begin to drill an adquate test well to test the Mesa Verde Formation. That continuous operations with not more than thirty (30) days of elapsed time between wells are required to be conducted until a total of five (5) test wells to the Mesa Verde or production at a lesser depth have been drilled at locations so spaced over the Unit Area as to determine so far as may be practicable the productive acreage and gas reserves in the Mesa Verde and shallower formations underlying the Unit Area. In addition to the aforesaid Mesa Verde tests, Unit Operator is required to commence operations for the drilling of a Dakota test well either on this Unit Area or lands within the boundaries of adjacent unit areas which have been proposed.

5. That said Unit Agreement has been approved as to form by the Acting Director, Geological Survey, United States Department of the Interior, and has been briefly reviewed with the State Geologist of the State of New Mexico and the attorney for the Commissioner of Public Lands and it is believed that the operations to be carried on under the terms thereof will promote the economical and efficient recovery of oil and gas to the end that the maximum yield may be obtained from the Unit Area, and that such Agreement will be in the interest of conservation and prevention of waste as contemplated by the Oil Conservation Statutes of the State of New Mexico.

6. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement and after the approval thereof by the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, an approved copy of said Agreement will be filed with the New Mexico Oil Conservation Commission.

WHEREFORE, the undersigned applicant respectfully requests that a public hearing be held on the matter of the approval and adoption of the said Unit Agreement as provided by the statutes of the State of New Mexico and the regulations of the New Mexico Oil Conservation Commission, and that upon said hearing said Unit Agreement be approved and adopted by the New Mexico Oil Conservation Commission.

PHILLIPS PETROLEUM COMPANY

By E H Foster

E. H. Foster, Division Chief Attorney
First National Bank Building
Amarillo, Texas P.O. Box 175

GLS:mle
8-4-52

UNIT OPERATING AGREEMENT
SAN JUAN 29 - 5 UNIT AREA

THIS AGREEMENT, made and entered into this ____day of _____, 1952, by and among Phillips Petroleum Company, a Delaware corporation, hereinafter sometimes referred to as "Unit Operator", and such other parties owning working interests subject to the Unit Agreement for the Development and Operation of the San Juan 29-5 Unit Area as may execute this agreement, hereinafter sometimes called "Nonoperators", all parties being sometimes referred to as "Working Interest Owners",

W I T N E S S E T H:

WHEREAS, the parties hereto are also parties to that certain Unit Agreement for the Development and Operation of the San Juan 29-5 Unit Area, County of Rio Arriba, State of New Mexico, hereinafter called the "Unit Agreement", embracing all of Township 29 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico, containing 22,521.54 acres, more or less, and

WHEREAS, the parties hereto, in accord with the provisions of Section 7 of the Unit Agreement, desire to provide for the apportionment of costs and benefits among Working Interest Owners and to establish related operating arrangements,

NOW THEREFORE, premises considered, the parties hereto mutually agree that:

1. Confirmation of Unit Agreement

The Unit Agreement, including the exhibits thereto, is hereby confirmed and adopted and made a part of this agreement. Terms employed in this agreement shall bear the same meaning as given them in the Unit Agreement. The unit area shall be developed and operated for the production and handling of unitized substances in accord with the Unit Agreement and this Unit Operating Agreement. In the event of any inconsistency or conflict between provisions of this agreement and the Unit Agreement, the Unit Agreement shall prevail.

2. Titles

(a) Representation of Ownership

Each of the parties hereto represents to all other parties hereto that its ownership of oil, gas and mineral interests in the unit area is correctly stated in the schedule attached as Exhibit B to the Unit Agreement.

In the event such representation of any party is erroneous or the title of any party hereto fails, in whole or in part, the interests of the parties hereunder shall be accordingly adjusted to the end that no party shall be credited with interests that it does not own. Parties contributing acreage to the unit and receiving credit hereunder therefor shall, subject to the provisions of Section 2(c) below, bear the entire loss occasioned by any failure of title or defect in their title or encumbrance thereon and shall save the other parties hereto harmless from any obligation or liability on account thereof. All title curative expense and all costs and expenses incurred in defending or establishing title to any interest in the unitized substances shall be borne by the party or parties hereto who claim such interest.

(b) Furnishing Title Data

Within fifteen (15) days following its execution of this agreement, each Working Interest Owner shall furnish to the Unit Operator copies of its leases, operating agreements or other documents upon which it relies as establishing its ownership of working interests, together with copies of its rental receipts or other evidence satisfactory to establish that such leases, agreements and/or other documents remain in full force and effect. It shall also furnish any title data in its possession relating to its working interest ownership, including the title opinion of its attorney and any curative instruments acquired in relation thereto. Where outstanding title requirements have not been satisfied, the Working Interest Owner whose title is affected shall proceed to satisfy such title requirements with due diligence and furnish proof of the satisfaction thereof to the Unit Operator.

(c) Examination of Title for Drilling

As a prerequisite to the drilling of any well hereunder, Unit Operator shall obtain a title opinion by a competent attorney or attorneys selected by it, based upon examination of complete abstract of title certfied to date and/or the official County and/or State or Federal records as well as examination of the material submitted pursuant to Section 2(b) above, approving title for drilling purposes to the half section drilling block (where the well is to be drilled to the Mesaverde or shallower formations) or to the appropriate spacing unit (where the well is to be drilled to formations below the Mesaverde) upon which the well is to be located;

ORI

provided, however, that Unit Operator shall not be required to re-examine title to any drilling block or spacing unit for the drilling of any second or subsequent well thereon. The party or parties owning working interests in such drilling block or spacing unit shall furnish such abstracts promptly as required and shall satisfy title requirements made by the examining attorney, at such party's or parties' sole expense, without delay in order that the drilling obligation stated in the Unit Agreement shall be timely performed. Costs of title examination shall be charged as a part of the cost of drilling the well. Approving opinion of title as a prerequisite of drilling may be waived upon approval of the owners of eighty per cent (80%) of the Working interest committed to the unit. Any party hereto interested in obtaining the drilling of a well may post a bond in form satisfactory to the Unit Operator in an amount equal to one and one-half times the estimated cost of the proposed well, conditioned to protect all parties hereto against any loss of their investment in the well by reason of title failure, whereupon the requirement herein for an approving opinion of title will be waived. If title subsequently fails to any tract or tracts, the title to which has been cleared for drilling under this section, the Working Interest Owner thereof shall bear the entire loss in participation in unitized substances produced after such title failure which would be attributable to the leasehold estate or working interest in such tract under the terms of this agreement, but shall not be obligated to save any parties hereto harmless from any other loss occasioned thereby except to the extent of any indemnity agreement which may have been executed as hereinabove provided.

3. Apportionment of Costs and Benefits

Except as herein otherwise expressly provided, all costs, expenses and liabilities accruing or resulting from exploration, development, operation and maintenance of the unitized land shall be borne, and all unitized substances produced hereunder and other benefits accruing hereunder shall be owned and shared, by the Working Interest Owners who have executed the Unit Agreement and this agreement, as follows:

(a) Costs and Benefits in Mesaverde and Shallower Formations

Costs and benefits accruing in the development and operation of any drilling block (as defined in Section 11 of the Unit Agreement) prior

to its admission into a participating area shall be borne and shared in the proportion that the acreage owned by each of such Working Interest Owners owning working interests in the drilling block bears to the total of working interests owned by all such Working Interest Owners owning working interests in the drilling block. Costs and benefits accruing or resulting from development and operation of any participating area shall be borne by such Working Interest Owners owning interests in such participating area in the same proportion that the interest owned by each bears to the total of interests owned by all such Working Interest Owners in said participating area. Except for the adjustment in investment in the field facilities as hereinafter provided, no adjustment of investment or previously incurred costs shall be made upon the admission of a drilling block into the participating area, but upon such admission all equipment used for the operations of the participating area shall thenceforth be owned by the Working Interest Owners in the enlarged participating area in the same proportions as provided herein for their sharing of costs and benefits. Notwithstanding the foregoing, however, when any drilling block is admitted to the participating area prior to the completion thereon of a well capable of producing unitized substances in paying quantities from the formation to which such participating area is applicable, Unit Operator shall comply with the obligation imposed by the Unit Agreement to drill a well thereon to the horizon from which production is being secured in the participating area, and all costs of drilling, completing, testing and equipping such well to produce shall be charged to and borne by such Working Interest Owners owning working interests in such drilling block in the proportions which the interests of each bear to the aggregate of all the interests of all such Working Interest Owners within said drilling block. Any such well shall be owned and operated for the benefit of parties owning interests in the participating area in the same manner as other wells in such participating area. Upon admission of a drilling block into a participating area, there shall be an adjustment of the cost of field facilities among all such Working Interest Owners in the enlarged participating area so that the cost of field facilities allocable to the enlarged participating area shall be borne by such Working Interest Owners in proportion to their participation in costs and benefits

of operation of the enlarged participating area. Where field facilities serve more than one participating area, costs and ownership thereof shall be allocated between participating areas on a well basis and shall be adjusted upon drilling of additional wells so that each participating area will bear such costs and own such field facilities in the proportion that the number of wells within such participating area, which upon their completion shall have been capable of producing unitized substances in paying quantities, bears to the total number of such wells within the unit area. No adjustment between participating areas shall be made on account of the cessation of production in paying quantities from any well or wells. "Field facilities", as that term is used in this section, shall mean facilities which are installed for serving the entire unit operation, such as, but not limited to, warehouses, field offices, camps, gathering systems, field tankage other than that serving a particular well or drilling block, power stations and power lines, water stations and water lines. Costs of field facilities shall be deemed to be the tangible and intangible costs thereof as reflected by the Operator's books, depreciated at the rate of four per cent (4%) per annum, or fractional portion thereof, up to the period an adjustment is required. In the event book costs cannot be determined on certain classifications of equipment, the current market prices in effect as of the date a drilling block is admitted to the participating area shall be used as a basis for pricing. Roads shall not be considered a part of Field Facilities. Costs of all road construction required for the drilling of the five Mesaverde test wells in accord with Section 9 of the Unit Agreement shall be allocated to the working interest owners owning working interest in the five Drilling Blocks upon which said test wells are drilled on an acreage basis. Roads required for the drilling of subsequent wells shall be charged as a part of the drilling costs and borne by the same party or parties as are required to pay the costs of drilling such wells. There will be no reallocation of road costs. In the event any well or wells capable of producing unitized substances in paying quantities shall have been completed prior to the effective date of this agreement, such well or wells shall be turned over to the Unit Operator for operation hereunder on the first day of the month following the said effective date of this agreement, and the half section drilling block on which each such well is located shall constitute or become a part of the participating area for the formation in which such well is completed. Likewise, if any Working Interest Owner shall have started any well but it shall not have been completed on the effective date of this

agreement, such Working Interest Owner shall proceed with due diligence to complete the drilling of such well and, if dry, to plug and abandon it or, if a producer, to test, complete and equip it to produce and then turn it over to the Unit Operator for operation hereunder. Adjustment for any such well or wells shall be only as hereinabove provided.

(b) Costs and Benefits in Formations Below the Mesaverde

The cost of drilling, equipping and completing the initial test well projected to a depth below the base of Mesaverde formation and the cost of plugging and abandoning same if a dry hole shall be paid by all of such Working Interest Owners each in the proportion that its ownership of working interests on an acreage basis within the unit area bears to the total of all such interests of such parties. Costs of drilling the second or any subsequent test well to formations lying below the Mesaverde, which is not required to be drilled by the terms of the Unit Agreement, shall be only in accord with an agreement to be reached by the parties participating in the drilling of such second or additional test wells. In the event any such test well so drilled shall encounter unitized substances in paying quantities so as to justify the establishment of a participating area or the enlargement of an existing participating area for the formation encountered, such participating area or enlargement shall be formed as provided in the Unit Agreement. On the establishment of any participating area, there shall be a retroactive adjustment of the cost of drilling, completing and equipping for production and operating of the said test well and of the cost of field facilities, to the end that the owners of working interests in the participating area newly established shall reimburse without interest the party or parties who paid for the costs and expenses of drilling, completing and equipping for production and operating the well less any income derived by said party or parties up to the date of settlement, and thereafter the costs incurred and benefits derived from the operation of the well shall be borne by and shall inure to the benefit of the Working Interest Owners in the participating area in proportion to their ownership of interests therein. On the enlargement of any participating area, there shall be an investment adjustment between the owners of working interests in the enlarged participating area, to the end that the investment within the enlarged participating area, including the investment in the allocated portion of field facilities, shall be paid for by the affected Working Interest Owners in the enlarged participating area in proportion to the interests of each therein and in

proportion to their shares in the costs of operation and revenue to be derived from the enlarged participating area, and also to the end that the parties who have previously paid said costs shall be reimbursed on the basis hereinafter set forth. The affected Working Interest Owners in the participating area before its enlargement shall receive credit for the intangible cost of drilling, completing and equipping for production all wells capable of producing unitized substances situated within said participating area. The costs to be so credited shall be measured by the average cost of drilling, completing and equipping for production wells of like character and depth in the field in a good and workmanlike manner at the time when said wells were drilled. Credit shall also be given for the casing and other tangible properties and facilities installed in the wells or used in connection with the operation thereof at a percentage of the original cost, such percentage to be determined as provided in the Accounting Procedure. The affected Working Interest Owners on any tract outside of the participating area that is to be admitted to the enlarged participating area shall likewise receive credit for the intangible cost of drilling, completing and equipping any wells on their respective lands so admitted, together with the value of the tangible equipment, facilities and structures located thereon and used in connection therewith, on the basis above set out. The sum total of all credit shall be the investment cost apportionable to the enlarged participating area. The investment adjustment shall be made by cash settlement among the Working Interest Owners through the Unit Operator. No credit shall be given for the previous cost of operating any wells or repairing or maintaining other property, nor shall there be any debit for or on account of production taken from wells prior to the effective date of the enlargement of the participating area.

4. Royalty and Other Payments Out of Production

One-eight (1/8) of all of the unitized substances produced hereunder, or the proceeds thereof, shall be set aside for the payment or delivery in kind, as the case may be, in accord with underlying leases and other documents requiring payment of royalties, by the Unit Operator or the Working Interest Owner in accord with Section 12 of the Unit Agreement. Where any working interest is burdened by royalties in excess of one-eight (1/8) or by overriding royalties,

oil payments or other payments out of production, the required payment in excess of 1/8 shall be borne by the owner of the working interest so burdened. Before receiving its proportionate share of the unitized substances produced hereunder or the proceeds thereof, each Working Interest Owner shall pay or secure the payment of any such excess royalties or other payments constituting a burden upon its working interest.

5. Rentals

Each Working Interest Owner whose interest is chargeable with rentals, minimum royalties in excess of the royalties on actual production, or other payments in the nature of rentals required to maintain its working interest rights, shall properly pay such rentals, minimum royalties or other payments. The inadvertent failure of any party to properly make such payments shall not subject such party to liabilities hereunder except to the extent hereinabove provided in the event of loss of title.

6. Test Wells

Unit Operator is hereby authorized and directed to carry out the drilling program outlined in Section 9 of the Unit Agreement. Subject to obtaining the necessary approval of State and Federal authorities as therein required, it is agreed that locations for the five (5) required Mesaverde test wells shall be as follows:

App. Cen. SW/4 Sec. 3, T29N, R5W;
App. Cen. SW/4 Sec. 6, T29N, R5W;
App. Cen. SW/4 Sec. 13, T29N, R5W;
App. Cen. SW/4 Sec. 17, T29N, R5W;
App. Cen. NE/4 Sec. 33, T29N, R5W.

Said wells shall be drilled in such sequence as may be determined by the Unit Operator. Location of the Dakota test well shall be determined by Unit Operator on the basis of geological data obtained in the drilling of Mesaverde wells on this and adjoining unit areas prior to the required date for commencement of operations for the drilling of said Dakota test well.

7. Determinations by Majority Vote

In any matter in which the action of the Unit Operator requires the concurrence of the working interest parties hereto or any of them, Unit Operator will be governed by the decision of the owners of a majority of the working interest in the participating area, or the nonadmitted drilling block, as the case may be, unless otherwise specified herein or in the Unit Agreement, determined

in the proportion that the acreage interest of each such party in the participating area or such affected drilling block bears to the total acreage interest in the participating area or affected drilling block. Matters affecting the unit area as a whole, shall be determined in accordance with the proportionate acreage interest as above defined in the entire unit area. In any case where one working interest party hereto holds such a majority in interest, but less than the full working interest in the area affected, his vote shall require the concurrence of one additional party in order to constitute the controlling vote.

In any case in which it is necessary to poll the working interest parties hereto, Unit Operator shall notify all affected Working Interest Owners in writing of the question for decision and its recommended course of action. Each such Working Interest Owner shall within ten (10) days of receipt of such notice advise Unit Operator in writing of its decision thereon. Within five (5) days thereafter Unit Operator shall notify each affected Working Interest Owner in writing of the result of such poll. In the event that any Working Interest Owner fails to advise Unit Operator in writing of its decision, within the 10-day period above provided, it shall be conclusively presumed that its decision is in accord with the course of action originally recommended by Unit Operator, except that, if the matter for decision is one where the nonresponding Working Interest Owner might elect, pursuant to the provisions of this agreement, not to participate originally in some element of cost or expense but instead to pay his share thereof out of production or the proceeds thereof, it shall be conclusively presumed that such nonresponding Working Interest Owner elects to follow that latter course.

The Unit Operator, except when otherwise required by governmental authority, shall not do any of the following without first obtaining the approval of such a majority interest, as provided above, in the affected participating area or drilling block or unit area, as the case may be:

(a) Make any expenditure in excess of Five Thousand Dollars ($5,000.00) other than normal operating expenses, except in connection with a well, the drilling of which has been previously authorized by or pursuant to this agreement; provided, however, that nothing in this paragraph shall be deemed to prevent Unit Operator from making an expenditure in excess of said amount

if such expenditure becomes necessary because of a sudden emergency which may otherwise cause loss of life or extensive damage to property. In the event of such emergency expenditure, Unit Operator shall, within fifteen (15) days after making such expenditure, give written notice to the other parties.

(b) Make any arrangement for the use of facilities owned by the Working Interest Owners in the operation and development outside the unit area or determine the amount of any charges therefor unless otherwise provided for in this agreement or in the Unit Agreement.

(c) Dispose of any major items of surplus material or equipment having original cost of One Thousand Dollars ($1,000.00) or more, other than junk. Any such item or items of less cost may be disposed of without such consent.

(d) Submit to the Supervisor, Commissioner or Commission any plan for further development of the unit area or any proposed expansion of the unit area.

(e) Abandon any well which is producing unitized substances.

Unit Operator shall not incur any costs or expenses for any single project costing in excess of Five Hundred Thousand Dollars ($500,000.00) without first obtaining the approval of the owners of eighty per cent (80%) of the working interests committed to the unit.

8. Drilling of Additional Wells

(a) Obligation Wells and Wells Mutually Agreed Upon

In addition to the required test wells, all other wells which Unit Operator is required to drill under the terms of the Unit Agreement or to comply with valid orders of governmental authorities having jurisdiction in the premises shall be drilled by Unit Operator for the account of the Working Interest Owners owning interests in the affected unit area, participating area or drilling block, as the case may be, as hereinabove provided. Unit Operator will also drill appropriate development wells within participating areas in accord with plans of development adopted by a majority vote of affected Working Interest Owners in accord with Section 7 above. Unit Operator will drill wells to the Mesaverde or any shallower formations at regular well locations outside of the applicable participating area upon

request of the Working Interest Owner or Owners owning one hundred per cent (100%) of the working interest within the drilling block upon which the well is to be located. Such wells shall be drilled in order of their request and approval by applicable governmental authorities.

(b) Other Wells

Unit Operator will not drill any well without the mutual consent of all the parties hereto other than as provided in Subsection (a) of this section 8, except as hereinafter provided. Any Working Interest Owner owning a part of the working interests in a drilling block desiring that a well be drilled thereon to the Mesaverde or any shallower formation outside of the participating area established hereunder for such formation, or any Working Interest Owner owning working interests in acreage constituting a spacing unit for wells drilled to any formation below the Mesaverde desiring that a well be drilled thereon to such deeper formation, shall so notify Unit Operator, specifying the proposed location, objective depth and estimated cost of such well. Upon receipt of such notice, the Unit Operator shall advise those other Working Interest Owners parties hereto who, under the provisions of this agreement, would be required to share the cost and risk of the proposed well. Each such party shall, by responsive notice given to the Unit Operator within thirty (30) days of receipt of the aforesaid notice, elect as to whether such party desires to join in the drilling of such well. Failure to respond within said 30 days shall be deemed an election not to join in the drilling of the proposed well. If all of said parties elect to join, the well shall be drilled for the account of all such parties in accord with the preceding provisions of this agreement. If less than all of such parties elect to join in the drilling of such well, Unit Operator shall, upon obtaining required governmental approvals, proceed with due diligence to drill such well at the sole cost and risk of the party or parties electing to share in the costs thereof, hereinafter called the "drilling parties". In the event any such well is a dry hole (and is not taken over for plug back or deepening), it shall be plugged and abandoned at the sole cost of the drilling parties. In the event such well is a producer, it shall be tested, completed and equipped to produce by the Unit Operator at the sole cost of the drilling parties,

and such drilling parties each in proportion to its contribution to the cost of drilling, testing, completing and equipping the well shall be entitled to receive the proceeds of production from the well or, if it is capable of producing in paying quantities, shall be entitled to receive the proceeds of production allocable to the interests admitted to the participating area on account of such well, after deducting therefrom all royalties, overriding royalties, production payments and one hundred per cent (100%) of the operating expenses attributable thereto, until said drilling parties shall have received therefrom one hundred fifty per cent (150%) of the costs of drilling, testing, completing and equipping said well to produce. For the purposes of this section, where a party takes in kind the proceeds of production from such a well shall be computed upon the same price basis as that employed for payment of royalties to the United States on comparable production from the unit area. When the drilling parties shall have been reimbursed for 150% of said costs as hereinabove provided, proceeds from the well shall thereafter be shared by the Working Interest Owners within the participating area in the manner stipulated in Section 3 above. Any amounts which may be realized from sale or disposition of the well or equipment thereon, or required in connection with the drilling, testing, completing, equipping and operating thereof, shall be paid to the drilling parties and credited against the total unreturned portion of said 150%, with the balance thereof, if any, to be divided as provided in Section 3 above among the parties owning the well. Locations of all wells drilled under this provision must be in accord with the spacing pattern adopted by the Unit Operator for the formation to which the well is projected.

9. Option to Take Over Wells

If any well drilled under this agreement is a dry hole and the party or parties owning the well are ready to abandon it but the well can be plugged back or deepened to a different formation, Unit Operator shall so notify the Working Interest Owners in the affected unit area, participating area or drilling block, as the case may be, and such parties shall have the right to take over said well and cause the Unit Operator to plug back or deepen it, as the case may be, and to complete it for the account of the parties owning working

interests in the unit area, participating area or drilling block, as the case may be, upon effecting an investment adjustment so as to reimburse the party or parties who shall have borne the cost of drilling said well for either their cost of drilling to the depth at which the well is taken over (computed in accordance with the Accounting Procedure attached hereto) or for the average cost of drilling from the surface to the formation in which the well is to be completed, whichever is the lesser amount. Working Interest Owners so notified hereunder shall respond as provided in Section 7. If one, but less than all, of the affected working interest parties elects to take the well over, then Unit Operator shall take it over and conduct the specified operation for the account of the electing party or parties, and such party or parties shall be entitled to recover 150% of their costs in acquiring, deepening or plugging back, testing and completing the well in the same manner as provided in Section 8(b) above; provided, however, that where fifty per cent (50%) of the affected Working Interest Owners elect to take the well over for use in satisfying the obligation to drill a test well hereunder, the well shall be drilled for the account of all of the affected Working Interest Owners. In the event any one well is completed as a paying producer in more than one formation, the Working Interest Owners of the respective participating areas established for such formations shall arrange for appropriate allocation of investment and operating costs of such well by separate agreement.

10. Charges for Drilling Operations

All wells drilled on the unit area shall be drilled on a competitive contract basis at the usual rates prevailing in the field. Unit Operator, if it so desires, may employ its own tools and equipment in the drilling of wells, but in such event the charge therefor shall not exceed the prevailing rate in the field and such work shall be performed by Unit Operator under the same terms and conditions as shall be customary and usual in the field in contracts of independent contractors who are doing work of a similar nature.

11. Access to Operations and Information

Representatives of each party hereto shall have free access to the entire unit area at all reasonable times to inspect and observe operations of every kind and character thereon. Each party hereto shall have access at all reasonable times to any and all information pertaining to wells drilled,

production secured, and to the books, records and vouchers relating to the operation of the unit area. Unit Operator shall, upon request, furnish to the other parties hereto daily drilling reports, true and complete copies of well logs and other data relating to wells drilled, and shall also, upon request, make available samples and cuttings from any and all wells drilled on the unit area.

12. Disposition of Production

Each of the parties hereto shall take in kind or separately dispose of its proportionate share of the unitized substances produced hereunder, exclusive of production which may be used in development and producing operations of the unit area and in preparing and treating oil for marketing purposes, and production unavoidably lost. In the event any party hereto shall fail to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the unitized substances, Unit Operator shall have the right for the time being and subject to revocation at will by the party owning same to purchase such unitized substances or to sell the same to others at not less than the market price prevailing in the area. Each party hereto shall be entitled to receive directly payment for its proportionate share of the proceeds from the sale of unitized substances produced, saved and sold from the unit area, and on all purchases or sales each party shall execute any division order or contract of sale pertaining to its interest. Any extra expenditure incurred by reason of the taking in kind or separate disposition by any party hereto of its proportionate share of the production shall be borne by such party.

13. Pipe and Other Tubular Goods

Notwithstanding any limitations of the Accounting Procedure, Exhibit A, during such times as tubular goods and other equipment are not available at the nearest customary supply point Unit Operator shall be permitted to charge the joint account of parties responsible hereunder for all tubular goods and other equipment transferred from Unit Operator's warehouse or other stocks to

the unit area for use on a particular participating area or drilling block, as the case may be, with such costs and expenses as may have been incurred in purchasing, shopping, and moving the required tubular goods and other equipment to the unit area; provided, however, that each affected Working Interest Owner shall be given the opportunity, in lieu of bearing its proportionate part of such costs, of furnishing in kind or in tonnage, as the parties may agree, its share of such tubular goods and other equipment required.

14. Advances

Each of the parties hereto shall promptly pay and discharge its proportionate part of all cost and expense on the basis set forth in the Accounting Procedure attached as Exhibit A. Unit Operator, at its election, may require the parties hereto to advance their respective proportion of development and operating costs according to the following conditions: On or before the first day of each calendar month, Unit Operator shall submit an itemized estimate of such costs for the succeeding calendar month to each of the parties hereto with a request for the payment of such party's proportionate part thereof. Within ten (10) days thereafter each of such parties shall pay, or secure the payment in a manner satisfactory to Unit Operator, such party's proportionate share of such estimate. Unit Operator shall credit each Working Interest Owner with the advances so made. Should any party fail to pay or secure the payment of such party's proportionate part of such estimate, the same shall bear interest at the rate of six per cent (6%) per annum until paid. Adjustments between estimates and actual costs shall be made by Unit Operator at the close of each calendar month and the accounts of the parties adjusted accordingly.

15. Operator's Lien

Unit Operator shall have a lien on the interest of each of the parties in the unit area, unitized substances produced therefrom, the proceeds thereof and the material and equipment thereon, to secure the payment of such party's proportionate part of the cost and expense of developing and operating the unitized lands and to secure the payment by any such party of such party's proportionate part of any advance estimate of such cost and expense. Unit Operator shall protect such property from all other liens arising from operations hereunder.

16. Insurance

Unit Operator, during the term hereof, shall purchase or provide protection comparable to that afforded under standard form policies of insurance for workmen's compensation with statutory limits, employer's liability insurance with a limit of $25,000, and general public liability insurance with limits of $30,000/$60,000. Unit Operator shall charge to the joint account an amount equal to the premium applicable to the protection so provided. All losses not covered by standard form policies of insurance for hazards set out above shall be borne by the parties hereto as their interests appear at the time of any loss.

17. Surrender

No party hereto shall surrender any of its working interests insofar as they relate to lands located within a participating area. However, should any party hereto at any time desire to surrender any of the oil and gas leases or operating agreements subject hereto, or any interest therein, insofar as they cover lands located outside such a participating area but within the unit area, it shall notify all other parties hereto in writing. Within thirty (30) days following receipt of such notice by the other parties hereto, the party desiring to surrender such working interests insofar as they affect such land may proceed to surrender the same if such right is reserved in the leases or operating agreement, unless any other party or parties hereto have, within said 30-day period, given written notice to the party desiring to surrender that they desire an assignment of said working interests insofar as they cover said land. In such event the party desiring to surrender shall assign, without express or implied warranty of title, and subject to existing covenants, contracts and reservations, all its interest in such working interests insofar as they cover such land and the wells, material and equipment located thereon, to the party or parties desiring an assignment. Thereupon such assigning party shall be relieved from all obligations thereafter accruing (but not theretofore accrued) hereunder with respect to the interest assigned. From and after the making of such assignment, the assigning party shall have no further interest in the property assigned but shall be entitled to receive from the assignees payment for its interest therein in an amount equal to the salvage value of any salvable material located on said land. If such assignment shall run in favor of more

than one party hereto, the interest covered shall be shared by such parties in the proportions that the interest of each party assignee in the lands committed to the Unit Agreement bears to the total interest of all parties assignee in lands committed to the Unit Agreement.

18. Taxes

Unit Operator shall, for the joint account, render for ad valorem tax purposes the entire working interests in the unit area of all parties hereto and all personal property used in connection with operations hereunder, or such part thereof as may at any time be subject to taxation. Unit Operator shall also pay all such ad valorem taxes, at the time and in the manner required by law, which may be assessed upon or against all or any portion of such working interests and personal property. Each party shall pay its proportionate part of the total taxes so paid and expenses incurred in connection with the rendering and payment thereof in accord with Accounting Procedure, Exhibit A. Nothing herein shall relieve any Working Interest Owner of the consequence of any loss of title occasioned by failure of the landowner to pay ad valorem taxes levied against the land to which its working interest relates.

19. Employees

The number of employees, the selection of such employees, the hours of labor and the compensation for services to be paid any and all such employees shall be determined by the Unit Operator. Such employees shall be the employees of Unit Operator.

20. Liabilities

The liability of the parties hereunder shall be several and not joint or collective. Each party shall be responsible only for its obligations as herein set out and shall be liable only for its proportionate share of the cost of developing and operating the unit area as determined by the provisions hereof.

21. Force Majeure

This agreement and the respective rights and obligations of the parties hereunder shall be subject to all valid and applicable State and Federal laws, rules, regulations and orders, and in the event this agreement, or any provision thereof, is or the operations contemplated thereby are found to be inconsistent with or contrary to any such law, rule, regulation or order, the latter shall be deemed to control and this agreement shall be regarded as modified accordingly

and as so modified shall continue in full force and effect. Unit Operator shall not be liable for any loss of property or of time caused by strikes, riots, fires, tornadoes, floods, inability to obtain tubular goods or other required materials or services, or for any other cause beyond the reasonable control of Unit Operator in the exercise of due diligence.

22. Notices

All notices that are required or authorized to be given hereunder shall be given in writing by United States mail or Western Union telegram, postage or charges prepaid, and addressed to the party to whom such notice is to be given at the address indicated for such party opposite its signature hereto. The originating notice to be given under any provision hereof shall be deemed given only when received by the party to whom such notice is directed, and the time for such party to give any response thereto shall run from the date the originating notice is received. The second or any subsequent responsive notice shall be deemed given when deposited in the United States post office or with the Western Union Telegraph Company with postage or charges prepaid.

23. Fair Employment Practices

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 subcontracts.

24. Unleased Interests

Should the owner of any unleased interest in lands lying within the unit area become a party to the Unit Agreement and this agreement, such unleased interest shall be treated, for all purposes of this agreement, as if there were an oil and gas lease covering such unleased interest on a form providing for the usual and customary one-eighth (1/8) royalty and containing the usual and customary "lesser interest clause". This agreement shall in no way affect the right of the owner of any such unleased interest to receive an amount or share of unitized substances equivalent to the royalty which would be payable or due under the terms of the Unit Agreement if such unleased interest were subject to such an oil and gas lease.

25. Effective Date and Term

This Unit Operating Agreement shall become effective as of the effective date of the Unit Agreement and shall remain in full force and effect during

the life of such Unit Agreement. The terms hereof shall be considered as covenants running with the ownership of working interests committed hereto and shall be binding upon the heirs, personal representatives, successors and assigns of the parties hereto.

26. Execution by Counterparts

This agreement may be executed in counterparts with the same force and effect as if all parties executing any counterpart hereof had executed one original document. It shall be binding upon all parties executing any counterpart hereof whether or not signed by all parties listed below as owning working interests. Any party owning working interests within the unit area may execute this agreement at any time prior to its effective date. Any such Working Interest Owner desiring to join subsequent to the effective date hereof shall be permitted to join only in accord with such terms and conditions as may then be agreeable to the Unit Operator.

EXECUTED as of the day and year first above written.

Attest:

Assistant Secretary

Phillips Building
Bartlesville, Oklahoma

PHILLIPS PETROLEUM COMPANY

By _____
Vice President

UNIT OPERATOR AND WORKING INTEREST OWNER

Attest:

Assistant Secretary

Dallas, Texas

GENERAL AMERICAN OIL COMPANY OF TEXAS

By _____
Vice President

Attest:

Assistant Secretary

Bassett Tower
El Paso, Texas

EL PASO NATURAL GAS CO.

By _____
Vice President

Attest:

~~Assistant~~ Secretary

First National Bank Building
Tulsa, Oklahoma

SUNRAY OIL CORPORATION

By _____
Vice President

Attest:

~~Assistant~~ Secretary

White Building
Roswell, New Mexico

SOUTHERN PETROLEUM EXPLORATION, INC.

By _____
~~Vice~~ President

Attest:

~~Assistant~~ Secretary

~~Fifth Floor K.F.H. Building~~
321 W. Douglas
Wichita, Kansas

WOOD RIVER OIL & REFINING CO., INC.

By _____
Vice President

Attest:

Assistant Secretary

Fair Building
Fort Worth, Texas

STANOLIND OIL AND GAS COMPANY

APPROVED

By _____
Vice President

Witness:

_____

Address _____

_____
Tom Bolack

Witness:

_____

Address:_____

_____
Forrest B. Miller

Witness:

_____

Address: _____

_____
Hazel Bolack

Witness:

_____

Address:_____

_____

WORKING INTEREST OWNERS

EXHIBIT "A"

Model Form-PASO-1949-1

Attached to and made a part of Unit Operating Agreement covering San Juan Unit 29-6 Rio Arriba County, New Mexico

ACCOUNTING PROCEDURE

(UNIT AND JOINT LEASE OPERATIONS)

I. GENERAL PROVISIONS

1. **Definitions**
The term "joint property" as herein used shall be construed to mean the subject area covered by the agreement to which this "Accounting Procedure" is attached.
The term "Operator" as herein used shall be construed to mean the party designated to conduct the development and operation of the leased premises for the joint account.
The term "Non-Operator" as herein used shall be construed to mean any one or more of the non-operating parties.

2. **Statements and Billings**
Operator shall bill Non-Operator on or before the last day of each month for its proportionate share of costs and expenditures during the preceding month. Such bills will be accompanied by statements, reflecting the total costs and charges as set forth under Sub-Paragraph A.1 below:
A. Statement in detail of all charges and credits to the joint account.
B. Statement of all charges and credits to the joint account, summarized by appropriate classifications indicative of the nature thereof.
C. Statements, as follows:
(1) Detailed statement of material ordinarily considered controllable by Operators of oil and gas properties;
(2) Statement of all other charges and credits to the joint account summarized by appropriate classifications indicative of the nature thereof; and
(3) Statement of any other receipts and credits.

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

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

II. DEVELOPMENT AND OPERATING CHARGES

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

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

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

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

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

5. **Moving Surplus Material from Joint Property**
Moving surplus material from the joint property to outside vendees, if sold f.o.b. destination, or minor returns to Operator's warehouse or other storage point. No charge shall be made to the joint account for moving major surplus material to Operator's warehouse or other storage point for a distance greater than the distance to the nearest reliable supply store or railway receiving point, except by special agreement with Non-Operator; and no charge shall be made to the joint account for moving material to other properties belonging to Operator, except by special agreement with Non-Operator.

6. **Use of Operator's Equipment and Facilities**
Use of and service by Operator's exclusively owned equipment and facilities as provided in Paragraph 4, of Section III, "Basis of Charges to Joint Account."

7. **Damages and Losses**
Damages or losses incurred by fire, flood, storm, or any other cause not controllable by Operator through the exercise of reasonable diligence. Operator shall furnish Non-Operator written notice of damage or losses incurred by fire, storm, flood, or other natural or accidental causes as soon as practicable after report of the same has been received by Operator.

8. **Litigation, Judgments, and Claims**
All costs and expenses of litigation, or legal services otherwise necessary or expedient for the protection of the joint interests, including attorney's fees and expenses as hereinafter provided, together with all judgments obtained against the joint account or the subject matter of this agreement; actual expenses incurred by any party or parties hereto in securing evidence for the purpose of defending against any action or claim prosecuted or urged against the joint account or the subject matter of this agreement.
   A. If a majority of the interests hereunder shall so agree, actions or claims affecting the joint interests hereunder may be handled by the legal staff of one or more of the parties hereto, and a charge commensurate with the services rendered may be made against the joint account, but no such charge shall be made until approved by the legal department of or attorneys for the respective parties hereto.
   B. Fees and expenses of outside attorneys shall not be charged to the joint account unless authorized by the majority of the interests hereunder.

9. **Taxes**
All taxes of every kind and nature assessed upon or in connection with the properties which are the subject of this agreement, the production therefrom or the operation thereof, and which taxes have been paid by the Operator for the benefit of the parties hereto.

10. **Insurance**
   A. Premiums paid for insurance carried for the benefit of the joint account, together with all expenditures incurred and paid in settlement of any and all losses, claims, damages, judgments, and other expenses, including legal services, not recovered from insurance carrier.
   B. If no insurance is required to be carried, all actual expenditures incurred and paid by Operator in settlement of any and all losses, claims, damages, judgments, and any other expenses, including legal services, shall be charged to the joint account.

11. **District and Camp Expense**
A proportionate share of the salaries and expenses of Operator's District Superintendent and other general district or field employees serving the joint property, whose time is not allocated direct to the joint property, and a proportionate share of maintaining and operating a district office and all necessary camps, including housing facilities for employees if necessary, in conducting the operations on the joint property and other leases owned and operated by Operator in the same locality. The expense of, less any revenue from, these facilities shall include depreciation or a fair monthly rental in lieu of depreciation on the investment. Such charges shall be apportioned to all leases served on some equitable basis consistent with Operator's accounting practice.

12. **Overhead**
Overhead charges, which shall be in lieu of any charges for any part of the compensation or salaries paid to managing officers and employees of Operator, including the division superintendent, the entire staff and expenses of the division office located at _____, and any portion of the office expense of the principal business office located at _____, but which are not in lieu of district or field office expenses incurred in operating any such properties, or any other expenses of Operator incurred in the development and operation of said properties; and Operator shall have the right to assess against the joint property covered hereby the following overhead charges:
   A. $_____ per month for each drilling well, beginning on the date the well is spudded and terminating when it is on production or is plugged, as the case may be, except that no charge shall be made during the suspension of drilling operations for fifteen (15) or more consecutive days.
   B. $_____ per well per month for the first five (5) producing wells.
   C. $_____ per well per month for the second five (5) producing wells.
   D. $_____ per well per month for all producing wells over ten (10).
   E. In connection with overhead charges, the status of wells shall be as follows:
      (1) In-put or key wells shall be included in overhead schedule the same as producing oil wells.
      (2) Producing gas wells shall be included in overhead schedule the same as producing oil wells.
      (3) Wells permanently shut down but on which plugging operations are deferred, shall be dropped from overhead schedule at the time the shutdown is effected. When such wells are plugged, overhead shall be charged at the producing well rate during the time required for the plugging operation.
      (4) Wells being plugged back or drilled deeper shall be included in overhead schedule the same as drilling wells.
      (5) Various wells may be shut down temporarily and later replaced on production. If and when a well is shut down (other than for proration) and not produced or worked upon for a period of a full calendar month, it shall not be included in the overhead schedule for such month.
      (6) Salt water disposal wells shall not be included in overhead schedule.

F. The above overhead schedule on producing wells shall be applied to individual leases; provided that, whenever leases covered by this agreement are operated as a unitized project in the interest of economic development, the schedule shall be applied to the total number of wells, irrespective of individual leases.

G. The above specific overhead rates may be amended from time to time by agreement between Operator and Non-Operator if, in practice, they are found to be insufficient or excessive.

13. **Warehouse Handling Charges** None

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

III. BASIS OF CHARGES TO JOINT ACCOUNT

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

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

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

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

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

4. **Operator's Exclusively Owned Facilities**
The following rates shall apply to service rendered to the joint account by facilities owned exclusively by Operator:

A. Water service, fuel gas, power, and compressor service: At rates commensurate with cost of providing and furnishing such service to the joint account but not exceeding rates currently prevailing in the field where the joint property is located.

B. Automotive Equipment: Rates commensurate with cost of ownership and operation. Such rates should generally be in line with schedule of rates adopted by the Petroleum Motor Transport Association, or some other recognized organization, as recommended uniform charges against joint account operations and revised from time to time. Automotive rates shall include cost of oil, gas, repairs, insurance, and other operating expense and depreciation; and charges shall be based on use in actual service on, or in connection with, the joint account operations. Truck, tractor, and pulling unit rates shall include wages and expenses of driver.

C. A fair rate shall be charged for the use of drilling and cleaning-out tools and any other items of Operator's fully owned machinery or equipment which shall be ample to cover maintenance, repairs, depreciation, and the service furnished the joint property; provided that such charges shall not exceed those currently prevailing in the field where the joint property is located.

D. Whenever requested, Operator shall inform Non-Operator in advance of the rates it proposes to charge.

E. Rates shall be revised and adjusted from time to time when found to be either excessive or insufficient.

IV. DISPOSAL OF LEASE EQUIPMENT AND MATERIAL

The Operator shall be under no obligation to purchase interest of Non-Operator in surplus new or secondhand material. Derricks, tanks, buildings, and other major items shall not be removed by Operator from the joint property without the approval of Non-Operator. Operator shall not sell major items of material to an outside party without giving Non-Operator an opportunity either to purchase same at the price offered or to take Non-Operator's share in kind.

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

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

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

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

V. BASIS OF PRICING MATERIAL TRANSFERRED FROM JOINT ACCOUNT

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

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

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

3. **Good Used Material**
Good used material (Condition "B"), being used material in sound and serviceable condition, suitable for reuse without reconditioning,
   A. At 75% of current new price if material was charged to joint account as new, or
   B. At 75% of current new price less depreciation consistent with their usage on and service to the joint property, if material was originally charged to the joint property as secondhand at 75% of new price.

4. **Other Used Material**
Used Material (Condition "C"), being used material which
   A. After reconditioning will be further serviceable for original function as good secondhand material (Condition "B"), or
   B. Is serviceable for original function but substantially not suitable for reconditioning,
at 50% of current new price.

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

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

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

VI. INVENTORIES

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

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

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

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

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

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

STATE OF Oklahoma)
) SS.
COUNTY OF Washington)

On this 8th day of September, 1952, before me appeared C. O. Stark, to me personally known, who, being by me duly sworn, did say that he is Vice President of Phillips Petroleum Company, a corporation, and that the seal affixed to said instrument is the corporation 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 that said C. O. Stark acknowledged said instrument to be the free act and deed of said corporation.

Mueta Rinehart
Notary Public

My commission expires:

August 1, 1955

STATE OF Texas)
) SS.
COUNTY OF El Paso)

On this 16th day of September, 1952, before me appeared C. L. Perkins, to me personally known, who, being by me duly sworn, did say that he is Vice President of EL PASO NATURAL GAS COMPANY, a corporation, and that the seal affixed to said instrument is the corporation 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 that said C. L. Perkins acknowledged said instrument to be the free act and deed of said corporation.

Bernard S. Billingsley
Notary Public

My commission expires:
BERNARD S. BILLINGSLEY
Notary Public, in and for El Paso County, Texas
My commission expires June 1, 1953

STATE OF Texas)
) SS.
COUNTY OF Dallas)

On this 17 day of Sept., 1952, before me appeared M E Nilsen, to me personally known, who, being by me duly sworn, did say that he is ___ President of GENERAL AMERICAN OIL COMPANY OF TEXAS, a corporation, and that the seal affixed to said instrument is the corporation 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 that said M E Nilsen acknowledged said instrument to be the free act and deed of said corporation.

Mary Jane Rice
Notary Public

My commission expires:

6-1-53

STATE OF West Va.)
) SS.
COUNTY OF Tyler)

On this 26 day of Sept, 1952, before me appeared Paul W. Neuenschwander to me personally known, who, being by me duly sworn, did say that he is President of SOUTHERN PETROLEUM EXPLORATION, Inc a corporation, and that the seal affixed to said instrument is the corporation 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 that said Paul W. Neuenschwander acknowledged said instrument to be the free act and deed of said corporation.

B. L. Stanley
Notary Public

My commission expires:
JUNE 13, 1962

STATE OF Kansas)
) SS.
COUNTY OF Sedgwick)

On this 13 day of October, 1952, before me appeared H. G. Williams to me personally known, who, being by me duly sworn, did say that he is Vice President of WOOD RIVER OIL & REFINING CO., INC., a corporation, and that the seal affixed to said instrument is the corporation 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 that said H. G. Williams acknowledged said instrument to be the free act and deed of said corporation.

Emma M. Hirst
Notary Public

My commission expires:
My Commission Expires Feb. 7, 1955

STATE OF OKLAHOMA)
COUNTY OF TULSA)

On this 10th day of October, 19 52, before me appeared A. L. Selliday, to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANOLIND OIL AND 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 A. L. Selliday acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 10th day of October, 19 52.

My commission expires:
My Commission Expires October 4, 1955

Maxine McAdams
Notary Public

STATE OF _____)
) SS.
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 ____President of _____, a corporation, and that the seal affixed to said instrument is the corporation 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 that said_____acknowledged said instrument to be the free act and deed of said corporation.

_____
Notary Public

My commission expires:

_____

STATE OF OKLAHOMA)
) SS.
COUNTY OF TULSA)

On this 27th day of October, 19 52, before me appeared H. O. HARDER, to me personally known, who, being by me duly sworn, did say that he is Vice President of Sunray Oil Corporation, a corporation, and that the seal affixed to said instrument is the corporation 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 that said H. O. Harder acknowledged said instrument to be the free act and deed of said corporation.

Mildred M. Bradshaw
Notary Public

My commission expires:

Sept. 30, 1954

STATE OF _____)
) SS.
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 ____President of _____, a corporation, and that the seal affixed to said instrument is the corporation 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 that said_____ acknowledged said instrument to be the free act and deed of said corporation.

_____
Notary Public

My commission expires:

_____

STATE OF_____)
) SS.
COUNTY OF_____)

On this _____day of _____, 19_____, before me personally appeared _____, to me known to be the person _described in and who executed the foregoing instrument, and acknowledged that _____executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF_____)
) SS.
COUNTY OF_____)

On this _____day of _____, 19_____, before me personally appeared _____, to me known to be the person ___described in and who executed the foregoing instrument, and acknowledged that ____executed the same as _____free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF_____)
) SS.
COUNTY OF_____)

On this _____day of_____, 19____, before me personally appeared _____, to me known to be the person___described in and who executed the foregoing instrument, and acknowledged that _____executed the same as _____free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF_____)
) SS.
COUNTY OF_____)

On this _____day of _____, 19_____, before me personally appeared _____, to me known to be the person __described in and who executed the foregoing instrument, and acknowledged that _____executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF_____)
) SS.
COUNTY OF_____)

On this _____day of _____, 19_____, before me personally appeared _____, to me known to be the person ___described in and who executed the foregoing instrument, and acknowledged that ____executed the same as _____free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF_____)
) SS.
COUNTY OF_____)

On this _____day of_____, 19____, before me personally appeared _____, to me known to be the person___described in and who executed the foregoing instrument, and acknowledged that _____executed the same as _____free act and deed.

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

_____
Notary Public

My commission expires:

_____

AMENDMENT AND SUPPLEMENT TO
SAN JUAN 29-5 UNIT OPERATING AGREEMENT
RIO ARRIBA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of June, 1959, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "parties hereto",

W I T N E S S E T H:

WHEREAS, the parties hereto are the owners of working interests in the Unit Area subject to the Unit Agreement for the Development and Operation of the San Juan 29-5 Unit Area, Rio Arriba County, New Mexico, designated Contract Number 14-08-001-437, and subject to the Unit Operating Agreement for the San Juan 29-5 Unit Area (said Unit Operating Agreement hereinafter referred to as "Unit Operating Agreement"), reference to which is here made for all purposes; and

WHEREAS, the parties hereto desire to provide for the drilling and operation of wells to be completed in dual formations and for the sharing and allocation of costs and risks incident thereto.

NOW, THEREFORE, in consideration of the premises and the promises herein contained, and other good and valuable consideration, the full receipt and sufficiency of which are hereby acknowledged, the parties hereto have agreed and do agree as follows:

ARTICLE I

Unit Agreement Confirmed

The Unit Agreement and all Exhibits attached thereto, are hereby confirmed and made a part of this agreement; and in the event of any conflict between the provisions of the Unit Agreement and the provisions of the Unit Operating Agreement, as amended and supplemented hereby, the provisions of the Unit Agreement shall prevail.

ARTICLE II

Unit Operating Agreement Amended

In order to prevent conflict between the provisions of this Amendment and Supplement and the provisions of the Unit Operating Agreement, the following quoted sentence in Section 9 of the Unit Operating Agreement is hereby deleted:

> "In the event any one well is completed as a paying producer in more than one formation, the Working Interest Owners of the respective participating areas established for such formations shall arrange for appropriate allocation of investment and operating costs of such well by separate agreement."

ARTICLE III

Supplement to Unit Operating Agreement

The provisions which follow in this Article III are supplemental to the Unit Operating Agreement and are hereby adopted as part of said Agreement.

1. Definitions

"Shallow Owners" - the working interest owners either in the Unit Area, Participating Area, drilling block or in less than the Unit Area, whichever is applicable, owning the working interest in and to the shallower formation of a well to be drilled or which is completed in two formations.

"Deep Owners" - the working interest owners either in the Unit Area, Participating Area, drilling block or in less than the Unit Area, whichever is applicable, owning the working interest in and to the deeper formation of a well to be drilled or which is completed in two formations.

2. Formula for Allocation of Costs for Drilling and Completing Dual Wells.

Whenever in this Agreement it is provided that costs will be borne by Shallow Owners and Deep Owners in accordance with Section 2, Article III, the following procedures will be used:

At the same time Shallow and Deep Owners separately agree to the drilling of a well to be projected to dual formations, both such categories of Owners shall approve an estimate prepared by Unit Operator of the total costs of drilling and completing said well to the wellhead in both formations. Such approval shall be obtained in accordance with Section 7 of the Unit Operating Agreement. The estimated total costs shall be divided into the following categories:

a) Costs to be incurred above the base of the shallower of the two formations, except those set forth in Subsection (c) hereof.

b) Costs to be incurred below the base of the shallower of the two formations.

c) Costs attributable to testing and completing in the shallower formation.

Upon completion of the well, the actual costs of drilling, completing, testing and equipping such well will be apportioned among the three categories set forth hereinabove, and these actual costs will be paid by the obligated parties as follows:

a) Costs incurred above the base of the shallower formation except those set forth in Subsection (c) hereof will be shared equally by and between Shallow Owners and Deep Owners.

b) The costs incurred below the base of the shallower formation shall be paid by Deep Owners.

c) Costs attributable to testing and completing in the shallower formation shall be paid by Shallow Owners.

3. Drilling and Completing Dual Wells. Costs of drilling, testing, treating, equipping and completing wells to the wellhead which are begun with the objective of dual completion and which are completed as dual wells shall be borne by Shallow Owners and by Deep Owners in accordance with the provisions of Section 2, Article III. Until admission into a participating area the material and equipment thereon shall be owned by the party or parties paying the cost thereof pursuant to Section 2, Article III. Shallow Owners and Deep Owners shall respectively own, subject to allocation to an appropriate participating area, all unitized substances produced from their respective formations. Upon abandonment of the well if dry in both formations, costs of plugging and abandoning shall be shared equally by and between Shallow Owners and Deep Owners. Upon the completed well being admitted into a participating area or areas, the ownership of equipment and materials shall pass to the owners of the participating area or areas in accordance with the terms of Section 3 of the Unit Operating Agreement.

4. Completion of Well in Shallower Formation but Abandoned as to Deeper Formation. In the event that a well begun with the objective of dual completion is drilled to the deeper formation and results in discovery of unitized substances in paying quantities in the shallower formation but is dry in the deeper formation, all costs of drilling, testing and treating shall be borne by the Shallow Owners and Deep Owners in accordance with Section 2, Article III. All costs of equipping the well shall be borne by Shallow Owners. Further, Shallow Owners shall pay to Deep Owners the salvable value of the material and equipment or share thereof paid for or furnished by Deep Owners. Thereafter Shallow Owners shall own all material and equipment acquired in the drilling and completing of said well. Shallow Owners shall own all unitized substances produced from the shallow formation and shall bear all costs of plugging and abandonment of the well.

5. Completion of Well in Deeper Formation but Abandoned as to Shallower Formation. In the event that a well begun with the objective of dual completion results in discovery of unitized substances in paying quantities in the deeper formation, but dry in the shallower formation, all costs of drilling, testing and treating shall be borne by the Shallow Owners and the Deep Owners in accordance with the provisions of Section 2, Article III. All costs of equipping the well shall be borne by Deep Owners. Further, Deep Owners shall pay to Shallow Owners the salvable value of the material and equipment or share thereof paid for or furnished by Shallow Owners. Thereafter, Deep Owners shall own all material and equipment acquired in the drilling and completion of such well. Deep Owners shall own all unitized substances produced from the deeper formation, and shall bear all costs of plugging and abandoning the well.

6. Abandonment as to one Formation after Completion of Well in Both Formations. In the event that, after completion of a dual well, the working interest owners of one formation should decide to abandon the well as to their formation, the working interest owners of the remaining producing formation shall pay to the working interest owners of the formation to be abandoned, the salvage value of equipment belonging to the owners of the formation to be abandoned. The owners of the formation to be abandoned shall pay for the abandonment of that formation. After payment of the amount provided for above, the working interest owners of the formation from which the well continues to produce shall own all of such equipment. The working interest owners of the producing formation, after abandonment as to the other formation, shall also bear all costs of plugging and abandoning upon later abandonment of the well as to their formation.

7. Deepening a Shallow Well or Converting a Deeper Well for Dual Completion. Before any well which is completed in a single formation may be deepened or perforated at a shallower depth for purposes of completion as a dual well, the working interest owners of both formations must approve the operation under the general

provisions of the Unit Operating Agreement. The payment to the owners of the single existing completion by the owners desiring to dual the well shall be a fair value representative of the well. If the operation should result in an impairment of production from, or a loss of, the existing well, the provisions of Section 10, Article III shall govern unless otherwise provided for in the approval.

8. Allocation of General Operating and Maintenance Costs in Dual Wells. After completion of a dual well, the costs of producing operations shall be borne by the working interest owners of the two formations as follows:

a) The completion in each separate formation shall be treated as a separate well for overhead and district and camp expense. Such expense shall be borne by the working interest owners of the respective formations as a separate cost allocable to their interest;

b) Each formation shall bear all costs of normal producing operations, including costs of labor, repairs, maintenance and replacement of equipment attributable to such formation. All costs of operations performed for the joint benefit of both formations shall be borne on a per well basis by the Shallow Owners to the extent of 50% of the total cost, and by the Deep Owners to the extent of 50% of total cost.

9. Allocation of Cost of Workover Operations for both Formations. After completion of a dual well, the costs of any workover or other operations on such well involving both formations shall be borne by the working interest owners of such formations as follows:

a) The costs of any operation which is directly related to one formation, including but not limited to operations such as treatments and perforations, shall be borne by the working interest owners of the formation for which the operation is performed.

b) All costs of material, equipment, repairs, replacements and labor not directly related to one formation, including but not limited to repair and correction of leaks which may result in communication between the two formations within the well bore shall be borne by the Shallow Owners to the extent of 50% of the total cost and by Deep Owners to the extent of 50% of the total cost.

c) Any material and equipment acquired by any such expenditures provided for in Subparagraph (a) and (b) above shall be owned by the Shallow Owners and the Deep Owners so as to be consistent with the ownership of the material and equipment as set forth in Section 3, Article III.

d) The working interest owners of each formation shall not be responsible for nor be charged with any loss of production from any other formations during any such operation.

10. Workover Operations of One Formation. After completion of a dual well, any subsequent workover, deepening, plugging back, or other operations or repair as to one formation only of such well, which requires a separation of the formations for the repair or other work on any portion of the well, shall be governed by the provisions which follow:

a) The proposed plan of operation must be approved in accordance with the voting procedure prescribed by Section 7 of the Unit Operating Agreement prior to commencement of operations by the working interest owners of the formation not to be worked upon, if there be no participating area; or the working interest owners of the participating area for the formation not to be worked upon, if such well be within a participating area for that formation; or by the working interest owners of such well, if it be excluded from the participating area; whichever is applicable.

b) The costs and expenses of any such operations will be borne by the working interest owners of the formation to be worked upon, or the working interest owners of the participating area for the formation to be worked upon or by the working interest owners of such well in the formation to be worked upon, whichever is applicable.

c) The working interest owners bearing the cost of the operation shall not be liable to the working interest owners of the formation not being worked upon for cessation of production during such operations for a period of time not exceeding a total of ninety (90) days. In the event such cessation of production during operations is for a longer period of time, the working interest owners of the formation being worked upon, hereinafter referred to as Remedial Owners, shall pay to the working interest owners of the formation not being worked upon, hereinafter referred to as Damaged Owners, damages in such amount as shall be determined by Remedial Owners and Damaged Owners jointly in accordance with the voting procedure prescribed by Section 7 of the Unit Operating Agreement for loss of production occurring after a ninety (90) day period.

d) If such operations disturb or remove the means of separation of the two formations in the well bore or otherwise require a cessation of production from the other formation not being reworked, the operator shall, before and after the operation, conduct a test of the well as to such other formation for the purpose of determining whether or not the producing capacity as to said formation has been impaired, by employing the procedure set forth as follows:

(1) For an oil well producing capacity will be measured by actual production obtained for thirty (30) producing days immediately preceding the workover and compared with the actual production for thirty (30) producing days immediately following the workover operations. If either the conditions or equipment have in any way been changed during the period of comparison, then the production figures obtained shall be corrected by calculation to account for any such change or changes.

(2) With respect to gas wells connected to a gas gathering system, the producing capacity shall be determined by the actual production before and after the workover

and shall be the thirty (30) days in which there was actual production into the line immediately before or after the workover as applicable with the well producing under similar pressure differential and other conditions. If the producing conditions or equipment size are different or the well is not connected to a gathering system, an appropriate applicable method will be utilized to determine the effect on deliverabilities which the workover has caused.

(3) If the producing capacity of the well as to such other formation has been reduced in excess of twenty per cent (20%), damages will be deemed to have occurred. If damage has occurred, the rights and liabilities between Remedial Owners and Damaged Owners shall be adjusted in accordance with the provisions set out below:

Remedial Owners may at their sole cost, risk and expense attempt to restore the well to 80% of its former capacity or may pay to Damaged Owners the cost of a replacement well completed in the damaged formation. If the attempt is unsuccessful, or if no attempt is made, and if the cost of a replacement well is not so paid, Remedial Owners shall pay damages to Damaged Owners in an amount determined by the following formula:

$$\text{Damage Payment} = \text{Cost of Replacement Well} \times \left(1 - \frac{A}{0.80B}\right)$$

A = The capacity of the well from the damaged formation after the workover or other operation or after completion of any further work to restore the well as to the damaged formation which the Remedial Owners elect to perform.

B = The capacity of the well from the damaged formation before the workover or other operation which impaired the producing capacity of such well.

In no event, however, shall the amount of damages, computed in the manner hereinabove provided, exceed the value of the remaining recoverable reserves (less cost of recovery) of the formation as to which the well was damaged which could have been recovered from such well if it had not been damaged. If more than one capacity test is made after completion of the workover or other operation or work performed at the election of Remedial Owners, the last capacity obtained in such testing will be used in calculating the reduction of capacity. The Remedial Owners will pay such damages within fifteen (15) days following the date the amount of damages is determined. Payment of damages will not alter the ownership of formations or equipment except if cost of a replacement well is paid Remedial Owners shall own all material and equipment on or used in connection with the damaged well and shall bear all costs of plugging and abandonment. If an attempt to restore the well to 80% of its former capacity is made and such attempt is successful, Remedial Owners shall have no further liability.

e) It is understood, however, that liability for loss or damages shall not accrue hereunder if: (1) in workover of the shallow formation such loss or damage exists prior to actual commencement of the operations to be performed in said formation, or,

in workover of the deep formation, loss or damage exists prior to penetration of workover equipment below the base of the shallow formation, and (2) the evidence is conclusive that the loss or damage resulted solely from the previously existing poor mechanical condition of the well.

11. Allocation of Overhead and District and Camp Expense in Dual Completion Operations. As to any well which was begun with the objective of dual completion and as to any well on which work is begun to deepen or to convert it into a dual completion, overhead charges during drilling shall be billed as though the well were a single well to be drilled to test the deepest formation, and for purposes of allocating district and camp expense among wells, each drilling well shall be treated as one well. Upon completion of such a well, each formation in which the well is completed shall be treated as a separate well for purposes of charging overhead and allocating field and camp expenses.

ARTICLE IV

Effective Date

When fully executed, as set forth in Article V, this Agreement shall be effective as to all parties hereto as of the first date hereinabove written, and unless otherwise terminated, it shall be effective as long as the Unit Agreement is effective. This Agreement may be terminated in any manner by which said Unit Agreement may be terminated.

ARTICLE V

Counterparts

This Amendment and Supplement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument in writing specifically referring hereto and shall be a binding agreement when all parties owning a working interest committed to the San Juan 29-5 Unit have executed such a counterpart, ratification or consent hereot, with the same force and effect as if all such parties had signed the same document.

EL PASO NATURAL GAS COMPANY

By _____
Attorney in Fact

Supplemental Execution Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

ATTEST:

ASSISTANT Secretary

PHILLIPS PETROLEUM COMPANY

By _____ President

ATTEST:

ASSISTANT Secretary

GENERAL AMERICAN OIL COMPANY OF TEXAS

By _____ VICE President

ATTEST:

_____ Secretary

SUNRAY MID-CONTINENT OIL COMPANY

By _____ President

ATTEST:

_____ Secretary

SOUTHERN PETROLEUM EXPLORATION, INC.

By _____ President

ATTEST:

_____ Secretary

WOOD RIVER OIL AND REFINING COMPANY

By _____ President

ATTEST:

_____ Secretary

PAN AMERICAN PETROLEUM CORPORATION

By _____ President

ATTEST:

Secretary

AMERICAN PETROFINA COMPANY OF TEXAS

By _____ VICE President

Supplemental Execution Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

ATTEST:

PHILLIPS PETROLEUM COMPANY

_____
Secretary

By_____
President

ATTEST:

GENERAL AMERICAN OIL COMPANY OF TEXAS

_____
Secretary

By_____
President

ATTEST:

SUNRAY MID-CONTINENT OIL COMPANY

Assistant Secretary

By_____
President

ATTEST:

SOUTHERN PETROLEUM EXPLORATION, INC.

_____
Secretary

By_____
President

ATTEST:

WOOD RIVER OIL AND REFINING COMPANY

_____
Secretary

By_____
President

ATTEST:

PAN AMERICAN PETROLEUM CORPORATION

_____
Secretary

By_____
President

ATTEST:

AMERICAN PETROFINA COMPANY OF TEXAS

_____
Secretary

By_____
President

Supplemental Execution Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

ATTEST:

PHILLIPS PETROLEUM COMPANY

_____
Secretary

By_____
President

ATTEST:

GENERAL AMERICAN OIL COMPANY OF TEXAS

_____
Secretary

By_____
President

ATTEST:

SUNRAY MID-CONTINENT OIL COMPANY

_____
Secretary

By_____
President

ATTEST:

SOUTHERN PETROLEUM EXPLORATION, INC.

R. E. Berry
Secretary

By Paul W. Trumbauer
President

ATTEST:

WOOD RIVER OIL AND REFINING COMPANY

_____
Secretary

By_____
President

ATTEST:

PAN AMERICAN PETROLEUM CORPORATION

_____
Secretary

By_____
President

ATTEST:

AMERICAN PETROFINA COMPANY OF TEXAS

_____
Secretary

By_____
President

Supplemental Execution Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

ATTEST:

PHILLIPS PETROLEUM COMPANY

_____
Secretary

By_____
President

ATTEST:

GENERAL AMERICAN OIL COMPANY OF TEXAS

_____
Secretary

By_____
President

ATTEST:

SUNRAY MID-CONTINENT OIL COMPANY

_____
Secretary

By_____
President

ATTEST:

SOUTHERN PETROLEUM EXPLORATION, INC.

_____
Secretary

By_____
President

ATTEST:

ROCK ISLAND OIL & REFINING CO., INC.
Formerly:
WOOD RIVER OIL AND REFINING COMPANY

_____
Secretary

By_____
President

ATTEST:

PAN AMERICAN PETROLEUM CORPORATION

_____
Secretary

By_____
President

ATTEST:

AMERICAN PETROFINA COMPANY OF TEXAS

_____
Secretary

By_____
President

Supplemental Execution Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

ATTEST:

PHILLIPS PETROLEUM COMPANY

_____
Secretary

By_____
President

ATTEST:

GENERAL AMERICAN OIL COMPANY OF TEXAS

_____
Secretary

By_____
President

ATTEST:

SUNRAY MID-CONTINENT OIL COMPANY

_____
Secretary

By_____
President

ATTEST:

SOUTHERN PETROLEUM EXPLORATION, INC.

_____
Secretary

By_____
President

ATTEST:

WOOD RIVER OIL AND REFINING COMPANY

_____
Secretary

By_____
President

ATTEST:

PAN AMERICAN PETROLEUM CORPORATION

APPROVED

Asst. Secretary

By C. F. Burgland
ATTORNEY-IN-FACT ~~President~~

ATTEST:

AMERICAN PETROFINA COMPANY OF TEXAS

_____
Secretary

By_____
President

Supplemental Execution Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

Date 3/16/60	T. M. McElvain
Date 3/17/60	Catherine B. McElvain
Date May 12-60	[signature]
Date May 12, 1960	[signature]
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____
Date _____	_____

Acknowledgement Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

STATE OF TEXAS §
§
COUNTY OF EL PASO §

The foregoing instrument was acknowledged before me this 11th day of July, 1960, by SAM SMITH, Attorney in Fact of EL PASO NATURAL GAS COMPANY, a Delaware corporation on behalf of said corporation.

Eloise Busse
Notary Public

My Commission expires:

ELOISE BUSSE
Notary Public in and for El Paso County, Texas
My Commission Expires June 1,1961

STATE OF Okla §
§
COUNTY OF Washington §

The foregoing instrument was acknowledged before me this 4th day of February, 1960, by C. O. Stark, Vice President of PHILLIPS PETROLEUM COMPANY.

Pauline Walkup
Notary Public

My Commission expires:

STATE OF Texas §
§
COUNTY OF Dallas §

The foregoing instrument was acknowledged before me this 6th day of June, 1960, by W. B. Barnes, [illegible] of GENERAL AMERICAN OIL COMPANY OF TEXAS.

[illegible]
Notary Public

My Commission expires:

June 1, 1961

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of SUNRAY MID-CONTINENT OIL COMPANY.

My Commission expires:

Notary Public

Acknowledgement Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

STATE OF TEXAS §
§
COUNTY OF EL PASO §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of EL PASO NATURAL GAS COMPANY, a Delaware corporation on behalf of said corporation.

My Commission expires: _____ Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of PHILLIPS PETROLEUM COMPANY.

My Commission expires: _____ Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of GENERAL AMERICAN OIL COMPANY OF TEXAS.

My Commission expires: _____ Notary Public

_____

STATE OF Oklahoma §
§
COUNTY OF Tulsa §

The foregoing instrument was acknowledged before me this 3rd day of June, 1960, by R. E. Foss, Vice President of SUNRAY MID-CONTINENT OIL COMPANY.

My Commission expires: Donna Jean Meyer Notary Public

Oct. 21, 1961

Acknowledgement Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of SOUTHERN PETROLEUM EXPLORATION, INC.

My Commission expires: _____ Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of WOOD RIVER OIL AND REFINING COMPANY.

My Commission expires: _____ Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of PAN AMERICAN PETROLEUM CORPORATION.

My Commission expires: _____ Notary Public

_____

STATE OF Texas §
§
COUNTY OF Dallas §

The foregoing instrument was acknowledged before me this 12 day of April, 1960, by _____, _____ of AMERICAN PETROFINA COMPANY OF TEXAS.

My Commission expires: _____ Notary Public

6-1-61

Acknowledgement Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

STATE OF WEST VA. §
§
COUNTY OF TYLER §

The foregoing instrument was acknowledged before me this 2 day of Feby, 19 60, by Paul W. Neuenschwander, President of SOUTHERN PETROLEUM EXPLORATION, INC.

Roy C. Heinlein
Notary Public

My Commission expires:
My Commission Expires
June 11, 1969

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of WOOD RIVER OIL AND REFINING COMPANY.

My Commission expires: Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of PAN AMERICAN PETROLEUM CORPORATION.

My Commission expires: Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of AMERICAN PETROFINA COMPANY OF TEXAS.

My Commission expires: Notary Public

_____

Acknowledgement Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of SOUTHERN PETROLEUM EXPLORATION, INC.

My Commission expires: _____ Notary Public

_____

STATE OF Kansas §
§
COUNTY OF Sedgwick §

The foregoing instrument was acknowledged before me this 9 day of March, 1960, by Fred A. Koch, President of [redacted]OCK ISLAND OIL & REFINING CO., INC.

Pauline A Gordon
My Commission expires: Notary Public

My commission expires Dec. 24, 1963

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of PAN AMERICAN PETROLEUM CORPORATION.

My Commission expires: _____ Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of AMERICAN PETROFINA COMPANY OF TEXAS.

My Commission expires: _____ Notary Public

_____

Acknowledgement Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of SOUTHERN PETROLEUM EXPLORATION, INC.

My Commission expires: _____ Notary Public

_____

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of WOOD RIVER OIL AND REFINING COMPANY.

My Commission expires: _____ Notary Public

_____

STATE OF TEXAS §
§
COUNTY OF TARRANT §

The foregoing instrument was acknowledged before me this 14th day of March, 1960, by E. F. BEDFORD, ATTORNEY-IN-FACT of PAN AMERICAN PETROLEUM CORPORATION.

Pauline A. Kay
Notary Public
PAULINE A. KAY

My Commission expires:
June 1, 1961

STATE OF §
§
COUNTY OF §

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____, _____ of AMERICAN PETROFINA COMPANY OF TEXAS.

My Commission expires: _____ Notary Public

_____

Acknowledgement Page to Amendment and Supplement to San Juan 29-5 Unit Operating Agreement, County of Rio Arriba, State of New Mexico, effective June 1, 1959.

STATE OF]
]
COUNTY OF]

The foregoing instrument was acknowledged before me this ____ day of _____, 19____, by J. H. McElvain & Others

My Commission expires: Notary Public

My Commission Expires Aug. 15, 1962

STATE OF New Mexico]
]
COUNTY OF San Juan]

The foregoing instrument was acknowledged before me this 12th day of May, 1960, by John R. Wright & Alice Wright, his wife

Lawrence R. Hall
Notary Public

My Commission expires:
My Commission Expires 6-21-61

STATE OF]
]
COUNTY OF]

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____.

My Commission expires: Notary Public

STATE OF]
]
COUNTY OF]

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____.

My Commission expires: Notary Public

SAN JUAN 29-5

UNIT AGREEMENT

WASHINGTON 25, D. C.

NOV 21 1952

Phillips Petroleum Company

Bartlesville, Oklahoma

Gentlemen:

On November 21, 1952, Acting Director of the Geological Survey, Thomas B. Nolan, approved the San Juan 29-5 unit agreement, Rio Arriba County, New Mexico, filed by your company as unit operator. This agreement has been designated No. 14-08-001-437 and is effective as of the date of approval.

Enclosed are three copies of the approved unit agreement for your records. It is requested that you furnish the State of New Mexico and any other interested principals with whatever evidence of this approval is deemed appropriate.

Very truly yours,

For the Director

Enclosures 3

ILLEGIBLE

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O
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Y

WOOD RIVER OIL & REFINING CO., INC.

321 West Douglas Wichita, Kansas

November 5, 1952

Phillips Petroleum Company
316½ S. Dewey Avenue
Bartlesville, Oklahoma

Re: Unit Agreement for Development and Operation of San Juan 29-6 Unit Area and San Juan 29-5 Unit Area, Rio Arriba County, New Mexico.

Gentlemen:

Reference is made to the above Unit Agreement and Unit Operating Agreements which we just recently executed at the request of Phillips Petroleum Company, designed as Unit Operator in said agreements.

Our joinder in these agreements was requested because we were the owners of the working interest under leases covering the following lands embraced within the proposed unit areas:

T. 29N, R. 5W, N.M.
Sec. 31: $W\frac{1}{2}SW\frac{1}{4}$, $S\frac{1}{2}SW\frac{1}{4}NW\frac{1}{4}$
T. 29N, R. 6W, N.M.
Sec. 26: $E\frac{1}{2}SW\frac{1}{4}$
Sec. 35: $N\frac{1}{2}NE\frac{1}{4}$, $NE\frac{1}{4}NW\frac{1}{4}$

We executed the agreements with the express understanding that withdrawal could be accomplished before approval in the event that owners of all mineral or royalty interests under our leases failed to consent thereto. Certain royalty owners have consented but we have been unable to get the consent of one party who owns substantial interest under our leases.

In accordance with the express condition attaching to our execution of these agreements at the time and under specific provision in the agreements, this letter constitutes formal notification from undersigned of our withdrawal from these agreements and that the lands above described are not committed to said unit agreements. At such time as the recalcitrant interest owner changes his mind, we would reconsider the question of subsequent joinder in the units.

Yours very truly,

Oliver A. Witterman /s/

OAW/r

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE SAN JUAN 29-5 UNIT AREA,
COUNTY OF RIO ARRIBA,
STATE OF NEW MEXICO

I-Sec. No._____

This agreement entered into as of the 8TH day of September, 1952, 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 and gas interests in the unit area subject to this agreement; and

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

Whereas the Commissioner of Public Lands of the State of New Mexico is authorized by an act of the Legislature (Chapter 88, Laws 1943, New Mexico Statutes 1941 Annotated, Sections 8-1138 to 8-1141) to consent to and approve the development or operation of lands of the State of New Mexico under this agreement; and

Whereas the Oil Conservation Commission of the State of New Mexico is authorized by an act of the Legislature (Chapter 72, Laws 1935, New Mexico Statutes 1941 Annotated, Sections 69-201 et seq.) to approve this agreement and the conservation provisions hereof; and

Whereas the parties hereto hold sufficient interests in the San Juan 29-5 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 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 New Mexico are hereby accepted and made a part of this agreement.

2. Unit area.

The following-described land is hereby designated and recognized as constituting the unit area:

New Mexico Principal Meridian:

All of Township 29 North, Range 5 West,
Rio Arriba County, containing 22,521.54
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," or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Commissioner," and not less than five copies of the revised exhibits shall be filed with the Supervisor and copies thereof shall be filed with the Commissioner and the New Mexico Oil Conservation Commission, hereinafter referred to as the "Commission".

The above-described unit area shall when practicable be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purposes of this agreement, whenever such expansion is necessary or advisable to conform with the purposes of this agreement. Such expansion shall be effected in the following manner:

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

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

(c) Upon expiration of the 30-day period provided in the preceding item (b) hereof, Unit Operator shall file with the Supervisor, Commissioner and the Commission evidence of mailing of the notice of expansion 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 shall, upon approval by the Director, Commissioner, and the Commission, become effective as of the date prescribed in the notice thereof.

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

3. Unitized substances.

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

4. Unit Operator.

Phillips Petroleum Company, a Delaware corporation with offices at Bartlesville, Oklahoma, is hereby designated as Unit Operator and by signature hereto as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development, and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interest in unitized substances, and the term "working interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by it.

5. Resignation or removal of unit operator.

Unit Operator shall have the right to resign at anytime prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of 6 months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, Commissioner and the Commission, and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and by the Commission as to other lands, unless a new Unit Operator shall have been selected and

approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

Unit Operator shall have the right to resign in like manner and subject to like limitations as above provided at any time a participating area established hereunder is in existence, but provided, however, until a successor unit operator is selected and approved as hereinafter provided, the working interest owners shall be jointly responsible for performance of the duties of unit operator, and shall not later than 30 days before such resignation becomes effective appoint a common agent to represent them in any action to be taken hereunder.

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

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

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

6. Successor unit operator.

Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, the owners

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

7. Accounting provisions and unit operating agreement.

Costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests, all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements, entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement." Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions

of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any inconsistency or conflict between the unit agreement and the unit operating agreement, this unit agreement shall prevail. Three true copies of any unit operating agreement executed pursuant to this section shall be filed with the Supervisor.

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. Drilling to discovery.

Within 60 days after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a location selected by it and approved by the Supervisor if on Federal land or the Commission if on State or Patented land unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Mesaverde formation has been tested or the Unit Operator shall at any time establish to the satisfaction of the Supervisor if on Federal land or the Commissioner if on State land or the Commission if on patented land that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 6,000 feet. Within 30 days

following completion of the aforesaid initial test well upon the unit area, Unit Operator shall commence the drilling of an additional well and shall thereafter continue drilling operations on the unit area, with not more than 30 days of elapsed time between the completion of one well and the commencement of the next succeeding well, until an aggregate of five wells commenced after May 10, 1952 (whether commenced before or after the effective date of this agreement), shall have been drilled thereon to said depth at locations selected by Unit Operator and approved by the Supervisor if on Federal land or the Commissioner if on State land or the Commission if on patented land so spaced over the unit area as to determine so far as may be practicable the productive acreage and gas reserves in the Mesaverde and shallower formations underlying said unit area.

In addition to the foregoing, within one year from the effective date hereof the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor, Commissioner, or Commission, respectively, unless on or before such first anniversary of the effective date hereof operations for the drilling of a well to test the Dakota formation shall have been commenced on the area approved by the United States Geological Survey for the San Juan 29-6, San Juan 30-5, San Juan 30-6 unit agreements, and thereafter shall continue such drilling diligently until the Dakota formation has been tested or the Unit Operator shall at any time establish to the satisfaction of he Supervisor if on Federal land or the Commissioner if on State land or patented land that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said Dakota test well to a depth in excess of 8,500 feet, provided, that, in the event said Dakota test well shall be a dry hole at its total depth, it shall then be considered as one of the five test wells required in the preceding paragraph of this Section 9.

In the event none of the wells drilled pursuant to the above specified drilling program results in obtaining production in paying quantities, then upon completion of the above-outlined drilling program until the discovery of a deposit of unitized substances capable of being

produced in paying quantities, the Unit Operator shall continue drilling diligently one well at a time, allowing not more than 6 months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of said Supervisor if on Federal land, or the Commissioner if on State land, or the Commission if on privately owned land, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to comply with the drilling provisions of this section, the Director, Commissioner and the Commission 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 a well capable of producing unitized substances in paying quantities or within 6 months after completion of the drilling program outlined in Section 9 above, whichever is the later date, the Unit Operator shall submit for the approval of the Supervisor, the Commissioner and the Commission an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor, the Commissioner and the Commission, shall constitute the further drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Supervisor, the Commissioner and the Commission, a plan for an additional specified period for the development and operation of the

unitized land. Any plan submitted pursuant to this section shall provide for the exploration of the unitized area and for the determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and shall be as complete and adequate as the Supervisor, the Commissioner and the Commission may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall (a) specify the number and locations of any wells to be drilled and the proposed order and time for such drilling; and (b) to the extent practicable specify the operating practices regarded as necessary and advisable for proper conservation of natural resources. Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor, the Commissioner and the Commission. Said plan or plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the 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 well capable of producing any unitized substance in paying quantities and the drilling program outlined in Section 9 above, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor, the Commissioner and the Commission, shall be drilled except in accordance with a plan of development approved as herein provided.

11. Participation after discovery.

(a) MESAVERDE AND SHALLOWER FORMATIONS. That portion of the unit area lying above the base of the Mesaverde formation is hereby divided into Drilling Blocks containing 320 acres each, more or less, which Drilling Blocks shall constitute one-half sections, by government survey, the sections being divided by a line running north and south in such manner that each Drilling Block shall be either the East Half (E/2) or the West Half (W/2) of each given section, provided, however, that in any instances of irregular surveys that portion of a section which most nearly constitutes either the East Half (E/2) or the West Half (W/2) shall constitute a Drilling Block even though

its acreage may be irregular, and provided further that any irregular strips or small tracts shall attach to the adjacent Drilling Blocks to which they most logically attach within the limitations for Drilling Blocks as herein set forth, and provided further that in the event any portion of the area subject to this agreement is not surveyed, Unit Operator shall project the survey from the nearest established government survey points for the purposes of this agreement.

Upon completion of a well capable of producing unitized substances from the Mesaverde or shallower formations or as soon thereafter as required by the Supervisor or the Commissioner, the Unit Operator shall determine whether said well is capable of producing unitized substances in paying quantities and shall advise the Supervisor, the Commissioner and the Commission of its conclusion in that regard, giving the data upon which its conclusion is based and identifying the Drilling Block upon which said well is located. Protests against said conclusion may be filed with the Director, the Commissioner and the Commission within 15 days thereafter but unless the Director, the Commissioner or the Commission shall, within 30 days after the filing of the original statement of conclusion by Unit Operator, disapprove of such conclusion, the decision of Unit Operator shall thereafter be binding upon the parties hereto. If any such well is determined to be capable of producing unitized substances in paying quantities, all of the land in the Drilling Block shall constitute the participating area for the formation from which the well is producing effective as of the date of first production. Unit Operator shall prepare a schedule setting forth the percentage of unitized substances to be allocated, as herein provided, to each unitized tract in the participating area so established, and upon approval thereof by the Director, the Commission and Commissioner said schedule 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 producing as a single pool or zone, and all of the provisions of this section of this agreement shall be considered as applicable separately for each such participating area. It is hereby agreed for the purposes of this agreement that all wells completed for production in the Fruitland formation shall be regarded as producing from

a single zone or pool and all wells completed for production in the Pictured Cliffs formation shall be regarded as producing from a single zone or pool, and all wells completed for production in the Mesaverde group shall be regarded as producing from a single zone or pool. Additional Drilling Blocks, subject to any limitations elsewhere set out in this agreement, shall be admitted to the participating area on the first day of the month following the month in which it has been established that a well capable of production of unitized substances in paying quantities has been drilled on any such Drilling Block, and the percentage of allocation shall be revised accordingly, in which event all of the production prior to the effective date of admission of such drilling block to the participating area shall be credited solely to the account of that particular block. For the purposes hereof, it shall be deemed that the capability of a well to produce unitized substances in paying quantities has been established when so determined by the Unit Operator and when notice of such determination shall have been delivered to the Supervisor, the Commissioner and the Commission, which notice includes the data upon which the determination is based and identifies the Drilling Block upon which the well is located, subject to the right of any interested party to protest in writing against said determination to the Unit Operator, the Director, the Commissioner and the Commission within 15 days thereafter, however, in any event, such determination shall become effective within 30 days from the date thereof unless disapproved within said 30-day period by the Director, Commissioner, or Commission. In the event such determination is not upheld and changed conditions subsequently warrant, a new determination based on new showings and a new effective date may be submitted and processed in the same manner as aforesaid. No land shall be excluded from a participating area on account of depletion of the unitized substances.

In the event that any Drilling Block is admitted to a participating area as hereinabove provided when it lies directly north, south, east, or west of any Drilling Block already included in said participating area, and where there is one, but only one intervening Drilling Block on which no well has then been drilled, said intervening Drilling Block shall also be admitted to said participating area at the same time, in the same manner and subject to the same conditions as the Drilling Block which is then admitted to such participating area by reason of the completion of a well thereon capable of producing unitized

substances in paying quantities. In such event, the drilling of a well on such undrilled intervening Drilling Block shall be commenced, within one year from the effective date of said Drilling Block's inclusion in the participating area, unless said time be extended by the Director, Commissioner, and Commission, and shall be continued with due diligence to the depth necessary to test the horizon from which production is secured in said participating area.

If the initial well on any Drilling Block is not capable of production in paying quantities and at a later date a well is drilled on such Drilling Block which is capable of production of unitized substances in paying quantities, then that portion of the Drilling Block considered to be capable of production in paying quantities by reasonable geologic inference shall be admitted to the participating area upon recommendation of the Unit Operator and approval of the Director, the Commissioner and the Commission. If geologic inference is not applicable, the forty-acre tract by government survey, existing or projected, on which the producible well is drilled and all other untested forty-acre tracts or lots approximating 40 acres lying within the Drilling Block shall be admitted to the participating area.

If any Drilling Block, or portion thereof, on which a well has been drilled is not included in a participating area, conformably with the provisions of this agreement, and thereafter should become capable of production in paying quantities by reason of repressuring or other methods of secondary recovery, such Drilling Block or portion thereof shall be admitted to the applicable participating area on recommendation of the Unit Operator and approval thereof as provided for the inclusion of lands in a participating area in the preceding paragraph hereof.

Regardless of any revision of the participating area, and except as herein elsewhere specifically provided, there shall be no retroactive adjustment for production obtained prior to the effective date of any such revision of the participating area.

Whenever it is determined, in the manner provided in this agreement, that a well drilled under this agreement is not capable of production in paying quantities and inclusion of the Drilling Block on which it is situated in a participating area is unwarranted, production from such well shall, for the purposes of settlement among royalty interest owners, be allocated to the Drilling Block on which the well is located so long as such land is not within a participating area established for the pool or deposit from which such

production is obtained. Settlement for working interest benefits from such a well shall be made as provided in the unit operating agreement.

(b) FROM FORMATIONS BELOW THE MESAVERDE. Upon completion of a well capable of producing unitized substances from formations lying below the base of the Mesaverde in paying quantities, 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 subdivisions of the public-land survey or aliquot parts thereof, of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all lands in said schedule on approval of the Director, the Commissioner, and the Commission to constitute a participating area, effective as of the date of first production. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective.

A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director, the Commissioner, and the Commission. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, unless a more appropriate effective date is specified in the schedule. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this subsection (b) that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities; but, regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of 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 areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor and the Commissioner and the amount thereof deposited as directed by the Supervisor and the Commissioner, respectively, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the 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, for the purposes of settlement among all parties other than working interest owners, be allocated to the land on which the well is located so long as such land is not within a participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a well shall be made as provided in the unit operating agreement.

12. Allocation of production.

All unitized substances produced from each participating area established under this agreement, except any part thereof used in conformity with good operating practices within the unitized area for drilling, operating, camp and other production or development purposes, for repressuring or recycling in accordance with a plan of development approved by the Supervisor and Commissioner, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of unitized land of the participating area established for such production and, for the purpose of determining any benefits accruing under this agreement, each such tract or unitized land shall have allocated to it such percentage of said production as the number of acres of such tract included in said participating area bears to the total acres of unitized land in said participating area, except that allocation of production hereunder for purposes other than for settlement of the royalty, overriding royalty, or payment out of production

obligations of the respective working interest owners, shall be on the basis prescribed in the unit operating agreement whether in conformity with the basis of allocation herein set forth or otherwise. It is hereby agreed that production of unitized substances from a participating area shall be allocated as provided herein regardless of whether any wells are drilled on any particular part or tract of said participating area. If any gas produced from one participating area is used for repressuring or recycling purposes in another participating area, the first gas withdrawn from such last mentioned participating area for sale during the life of this agreement shall be considered to be the gas so transferred until an amount equal to that transferred shall be so produced for sale and such gas shall be allocated to the participating area from which initially produced as constituted at the time of such final production.

13. Development or operation of non-participating land or formations and drilling of wells not mutually agreed upon.

Any party or parties hereto owning or controlling the working interests or a majority of the working interests in any unitized land having thereon a regular well location may, with the approval of the Supervisor as to Federal land, the Commissioner as to State land and the Commission as to privately owned land, and subject to the provisions of the Unit Operating Agreement, at such party's sole risk, cost, and expense drill a well to test any formation for which a participating area has not been established or to test any formation for which a participating area has been established if such location is not within said participating area, or drill any well not mutually agreed to by all interested parties, 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 party or parties paying the cost of drilling such well shall be reimbursed as provided in the unit operating agreement for the cost of drilling such well, and the well shall thereafter be operated by Unit Operator in accordance with the terms of this agreement and the unit operating agreement.

If any well drilled as aforesaid by a working interest owner obtains

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

14. Royalty Settlement.

The United States and the State of New Mexico and all royalty owners who, under existing contracts, 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 interest not taken in kind shall be made by working interest owners responsible therefor under existing contracts, laws, and regulations, on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases.

If gas obtained from lands not subject to this agreement is introduced into any participating area of the lands being operated 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 Commissioner, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with due allowance for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the plan of operations or as may otherwise be consented to by the Supervisor 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 regulations; provided, that for leases on which the royalty rate depends on the daily average production per well, said average production shall be determined in accordance with the operating regulations as though each participating area were a single consolidated lease.

Royalty due on account of State and privately owned lands shall be computed and paid on the basis of all unitized substances allocated to such lands.

15. Rental settlement.

Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws, and regulations, provided that nothing herein contained shall operate to relieve the lessees of 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 unless such rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

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 or suspended upon the order of the Commissioner pursuant to applicable laws and regulations.

With respect to any lease on non-Federal land containing provisions 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 privilege of deferring such drilling operations, the rentals required thereby shall, notwithstanding any other provision of this agreement, be deemed to accrue and become payable during the term therof as extended by this agreement and 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, including wells on adjacent unit areas, or pursuant to applicable regulations pay a fair and reasonable compensatory royalty as determined by the Supervisor for Federal lands or as approved by the Commissioner for State lands.

18. Leases and contracts conformed and extended.

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

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

(b) Drilling and producing operations performed hereunder upon any tract of unitized lands will be accepted and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no lease shall

be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

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

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

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

(f) Each sublease or contract relating to the operation and development of unitized substances from lands of the United States committed to this agreement, which by its terms would expire prior to the time at which the underlying lease, as extended by the 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.

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

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the portions so segregated in proportion to the acreage of the respective tracts.

(h) Parties hereto, each as to its interest in the unit area, hereby grant to Unit Operator necessary surface rights to cover use of any portion of the surface of the unit area reasonably necessary for operations hereunder.

19. Covenants run with land.

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

20. Effective date and term.

This agreement shall become effective upon approval by the Secretary or his duly authorized representative and shall terminate on June 1, 1956, unless (a) such date of expiration is extended by the Director and Commissioner, or (b) it is reasonably determined prior to the expiration of the fixed term or any extension thereof that the unitized land is incapable of production of unitized substances in paying quantities in the formations tested hereunder and after notice of intention to terminate the agreement on such ground is given by the Unit Operator to all parties in interest at their last known addresses, the agreement is terminated with the approval of the Director and Commissioner, or (c) a valuable discovery of unitized substances has been made on unitized land during said initial term or any extension thereof, in which event the agreement shall remain in effect for such term and so long as unitized substances can be produced in paying quantities, i. e., in this

particular instance in quantities sufficient to pay for the cost of producing same from wells on unitized land within any participating area established hereunder and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can be produced as aforesaid, or (d) it is terminated as heretofore provided in this agreement.

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

21. Rate of prospecting, development, and production.

All production and the disposal thereof shall be in conformity with allocations, allotment and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute. The Director is 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, 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; 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.

Powers in this section vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than 15 days from notice.

22. Automatic Elimination.

Notwithstanding any other provisions of this agreement, any lease, no portion of which is included within a participating area within 7 years after the first sale of unitized substances from any lands subject to this agreement, shall be automatically eliminated from this agreement and said lease, and the lands covered thereby shall no longer be a part of the unit area and shall no longer be subject to this agreement, unless at the expiration of said 7 year period drilling operations are in progress on such lease, in which event the lands covered by such lease shall remain subject hereto and within said unit area for so long as such drilling operations are continued diligently and, so long thereafter as such lands or any portion thereof may be included in a participating area hereunder. Inasmuch as any elimination under this section is automatic, the Unit Operator shall, within 90 days after any such elimination hereunder, describe the area so eliminated, and promptly notify all parties in interest.

23. 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 on account of delay or failure in whole or in part to comply with any applicable provision thereof 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, in the exercise of due diligence, the concurrence of proper representatives of the United States and proper 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 the laws of the State of New Mexico.

24. Appearances.

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

25. 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.

26. 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.

27. 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.

28. 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 subcontracts.

29. Loss of title.

In the event title to any tract of unitized land shall fail and the true owner cannot be induced to join in this unit agreement, such tract shall be automatically regarded as not committed hereto and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any royalty, working interest, or other interests subject thereto, payment or delivery on account thereof may be withheld without liability for interest until the dispute is finally settled; provided, that, as to Federal land and State land or leases, no payments of funds due the United States or the State of New Mexico should be withheld, but such funds of the United States shall be deposited as directed by the Supervisor, and such funds of the State shall be deposited as directed by the Commissioner, to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

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

30. Non-Joinder and subsequent joinder.

If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the

working interest in that tract may withdraw said tract from this agreement by written notice to the Director, the Commissioner and the Unit Operator prior to the approval of this agreement by the Director. Any such tract not so withdrawn shall be considered as unitized, and any necessary adjustments of royalty occasioned by failure of the royalty and record owner to join will be for the account of the corresponding working interest owner. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is subject to such requirements or approvals, if any, pertaining to such joinder, as may be provided for in the unit operating agreement. After final approval hereof joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. Prior to final approval hereof, joinder by any owner of a non-working interest must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as effectively committed hereto. Except as may otherwise herein be provided subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor and 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.

31. Counterparts.

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

32. Surrender.

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

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

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

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

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

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

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

For any period the working interest in any lands are not expressly committed to the unit operating agreement as the result of any such surrender or forfeiture, the benefits and obligations of operations accruing to such lands under this agreement and the unit operating agreement shall be shared by the remaining owners of unitized working interests in accordance with their respective participating working interest ownerships, and such owners of working interests shall compensate the fee owner of unitized substances in such lands by paying sums equal to the rentals, minimum royalties, applicable to such lands under the lease in effect when the lands were unitized, as to such participating area or areas.

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

Nothing in this section shall be deemed to limit the right of joinder or subsequent joinder to this agreement as provided elsewhere in this agreement.

The exercise of any right vested in a working interest owner to reassign such working interest to the party from whom obtained shall be subject to the same conditions as set forth in this section in regard to the exercise of a right to surrender.

OPERATOR

PHILLIPS PETROLEUM COMPANY

Date: SEP 8 1952

By _____
Vice President

Attest:

Address: Bartlesville, Oklahoma

_____
Assistant Secretary

WORKING INTEREST OWNERS

PHILLIPS PETROLEUM COMPANY

Date: SEP 8 1952

By _____
Vice President

Attest:

Address: Bartlesville, Oklahoma

_____
Assistant Secretary

EL PASO NATURAL GAS COMPANY

Date: SEP 16 1952

By _____
Vice President

Attest:

Address: Bassett Tower,
El Paso, Texas

_____
Assistant Secretary

GENERAL AMERICAN OIL COMPANY OF TEXAS

Date: SEP 17 1952

By _____
~~Vice~~ President

Attest:

Address: _____
Dallas, Texas

_____
Assistant Secretary

SUNRAY OIL CORPORATION

Date: OCT 27 1952

By _____
Vice President

Form Approved
Attorney

Attest:

Address: P. O. Box 2039
~~Phillips Petroleum Building~~
Tulsa, Oklahoma

_____
~~Assistant~~ Secretary

SOUTHERN PETROLEUM EXPLORATION, INC.

Date: Sept 26 1952

By _____
~~Vice~~ President

Attest:

Address: White Building
Roswell, New Mexico

_____
~~Assistant~~ Secretary

STANOLIND OIL AND GAS COMPANY

APPROVED

Date: OCT 10 1952

By _____
Vice President

Attest:

Address: Fair Building
Fort Worth, Texas

_____
Assistant Secretary

WOOD RIVER OIL & REFINING CO., INC.

Date: _____

By _____
Vice President

Attest: _____
~~Assistant~~ Secretary

Address: 321 W. Douglas
~~Fourth Federal~~ Building
Wichita, Kansas

Date: _____

Address: 1010 N. Dustin
Farmington, New Mexico

_____
Tom Bolack

Date: _____

Address: _____

_____
Forrest B. Miller

Date: _____

Address: _____

_____
Hazel Bolack

Date: _____

Address: _____

_____

GLS:mle
9-2-52

CERTIFICATE OF APPROVAL BY COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO, OF UNIT AGREEMENT FOR DEVELOPMENT AND OPERATION OF SAN JUAN 29-5 UNIT AREA, RIO ARRIBA COUNTY, NEW MEXICO

There having been presented to the undersigned Commissioner of Public Lands in the State of New Mexico, for examination, the attached Agreement for the Development and Operation of the San Juan 29-5 Unit Area, Rio Arriba County, New Mexico, in which Phillips Petroleum Company is designated as Unit Operator and which has been executed by various parties owning and holding oil and gas leases embracing lands within the Unit Area, and upon examination of said agreement the Commissioner finds:

(a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said area;

(b) That under the operations proposed the State will receive its fair share of the recoverable oil or gas in place under its lands in the area affected;

(c) That the agreement is, in other respects, for the best interests of the State;

(d) That the agreement provides for the unit operation of the area, for the allocation of production and the sharing of proceeds from a part of the area covered by the agreement on an acreage basis as specified in the agreement.

NOW, THEREFORE, by virtue of the authority conferred upon me by Chapter 88 of the Laws of the State of New Mexico, 1943, as amended by Chapter 162 of the Laws of the State of New Mexico, 1951, I, the undersigned Commissioner of Public Lands for the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said agreement and do hereby amend all leases embracing lands of the State of New Mexico committed to said unit agreement, to conform and extend said leases as provided in said agreement so that the provisions of each such lease, so far as they apply to lands within such area, will conform to the provisions of such agreement and so that the length of the secondary term as to lands within such area will be extended to coincide with the terms of such agreement. This approval is subject to all of the provisions of the aforesaid Chapter 88 of the Laws of the State of New Mexico, 1943, as amended by Chapter 162 of the Laws of the State of New Mexico, 1951.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 15 day of October, 1952.

Commissioner of Public Lands
of the State of New Mexico

Seal

BEFORE THE OIL CONSERVATION COMMISSION OF
THE STATE OF NEW MEXICO

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

CASE NO. 418
ORDER NO. R-20[illegible]

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY, A DELAWARE
CORPORATION, FOR APPROVAL OF THE SAN
JUAN 29-5 UNIT AGREEMENT, EMBRACING
TOWNSHIP 29 NORTH, RANGE 5 WEST, NMPM,
RIO ARRIBA COUNTY, NEW MEXICO CONTAINING
22,521.54 ACRES.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on October 15, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this [illegible] day of October, 1952, the Commission, a quorum being present, having considered said application and the evidence introduced in support thereof, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

SECTION 1. That this order shall be known as the

SAN JUAN 29-5 UNIT AGREEMENT ORDER

SECTION 2. (a) That the project herein referred to shall be known as the San Juan 29-5 Unit Agreement, and shall hereafter be referred to as the "Project."

(b) That the plan by which the Project shall be operated shall be embraced in the form of a unit agreement for the development and operation of the San Juan 29-5 Unit Area referred to in the Applicant's Application and filed with said application, and such plan shall be known as the San Juan 29-5 Unit Agreement Plan.

SECTION 3. That the San Juan 29-5 Unit Agreement Plan shall be, and hereby is, approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement this approval shall not be considered as waiving or relinquishing in any manner any rights, duties or obligations which are now, or may hereafter, be vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said San Juan 29-5 Unit Agreement, or relative to the production of oil or gas therefrom.

SECTION 4. (a) That the Unit Area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

All of Township 29 North, Range 5 West

Total unit area: 22,521.80 acres, more or less.

ILLEGIBLE

(b) The unit area may be enlarged or contracted as provided in said Plan.

SECTION 5. That the unit operator shall file with the Commission an executed original or executed counterpart of the San Juan 29-5 Unit Agreement within 30 days after the effective date thereof.

SECTION 6. That any party owning rights in the unitized substances who does not commit such rights to said unit agreement before the effective date thereof may thereafter become a party thereto by subscribing to such agreement or counterpart thereof, or by ratifying the same and if the owner of a working interest by joinder in the related unit operating agreement. The Unit operator shall file with the Commission within 30 days a duplicate original of any such counterpart or ratification.

SECTION 7. That this order shall become effective upon approval of said unit agreement by the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall immediately notify the Commissioner in writing of such termination.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

GUY SHEPARD, Member

R. R. SPURRIER, Secretary

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CERTIFICATION— DETERMINATION

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

A. Approve the attached agreement for the development and operation of the San Juan 29-5 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: NOV 21 1952

Thomas B. Nolan

Acting Director, United States Geological Survey

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STATE OF Oklahoma)
) ss.
COUNTY OF Washington)

On this 8 day of September, 1952, before me appeared C. O. Stark, to me personally known, who, being by me duly sworn, did say that he is Vice President of Phillips Petroleum Company, a corporation, and that the seal affixed to said instrument is the corporation 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 that said C. O. Stark acknowledged said instrument to be the free act and deed of said corporation.

D B Legg
Notary Public

My commission expires:

My Commission Expires December 29, 1953

STATE OF Texas)
) ss.
COUNTY OF El Paso)

On this 16 day of September, 1953 before me appeared C. L. Perkins, to me personally known, who, being by me duly sworn, did say that he is Vice President of EL PASO NATURAL GAS COMPANY, a corporation, and that the seal affixed to said instrument is the corporation 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 that said C. L. Perkins acknowledged said instrument to be the free act and deed of said corporation.

Robert E. Heyser
Notary Public

My commission expires:

ROBERT E. HEYSER
Notary Public in and for El Paso County, Texas
My Commission Expires June 1, 1953

STATE OF Texas)
) ss.
COUNTY OF Dallas)

On this 17 day of September, 1953 before me appeared M E Wilson, to me personally known, who, being by me duly sworn, did say that he is ____ President of GENERAL AMERICAN OIL COMPANY OF TEXAS, a corporation, and that the seal affixed to said instrument is the corporation 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 that said M E Wilson acknowledged said instrument to be the free act and deed of said corporation.

Mary Jane Rice
Notary Public

My commission expires:

6-1-53

STATE OF West Va.)
) ss.
COUNTY OF Tyler)

On this 26 day of Sept, 1952, before me appeared Paul W. Neuenschwander, to me personally known, who, being by me duly sworn, did say that he is — President of SOUTHERN NATURAL GAS EXPLORATION, Inc, a corporation, and that the seal affixed to said instrument is the corporation 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 that said Paul W. Neuenschwander acknowledged said instrument to be the free act and deed of said corporation.

B. L. Stanley
Notary Public

My commission expires:
JUNE 13, 1962

STATE OF OKLAHOMA)
COUNTY OF TULSA)

On this 10th day of October, 19 52, before me appeared A. J. Spillman, to me personally known, who, being by me duly sworn, did say that he is the Vice President of STANOLIND OIL AND 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 A. J. Spillman acknowledged said instrument to be the free act and deed of said corporation.

Given under my hand and notarial seal this 10th day of October, 1952.

My commission expires:
My Commission Expires October 4, 1955

Mozine McAdams
Notary Public

STATE OF Kansas)
) ss.
COUNTY OF Sedgwick)

On this 13 day of October, 1952, before me appeared H. G. Williams, to me personally known, who, being by me duly sworn, did say that he is Vice President of WOOD RIVER OIL & REFINING CO., INC., a corporation, and that the seal affixed to said instrument is the corporation 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 that said H. G. Williams acknowledged said instrument to be the free act and deed of said corporation.

Ruth H. Roesing
Notary Public

My commission expires:
My Commission Expires May 12, 1955

STATE OF _____)
) ss.
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 ____ President of _____, a corporation, and that the seal affixed to said instrument is the corporation 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 that said _____ acknowledged said instrument to be the free act and deed of said corporation.

_____
Notary Public

My commission expires:

STATE OF [redacted])
) SS.
COUNTY OF [redacted])

On this [redacted] day of October, 19[redacted], before me appeared [redacted], to me personally known, who, being by me duly sworn, did say that he is [redacted] President of [redacted], a corporation, and that the seal affixed to said instrument is the corporation 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 that said [redacted] acknowledged said instrument to be the free act and deed of said corporation.

[redacted]
Notary Public

My commission expires:

[redacted]

STATE OF _____)
) ss.
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 ____ President of _____, a corporation, and that the seal affixed to said instrument is the corporation 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 that said _____ acknowledged said instrument to be the free act and deed of said corporation.

_____
Notary Public

My commission expires:

_____

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19 ___, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument, and acknowledged that _____ executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19 ___, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument, and acknowledged that _____ executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19 ___, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument, and acknowledged that _____ executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19 ___, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument, and acknowledged that _____ executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19 ___, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument, and acknowledged that _____ executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 19 ___, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument, and acknowledged that _____ executed the same as _____ free act and deed.

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

_____
Notary Public

My commission expires:

_____