CASE 6458: COTTON PETROLEUM CORPORATION
FOR AN UNORTHODOX GAS WELL LOCATION,
EDDY COUNTY, NEW MEXICO

CASE NO.

6458

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
14 February 1979

EXAMINER HEARING

IN THE MATTER OF:		
Application of Cotton Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico.	)	CASE 6458
and	)	
Application of Cotton Petroleum Corporation for compulsory pooling, Eddy County, New Mexico.	)	CASE 6459

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant: Conrad Coffield, Esq.
HINKLE, COX, EATON, COFFIELD & HENSLEY
P. O. Box 3580
Midland, Texas

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MR. NUTTER: We'll call now Case Number 6458.

MS. TESCHENDORF: Case 6458. Application of Cotton Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico.

MR. NUTTER: And Case 6459.

MS. TESCHENDORF: Case 6459. Application of Cotton Petroleum Corporation for compulsory pooling, Eddy County, New Mexico.

MR. COFFIELD: Conrad Coffield, with the Hinkle Law Firm, appearing on behalf of the applicant, Cotton Petroleum Corporation. I have two witnesses.

MS. TESCHENDORF: Will you stand and be sworn, please?

(Witnesses sworn.)

MR. NUTTER: These two cases will be consolidated for the purpose of testimony.

MARK SCHWEINFURTH

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. COFFIELD:

Q. Would you please state your name?

A. My name is Mark Schweinfurth.

Q. And where do you live, Mr. Schweinfurth?

A. In Midland.

Q. And what is your occupation?

A. I'm a geologist, so-called independent, and I live in Midland, Texas.

Q. And relative to these cases, what is your position with respect to the applicant?

A. I have been hired by the applicant to give expert testimony of a geological nature.

Q. You're a geological consultant?

A. Yes.

Q. Are you familiar with Cotton Petroleum's applications in these cases?

A. I am.

Q. Are you familiar with the property and the proposed well location involved?

A. I am.

Q. Mr. Schweinfurth, have you previously testified before the Division as a petroleum geologist?

A. Yes, I have.

Q. And were your qualifications accepted?

A. They were.

MR. COFFIELD: Is the witness considered qualified?

MR. NUTTER: Yes, he is.

Q. (Mr. Coffield continuing) Mr. Schweinfurth, generally speaing what does the applicant propose to accomplish by these -- these two applications?

First, there's 6458, what are we seeking there?

A. Cotton Petroleum proposes to drill an unorthodox location in the Indian Basin-Upper Pennsylvanian-Cisco Canyon Field at a location 660 feet from the south and east lines of Section 24, 21 South, 23 East.

Q. And the purpose of the application in the second case, Number 6459?

A. Cotton Petroleum proposes that in this particular Section 24, of 21, 23, in Eddy County, that they force pool interests of Marathon Oil Company to form a 640-acre proration unit.

Q. Mr. Schweinfurth, with respect to the unorthodox location aspect of these particular cases, generally why does Cotton Petroleum Corporation believe this proposed location is more desireable than an orthodox location?

A. As we will discuss later on Cotton Petroleum's location appears to be structurally and stratigraphically the optimum location in the section, the section having had some drainage over the years previously, they're reluctant to drill any farther down the structure than the proposed location.

Q. All right. Please refer to what has been marked as Exhibit One and explain to the Examiner what that represents.

A. Exhibit One is a land plat showing a portion of Eddy County which is on the northeastern portion of the Indian Basin-Upper Pennsylvanian-Cisco Canyon Field. It is a land plat showing not only Section 24 in which Cotton Petroleum proposes to drill the requested well, but it also shows surrounding sections, the wells that are in them, and the color code is -- signifies the different operators surrounding that location.

Q. Does the plat have a key, then, for this -- yes, I see it there at the left side?

A. Yes.

Q. For the operators?

A. Yes, Cotton not only has a legend showing the colors of the different operators, it shows on the right side the ownership of the different operators in the section where the well is to be proposed, it also shows the scale of the map, which is one inch equals 2000 feet.

Q. Okay, Mr. Schweinfurth, relative to the location as set forth in the application as compared with an orthodox location, what is the relative location of the proposed well?

A. The orthodox location, if I understand your

question right, is normally 1650 from the south -- would be a 1650 from the lease lines. The proposed location is 660 feet from the lease lines of the southeast quarter of the section.

Q. So then the proposed location is closer to both the south and the east boundaries of the section, is that correct?

A. Yes, sir.

Q. Please refer to what's been marked as Exhibit Two and explain what that represents.

A. Exhibit Number Two is a structure map, quotation marks, it's not a tectonic structure map, but it is a top of the reef map, contoured on the Upper Pennsylvanian-Cisco Canyon pay.

It covers the exact same area of the Exhibit Number One land plat, and it shows the Cisco Canyon reef top relative to the proposed location in Section 24, and also relative to the wells surrounding it. These wells that are now producing from the Cisco Canyon reef are colored in blue, and it can be noted from this map that the proposed location is some 100 feet higher than the Marathon than the Sinclair Well, which is a dry hole in the northeast of the southwest quarter of Section 24.

MR. NUTTER: You said Sinclair, but that's shown there to be Marathon.

A. Yes, sir, it is an old Sinclair Well. It currently now is -- belongs to Arco, or it would currently be an Arco Well, but Marathon is one of the lease holders in that portion of the section, and that's what the designation Marathon is there.

It was drilled by Sinclair in 1965, as I remember, '64, pardon me.

That well was a dry hole in the reef in 1964 because of the upper portion of the reef being relatively impervious to the transmission of hydrocarbons.

Q. Do you have anything further on Exhibit Two?

A. I would also like to point out that on Exhibit Two there is an A-A prime cross section, which I would like to show at the hearing, next.

Q. Okay, then go on to Exhibit Three and explain what that exhibit is.

A. Exhibit Three is that cross section, and its purpose is to show the difference between the reef, productive reef between the Sinclair Well in the southwest quarter of 24 and the Kerr-McGee in the southeast quarter of 30, to the southeast of the proposed location.

If you will note that the so-called top of the Indian Basin-Cisco Canyon pay is noted on the cross section. The proposed location is drawn in and the stratigraphic correlation within the reef is noted on the line

below the sea level datum.

As you can see, the section in the Sinclair Well was approximately 100 feet. That same section builds up or reefs up to somewhere about 400 feet in the Kerr McGee Well to the southeast. That is the section that the Cotton Petroleum Corporation well hopes to tap a portion of in their proposed location.

Q. So one of the purposes for offering Exhibit Three is to reveal and show graphically the fact that there is more reef prospectively in the proposed location.

A. Yes, sir.

Q. Is that correct?

A. It appears to be. If we may refer again to Exhibit Two, in Section 19 Penroc had a producing well in the Pennsylvanian reef up until it -- it also produced about a billion feet of gas, and is now not producing, so that I would say that if -- if you could infer production across the 3600 foot contour interval, you might have a basis for assigning an amount of producing acreage to that particular proposed location.

Q. Mr. Schweinfurth, would an orthodox location, drilling this well at an orthodox location substantially diminish the chances of successful completion?

A. Certainly would. I feel that it would.

Q. Do you, in your opinion, do you think that

approval of this unorthodox location would necessarily require or dictate the approval of other wells in the general area at unorthodox locations?

A. I would say not. As a matter of fact, the reef not only is a -- I think it's been demonstrated that this particular reef does have in fact a partial water drive, in that the higher wells on the structure will get their proportionate share of gas plus, and that the lower wells on the structure will not, especially if they, in this case they've been drained over the period of time that the reef has been producing.

Q. Mr. Schweinfurth, what, in your opinion, is the volume of production which could reasonably be expected from a well located at the proposed unorthodox location?

A. Of course, that's a difficult question to answer, but from past performance of other wells, it wouldn't be -- it wouldn't be -- and educated guess would be 3-million feet a day, I would say.

Q. Mr. Schweinfurth, have you considered the risk aspects of this particular prospect, this well that's to be drilled, how risky the prospect will be.

A. I would say that the risk of carbonate reefs in the Permian Basin are about the most risky reservoirs to drill for, because not only are you faced with the vagaries of the structure or the top of the reef, but you're also

faced with the inhomogenous porosities that are common to reefs, so that you've got two strikes against you, and then the third strike in this particular case is there has in fact been some drainage across this proposed section.

Q. With all of that in mind, then, Mr. Schweinfurth, do you have a recommendation to make to the Division with respect to a risk penalty which should be assessed in connection with the forced pooling nature of our application?

A. It is my opinion that a full 200 percent penalty should be assessed for a well of this high risk.

Q. Okay, Mr. Schweinfurth, were these exhibits prepared by you or under your supervision, Exhibits One, Two, and Three?

A. Yes, sir, they were.

Q. And in your opinion will the approval of Cotton Petroleum Corporation's application prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights?

A. Yes, sir.

MR. COFFIELD: Mr. Examiner, I move the admission of Exhibits One through Three.

MR. NUTTER: Applicant's Exhibits One through Three will be admitted in evidence.

MR. COFFIELD: And I have no further questions

of this witness on direct.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. Schweinfurth, which was the well that you mentioned had produced some amount of gas and then was abandoned?

A. The Penroc well in the northeast quarter of Section 19.

Q. Okay, was it completed in the Upper Penn?

A. Yes, sir, it was.

Q. And how much did it produce from there?

A. About a billion feet of gas.

Q. And how about the well up here in Section 13? Was it dry from the beginning?

A. Yes, sir, it was dry from the Upper Penn.

Q. And that well in Section 18?

A. Yes, sir, the same.

Q. Never produced?

A. Never produced, no, sir.

Q. Okay, can you give me the cumulative production on the other wells which you show on this exhibit?

A. No, sir, I do not have that information.

MR. NUTTER: Mr. Coffield, I think we'll take administrative note of our records to determine what

the production has been in these other wells.

MR. COFFIELD: Yes, sir.

Q. Do you feel, Mr. Schweinfurth, now tell me the history of this Marathon, or the old Sinclair Well, Mr. Schweinfurth, why it didn't produce.

A. It was tested in the upper portion of the reef and it had a gas show of approximately 11,000 cubic feet per day, and declined. The pressures indicated that it was tight, a rapid decline, in the drill stem testing it was tight.

Q. And it had the amount of gross section that you show here on Exhibit Number Three, which is only about a fourth of what the Kerr McGee Well has to the southeast?

A. Yes, sir, I would say that's correct.

Q. And what do you anticipate for your proposed location, maybe a couple of hundred, two hundred feet?

A. Yes, sir. I expect that if we just assign a straight line curve, as you can see from the cross section, it will be some two hundred, two hundred and fifty feet of reef production.

Q. Do you feel that the entire Section 24 is productive of gas?

A. Since the Sinclair Well was tight, it's difficult to say. As you will note in Section 14 to the northwest, the Arco Well is producing still. I am sorry

I do not have the cumulative production, but it isn't just a problem of water table, it's a problem also of porosity in the Sinclair well, and it's difficult to say how great an extent that tight section will be.

The well in -- I would say the well in 13 and 18 were both not only subject to being tight, but also being below the water table, but the other wells around the proposed location, the Marathon, or excuse me, the Sinclair Well is the only one that demonstrated that it was too tight to produce.

Q. Now what's your feeling, Mr. Schweinfurth, on the prospect of a penalty to be assigned to this well in this prorated gas pool because of its unorthodox location? Do you think it should have a penalty imposed on it because it's 660 feet from the boundaries rather than 1650?

A. Well, I feel that it has -- the interest owners in Section 24 have already undergone a penalty because they've been drained over the years.

Q. Well, they tried to produce it and didn't.

A. I would say that for administrative purposes, if you'll pardon my boldness, I don't know how else you could do it but draw a line between the Sinclair Well and the Penroc well and assign that portion up dip to a productive zone and that portion down dip, because there is

not enough -- close enough control to do anything else.

I sympathize with your problem.

Q. Not many wells when they just drill one to the square mile.

A. That's exactly right.

MR. NUTTER: What's your other witness going to testify to, Mr. Coffield?

MR. COFFIELD: We have testimony with respect to ownership aspects of the forced pool.

MR. NUTTER: Well costs?

MR. COFFIELD: Well costs and that sort of thing.

Q. (Mr. Nutter continuing.) Mr. Schweinfurth, we have received a telegram from Amoco Production Company, and Amoco has suggested that -- or has stated the dry hole located in the northeast of the southwest of Section 24 substantiates the limited productivity of Section 24, and we believe only 160 acres could reasonably be considered productive of hydrocarbons.

We therefore recommend this penalty should amount to at least 75 percent of its normal full allowable (25 percent allowable) in order to protect correlative rights of all parties involved in the Indian Basin Field.

A. If I were to answer to that, I would --

Q. I think the Hanagan Petroleum Corporation

has also suggested a penalty, although they didn't specify any particular number, I don't believe.

A. Obviously with a dry hole in the section there is some portion of that section which is not productive, but I think Amoco is no closer to the right number than -- than just picking a number out of a hat. I think that the structure contour lines indicate that there would possibly be 50 percent of the section productive if you just took all that portion up dip of the 3600 foot contour line.

MR. NUTTER: Are there any other questions of Mr. Schweinfurth? He may be excused.

HARRY BLOMQUIST III

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. COFFIELD:

Q. Will you state your full name?

A. Harry Blomquist III.

Q. And Mr. Blomquist, where do you live?

A. I live in Midland, Texas.

Q. Who is your employer?

A. I'm employed by Cotton Petroleum Corporation as Division Landman for the Midland Division.

Q. Mr. Blomquist, are you familiar with Cotton

Petroleum Corporation's application in these cases?

A. Yes, sir, I am.

Q. And have you previously testified before the Division as a petroleum landman?

A. No, I haven't.

Q. And for the record and for the Examiner's information, would you please give a review of your educational background and employment history?

A. I graduated from the University of Texas in 1975 with a Bachelor's degree in Business Administration, and majored in petroleum land management. I was employed by Tartan Production Company (sic) for one year in Houston, until June of 1977, at which time I went to work for Cotton Petroleum.

I worked in the Tulsa office in Oklahoma for a year and a half and I moved to Midland in October and have been in Midland since then.

MR. COFFIELD: Is the witness considered qualified, Mr. Examiner?

MR. NUTTER: Yes, sir, he's a qualified landman.

Q. (Mr. Coffield continuing.) Are you familiar with the property involved in these particular applications and the land ownership that is involved in this matter?

A. Yes, sir, I am.

Q. Would you please refer to Exhibit One, which has previously been introduced, and explain Cotton's interest and position in the 320 acres involved in this case?

A. Cotton owns -- has a lease on the 40 acres shown in yellow in the northeast of the southeast quarter. The remainder of the acreage is owned, as you can see on the tabulation in the lower righthand corner of the exhibit, and it's undivided split up throughout the section.

Arco owns all of the north half and the remainder of it is split up between Marathon, Arco, and Maralo, and Irmalo.

Q. Okay, Mr. Blomquist, is it correct then that you have by virtue of farm-out arrangements or otherwise control of all of the acreage involved except what's involved with Marathon?

A. That's correct.

Q. Would you please tell about your contacts with Marathon and your attempts to make -- get approval --

A. Okay.

Q. -- for this matter, then?

A. Okay, the initial contact with Marathon was made by Mr. Schweinfurth, and I'll give a little brief discussion of his contacts, as well as my own.

They were first contacted by letter in February, '77, in which Mr. Schweinfurth requested a farm-out

of their acreage. At that time they indicated that they would at some time be willing to deal on their acreage but they wanted to wait and see what kind of deals were made with the other working interest owners, primarily Arco.

They were next contacted in September of '78 after farm-outs were obtained from Arco and Maralo. At this time they indicated that they wouldn't be willing to consider the proposal, and that was all they stated with regard to that -- with regard to their interests.

In January I again contacted Marathon and offered them -- offered to take a farm-out of their acreage based on the same terms as the farm-out we acquired from Arco, and they indicated that they would not make any election until such time as a forced pooling order was issued, and that's the status of our trade with Marathon.

Q. What about the overriding royalty interests underlying the area involved? Have they committed or have they agreed --

A. No, they haven't agreed. I'll have to submit a list of the overriding royalty interest owners after I return to Midland because I didn't bring it with me.

Q. So are you in the process of trying to complete the contract with the overriding owners?

A. Yes, sir.

Q. And to the extent that you're unable to ob-

tain any approval -- approval by any of these override owners, do you want them also included in this forced pool order?

A. Yes, sir, I do.

Q. And you will submit to the Commission when you return to Midland the necessary list of override owners?

A. Yes.

Q. Okay. Mr. Blomquist, refer to what has been marked as Exhibit Four and explain what that represents.

A. Exhibit Four is an AFE covering the estimated costs of the drilling and completing our proposed well.

Q. This AFE is prepared by Cotton Petroleum as a matter of internal control, is that correct?

A. Yes, sir.

Q. Because there is nobody else currently involved with respect to the well costs, as far as voluntary approval, is that correct?

A. That's correct. We currently have 100 percent of the working interests unless Marathon elects to join.

Q. Okay. Mr. Blomquist, would you please just kind of in narrative fashion discuss the estimated economics of this particular prospect?

A. Well, based on the estimated reserves, 3-billion cubic feet, and based on the cost of the well and

operations, we consider it to be an economic venture.

Q. All right, what about -- no, let's go on to Exhibit Five.

A. Okay.

Q. Will you explain what that --

A. Exhibit Five --

Q. What those are and what they represent?

A. This is copies of the farm-out agreements from the other working interest parties in the section, being the Maralo, Irmalo, and Atlantic Richfield, and also copies of letters of extension, which show the commencement date to be March 1st.

MR. COFFIELD: In this connection, Mr. Examiner, we would respectfully request the earliest possible consideration of these cases because of this March 1st expiration date for commencement of the well.

Q. Mr. Blomquist, with regard to administrative costs, and so forth, are you prepared to make a recommendation to the Examiner as to what those amounts should be?

A. Yes, sir. Our standard overhead rates as covered by our operating agreement are normally $2300 per month for drilling wells and $300 per month for operating.

Since this is 100 percent owned deal, we don't have any operating agreement covering this well.

Q. Okay, but your standard rates are $2300

and $300?

A. That's correct.

Q. Now with regard to the unorthodox location aspect of it, of these cases, Mr. Blomquist, were you the one who was in charge of contacting the offsetting operators?

A. Yes, I was.

Q. And did you in fact mail out --

A. I mailed out waiver letters to all of the offsetting operators and I received waivers of objection from Penroc, being the operator of the well to the east of our location, which has since been abandoned, and also from Atlantic Richfield.

I also received verbal response from Kerr McGee and they indicated that they would not oppose us, although I didn't receive a signed waiver letter from them.

MR. NUTTER: We have some correspondence or something from Kerr McGee and we might get that in the record while we're on it.

A. Okay.

MS. TESCHENDORF: Mr. David Christian was at the hearing today but had to catch a plane, so he left a signed statement. He's representing Kerr McGee Corporation. He states that they own leasehold interests in Sections 19 and 30 in this township.

They have no objection to the proposed un-

orthodox location; however, due to lease obligations or other reasons, should Kerr McGee decide to drill an offset well to protect against drainage, Kerr McGee would urge the OCD to take due notice of whatever action it decides to take in Case 6458.

MR. NUTTER: We'll take notice of the action we take.

Q. (Mr. Coffield continuing.) Okay, Mr. Blomquist, are these two exhibits, Exhibit Four and Five, which are the AFE and the farmouts, true copies of items as taken from your own files and over which you have authority for supervision and control?

A. Yes, they are.

Q. In your opinion will the approval of these applications of Cotton Petroleum in these two cases prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights?

A. Yes, sir, they will.

MR. COFFIELD: I move the admission of Exhibits Four and Five, Mr. Examiner.

MR. NUTTER: Applicant's Exhibits Four and Five will be admitted in evidence.

MR. COFFIELD: I have no other questions of this witness on direct.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. Blomquist, has Marathon actually been offered an opportunity to -- they have been offered an opportunity to farm-out their interest, I appreciate that.

A. Yes, sir.

Q. Have they also been offered an opportunity to join in the drilling of the well on a voluntary basis?

A. Yes, sir, they have. I forgot to mention it, but in my letter in January I requested that they either join or farm-out, and I also told them the estimated costs of the well.

Q. Did you send this particular AFE to them?

A. No, sir, I didn't have it. I just told them the dry hole and completed well costs.

Q. Which were similar to what these are?

A. Exactly.

Q. And what was their response to that?

A. They just told me that they weren't going to do anything.

Q. Neither way?

A. Right.

Q. But they did indicate to you verbally that they may go ahead and join you or farm-out after the forced

pooling action, is that it?

A. That's correct. Well, they told me they would elect under the forced pooling order. That's exactly what he told me.

Q. Did they say whether they're going to go consent or nonconsent on it?

A. He didn't say, but I understand, you know, I interpreted his meaning they would go nonconsent.

Q. I see.

A. And just take, you know, a penalty.

Q. And Cotton is willing to carry them on this to the --

A. Yes, sir.

Q. -- tune of 185 acres out of the 640.

A. Yes, sir.

Q. Now, as I understand it, Arco owns the north half in its entirety by themselves, maybe with an override, I don't know.

A. That's correct.

Q. And then the south half, with the exception of the 40 which Cotton has, is owned by these people listed here, being Atlantic, Marathon, Irmalo, Maralo.

A. Yes, sir, that's correct.

Q. As an undivided interest throughout that 280 acres.

A. Yes, sir.

Q. And their net acres are shown on the legend there.

A. That's correct.

Q. So apparently ARCO has some portion of the south half, too, then, don't they?

A. Yes, sir.

Q. Now what about royalty ownership? Is this all Federal lands, or what?

A. Yes, sir, it is all Federal lands.

Q. Is the south half a different lease than the north half?

A. Yes, sir, it is.

Q. Has any attempt been made to communitize this, insofar as the Federal government is concerned there?

A. No, sir.

Q. And the AFE was prepared by L. G. Langlie, I presume.

A. That's correct.

Q. And what position does he occupy with Cotton Petroleum Corporation?

A. He's our Division Production Manager.

Q. I see. And he's the one that normally prepares AFE's and well cost estimates?

A. That's correct.

MR. NUTTER: Are there any further questions of Mr. Blomquist? He may be excused.

Do you have anything further, Mr. Coffield?

MR. COFFIELD: No, sir, we haven't.

MR. NUTTER: We did mention both the telegrams. We had a telegram from Hanagan Petroleum Corporation, PanAmerican. We had the correspondence from Kerr McGee. Is that all that we have in these cases?

Does anyone have anything to offer in Cases 6458 and 6459?

If not, we'll take the cases under advisement.

(Hearing concluded.)

REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd CSR
Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6458-59 heard by me on 2/19 19 79.

, Examiner
Oil Conservation Division

1

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

JERRY APODACA
GOVERNOR

NICK FRANKLIN
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

March 20, 1979

Re: CASE NO. 6458
ORDER NO. R-5942

Mr. Conrad E. Coffield
Hinkle, Cox, Eaton, Coffield
& Hensley
Attorneys at Law
P. O. Box 3580
Midland, Texas 79702

Applicant:

Cotton Petroleum Corporation

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC

Other David Christian, Hugh Hanagan, J. R. Barnett

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6458
Order No. R-5942

APPLICATION OF COTTON PETROLEUM
CORPORATION FOR AN UNORTHODOX GAS
WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on February 14, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of March, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Cotton Petroleum Corporation, seeks approval of an unorthodox gas well location for its Federal 24 Well No. 1 to be located at a point 660 feet from the South line and 660 feet from the East line of Section 24, Township 21 South, Range 23 East, NMPM, Indian Basin-Upper Pennsylvanian Pool, Eddy County, New Mexico.

(3) That all of said Section 24 is to be dedicated to the well.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(5) That no offset operator appeared at the hearing and objected to the proposed unorthodox location.

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic

loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location is hereby approved for the Cotton Petroleum Corporation Federal 24 Well No. 1 to be located at a point 660 feet from the South line and 660 feet from the East line of Section 24, Township 21 South, Range 23 East, NMPM, Indian Basin-Upper Pennsylvanian Pool, Eddy County, New Mexico.

(2) That all of said Section 24 shall be dedicated to the above-described well.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY
Director

S E A L

fd/

Western Union Telegram

RECEIVED
FEB 12 1979
Oil Conservation

IPMFEKA SANA
1-011888S044 02/13/79
TWX AMOCO PROD HOU
001 HOUSTON, TEXAS FEBRUARY 13, 1979
PMS MR. JOE D. RAMEY
OIL CONSERVATION DIVISION
ENERGY AND MINERALS DEPARTMENT
STATE LAND OFFICE BUILDING - 2ND FLOOR
SANTA FE, NM 87501

Case 6458

RE: CASE NO. 6458, COTTON PETROLEUM CORPORATION APPLICATION FOR UNORTHODOX GAS WELL LOCATION, INDIAN BASIN-UPPER PENN GAS POOL, EDDY /COUNTY, NEW MEXICO.

AMOCO PRODUCTION COMPANY HAS BEEN ADVISED OF COTTON PETROLEUM CORPORATION'S APPLICATION FOR UNORTHODOX GAS WELL LOCATION FOR ITS FEDERAL 24 WELL NO. 1 TO BE LOCATED AS FOLLOWS:

660' FSL AND 660' FEL
SECTION 24, T-21-S, R-23-E
EDDY COUNTY, NEW MEXICO

AMOCO PRODUCTION COMPANY IS A JOINT INTEREST OWNER OF THE MARATHON OPERATED INDIAN BASIN "F" NO. 1 LOCATED IN SECTION 25, T-21-W, R-23-E, OFFSETTING COTTON PETROLEUM CORPORATION'S PROPOSED WELL TO THE SOUTH. PLEASE BE ADVISED AMOCO PRODUCTION COMPANY OBJECTS TO THE PROPOSED UPPER PENN WELL TO BE DRILLED AT THE UNORTHODOX LOCATION. HOWEVER, IF THE OIL CONSERVATION DIVISION DOES APPROVE THE DRILLING OF THE PROPOSED WELL, AND IN THE EVENT THE WELL IS PRODUCTIVE IN THE UPPER PENN GAS PAY, A PENALTY SHOULD BE IMPOSED DUE TO ITS LIMITED PRODUCTIVE AREAL EXTENT. THE DRY HOLE LOCATED IN THE NE/4 SW/4 OF SECTION 24 SUBSTANTIATES THE LIMITED PRODUCTIVITY OF SECTION 24 AND WE BELIEVE ONLY 160 AC. COULD BE REASONABLY CONSIDERED PRODUCTIVE OF HYDROCARBONS. WE, THEREFORE, RECOMMEND THIS PENALTY SHOULD AMOUNT TO AT LEAST 75% OF ITS NORMAL FULL ALLOWABLE (25% ALLOWABLE) IN ORDER TO PROTECT CORRELATIVE RIGHTS OF ALL PARTIES INVOLVED IN THE INDIAN BASIN FIELD.

AMOCO PRODUCTION COMPANY

J R BARNETT
REGIONAL ENGINEERING MANAGER

1541 EST

IPMFEKA SANA

Telegram

IPMFEKA SANA
4-027013E043 02/12/79
ICS IPMMTZZ CSP
5056235053 TDMT ROSWELL NM 83 02-12 1258P EST
PNS OIL CONSERVATION DIVISION, RPT DLY BY MGM, DLR
STATE LAND OFFICE BLDG
SANTA FE NM 87501
REFERENCE CASE NUMBER 6458 - FEBRUARY 14 1979 HEARING - DOCKET NUMBER 6-79

GENTLEMEN

HANAGAN PETROLEUM CORPORATION AS AN OPERATOR IN THE INDIAN BASIN UPPER PENNSYLVANIAN GAS FIELD OBJECTS TO THE UPPER PENNSYLVANIAN WELL PROPOSED TO BE DRILLED IN THE CAPTIONED. HOWEVER SHOULD YOU APPROVE THE DRILLING OF THE PROPOSED WELL AND IN THE EVENT THE WELL IS PRODUCTIVE IN THE UPPER PENNSYLVANIAN GAS FIELD PAY, A PENALTY ON ITS ALLOWABLE SHOULD BE IMPOSED DUE TO ITS LIMITED PRODUCTIVE AERIAL EXTENT

VERY TRULY YOURS
HANAGAN PETROLEUM CORP BY HUGH E HANAGAN (MR HILL P O BOX 1737 ROSWELL NM 88201)

1300 CST

IPMFEKA SANA

DAVID CHRISTIAN
P.O. BOX 25861
OKLA. CITY, OK. 73125

REPRESENTING KERR-MCGEE CORPORATION
CASE 6458

KERR-MCGEE CORPORATION OWNS LEASEHOLD INTERESTS IN SECTIONS 19 & 30, T21S-R24E, EDDY COUNTY, NEW MEXICO, WHICH OFFSETS APPLICANT'S PROPOSED LOCATION TO THE EAST & SOUTHEAST. KERR-MCGEE HAS NO OBJECTION TO APPLICANT'S PROPOSED UNORTHODOX LOCATION. HOWEVER, DUE TO LEASE OBLIGATIONS OR OTHER REASONS, SHOULD KERR-MCGEE DECIDE TO DRILL AN OFFSET WELL TO PROTECT AGAINST DRAINAGE, KERR-MCGEE WOULD URGE THE OIL CONSERVATION DIVISION TO TAKE DUE NOTICE OF WHATEVER ACTION IT DECIDES TO TAKE IN CASE 6458.

David Christian
2-14-79

KERR-McGEE CORPORATION
KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

FEB 12 1979

February 9, 1979

OIL AND GAS DIVISION

New Mexico Department of
Energy And Minerals
P. O. Box 2088
Santa Fe, New Mexico 87501

Attn: Mr. Joe D. Ramey

CASE 6458
APPLICATION OF COTTON PETROLEUM CORPORATION
SECTION 24, T21S, R23E
EDDY COUNTY, NEW MEXICO

Dear Mr. Ramey:

Kerr-McGee Corporation received notice on February 5, 1979 of an application by Cotton Petroleum Corporation for an unorthodox gas well location in the Indian Basin-Upper Pennsylvanian Pool (Case 6458). Please be advised that Kerr-McGee objects to the location proposed by the applicant and its representatives may appear at the hearing scheduled to be held on February 14, 1979, and enter testimony and evidence in opposition to same.

Please give David Christian a telephone call at (405) 270-2129 if additional information concerning this matter is needed.

Very truly yours,

KERR-McGEE CORPORATION

Donald W. Hecker
Operations Manager-N.A.

DWH/DC/kb

CASE 6458: Application of Cotton Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 24 Well No. 1 to be located 660 feet from the South and East lines of Section 24, Township 21 South, Range 23 East, Indian Basin-Upper Pennsylvanian Pool, Eddy County, New Mexico, all of said Section 24 to be dedicated to the well.

CASE 6459: Application of Cotton Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying all of Section 24, Township 21 South, Range 23 East, Indian Basin-Upper Pennsylvanian Pool, Eddy County, New Mexico, to be dedicated to a well to be drilled 660 feet from the South and East lines of said section. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6460: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order extending certain pools in Rio Arriba, San Juan, and Sandoval Counties, New Mexico:

(a) EXTEND the Aztec-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM
Section 26: W/2

(b) EXTEND the Ballard-Pictured Cliffs Pool in Rio Arriba, Sandoval and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM
Section 16: NE/4

TOWNSHIP 24 NORTH, RANGE 6 WEST, NMPM
Section 18: SE/4

(c) EXTEND the Beautiful Mountain-Mississippian Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 27 NORTH, RANGE 19 WEST, NMPM
Section 32: SE/4 SW/4 and SW/4 SE/4

(d) EXTEND the Bisti-Lower Gallup Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 10 WEST, NMPM
Section 5: S/2 NE/4

(e) EXTEND the Blanco Mesaverde Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 2 WEST, NMPM
Section 8: E/2
Section 9: All

TOWNSHIP 26 NORTH, RANGE 6 WEST, NMPM
Section 3: W/2
Section 4: All
Section 5: All

TOWNSHIP 27 NORTH, RANGE 2 WEST, NMPM
Section 21: S/2
Section 28: W/2
Section 29: S/2 (Partial)
Section 30: S/2 (Partial)

TOWNSHIP 30 NORTH, RANGE 5 WEST, NMPM
Section 1: W/2

(f) EXTEND the Blanco-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 9 WEST, NMPM
Section 7: S/2
Section 18: W/2

COTTON PETROLEUM CORPORATION

Prospect: Marathon

AUTHORITY FOR EXPENDITURE

AFE No. _____ Lease Name FEDERAL 24 Well No. 1

Description 660' FS & EL Sec. 24, 7-21-S R-23-E Parish/County Eddy

State New Mexico Area Midland Operator COTTON PETROLEUM CORPORATION

Project _____ Prepared by L. G. Langley

Exploration ☐ Development ☒ Recompletion ☐ Workover ☐ T. D. 7600' Date 2/3/79

DRILLING INTANGIBLES	Dry Hole Without Pipe	Completed Well	Actual Cost	Over (Under)
Location, Roads, Damages	$ 9,000	$ 9,000		
Footage 7,600 ft. @ 16 ft.	121,600	121,600		
Day Work 3 days WDP @ $ _____ /day	10,800	10,800		
_____ days WODP @ $ _____ day				
Rig Move Costs				
Cement, Cementing and Services	10,000	21,000		
Testing and Coring	8,000	8,000		
Logging	21,000	21,000		
Professional Services	3,500	3,500		
Mud Materials, Water	20,000	20,000		
Bits				
Fuel				
Coreheads and Rentals				
Geological	5,000	5,000		
Miscellaneous (Inc. Labor & Transportation)	10,000	10,000		
Total Drilling	218,900	229,900		
COMPLETION INTANGIBLES:				
Completion Unit 10 days/hrs. @ $ _____		$ 10,000		
Cement and Cementing				
Floating Equipment, Centralizers, Scratchers				
Perforating and Logging		6,000		
Frac and/or Acid		12,000		
Fuel, Water, Power				
Battery Construction - Dirt Work, etc.		3,000		
Completion Tools and Equipment - Rentals		2,000		
Professional Services		3,000		
Miscellaneous Services (Inc. Marine)		3,500		
Other (Including Labor & Transportation)				
Total Completion		39,600		
Total Intangibles	218,900	$ 269,500		
EQUIPMENT:				
Casing 300 ft. 13-3/8 @ $ _____ /ft.	5,300	$ 5,300		
2000 ft. 8-5/8 @ $ _____ /ft.	17,800	17,800		
7600 ft. 4-1/2 @ $ _____ /ft.		45,600		
_____ ft. _____ @ $ _____ /ft.				
Tubing 7600 ft. 2-3/8 @ $ _____ /ft.		22,800		
Wellhead Equipment	2,000	10,000		
Rods _____ ft. _____ @ $ _____ /ft.				
Subsurfaces Equipment - BH Pump, Pkrs., etc.		1,000		
Line Pipe _____ ft. _____ @ $ _____ /ft.		1,500		
Tanks, Treaters, Separators, etc.		10,000		
Gas Processing Unit		3,500		
Marine - Barges, Platforms, etc.				
Pumping Unit and Engine				
Other Miscellaneous Equipment		5,000		
Total Equipment Cost	25,100	$ 122,500		
Total Well Cost	$ 244,000	$ 392,000		

APPROVALS

Operator Coton Petr. Corp.	By L G Langley	WI _____ %	Date _____
Company _____	By _____	WI _____ %	Date _____
Company _____	By _____	WI _____ %	Date _____
Company _____	By _____	WI _____ %	Date _____
Company _____	By _____	WI _____ %	Date _____
Company _____	By _____	WI _____ %	Date _____

P-25 (REV. 8/77)

BEFORE EXAMINER
OIL CONSERVATION DIVISION
EXHIBIT NO. 4
CASE NO. 6458 & 6459

MARK F. SCHWEINFURTH
501 C & K PETROLEUM BUILDING
MIDLAND, TEXAS 79701

CONSULTING GEOLOGIST

915/684-7762

December 1, 1978

Cotton Petroleum Corporation
420 Wall Towers West
Midland, TX 79701

Re: ARCO Farmout
Sec. 24, 21S-23E,
Eddy County, New Mexico
CPC Marathon Prospect

Gentlemen:

In accordance with and pursuant to our letter agreement dated September 13, 1977, this letter shall serve as an assignment of rights granted me in that farmout agreement from Atlantic Richfield Company dated September 1, 1978. By accepting in the space provided below Cotton agrees to fulfill the obligations of the farmoutee as set out in the subject farmout agreement.

Yours very truly,

Mark F. Schweinfurth

Mark F. Schweinfurth

AGREED TO AND ACCEPTED
this 1st day of December, 1978

COTTON PETROLEUM CORPORATION

By: W. B. Bomgardner II

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 5
CASE NO. 6458 & 6459

Cotton Petroleum Corporation
A United Energy Resources, Inc. Company

420 Wall Towers West/Midland, Texas 79701 (915) 683-5211

November 3, 1978

Atlantic Richfield Company
P. O. Box 1610
Midland, TX 79702

Attention: Mr. Glenn Zellner

Re: Farmout Agreement
Section 24, 21S-23E
Eddy County, New Mexico
CPC Marathon Prospect
Lowe Lease #2728

Gentlemen:

Enclosed are two executed copies of our farmout agreement covering the captioned area. As you know, Mark Schweinfurth has assigned this agreement to Cotton Petroleum.

Since it will be necessary to force pool the section in order to acquire the interest of Marathon, Cotton does hereby request that the commencement date set forth in Article II of the farmout agreement be extended to March 1, 1979. If you are agreeable to this extension, please indicate by signing in the space provided below and returning one copy of this letter to our office at your earliest possible convenience.

Yours very truly,

COTTON PETROLEUM CORPORATION

H. L. Blomquist III
Division Landman

HLB/sp
Enclosure

AGREED TO AND ACCEPTED this
6th day of November, 1978

ATLANTIC RICHFIELD COMPANY

By: _____

FARMOUT AGREEMENT

Re: Lease No. S-NM-239
& S-NM-251
Eddy County, New Mexico
Area: Indian Basin

THIS AGREEMENT, made and entered into this 1st day of September, 1978, by and between ATLANTIC RICHFIELD COMPANY, a Pennsylvania Corporation having a permit to do business as a foreign corporation in the State of New Mexico and whose mailing address is Post Office Box 1610, Midland, Texas, hereinafter called Atlantic and

MARK F. SCHWEINFURTH

501 C & K Petroleum Building

Midland, Texas 79701

hereinafter called Farmoutee;

WITNESSETH: THAT,

-I-

Atlantic agrees to assign to Farmoutee without warranty of title of any kind, either expressed or implied, all of its leasehold interest in the oil and gas for a period of 90 days and as long thereafter as oil and/or gas is produced in commercial quantities, subject to all the terms, conditions, provisions and limitations of this agreement in the following described tracts of land, Eddy County, New Mexico:

Township 21 South, Range 23 East, N.M.P.M.

TRACT 1: N/2 of Section 24

TRACT 2: S/2 of S/2 of Section 24

-II-

Farmoutee hereby agrees to commence on or before December 1, 1978 the actual drilling of a test well to be located at a legal location in the SE/4 of Section 24, T-21-S, R-23-E, and to pursue the drilling of this test well with due diligence and in a good and workmanlike manner until Farmoutee has thoroughly tested the Cisco-Canyon formation as identified by and to the satisfaction of Atlantic, or Farmoutee has reached a total depth of 7700 feet, whichever is the lesser depth. The test is to be completed within 90 days from the date of commencement.

-III-

Within 90 days from the completion of the first well as a well capable of producing oil and/or gas, Farmoutee agrees to conduct a continuous drilling program, with not more than 90 days elapsing between the completion of one well and the commencement of another well, until the acreage subject hereto is developed to a density of one well for each standard spacing and proration unit prescribed by orders of the New Mexico Oil Conservation Commission or if there are no applicable spacing and proration rules, then one well for each 40 acre tract in the event of oil production and one well for each 320 acre tract in the event of gas production. The second well and all additional wells are to be

drilled to a depth sufficient to test adequately the deepest producing interval encountered in the first well. If Farmoutee fails to conduct the continuous drilling program within the time and in the manner herein specified, all interest in the premises assigned to Farmoutee pursuant to this agreement shall automatically revert to Atlantic, except as to each tract as aforesaid for which Farmoutee has a producing well, and forthwith, Farmoutee shall reassign to Atlantic all interest in such forfeited acreage acquired by Farmoutee hereunder, warranting the same to be free and clear of all liens, claims or encumbrances created by, through or under Farmoutee.

At the time of completion of the last well drilled hereunder, Farmoutee shall reassign to Atlantic all said premises insofar as concerns rights below 100 feet below the deepest producing interval as to each respective tract or proration unit on or for which Farmoutee has a producing well, warranting the same to be free and clear of all liens, claims or encumbrances suffered by, through or under Farmoutee.

-IV-

Farmoutee agrees to properly test to Atlantic's satisfaction any formation that, either before or after logging as hereinafter provided, appears favorable to Atlantic for the production of oil and/or gas. Farmoutee agrees to provide and perform those services outlined in Exhibit 1, attached to this agreement and made a part hereof.

Atlantic's representative shall have full access to the well and all records thereof during all operations. Atlantic shall be given all information as and when obtained in connection with drilling progress and all operations and shall be permitted to observe all operations. In the event the test is a dry hole, Atlantic shall have the opprtunity to run a velocity survey to the bottom of the hole at Atlantic's expense before the well is plugged and abandoned. Upon abandonment of any and all wells drilled hereunder, Farmoutee agrees to plug same in accordance with the rules and regulations established by the New Mexico Oil Conservation Commission and pay for all damage to the surface which may have been suffered by reason of Farmoutee's drilling plugging operations. Farmoutee shall indemnify, save and keep Atlantic harmless from any and all risk, liability, expense and claims of every kind and character that might arise out of Farmoutee's operations hereunder.

-V-

Upon completion of the first well as a well capable of producing oil and/or gas in paying quantities and if drilled in accordance with all the terms and conditions of this agreement, Atlantic will furnish to Farmoutee upon Farmoutee's written request an assignment as set out above, on a form approved by Atlantic's attorneys, covering its interest in the above described land. The assignment will be to a depth of 100 feet below the depth drilled in the first well as set out above but in no event below the base of the Cisco-Canyon formation

and Atlantic expressly reserves all rights not hereinabove specifically stated to be assigned.

Atlantic shall also reserve a 1/16th of 8/8ths overriding royalty on all oil and/or gas produced, which shall be in addition to all royalties, overriding royalties, production payments and similar lease burdens existing as of this date. Atlantic's overriding royalty is to be free and clear of all cost, expense and taxes, including ad valorem taxes and excepting gross production taxes. Such overriding royalty shall extend to the oil and gas leases that may be assigned hereunder and to any renewals or extension thereof or top leases thereon that may be taken or become owned by Farmoutee within five (5) years after the surrender, termination or expiration of such leases insofar as such renewals, extensions or top leases apply to the above described land. This shall be a covenant running with the land; provided that Atlantic's overriding royalty shall not

extend to any renewal, extension or top lease which is acquired at a date subsequent to twenty (20) years from the date of above assignment. The request for the assignment must be made within 30 days from the completion of the first well. If such written request is not made, it is hereby agreed that Farmoutee shall relinquish any right and interest Farmoutee may have acquired under the terms of this agreement in the above described acreage. Any assignment prepared under the terms hereof shall contain the usual "lesser estates" clause.

-VI-

In addition to the overriding royalty interest hereinabove provided, Atlantic shall reserve unto itself, its successors and assigns, the right and option to convert its overriding royalty interest, after payout of any well drilled hereunder, to 50 % of the working interest in and to the oil and gas leasehold estate assigned and created hereunder, proportionately reduced, however, to accord with the interests involved herein if less than the full interest, together with a like interest in all lease equipment and personal property in or used in connection therewith, subject to a proportionate part of any royalty, overriding royalty, or similar lease burdens reserved and outstanding. For these purposes, "payout" shall be deemed to occur when proceeds or market value of production from any well completed on the above described lands, (after deducting production taxes, royalty, overriding royalty and like burdens) shall equal 100% of Farmoutee's actual cost of drilling, testing, equipping and completing the well, including the actual cost of any reworking, deepening or plugging back, plus 100% of the actual cost of operations of the well; the proceeds of production and the cost of such development and operations to be attributable only to the undivided interest subject hereto if less than the full interest in the oil and gas. Payout shall be determined and the option shall be exercised separately as to the proration unit around each well drilled on the above described land. Upon demand, Farmoutee shall execute and deliver an appropriate assignment, evidencing Atlantic's interest after election.

Farmoutee shall notify Atlantic in writing within 15 days after payout occurs and Atlantic shall have 30 days after receipt of such notice in which to exercise its option. If Atlantic exercises its option, the conversion shall be effective as of 7:00 a.m. on the first day of the month following date of payout. In computing Farmoutee's recoupment out of production of the above defined costs of a well or wells, Farmoutee agrees to furnish Atlantic monthly, or at such other times as may be requested by Atlantic, a statement showing the current payout status of the well or wells. Payout status reports should be mailed to:

Atlantic Richfield Company
Joint Operations Accounting
P. O. Box 2819
Dallas, Texas 75221

At such time as any well drilled on said land becomes jointly owned as between Farmoutee and Atlantic, the acreage allocated to said well shall become subject to the terms of the Operating Agreement attached hereto as Exhibit "2" and the provisions of the Accounting Procedure (Exhibit "C") attached to said Operating Agreement shall govern the "rates" and "charges" during "Payout" as defined above.

-VII-

Atlantic shall have the continuing right and option to purchase all oil and other liquid hydrocarbons, except any used for operating purposes, which may be produced and saved from the assigned premises. Any such purchases shall be at the price posted by Atlantic Richfield in the same field for the grade and quality of oil produced in effect at the time of purchase; provided that if there is no such Atlantic Richfield posting then any such purchases shall be at the average

of the two highest prices posted by others in the same field for the grade and quality of oil produced in effect at the time of purchase or, if there are no price postings in such field, then, in like sequence, at the price posted by Atlantic Richfield or at the average of the two highest prices posted by others in effect at the time of purchase in the oil producing area nearest to such field which produces the same kind and quality of crude oil. Before disposing of any oil or liquid hydrocarbons which Atlantic Richfield has the option to purchase under this agreement, you agree to contact Atlantic Richfield at the following address:

Atlantic Richfield Company
Midcontinent Crude Oil Supply
P. O. Box 2819
Dallas, Texas 75221

for the purpose of permitting Atlantic Richfield to act with respect to its options. Should Atlantic elect not to exercise its rights and option to purchase, such action shall not be held a waiver of the privilege to do so at any later time, but nothing herein shall be construed as requiring Atlantic Richfield to purchase or furnish a market for such production.

Before Farmoutee enters into any contract for the sale, purchase or processing of gaseous hydrocarbons from the interests involved herein, Farmoutee shall submit to Atlantic in writing the contract into which Farmoutee proposes to enter. Atlantic shall have the right and option, as its election, to (1) purchase all of such gas on the terms submitted, (2) take in kind or otherwise dispose of Atlantic's share of the gas on such terms and conditions as it deems advisable, or (3) allow Farmoutee to dispose of all of the gas and account to Atlantic, all in accordance with the terms of the proposal submitted, provided, however, that if Farmoutee is in any way affiliated with the purchaser of such gas, then Farmoutee shall account to Atlantic on the basis of the highest price offered or paid in the area by any purchaser or prospective purchaser. If Atlantic fails to notify Farmoutee of its election hereunder within sixty (60) days after receipt of such notice from Farmoutee, then it shall be considered that Atlantic made election (3) above. For the purpose of election (3) above the interest of Atlantic shall be considered to be only the overriding royalty interest reserved under this farmout agreement and shall not include Atlantic's working interest gas. In the event that Atlantic exercises its reserved option to convert its overriding royalty to a working interest upon payout of any well herein provided for, or at any time during which Atlantic may have a working interest in any well, Atlantic shall at all times have the express right to take its proportionate share of the working interest gas in kind or to independently market or dispose of the same and nothing herein contained shall be construed as giving or granting to Farmoutee the right to market or otherwise dispose of the proportionate share of the working interest gas of Atlantic without express authorization from time to time to do so.

-VIII-

It is further agreed that Atlantic shall continue to pay the annual rentals that may be payable under any of the leases that may be assigned hereunder and any shut-in gas royalty payments that may be required to maintain said leases in force and effect and Farmoutee agrees to promptly reimburse Atlantic for same. Nevertheless, Atlantic shall not be held liable in damages for failure to pay said rentals and/or royalty through mistake, clerical error or oversight.

-IX-

Before Farmoutee plugs and abandons the initial test well, Farmoutee hereby agrees to immediately notify Atlantic of Farmoutee's intention to do so. Atlantic shall then have forty-eight (48) hours (exclusive of Saturdays, Sundays and holidays) after receipt of said notice to decide whether we wish to take over said well. In the event Atlantic elects to take said well over, such

take over shall be without any prior cost to Atlantic except that Atlantic agrees to pay Farmoutee the reasonable salvage value of any and all lease and in-hole well equipment (except surface casing) less the reasonable estimated cost of salvaging said equipment then existing in the well or upon the drill site and further, Farmoutee shall relinquish to Atlantic any and all rights to which Farmoutee may be entitled in the above described acreage and well under the terms of this agreement. Operations on the above well from and after date of take over shall be at Atlantic's sole cost, risk and expense.

Further, prior to the abandonment of the last producing well hereafter drilled by Farmoutee on the premises involved herein, Farmoutee shall give Atlantic at least thirty (30) days advance notice prior to abandonment of the well. Atlantic thereupon shall have the right and option to take over the well in its then condition for additional testing by any method Atlantic desires, including but not limited to deepening or plugging back for the completion attempts at any depth, by paying to Farmoutee the reasonable salvage value of any salvable material in the hole, less the cost of salvaging same. If Atlantic elects not to take over the well, Farmoutee shall plug and abandon same at its sole cost, risk and expense. If Atlantic elects to take over the well, Farmoutee shall immediately assign to Atlantic all rights acquired by Farmoutee hereunder. All operations on any well taken over by Atlantic shall be at its sole cost, risk and expense and Atlantic shall plug and abandon any well taken over by it whenever Atlantic shall determine to abandon same.

-X-

Atlantic shall have no control over the drilling, testing and completing operations provided for in this agreement, said operations to be conducted at Farmoutee's sole cost, risk, and expense. None of such operations shall be considered as joint, it being expressly understood that this agreement does not constitute or provide any type of partnership or joint venture. It is understood that time is of the essence in fulfilling the provisions of this agreement as provided herein. No provisions of this agreement or assignment herein provided for shall be modified, altered, waived, or assigned except by written consent of Atlantic.

If this agreement correctly expresses the agreement between us, please signify Farmoutee's acceptance by executing and returning to Atlantic two copies of this agreement. This agreement shall be effective only upon the return of these executed copies within ten days from the date hereof.

ATLANTIC RICHFIELD COMPANY

BY: _____

ACCEPTED, APPROVED AND AGREED THIS 24 DAY OF October, 1978.

MARK F. SCHWEINFURTH

BY: _____

Form NM-F/O-1
(4-15-77)

EXHIBIT "I"

You agree to run logs and provide all information on each well involved with this agreement as indicated below:

1. Daily drilling and/or operations report describing all action commencing with staking of location and continuing through final completion or plugging of the well. Report must be daily by telephone or telegraph to A.R.Co. Scouting Department: Midland, Texas - Phone 915-684-0273 or 300 N. Pecos.

2. Drilling time:

   (a) Rate of penetration tabulation (1 copy) in no greater than 10' increments shall be delivered weekly to A.R.Co. Scouting Department, P. O. Box 1610, Midland, Texas, 79702.

   (b) In addition, if a geolograph or other such penetration rate or drilling monitoring device is used during drilling, copies of accumulated charts shall be delivered or sent weekly to the above named representative.

3. Well Cutting Samples:

   (a) Samples of at least every 10' from surface to bottom of hole shall be provided in cloth bags and delivered weekly to Midland Sample Cut, 704 S. Pecos, Midland, Texas. If a "tight-hole" operation is conducted, delivery may be to back door of 105 N. Ft. Worth St., Midland, Texas. Exception will be considered by D. E. Daugherty, District Geologist (Phone 915-684-0247) for near surface or shallow fast drilling zones like allurium and red beds if there is no critical reason for acquiring information such cuttings could provide.

   (b) If a mud logging unit is used, a set of cuttings caught and packaged by mud logger shall be delivered to Charles Andrews*, 300 N. Pecos, Midland, Texas - when each standard box is filled. Two copies of mud log will be mailed daily to Scouting Dept., Charles Andrews, P.O. Box 1610, Midland, Texas 79702.

4. One copy of each form submitted to a State or Federal oil or gas regulatory agency shall be mailed to Land Department, Attention: Glenn Zellner, P. O. Box 1610, Midland, Texas 79702.

5. Prior to drillstem testing, coring, logging and potentialing, notify one of the following in order listed in due time to allow an Atlantic Richfield representative to witness operation.

	Office Phone	Home Phone
Charles Andrews	684-0100	694-5797
John McBride	684-0100	697-1584
Glen Luff	684-0100	684-5354

6. *Three copies of each report and analysis, commercial or proprietary pertaining to or based on cores, drillstem test, porosity or fluid saturations from logs, and fluids, gas, or well cutting samples will be sent to the following:

   Scouting, Attention: Charles Andrews
   P. O. Box 1610, Midland, Texas 79702

   Chief Geologist, Room ATL-833
   P. O. Box 2819, Dallas, Texas 75221

7. *Weekly production data during the first 90 days production from the initial well and each subsequent well involved shall be sent to Scouting Dept., Charles Andrews, P.O. Box 1610, Midland, Texas 79702

8. Logs required under the agreement:

   (a) A gamma ray curve must be run from surface to bottom of hole, with the top 3,000' of the hole recorded at a logging speed not greater than 30' per minute for acceptable validity of measured natural rock strata gamma radiation. Gamma ray log must be a companion to any other logging curve operator desires. If shallow gamma ray is a separate log, please mail to Charles Andrews, P. O. Box 1610, Midland, Texas 79702.

   (b) A porosity measuring log from base of surface casing to bottom of hole - neutron, density or sonic.

   (c) A resistivity measuring log of a type compatible with mud system from base of surface casing to bottom of hole, run in open hole.

   (d) Additional logs required -

   (e) Plus any other logs operator elects to run.

9. *Copies of all logs run in wells involved with this agreement, including dipmeter log and velocity survey report will be sent as follows:

   Field or preliminary prints of all logs run, including dipmeter monitor, must be delivered within 24 hours after all logging at a given depth is completed. Verbal approval by Atlantic Richfield representative, listed above, for delay of delivery until Monday is usual for weekend logging if no immediate decision is anticipated using log information. Should logging be interrupted for more than 1 day, reasonable diligence in delivering completed logs is expected, rather than wait until all the planned logging at that depth is completed.

   Deliver preliminary and final copies to:

   Scouting Department
   Charles Andrews
   P. O. Box 1610
   Midland, Texas 79702

   Copies Required:
   Preliminary - 2 copies
   Final - 4 copies
   Vel. Surv. Rpt. - 1 copy

   (or hand carry to 300 N. Pecos)

10. You shall furnish Atlantic Richfield without warranty one true copy of all title opinions and curative data obtained by you covering or affecting title to lands subject to this agreement. Abstracts and other title material owned or controlled by you covering such lands shall, upon request, be made available to Atlantic for examination.

*If operator desires "tight hole" handling of nonpublic information pertaining to the well (1) notify Charles Andrews, Scouting, P. O. Box 1610, Midland, Texas 79702, (2) try to stamp or label each required log, record or other document "Tight Hole" or other similar indication of desired special confidential handling.

Revised
5/20/77

EXHIBIT "2"

A.A.P.L. FORM 610

MODEL FORM OPERATING AGREEMENT—1956

Non-Federal Lands

OPERATING AGREEMENT

DATED

_____, 19____,

FOR UNIT AREA IN TOWNSHIP 21 SOUTH, RANGE 23 EAST

EDDY COUNTY, STATE OF NEW MEXICO.

SECTION 24

AMERICAN ASSOCIATION OF PETROLEUM LANDMEN
APPROVED FORM. A.A.P.L. NO. 610
MAY BE ORDERED DIRECTLY FROM THE PUBLISHER
ROSS - MARTIN COMPANY, BOX 800, TULSA 74101

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A.A.P.L. FORM 610

OPERATING AGREEMENT

THIS AGREEMENT, entered into this_____ day of_____, 19____, between COTTON PETROLEUM CORPORATION hereafter designated as "Operator", and the signatory parties other than Operator.

WITNESSETH, THAT:

WHEREAS, the parties to this agreement are owners of oil and gas leases covering and, if so indicated, unleased mineral interests in the tracts of land described in Exhibit "A", and all parties have reached an agreement to explore and develop these leases and interests for oil and gas to the extent and as hereinafter provided;

NOW, THEREFORE, it is agreed as follows:

1. DEFINITIONS

As used in this agreement, the following words and terms shall have the meanings here ascribed to them.

(1) The words "party" and "parties" shall always mean a party, or parties, to this agreement.

(2) The parties to this agreement shall always be referred to as "it" or "they", whether the parties be corporate bodies, partnerships, associations, or persons real.

(3) The term "oil and gas" shall include oil, gas, casinghead gas, gas condensate, and all other liquid or gaseous hydrocarbons, unless an intent to limit the inclusiveness of this term is specifically stated.

(4) The term "oil and gas interests" shall mean unleased fee and mineral interests in tracts of land lying within the Unit Area which are owned by parties to this agreement.

(5) The term "Unit Area" shall refer to and include all of the lands, oil and gas leasehold interests and oil and gas interests intended to be developed and operated for oil and gas purposes under this agreement. Such lands, oil and gas leasehold interests and oil and gas interests are described in Exhibit "A".

(6) The term "drilling unit" shall mean the area fixed for the drilling of one well by order or rule of any state or federal body having authority. If a drilling unit is not fixed by any such rule or order, a drilling unit shall be the drilling unit as established by the pattern of drilling in the Unit Area or as fixed by express agreement of the parties.

(7) All exhibits attached to this agreement are made a part of the contract as fully as though copied in full in the contract.

(8) The words "equipment" and "materials" as used here are synonymous and shall mean and include all oil field supplies and personal property acquired for use in the Unit Area.

2. LOSS OF TITLE

In the event of loss or failure of title, in whole or in part, of any party hereto to any lease or interest covered by this agreement, the interests of the parties in the remainder of the Unit Area will be revised on a net surface leasehold acreage basis so that the party whose title has failed or has been lost will not be given credit for the interest affected by such loss or failure. Such revision of ownership shall not be retroactive as to investment or operating costs, or as to production, but each party whose title has been lost or has failed shall indemnify the other party or parties hereto against, and hold such other party or parties harmless from, all loss, cost, damage and expense which may result from, or in any manner arise because of, the delivery to such party of production obtained hereunder from acreage covered hereby or the payment of such party of the proceeds from the sale of such production prior to the date said loss or failure of title is determined.

The expiration of any lease because of the failure of the parties to extend same, in accordance with the provisions thereof, beyond its primary term shall not be considered as a loss or failure of title within the meaning of this Section 2. Any loss of a lease because of its expiration under its own terms at or after the expiration of its primary term shall be a common loss of the parties. Likewise, where all of the parties consent to a surrender of a lease (whether during or after its primary term) such loss shall be a common loss of the parties.

3. UNLEASED OIL AND GAS INTERESTS

If it develops that any interest owned and contributed by a party hereto is an unleased interest in the oil and gas rights, then such unleased interest shall be treated for all purposes of this agreement as if it were an oil and gas lease covering such unleased interest on a form providing for the usual and customary three-sixteenths 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 production equivalent to the royalty which would be payable if such unleased interest were subject to an oil and gas lease as provided in the preceding sentence. Where any provision of this agreement shall operate to require an assignment from any party contributing an unleased mineral interest, such provision shall be construed (insofar as such unleased mineral interest is concerned) as requiring instead the execution and delivery by such party of an oil and gas lease, for a primary term of one year from the date of its delivery and so long thereafter as oil or gas is produced, which lease shall reserve unto the Lessor a three-sixteenths royalty and contain the usual "lesser interest clause."

4. INTERESTS OF PARTIES

Exhibit "A" lists all of the parties, and their respective percentage of fractional interest under this agreement. Unless changed by other provisions, all costs and liabilities incurred in operations under this contract shall be borne and paid, and all equipment and material acquired in operations on the Unit Area shall be owned, by the parties as their interests are given in Exhibit "A". All production of oil and gas from the Unit Area, subject to the payment of the Lessor's usual three-sixteenths royalties, shall also be owned by the parties in the same manner.

If the interest of any party in any oil and gas lease covered by this agreement is subject to an overriding royalty, production payment, or other charge over and above the usual one-eighth (⅛) royalty, such party shall assume and alone bear all such excess obligations and shall account for them to the owners thereof out of its share of the working interest production of the Unit Area.

5. OPERATOR OF UNIT

COTTON PETROLEUM CORPORATION shall be the Operator of the Unit Area, and shall conduct and direct and have full control of all operations on the Unit Area as permitted and required by, and within the limits of, this agreement. It shall conduct all such operations in a good and workmanlike manner, but it shall have no liability as Operator to the other parties for losses sustained, or liabilities incurred, except such as may result from gross negligence or from willful breach of the provisions of this agreement.

6. EMPLOYEES

The number of employees and their selection, and the hours of labor and the compensation for services performed, shall be determined by Operator. All employees shall be the employees of Operator.

~~**7. TEST WELL**~~

~~On or before the_____ day of_____, 19____, Operator shall commence the drilling of a well for oil and gas in the following location:~~

~~and shall thereafter continue the drilling of the well with due diligence to~~

~~unless granite or other practically impenetrable substance is encountered at a lesser depth or unless all parties agree to complete the well at a lesser depth.~~

~~Operator shall make reasonable tests of all formations encountered during drilling which give indication of containing oil and gas in quantities sufficient to test, unless this agreement shall be limited in its application to a specific formation or formations, in which event Operator shall be required to test only the formation or formations to which this agreement may apply.~~

~~If in Operator's judgment the well will not produce oil or gas in paying quantities, and it wishes to plug and abandon the test as a dry hole, it shall first secure the consent of all parties to the plugging, and the well shall then be plugged and abandoned as promptly as possible.~~

8. COSTS AND EXPENSES

Except as herein otherwise specifically provided, Operator shall promptly pay and discharge all costs and expenses incurred in the development and operation of the Unit Area pursuant to this agreement and shall charge each of the parties hereto with their respective proportionate shares upon the cost and expense basis provided in the Accounting Procedure attached hereto and marked Exhibit "C". If any provision of Exhibit "C" should be inconsistent with any provision contained in the body of this agreement, the provisions in the body of this agreement shall prevail.

Operator, at its election, shall have the right from time to time to demand and receive from the other parties payment in advance of their respective shares of the estimated amount of the costs to be incurred in operations hereunder during the next succeeding month, which right may be exercised only by submission to each such party of an itemized statement of such estimated costs, together with an invoice for its share thereof. Each such statement and invoice for the payment in advance of estimated costs shall be submitted on or before the 20th day of the next preceding month. Each party shall pay to Operator its proportionate share of such estimate within fifteen (15) days after such estimate and invoice is received. If any party fails to pay its share of said estimate within said time, the amount due shall bear interest at the rate of ten (10%) percent per annum until paid. Proper adjustment shall be made monthly between advances and actual cost, to the end that each party shall bear and pay its proportionate share of actual costs incurred, and no more.

9. OPERATOR'S LIEN

Operator is given a first and preferred lien on the interest of each party covered by this contract, and in each party's interest in oil and gas produced the proceeds from the sale of and upon each party's interest in material and equipment, to secure the payment of all sums due from each such party to Operator.

In the event any party fails to pay any amount owing by it to Operator as its share of such costs and expense or such advance estimate within the time limited for payment thereof, Operator, without prejudice to other existing remedies including reasonable attorney fees in the event of suit to collect any delinquenc is authorized, at its election, to collect from the purchaser or purchasers of oil or gas, the proceeds accruing to the working interest or interests in the Unit Area of the delinquent party up to the amount owing by such party, and each purchaser of oil or gas is authorized to rely upon Operator's statement as to the amount owing by such party.

In the event of the neglect or failure of any non-operating party to promptly pay its proportionate part of the cost and expense of development and operation when due, the other non-operating parties and Operator, within thirty (30) days after the rendition of statements therefor by Operator, shall proportionately contribute to the payment of such delinquent indebtedness and the non-operating parties so contributing shall be entitled to the same lien rights as are granted to Operator in this section. Upon the payment by such delinquent or defaulting party to Operator of any amount or amounts on such delinquent indebtedness, or upon any recovery on behalf of the non-operating parties under the lien conferred above, the amount or amounts so paid or recovered shall be distributed and paid by Operator to the other non-operating parties and Operator proportionately in accordance with the contributions theretofore made by them.

10. TERM OF AGREEMENT

This agreement shall remain in full force and effect for as long as any of the oil and gas leases subjected to this agreement remain or are continued in force as to any part of the Unit Area, whether by production, extension, renewal or otherwise; provided, however, that in the event the first well drilled hereunder results in a dry hole and no other well is producing oil or gas in paying quantities from the Unit Area, then at the end of one hundred eighty (180) days after abandonment of the first test well, this agreement shall terminate unless one or more of the parties are then engaged in drilling a well or wells pursuant to Section 12 hereof, or all parties have agreed to drill an additional well or wells under this agreement, in which event this agreement shall continue in force until such well or wells shall have been drilled and completed. If production results therefrom this agreement shall continue in force thereafter as if said first test well had been productive in paying quantities, but if production in paying quantities does not result therefrom this agreement shall terminate at the end of one hundred eighty (180) days after abandonment of such well or wells. It is agreed, however, that the termination of this agreement shall not relieve any party hereto from any liability which has accrued or attached prior to the date of such termination.

11. LIMITATION ON EXPENDITURES

Without the consent of all parties: (a) No well shall be drilled on the Unit Area except any well expressly provided for in this agreement and except any well drilled pursuant to the provisions of Section 12 of this agreement, it being understood that the consent to the drilling of a well shall include consent to all necessary expenditures in the drilling, testing, completing,* and equipping of the well, including necessary tankage; (b) No well shall be reworked, plugged back or deepened except a well reworked, plugged back or deepened pursuant to the provisions of Section 12 of this agreement, it being understood that the consent to the reworking, plugging back or deepening of a well shall include consent to all necessary expenditures in conducting such operations and completing* and equipping of said well to produce, including necessary tankage; (c) Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of ----TEN THOUSAND AND NO/100 ---------- Dollars ($ 10,000.00) except in connection with a well the drilling, reworking, deepening, or plugging back of which has been previously authorized by or pursuant to this agreement; provided, however, that in case of explosion, fire, flood, or other sudden emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion are required to deal with the emergency and to safeguard life and property, but Operator shall, as promptly as possible, report the emergency to the other parties. Operator shall, upon request, furnish copies of its "Authority for Expenditures" for any single project costing in excess of $ 5,000.00

12. OPERATIONS BY LESS THAN ALL PARTIES*

If all the parties cannot mutually agree upon the drilling of any well on the Unit Area other than the test well provided for in Section 7, or upon the reworking, deepening or plugging back of a dry hole drilled at the joint expense of all parties or a well jointly owned by all the parties and not then producing in paying quantities on the Unit Area, any party or parties wishing to drill, rework, deepen or plug back such a well may give the other parties written notice of the proposed operation, specifying the work to be performed, the location, proposed depth, objective formation and the estimated cost of the operation. The parties receiving such a notice shall have thirty (30) days (except as to reworking, plugging back or drilling deeper, where a drilling rig is on location, the period shall be limited to forty-eight (48) hours exclusive of Saturday and Sunday and legal holidays) after receipt of the notice within which to notify the parties wishing to do the work whether they elect to participate in the cost of the proposed operation. Failure of a party receiving such a notice to so reply to it within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.

If any party receiving such a notice elects not to participate in the proposed operation (such party or parties being hereafter referred to as "Non-Consenting Party"), then in order to be entitled to the benefits of this section, the party or parties giving the notice and such other parties as shall elect to participate in the operation (all such parties being hereafter referred to as the "Consenting Parties") shall, within thirty (30) days after the expiration of the notice period of thirty (30) days (or as promptly as possible after the expiration of the 48-hour period where the drilling rig is on location, as the case may be) actually commence work on the proposed operation and complete it with due diligence.

The entire cost and risk of conducting such operations shall be borne by the Consenting Parties in the proportions that their respective interests as shown in Exhibit "A" bear to the total interests of all Consenting Parties. Consenting Parties shall keep the leasehold estates involved in such operations free and clear of all liens and encumbrances of every kind created by or arising from the operations of the Consenting Parties. If such an operation results in a dry hole, the Consenting Parties shall plug and abandon the well at their sole cost, risk and expense. If any well drilled, reworked, deepened or plugged back under the provisions of this section results in a producer of oil and/or gas in paying quantities, the Consenting Parties shall complete and equip the well to produce at their sole cost and risk, and the well shall then be turned over to Operator and shall be operated by it at the expense and for the account of the Consenting Parties. Upon commencement of operations for the drilling, reworking, deepening or plugging back of any such well by Consenting Parties in accordance with the provisions of this section, each Non-Consenting Party shall be deemed to have relinquished to Consenting Parties, and the Consenting Parties shall own and be entitled to receive, in proportion to their respective interests, all of such Non-Consenting Party's interest in the well, its leasehold operating rights, and share of production therefrom until the proceeds or market value thereof (after deducting production taxes, royalty, overriding royalty and other interests existing on the effective date hereof payable out of or measured by the production from such well accruing with respect to such interest until it reverts) shall equal the total of the following:

(A) 100% of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment beyond the wellhead connections (including, but not limited to, stock tanks, separators, treaters, pumping equipment and piping), plus 100% of each such Non-Consenting Party's share of the cost of operation of the well commencing with first production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other provisions of this section, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that interest which would have been chargeable to each Non-Consenting Party had it participated in the well from the beginning of the operation; and

(B) 300% ~~200%~~ of that portion of the costs and expenses of drilling, reworking, deepening or plugging back, testing and completing, after deducting any cash contributions received under Section 25, and 300% ~~200%~~ of that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections), which would have been chargeable to such Non-Consenting Party if it had participated therein.

In the case of any reworking, plugging back or deeper drilling operation, the Consenting Parties shall be permitted to use, free of cost, all casing, tubing and other equipment in the well, but the ownership of all such equipment shall remain unchanged; and upon abandonment of a well after such reworking, plugging back or deeper drilling, the Consenting Parties shall account for all such equipment to the owners thereof, with each party receiving its proportionate part in kind or in value.

Within sixty (60) days after the completion of any operation under this section, the party conducting the operations for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to the well, and an itemized statement of the cost of drilling, deepening, plugging back, testing, completing, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement of such costs of operation, may submit a detailed statement of monthly billings. Each month thereafter, during the time the Consenting Parties are being reimbursed as provided above, the Consenting Parties shall furnish the Non-Consenting Parties with an itemized statement of all costs and liabilities incurred in the operation of the well, together with a statement of the quantity of oil and gas produced from it and the amount of proceeds realized from the sale of the well's working interest production during the preceding month. Any amount realized from the sale or other disposition of equipment newly acquired in connection with any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited against the total unreturned costs of the work done and of the equipment purchased, in determining when the interest of such Non-Consenting Party shall revert to it as above provided; if there is a credit balance it shall be paid to such Non-Consenting Party.

If and when the Consenting Parties recover from a Non-Consenting Party's relinquished interest the amounts provided for above, the relinquished interests of such Non-Consenting Party shall automatically revert to it and from and after such reversion such Non-Consenting Party shall own the same interest in such well, the operating rights and working interest therein, the material and equipment in or pertaining thereto, and the production therefrom as such Non-Consenting Party would have owned had it participated in the drilling, reworking, deepening or plugging back of said well. Thereafter, such Non-Consenting Party shall be charged with and shall pay its proportionate part of the further costs of the operation of said well in accordance with the terms of this agreement and the accounting procedure schedule, Exhibit "C", attached hereto.

Notwithstanding the provisions of this Section 12, it is agreed that without the mutual consent of all parties, no wells shall be completed in or produced from a source of supply from which a well located elsewhere on the Unit Area is producing, unless such well conforms to the then-existing well spacing pattern for such source of supply.

The provisions of this section shall have no application whatsoever to the drilling of the initial test well on the Unit Area, but shall apply to the reworking, deepening, or plugging back of the initial test well after it has been drilled to the depth specified in Section 7, if it is, or thereafter shall prove to be, a dry hole or non-commercial well, and to all other wells drilled, reworked, deepened, or plugged back, or proposed to be drilled, reworked, deepened, or plugged back, upon the Unit Area subsequent to the drilling of the initial test well.

13. RIGHT TO TAKE PRODUCTION IN KIND

Each party shall take in kind or separately dispose of its proportionate share of all oil and gas produced from the Unit Area, exclusive of production which may be used in development and producing operations and in preparing and treating oil for marketing purposes and production unavoidably lost. Each party shall pay or deliver, or cause to be paid or delivered, all royalties, overriding royalties, or other payments due on its share of such production, and shall hold the other parties free from any liability therefor. Any extra expenditure incurred in the taking in kind or separate disposition by any party of its proportionate share of the production shall be borne by such party.

Each party shall execute all division orders and contracts of sale pertaining to its interest in production from the Unit Area, and shall be entitled to receive payment direct from the purchaser or purchasers thereof for its share of all production.

In the event any party shall fail to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the oil and gas produced from the Unit Area, Operator shall have the right, subject to revocation at will by the party owning it, but not the obligation, to purchase such oil and gas or sell it to others for the time being, at not less than the market price prevailing in the area, which shall in no event be less than the price which Operator receives for its portion of the oil and gas produced from the Unit Area. Any such purchase or sale by Operator shall be subject always to the right of the owner of the production to exercise at any time its right to take in kind, or separately dispose of, its share of all oil and gas not previously delivered to a purchaser. Notwithstanding the foregoing, Operator shall not make a sale into interstate commerce of any other party's share of gas production without first giving such other party sixty (60) days notice of such intended sale. Any contract made by OPERATOR specifically for the sale of non-taking party's share of Unit production shall not be for a term longer than is commensurate with the minimum needs of the industry under the circumstances and shall in no event be for a term exceeding one year.

14. ACCESS TO UNIT AREA

Each party shall have access to the Unit Area at all reasonable times, at its sole risk, to inspect or observe operations, and shall have access at reasonable times to information pertaining to the development or operation thereof, including Operator's books and records relating thereto. Operator shall, upon request, furnish each of the other parties with copies of all drilling reports, well logs, tank tables, daily gauge and run tickets and reports of stock on hand at the first of each month, and shall make available samples of any cores or cuttings taken from any well drilled on the Unit Area.

15. DRILLING CONTRACTS

All wells drilled on the Unit Area shall be drilled on a competitive contract basis at the usual rates prevailing in the area. Operator, if it so desires, may employ its own or rental tools and equipment in the drilling of wells, but its charges therefor shall not exceed the prevailing rates in the field, and the rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced, and such work shall be performed by 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.

16. ABANDONMENT OF WELLS

No well, other than any well which has been drilled or reworked pursuant to Section 12 hereof for which the Consenting Parties have not been fully reimbursed as therein provided, which has been completed as a producer shall be plugged and abandoned without the consent of all parties; provided, however, if all* parties do not agree to the abandonment of any well, those wishing to continue its operation shall tender to each of the other parties its proportionate share of the value of the well's salvable material and equipment, determined in accordance with the provisions of Exhibit "C", less the estimated cost of salvaging and the estimated cost of plugging and abandoning. Each abandoning party shall then assign to the non-abandoning parties, without warranty, express or implied, as to title or as to quantity, quality, or fitness for use of the equipment and material, all of its interest in the well and its equipment, together with its interest in the leasehold estate as to, but only as to, the interval or intervals of the formation or formations then open to production. The assignments so limited shall encompass the "drilling unit" upon which the well is located. The payments by, and the assignments to, the assignees shall be in a ratio based upon the relationship of their respective percentages of participation in the Unit Area to the aggregate of the percentages of participation in the Unit Area of all assignees. There shall be no readjustment of interest in the remaining portion of the Unit Area.

After the assignment, the assignors shall have no further responsibility, liability, or interest in the operation of or production from the well in the interval or intervals then open. Upon request of the assignees, Operator shall continue to operate the assigned well for the account of the non-abandoning parties at the rates and charges contemplated by this agreement, plus any additional cost and charges which may arise as the result of the separate ownership of the assigned well.

[illegible] (15) days after receipt of notice of the proposed abandonment of

17. DELAY RENTALS AND SHUT-IN WELL PAYMENTS.

Delay rentals and shut-in well payments which may be required under the terms of any lease shall be paid by the party who has subjected such lease to this agreement, at its own expense. Proof of each payment shall be given to Operator at least ten (10) days prior to the rental or shut-in well payment date. Operator shall furnish similar proof to all other parties concerning payments it makes in connection with its leases. Any party may request, and shall be entitled to receive, proper evidence of all such payments. If, through mistake or oversight, any delay rental or shut-in well payment is not paid or is erroneously paid, and as a result a lease or interest therein terminates, there shall be no monetary liability against the party who failed to make such payment. Unless the party who failed to pay a rental or shut-in well payment secures a new lease covering the same interest within ninety (90) days from the discovery of the failure to make proper payment, the interests of the parties shall be revised on an acreage basis effective as of the date of termination of the lease involved, and the party who failed to make proper payment will no longer be credited with an interest in the Unit Area on account of the ownership of the lease which has terminated. In the event the party who failed to pay the rental or the shut-in well payment shall not have been fully reimbursed, at the time of the loss, from the proceeds of the sale of oil and gas attributable to the lost interest, calculated on an acreage basis, for the development and operating costs theretofore paid on account of such interest, it shall be reimbursed for unrecovered actual costs theretofore paid by it (but not for its share of the cost of any dry hole previously drilled or wells previously abandoned) from so much of the following as is necessary to effect reimbursement:

(1) Proceeds of oil and gas, less operating expenses, theretofore accrued to the credit of the lost interest, on an acreage basis, up to the amount of unrecovered costs;

(2) proceeds, less operating expenses thereafter incurred attributable to the lost interest on an acreage basis, of that portion of oil and gas thereafter produced and marketed (excluding production from any wells thereafter drilled) which would, in the absence of such lease termination, be attributable to the lost interest on an acreage basis, up to the amount of unrecovered costs, the proceeds of said portion of the oil and gas to be contributed by the other parties in proportion to their respective interests; and

(3) any moneys, up to the amount of unrecovered costs, that may be paid by any party who is, or becomes, the owner of the interest lost, for the privilege of participating in the Unit Area or becoming a party to this contract.

Operator shall attempt to notify all parties when a gas well is shut-in or returned to production, but assumes no liability whatsoever for failure to do so.

18. PREFERENTIAL RIGHT TO PURCHASE

Should any party desire to sell all or any part of its interests under this contract, or its rights and interests in the Unit Area, it shall promptly give written notice to the other parties, with full information concerning its proposed sale, which shall include the name and address of the prospective purchaser (who must be ready, willing and able to purchase), the purchase price, and all other terms of the offer. The other parties shall then have an optional prior right, for a period of ten (10) days after receipt of the notice, to purchase on the same terms and conditions the interest which the other party proposes to sell; and, if this optional right is exercised, the purchasing parties shall share the purchased interest in the proportions that the interest of each bears to the total interest of all purchasing parties. However, there shall be no preferential right to purchase in those cases where any party wishes to mortgage its interests, or to dispose of its interests by merger, reorganization, consolidation, or sale of all of its assets, or a sale or transfer of its interests to a subsidiary or parent company, or subsidiary of a parent company, or to any company in which any one party owns a majority of the stock.

19. SELECTION OF NEW OPERATOR

Should a sale be made by Operator of its rights and interests, the other parties shall have the right within sixty (60) days after the date of such sale, by majority vote in interest, to select a new Operator. If a new Operator is not so selected, the transferee of the present Operator shall assume the duties of and act as Operator. In either case, the retiring Operator shall continue to serve as Operator, and discharge its duties in that capacity under this agreement, until its successor Operator is selected and begins to function, but the present Operator shall not be obligated to continue the performance of its duties for more than 120 days after the sale of its rights and interests has been completed.

20. MAINTENANCE OF UNIT OWNERSHIP

For the purpose of maintaining uniformity of ownership in the oil and gas leasehold interests covered by this contract, and notwithstanding any other provisions to the contrary, no party shall sell, encumber, transfer or make other disposition of its interest in the leases embraced within the Unit Area and in wells, equipment and production unless such disposition covers either:

(1) the entire interest of the party in all leases and equipment and production; or

(2) an equal undivided interest in all leases and equipment and production in the Unit Area.

Every such sale, encumbrance, transfer or other disposition made by any party shall be made expressly subject to this agreement, and shall be made without prejudice to the rights of the other parties.

If at any time the interest of any party is divided among and owned by four or more co-owners, Operator may, at its discretion, require such co-owners to appoint a single trustee or agent with full authority to receive notices, approve expenditures, receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with, and with power to bind, the co-owners of such party's interests within the scope of the operations embraced in this contract; however, all such co-owners shall enter into and execute all contracts or agreements for the disposition of their respective shares of the oil and gas produced from the Unit Area and they shall have the right to receive, separately, payment of the sale proceeds thereof.

21. RESIGNATION OF OPERATOR

Operator may resign from its duties and obligations as Operator at any time upon written notice of not less than ninety (90) days given to all other parties. In this case, all parties to this contract shall select by majority vote in interest, not in numbers, a new Operator who shall assume the responsibilities and duties, and have the rights, prescribed for Operator by this agreement. The retiring Operator shall deliver to its successor all records and information necessary to the discharge by the new Operator of its duties and obligations.

22. LIABILITY OF PARTIES

The liability of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations, and shall be liable only for its proportionate share of the costs of developing and operating the Unit Area. Accordingly, the lien granted by each party to Operator in Section 9 is given to secure only the debts of each severally. It is not the intention of the parties to create, nor shall this agreement be construed as creating, a mining or other partnership or association, or to render them liable as partners.

23. RENEWAL OR EXTENSION OF ~~XXXXXXX~~ JOINT LOSS LEASES

If any party secures a renewal of any oil and gas lease subject to this contract, the loss of which would be a joint loss under Section 2 hereof, each and all of the other parties shall be notified promptly, and shall have the right, if exercised within thirty (30) days after receipt of such notice, to participate in the ownership of the renewal lease by paying to the party who acquired it their several proper proportionate shares of the acquisition cost, which shall be in proportion to the interests held at that time by the parties in the Unit Area.

If some, but less than all, of the parties elect to participate in the purchase of a renewal lease, it shall be owned by the parties who elect to participate therein, in a ratio based upon the relationship of their respective percentage of participation in the unit area to the aggregate of the percentages of participation in the unit area of all parties participating in the purchase of such renewal lease. Any renewal lease in which less than all the parties elect to participate shall not be subject to this agreement.

Each party who participates in the purchase of a renewal lease shall be given an assignment, without warranty of title, of its proportionate interest therein by the acquiring party.

The provisions of this section shall apply to renewal leases whether they are for the entire interest covered by the expiring lease or cover only a portion of its area or an interest therein. Any new or renewal lease taken before the expiration of its predecessor lease, or taken or contracted for within six (6) months after the expiration of the existing lease shall be subject to this provision; but any lease taken or contracted for more than six (6) months after the expiration of an existing lease shall not be deemed a new or renewal lease and shall not be subject to the provisions of this section.

The provisions in this section shall apply also and in like manner to extensions of oil and gas leases.

24. SURRENDER OF LEASES

The leases covered by this agreement, in so far as they embrace acreage in the Unit Area, shall not be surrendered in whole or in part unless all parties consent.

However, should any party desire to surrender its interest in any lease or in any portion thereof, and other parties not agree or consent, the party desiring to surrender shall assign, without express or implied warranty of title, all of its interest in such lease, or portion thereof, and any well, material and equipment which may be located thereon and any rights in production thereafter secured, to the parties not desiring to surrender it. Upon such assignment, the assigning party shall be relieved from all obligations thereafter accruing, but not theretofore accrued, with respect to the acreage assigned and the operation of any well thereon, and the assigning party shall have no further interest in the lease assigned and its equipment and production. The parties assignee shall pay to the party assignor the reasonable salvage value of the latter's interest in any wells and equipment on the assigned acreage, determined in accordance with the provisions of Exhibit "C", less the estimated cost of salvaging and the estimated cost of plugging and abandoning. If the assignment is in favor of more than one party, the assigned interest shall be shared by the parties assignee in the proportions that the interest of each bears to the interest of all parties assignee.

Any assignment or surrender made under this provision shall not reduce or change the assignors' or surrendering parties' interest, as it was immediately before the assignment, in the balance of the Unit Area; and the acreage assigned or surrendered, and subsequent operations thereon, shall not thereafter be subject to the terms and provisions of this agreement.

25. ACREAGE OR CASH CONTRIBUTIONS

If any party receives while this agreement is in force a contribution of cash toward the drilling of a well or any other operation on the Unit Area, such contribution shall be paid to the party who conducted the drilling or other operation and shall be applied by it against the cost of such drilling or other operation. If the contribution be in the form of acreage, the party to whom the contribution is made shall promptly tender an assignment of the acreage, without warranty of title, to all parties to this agreement in proportion to their interests in the Unit Area at that time, and if such tender is accepted by all parties such acreage shall become a part of the Unit Area and be governed by all the provisions of this contract. Each party shall promptly notify all other parties of all acreage or money contributions it may obtain in support of any well or any other operation on the Unit Area.

26. PROVISION CONCERNING TAXATION

Each of the parties hereto elects, under the authority of Section 761(a) of the Internal Revenue Code of 1954, to be excluded from the application of all of the provisions of Subchapter K of Chapter 1 of Subtitle A of the Internal Revenue Code of 1954. If the income tax laws of the state or states in which the property covered hereby is located contain, or may hereafter contain, provisions similar to those contained in the Subchapter of the Internal Revenue Code of 1954 above referred to under which a similar election is permitted, each of the parties agrees that such election shall be exercised. Each party authorizes and directs the Operator to execute such an election or elections on its behalf and to file the election with the proper governmental office or agency. If requested by the Operator so to do, each party agrees to execute and join in such an election.

Operator shall render for ad valorem taxation all property subject to this agreement which by law should be rendered for such taxes, and it shall pay all such taxes assessed thereon before they become delinquent. Operator shall bill all other parties for their proportionate share of all tax payments in the manner provided in Exhibit "C".

If any tax assessment is considered unreasonable by Operator, it may at its discretion protest such valuation within the time and manner prescribed by law, and prosecute the protest to a final determination, unless all parties agree to abandon the protest prior to final determination. When any such protested valuation shall have been finally determined, Operator shall pay the assessment for the joint account, together with interest and penalty accrued, and the total cost shall then be assessed against the parties, and be paid by them, as provided in Exhibit "C".

27. INSURANCE

At all times while operations are conducted hereunder, Operator shall comply with the Workmen's Compensation Law of the State where the operations are being conducted. Operator shall also carry or provide insurance for the benefit of the joint account of the parties as may be outlined in Exhibit "D" attached to and made a part hereof. Operator shall require all contractors engaged in work on or for the Unit Area to comply with the Workmen's Compensation Law of the State where the operations are being conducted and to maintain such other insurance as Operator may require.

In the event Automobile Public Liability Insurance is specified in said Exhibit "D", or subsequently receives the approval of the parties, no direct charge shall be made by Operator for premiums paid for such insurance for operator's fully owned automotive equipment.

28. CLAIMS AND LAWSUITS

If any party to this contract is sued on an alleged cause of action arising out of operations on the Unit Area, or on an alleged cause of action involving title to any lease or oil and gas interest subjected to this contract, it shall give prompt written notice of the suit to the Operator and all other parties.

The defense of lawsuits shall be under the general direction of a committee of lawyers representing the parties, with Operator's attorney as Chairman. Suits may be settled during litigation only with the joint consent of all parties. No charge shall be made for services performed by the staff attorneys for any of the parties, but otherwise all expenses incurred in the defense of suits, together with the amount paid to discharge any final judgment, shall be considered costs of operation and shall be charged to and paid by all parties in proportion to their then interests in the Unit Area. Attorneys, other than staff attorneys for the parties, shall be employed in lawsuits involving Unit Area operations only with the consent of all parties; if outside counsel is employed, their fees and expenses shall be considered Unit Area expense and shall be paid by Operator and charged to all of the parties in proportion to their then interests in the Unit Area. The provisions of this paragraph shall not be applied in any instance where the loss which may result from the suit is treated as an individual loss rather than a joint loss under prior provisions of this agreement, and all such suits shall be handled by and be the sole responsibility of the party or parties concerned.

Damage claims caused by and arising out of operations on the Unit Area, conducted for the joint account of all parties, shall be handled by Operator and its attorneys, the settlement of claims of this kind shall be within the discretion of Operator so long as the amount paid in settlement of any one claim does not exceed one thousand ($1000.00) dollars and, if settled, the sums paid in settlement shall be charged as expense to and be paid by all parties in proportion to their then interests in the Unit Area.

29. FORCE MAJEURE

If any party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, other than the obligation to make money payments, that party shall give to all other parties prompt written notice of the force majeure with reasonably full particulars concerning it; thereupon, the obligations of the party giving the notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure. The affected party shall use all possible diligence to remove the force majeure as quickly as possible.

The requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes; how all such difficulties shall be handled shall be entirely within the discretion of the party concerned.

The term "force majeure" as here employed shall mean an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood, explosion, governmental restraint, unavailability of equipment, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

30. NOTICES

All notices authorized or required between the parties, and required by any of the provisions of this agreement, shall, unless otherwise specifically provided, be given in writing by United States mail or Western Union Telegram, postage or charges prepaid, and addressed to the party to whom the notice is given at the

addresses listed on Exhibit "A". 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 notice in response thereto shall run from the date the originating notice is received. The second or any responsive notice shall be deemed given when deposited in the United States mail or with the Western Union Telegraph Company, with postage or charges prepaid. Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to all other parties.

31. **OTHER CONDITIONS, IF ANY, ARE:**

(a) No well drilled or completed by less than all parties pursuant to the provisions of Section 12 hereof shall be completed as a gas well in the same formation as any other gas well then producing, or capable of producing, gas in commercial quantities from the Unit Area if, as a result of the completion of said well, there would exist on the Unit Area a well density in the same formation of more than one producing gas well to _____ acres; provided that, if any regulatory body having jurisdiction should establish or prescribe a smaller drilling unit, less than all of the parties may complete such a gas well pursuant to the provisions of Section 12 hereof so long as its completion does not result in a well density in the same formation greater than that established or prescribed by the aforesaid regulatory body. No well drilled or completed by less than all of the parties pursuant to the provisions of Section 12 hereof shall be completed as an oil well in the same formation as any other oil well then producing from the Unit Area if, as a result of the completion of said well, there would exist on the Unit Area a well density in the same formation of more than one producing oil well to _____ acres; provided that, if any regulatory body having jurisdiction should establish or prescribe a smaller drilling unit, less than all of the parties may complete such an oil well pursuant to the provisions of Section 12 hereof so long as its completion does not result in a well density in the same formation greater than that established or prescribed by the aforesaid regulatory body.

(b) In spite of any provision to the contrary appearing in Sections 11 and 12 hereof, consent to the drilling of a well shall not be deemed as consent to the setting of casing and a completion attempt. After any well drilled pursuant to this agreement has reached its authorized depth, Operator shall give immediate notice to Non-Operators. The parties receiving such notice shall have forty-eight (48) hours (exclusive of Saturday or Sunday) in which to elect whether or not they desire to set casing and to participate in a completion attempt. Failure of a party receiving such notice so to reply within the period above fixed shall constitute an election by that party not to participate in the cost of a completion attempt. If all of the parties elect to plug and abandon the well, Operator shall plug and abandon same at the expense of all of the parties. If one or more, but less than all, of the parties elect to set pipe and to attempt a completion, the provisions of Section 12 shall apply to the operations thereafter conducted by less than all parties.

(c) If any party hereto hereafter should create any overriding royalty, production payment, or other burden against its working interest production and if any other party or parties should conduct non-consent operations pursuant to any provision of this agreement and, as a result, become entitled to receive the working interest production otherwise belonging to the non-participating party, the party or parties entitled to receive the working interest production of the non-participating party shall receive such production free and clear of burdens against such production which may have been created subsequent to this agreement and the non-participating party creating such subsequent burdens shall save the participating party or parties harmless with respect to the receipt of such working interest production.

(d) It is recognized by the parties hereto that in addition to each party's share of working interest production as shown in Exhibit "A", such party shall have the right, subject to existing contracts, to market the royalty gas attributable to each lease which it contributes to the Unit Area and to receive payments due for such royalty gas produced from or allocated to such lease or leases. It is agreed that, regardless of whether each party markets or contracts for its share of gas, including the royalty gas under the leases which it contributed to the Unit, such party agrees to pay or cause to be paid to the royalty owners under its lease or leases the proceeds attributable to their respective royalty interest and to hold all other parties harmless for its failure to do so. If a lease is owned in undivided interests, the leasehold owners under such lease shall designate a single party to receive and to pay or cause to be paid all royalty due under such lease and to hold all other parties hereto harmless for failure to do so.

This agreement may be signed in counterpart, and shall be binding upon the parties and upon their heirs, successors, representatives and assigns.

ATTEST:

_____ _____

OPERATOR

ATTEST:

_____ _____

ATTEST:

_____ _____

THE STATE OF TEXAS)
)
COUNTY OF MIDLAND)

BEFORE ME, the undersigned authority, on this day personally appeared _____, Attorney-in-Fact for ATLANTIC RICHFIELD COMPANY, a corporation, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same as the act and deed of said Atlantic Richfield Company, for the purposes and considerations and in the capacity therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 1970.

_____
Notary Public

CORPORATION ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

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

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the_____day of_____A.D., 19_____.

_____
NOTARY PUBLIC

CORPORATION ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

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

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the_____day of_____A.D., 19_____.

_____
NOTARY PUBLIC

PERSONAL ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared_____ _____ _____known to me to be the person_____whose name_____subscribed to the foregoing instrument, and acknowledged to me that_____he_____executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the_____day of_____A.D., 19_____.

_____
NOTARY PUBLIC

OIL AND GAS LEASE

THIS AGREEMENT made this _____ day of _____, 19____, between

_____

_____

as Lessor, and _____

as Lessee, WITNESSETH:

1. Lessor in consideration of Ten and No/100 Dollars ($10.00) in hand paid, of the royalties herein provided, and of the agreements of Lessee herein contained, hereby grants, leases and lets exclusively unto Lessee, for the purpose of investigating, exploring, prospecting, drilling and mining for and producing oil and gas, laying pipe lines, building roads, tanks, power stations, telephone lines and other structures thereon to produce, save, take care of, treat, transport, and own said products, the following described land in _____ County, Texas, to-wit:

and containing _____ acres, more or less. In the event a resurvey of said lands shall reveal the existence of excess and/or vacant lands lying adjacent to the lands above described and the Lessor, his heirs, or assigns, shall by virtue of his ownership of the lands above described, have preferential right to acquire said excess and/or vacant lands, then in that event this lease shall cover and include all such excess and/or vacant lands which the Lessor, its successors or assigns, shall have the preference right to acquire by virtue of its ownership of the lands above described as and when acquired by the Lessor; and the Lessee shall pay the Lessor for such excess and/or vacant lands at the same rate per acre as the cash consideration paid for the acreage hereinabove mentioned.

2. Subject to the other provisions herein contained, this lease shall be for a term of 180 days from this date (called "primary term") and as long thereafter as oil or gas is produced from said land hereunder.

3. The royalties to be paid Lessor are: (a) on oil three-sixteenths (3/16) of that produced and saved from said land, the same to be delivered at the wells or to the credit of Lessor into the pipe line to which the wells may be connected; Lessee may from time to time purchase any royalty oil in its possession, paying the market price therefor prevailing for the field where produced on the date of purchase; and (b) on gas, including casinghead gas or other gaseous substance, produced from said land and sold or used off the premises or in the manufacture of gasoline or other products therefrom, the market value at the well of three-sixteenths (3/16) of the gas so sold or used, provided that on gas sold at the wells, the royalty shall be three-sixteenths (3/16) of the amount realized from such sale; where gas from a well producing gas only is not sold or used, Lessee may pay as annual royalty, commencing ninety (90) days after such well is first shut in, the sum of $1.00 per acre per annum per year, and upon such payment it will be considered that gas is being produced within the meaning of Paragraph 2 hereof; provided, however, that such shut in payments shall not continue this lease in force for any consecutive period of more than 2 years. Lessee shall have free use of oil, gas, and water from said land, except water from Lessor's wells, for all operations hereunder, and the royalty on oil and gas shall be computed after deducting any so used.

4. If prior to discovery of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if after discovery of oil or gas, the production thereof should cease from any cause, this lease shall not terminate if Lessee commences additional drilling or re-working operations within sixty (60) days thereafter. If at the expiration of the primary term, oil or gas is not being produced on said land, but Lessee is then engaged in drilling or re-working operations thereon, the lease shall remain in force so long as operations on said well or for drilling or re-working of any additional well are prosecuted with no cessation of more than sixty (60) consecutive days, and if they result in the production of oil or gas so long thereafter as oil or gas is produced from said land. In the event a well or wells producing oil or gas in paying quantities should be brought in on adjacent land and drainage the leased premises, Lessee agrees to drill such offset wells as a reasonably prudent operator would drill under the same or similar circumstances.

5. Lessee shall have the right at any time until six months after the expiration of this lease to remove all property and fixtures placed by Lessee on said land, including the right to draw and remove all casing. When required by Lessor, Lessee will bury all pipe lines below ordinary plow depth, and no well shall be drilled within two hundred (200) feet of any residence or barn now on said land without Lessor's consent.

6. The rights of either party hereunder may be assigned in whole or in part, and the provisions hereof shall extend to the heirs, successors and assigns, but no change or division in ownership of the land, or royalties, however accomplished, shall operate to enlarge the obligations or diminish the rights of Lessee. No sale or assignment by either party shall be binding on the other party hereto until such party shall have been furnished with a certified copy of recorded instrument evidencing same. If six or more parties become entitled to royalty hereunder, Lessee may withhold payment thereof unless and until furnished with a recordable instrument executed by all such parties designating an agent to receive payment for all.

7. Lessor herein makes no warranty of title, either express or implied. Lessee hereby agrees that Lessee at its option may discharge any tax, mortgage, or other lien upon said land and in the event Lessee does so, it shall be subrogated to such lien with the right to enforce same and apply royalties accruing hereunder toward satisfying same. It is agreed that if Lessor owns an interest in said land less than the entire fee simple estate, then the royalties to be paid Lessor shall be reduced proportionately.

8. If any operation permitted or required hereunder, or the performance by Lessee of any covenant, agreement or requirement hereof is delayed or interrupted directly or indirectly by any past or future acts, orders, regulations, or requirements of the Government of the United States or of any state or other governmental body, or any agency, officer, representative or authority of any of them, the period of such delay or interruption shall not be counted against the Lessee, and the primary term of this lease shall automatically be extended after the expiration of the primary term set forth in Section 2 above, so long as the cause or causes for such delay or interruptions continue and for a period of six (6) consecutive thereafter; and such extension shall constitute and shall be considered for the purposes of this lease as a part of the primary term hereof. The Lessee shall not be liable to Lessor in damages for failure to perform any operation permitted or required hereunder or to comply with any covenant, agreement, or requirement hereof during the time Lessee is relieved from the obligations to comply with such covenants, agreements, or requirements.

IN WITNESS WHEREOF, this instrument is executed on the date first above written.

_____

_____

THE STATE OF TEXAS)
)
COUNTY OF MIDLAND)

BEFORE ME, the undersigned authority, on this day personally appeared _____, Attorney-in-Fact for ATLANTIC RICHFIELD COMPANY, a corporation, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same as the act and deed of said Atlantic Richfield Company, for the purposes and considerations and in the capacity therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 1970.

_____
Notary Public

CORPORATION ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

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

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

_____
NOTARY PUBLIC

CORPORATION ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

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

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

_____
NOTARY PUBLIC

PERSONAL ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared_____ _____ _____known to me to be the person_____whose name_____subscribed to the foregoing instrument, and acknowledged to me that _____he_____ executed the same for the purposes and consideration therein expressed.

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

_____
NOTARY PUBLIC

Recommended by the Council of Petroleum Accountants Societies of North America

COPR

EXHIBIT " C "

Attached to and made a part of _____

_____

_____

_____

ACCOUNTING PROCEDURE
JOINT OPERATIONS

I. GENERAL PROVISIONS

1. Definitions

"Joint Property" shall mean the real and personal property subject to the agreement to which this Accounting Procedure is attached.

"Joint Operations" shall mean all operations necessary or proper for the development, operation, protection and maintenance of the Joint Property.

"Joint Account" shall mean the account showing the charges paid and credits received in the conduct of the Joint Operations and which are to be shared by the Parties.

"Operator" shall mean the party designated to conduct the Joint Operations.

"Non-Operators" shall mean the parties to this agreement other than the Operator.

"Parties" shall mean Operator and Non-Operators.

"First Level Supervisors" shall mean those employees whose primary function in Joint Operations is the direct supervision of other employees and/or contract labor directly employed on the Joint Property in a field operating capacity.

"Technical Employees" shall mean those employees having special and specific engineering, geological or other professional skills, and whose primary function in Joint Operations is the handling of specific operating conditions and problems for the benefit of the Joint Property.

"Personal Expenses" shall mean travel and other reasonable reimbursable expenses of Operator's employees.

"Material" shall mean personal property, equipment or supplies acquired or held for use on the Joint Property.

"Controllable Material" shall mean Material which at the time is so classified in the Material Classification Manual as most recently recommended by the Council of Petroleum Accountants Societies of North America.

2. Statement and Billings

Operator shall bill Non-Operators on or before the last day of each month for their proportionate share of the Joint Account for the preceding month. Such bills will be accompanied by statements which identify the authority for expenditure, lease or facility, and all charges and credits, summarized by appropriate classifications of investment and expense except that items of Controllable Material and unusual charges and credits shall be separately identified and fully described in detail.

3. Advances and Payments by Non-Operators

Unless otherwise provided for in the agreement, the Operator may require the Non-Operators to advance their share of estimated cash outlay for the succeeding month's operation. Operator shall adjust each monthly billing to reflect advances received from the Non-Operators.

Each Non-Operator shall pay its proportion of all bills within fifteen (15) days after receipt. If payment is not made within such time, the unpaid balance shall bear interest monthly at the rate of twelve percent (12%) per annum or the maximum contract rate permitted by the applicable usury laws in the state in which the Joint Property is located, whichever is the lesser, plus attorney's fees, court costs, and other costs in connection with the collection of unpaid amounts.

4. Adjustments

Payment of any such bills shall not prejudice the right of any Non-Operator to protest or question the correctness thereof; provided, however, all bills and statements rendered to Non-Operators by Operator during any calendar year shall conclusively be presumed to be true and correct after twenty-four (24) months following the end of any such calendar year, unless within the said twenty-four (24) month period a Non-Operator takes written exception thereto and makes claim on Operator for adjustment. No adjustment favorable to Operator shall be made unless it is made within the same prescribed period. The provisions of this paragraph shall not prevent adjustments resulting from a physical inventory of Controllable Material as provided for in Section V.

5. Audits

A. Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit Operator's accounts and records relating to the Joint Account for any calendar year within the twenty-four (24) month period following the end of such calendar year; provided, however, the making of an audit shall not extend the time for the taking of written exception to and the adjustments of accounts as provided for in Paragraph 4 of this Section I. Where there are two or more Non-Operators, the Non-Operators shall make every reasonable effort to conduct joint or simultaneous audits in a manner which will result in a minimum of inconvenience to the Operator. Operator shall bear no portion of the Non-Operators' audit cost incurred under this paragraph unless agreed to by the Operator.

6. Approval by Non-Operators

Where an approval or other agreement of the Parties or Non-Operators is expressly required under other sections of this Accounting Procedure and if the agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, Operator shall notify all Non-Operators of the Operator's proposal, and the agreement or approval of a majority in interest of the Non-Operators shall be controlling on all Non-Operators.

II. DIRECT CHARGES

Operator shall charge the Joint Account with the following items:

1. Rentals and Royalties

Lease rentals and royalties paid by Operator for the Joint Operations.

2. Labor

A. (1) Salaries and wages of Operator's field employees directly employed on the Joint Property in the conduct of Joint Operations.

(2) Salaries of First Level Supervisors in the field.

(3) Salaries and wages of Technical Employees directly employed on the Joint Property if such charges are excluded from the Overhead rates.

B. Operator's cost of holiday, vacation, sickness and disability benefits and other customary allowances paid to employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II. Such costs under this Paragraph 2B may be charged on a "when and as paid basis" or by "percentage assessment" on the amount of salaries and wages chargeable to the Joint Account under Paragraph 2A of this Section II. If percentage assessment is used, the rate shall be based on the Operator's cost experience.

C. Expenditures or contributions made pursuant to assessments imposed by governmental authority which are applicable to Operator's costs chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II.

D. Personal Expenses of those employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II.

3. Employee Benefits

Operator's current costs of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of a like nature. applicable to Operator's labor cost chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II shall be Operator's actual cost not to exceed twenty per cent (20%).

4. Material

Material purchased or furnished by Operator for use on the Joint Property as provided under Section IV. Only such Material shall be purchased for or transferred to the Joint Property as may be required for immediate use and is reasonably practical and consistent with efficient and economical operations. The accumulation of surplus stocks shall be avoided.

5. Transportation

Transportation of employees and Material necessary for the Joint Operations but subject to the following limitations:

A. If Material is moved to the Joint Property from the Operator's warehouse or other properties, no charge shall be made to the Joint Account for a distance greater than the distance from the nearest reliable supply store, recognized barge terminal, or railway receiving point where like material is normally available, unless agreed to by the Parties.

B. If surplus Material is moved to Operator's warehouse or other storage point, no charge shall be made to the Joint Account for a distance greater than the distance to the nearest reliable supply store, recognized barge terminal, or railway receiving point unless agreed to by the Parties. No charge shall be made to the Joint Account for moving Material to other properties belonging to Operator, unless agreed to by the Parties.

C. In the application of Subparagraphs A and B above, there shall be no equalization of actual gross trucking cost of $200 or less excluding accessorial charges.

6. Services

The cost of contract services, equipment and utilities provided by outside sources, except services excluded by Paragraph 9 of Section II and Paragraph 1. ii of Section III. The cost of professional consultant services and contract services of technical personnel directly engaged on the Joint Property if such charges are excluded from the Overhead rates. The cost of professional consultant services or contract services of technical personnel not directly engaged on the Joint Property shall not be charged to the Joint Account unless previously agreed to by the Parties.

7. Equipment and Facilities Furnished by Operator

A. Operator shall charge the Joint Account for use of Operator owned equipment and facilities at rates commensurate with costs of ownership and operation. Such rates shall include costs of maintenance, repairs, other operating expense, insurance, taxes, depreciation, and interest on investment not to exceed eight per cent (8%) per annum. Such rates shall not exceed average commercial rates currently prevailing in the immediate area of the Joint Property.

B. In lieu of charges in Paragraph 7A above, Operator may elect to use average commercial rates prevailing in the immediate area of the Joint Property less 20%. For automotive equipment, Operator may elect to use rates published by the Petroleum Motor Transport Association.

8. Damages and Losses to Joint Property

All costs or expenses necessary for the repair or replacement of Joint Property made necessary because of damages or losses incurred by fire, flood, storm, theft, accident, or other cause, except those resulting from Operator's gross negligence or willful misconduct. Operator shall furnish Non-Operator written notice of damages or losses incurred as soon as practicable after a report thereof has been received by Operator.

9. Legal Expense

Expense of handling, investigating and settling litigation or claims, discharging of liens, payment of judgments and amounts paid for settlement of claims incurred in or resulting from operations under the agreement or necessary to protect or recover the Joint Property, except that no charge for services of Operator's legal staff or fees or expense of outside attorneys shall be made unless previously agreed to by the Parties. All other legal expense is considered to be covered by the overhead provisions of Section III unless otherwise agreed to by the Parties, except as provided in Section I, Paragraph 3.

10. Taxes

All taxes of every kind and nature assessed or levied upon or in connection with the Joint Property, the operation thereof, or the production therefrom, and which taxes have been paid by the Operator for the benefit of the Parties.

11. Insurance

Net premiums paid for insurance required to be carried for the Joint Operations for the protection of the Parties. In the event Joint Operations are conducted in a state in which Operator may act as self-insurer for Workmen's Compensation and/or Employers Liability under the respective state's laws, Operator may, at its election, include the risk under its self-insurance program and in that event, Operator shall include a charge at Operator's cost not to exceed manual rates.

12. Other Expenditures

Any other expenditure not covered or dealt with in the foregoing provisions of this Section II, or in Section III, and which is incurred by the Operator in the necessary and proper conduct of the Joint Operations.

III. OVERHEAD

1. Overhead - Drilling and Producing Operations

i. As compensation for administrative, supervision, office services and warehousing costs, Operator shall charge drilling and producing operations on either:

( ) Fixed Rate Basis, Paragraph 1A, or
( ) Percentage Basis, Paragraph 1B.

Unless otherwise agreed to by the Parties, such charge shall be in lieu of costs and expenses of all offices and salaries or wages plus applicable burdens and expenses of all personnel, except those directly chargeable under Paragraph 2A, Section II. The cost and expense of services from outside sources in connection with matters of taxation, traffic, accounting or matters before or involving governmental agencies shall be considered as included in the Overhead rates provided for in the above selected Paragraph of this Section III unless such cost and expense are agreed to by the Parties as a direct charge to the Joint Account.

ii. The salaries, wages and Personal Expenses of Technical Employees and/or the cost of professional consultant services and contract services of technical personnel directly employed on the Joint Property shall ( ) shall not ( ) be covered by the Overhead rates.

A. Overhead - Fixed Rate Basis

(1) Operator shall charge the Joint Account at the following rates per well per month:

Drilling Well Rate $_____
Producing Well Rate $_____

(2) Application of Overhead - Fixed Rate Basis shall be as follows:

(a) Drilling Well Rate

[1] Charges for onshore drilling wells shall begin on the date the well is spudded and terminate on the date the drilling or completion rig is released, whichever is later, except that no charge shall be made during suspension of drilling operations for fifteen (15) or more consecutive days.

[2] Charges for offshore drilling wells shall begin on the date when drilling or completion equipment arrives on location and terminate on the date the drilling or completion equipment moves off location or rig is released, whichever occurs first, except that no charge shall be made during suspension of drilling operations for fifteen (15) or more consecutive days

[3] Charges for wells undergoing any type of workover or recompletion for a period of five (5) consecutive days or more shall be made at the drilling well rate. Such charges shall be applied for the period from date workover operations, with rig, commence through date of rig release, except that no charge shall be made during suspension of operations for fifteen (15) or more consecutive days.

(b) Producing Well Rates

[1] An active well either produced or injected into for any portion of the month shall be considered as a one-well charge for the entire month.

[2] Each active completion in a multi-completed well in which production is not commingled down hole shall be considered as a one-well charge providing each completion is considered a separate well by the governing regulatory authority.

[3] An inactive gas well shut in because of overproduction or failure of purchaser to take the production shall be considered as a one-well charge providing the gas well is directly connected to a permanent sales outlet.

[4] A one-well charge may be made for the month in which plugging and abandonment operations are completed on any well.

[5] All other inactive wells (including but not limited to inactive wells covered by unit allowable, lease allowable, transferred allowable, etc.) shall not qualify for an overhead charge.

(3) The well rates shall be adjusted as of the first day of April each year following the effective date of the agreement to which this Accounting Procedure is attached. The adjustment shall be computed by multiplying the rate currently in use by the percentage increase or decrease in the average weekly earnings of Crude Petroleum and Gas Production Workers for the last calendar year compared to the calendar year preceding as shown by the index of average weekly earnings of Crude Petroleum and Gas Fields Production Workers as published by the United States Department of Labor, Bureau of Labor Statistics, or the equivalent Canadian index as published by Statistics Canada, as applicable. The adjusted rates shall be the rates currently in use, plus or minus the computed adjustment.

B. Overhead - Percentage Basis

(1) Operator shall charge the Joint Account at the following rates:

(a) Development

_____ Percent (%) of the cost of Development of the Joint Property exclusive of cos provided under Paragraph 9 of Section II and all salvage credits.

(b) Operating

_____ Percent (%) of the cost of Operating the Joint Property exclusive of costs provide under Paragraphs 1 and 9 of Section II, all salvage credits, the value of injected substances purchase for secondary recovery and all taxes and assessments which are levied, assessed and paid upon the mi eral interest in and to the Joint Property.

(2) Application of Overhead - Percentage Basis shall be as follows:
For the purpose of determining charges on a percentage basis under Paragraph 1B of this Section III, d velopment shall include all costs in connection with drilling, redrilling, deepening or any remedial oper tions on any or all wells involving the use of drilling crew and equipment; also, preliminary expenditur necessary in preparation for drilling and expenditures incurred in abandoning when the well is not com pleted as a producer, and original cost of construction or installation of fixed assets, the expansion of fixe assets and any other project clearly discernible as a fixed asset, except Major Construction as defined Paragraph 2 of this Section III. All other costs shall be considered as Operating.

2. Overhead - Major Construction

To compensate Operator for overhead costs incurred in the construction and installation of fixed assets, the ex pansion of fixed assets, and any other project clearly discernible as a fixed asset required for the development an operation of the Joint Property, Operator shall either negotiate a rate prior to the beginning of construction, or sha charge the Joint Account for Overhead based on the following rates for any Major Construction project in exce of $ 50,000 :

A. 5 % of total costs if such costs are more than $ 50,000 but less than $500,000 ; plus
B. 3 % of total costs in excess of $ 500,000 but less than $1,000,000; plus
C. 2 % of total costs in excess of $1,000,000.

Total cost shall mean the gross cost of any one project. For the purpose of this paragraph, the component part of a single project shall not be treated separately and the cost of drilling and workover wells shall be excluded.

3. Amendment of Rates

The Overhead rates provided for in this Section III may be amended from time to time only by mutual agreemen between the Parties hereto if, in practice, the rates are found to be insufficient or excessive.

IV. PRICING OF JOINT ACCOUNT MATERIAL PURCHASES, TRANSFERS AND DISPOSITIONS

Operator is responsible for Joint Account Material and shall make proper and timely charges and credits for all ma terial movements affecting the Joint Property. Operator shall provide all Material for use on the Joint Property; how ever, at Operator's option, such Material may be supplied by the Non-Operator. Operator shall make timely disposition of idle and/or surplus Material, such disposal being made either through sale to Operator or Non-Operator, division i kind, or sale to outsiders. Operator may purchase, but shall be under no obligation to purchase, interest of Non-Opera tors in surplus condition A or B Material. The disposal of surplus Controllable Material not purchased by the Opera tor shall be agreed to by the Parties.

1. Purchases

Material purchased shall be charged at the price paid by Operator after deduction of all discounts received. In cas of Material found to be defective or returned to vendor for any other reason, credit shall be passed to the Join Account when adjustment has been received by the Operator.

2. Transfers and Dispositions

Material furnished to the Joint Property and Material transferred from the Joint Property or disposed of by th Operator, unless otherwise agreed to by the Parties, shall be priced on the following bases exclusive of cash dis counts:

A. New Material (Condition A)

(1) Tubular goods, except line pipe, shall be priced at the current new price in effect on date of movement on maximum carload or barge load weight basis, regardless of quantity transferred, equalized to the lowes published price f.o.b. railway receiving point or recognized barge terminal nearest the Joint Property where such Material is normally available.

(2) Line Pipe

(a) Movement of less than 30,000 pounds shall be priced at the current new price, in effect at date o movement, as listed by a reliable supply store nearest the Joint Property where such Material is nor mally available.

(b) Movement of 30,000 pounds or more shall be priced under provisions of tubular goods pricing in Para graph 2A (1) of this Section IV.

(3) Other Material shall be priced at the current new price, in effect at date of movement, as listed by a reliab supply store or f.o.b. railway receiving point nearest the Joint Property where such Material is normall available.

B. Good Used Material (Condition B)

Material in sound and serviceable condition and suitable for reuse without reconditioning:

(1) Material moved to the Joint Property

(a) At seventy-five percent (75%) of current new price, as determined by Paragraph 2A of this Section IV

(2) Material moved from the Joint Property

(a) At seventy-five percent (75%) of current new price, as determined by Paragraph 2A of this Section IV if Material was originally charged to the Joint Account as new Material, or

(b) at sixty-five percent (65%) of current new price, as determined by Paragraph 2A of this Section IV, if Material was originally charged to the Joint Account as good used Material at seventy-five percent (75%) of current new price.

The cost of reconditioning, if any, shall be absorbed by the transferring property.

C. Other Used Material (Condition C and D)

(1) Condition C

Material which is not in sound and serviceable condition and not suitable for its original function until after reconditioning shall be priced at fifty percent (50%) of current new price as determined by Paragraph 2A of this Section IV. The cost of reconditioning shall be charged to the receiving property, provided Condition C value plus cost of reconditioning does not exceed Condition B value.

(2) Condition D

All other Material, including junk, shall be priced at a value commensurate with its use or at prevailing prices. Material no longer suitable for its original purpose but usable for some other purpose, shall be priced on a basis comparable with that of items normally used for such other purpose. Operator may dispose of Condition D Material under procedures normally utilized by the Operator without prior approval of Non-Operators.

D. Obsolete Material

Material which is serviceable and usable for its original function but condition and/or value of such Material is not equivalent to that which would justify a price as provided above may be specially priced as agreed to by the Parties. Such price should result in the Joint Account being charged with the value of the service rendered by such Material.

E. Pricing Conditions

(1) Loading and unloading costs may be charged to the Joint Account at the rate of fifteen cents (15¢) per hundred weight on all tubular goods movements, in lieu of loading and unloading costs sustained, when actual hauling cost of such tubular goods are equalized under provisions of Paragraph 5 of Section II.

(2) Material involving erection costs shall be charged at applicable percentage of the current knocked-down price of new Material.

3. **Premium Prices**

Whenever Material is not readily obtainable at published or listed prices because of national emergencies, strikes or other unusual causes over which the Operator has no control, the Operator may charge the Joint Account for the required Material at the Operator's actual cost incurred in providing such Material, in making it suitable for use, and in moving it to the Joint Property; provided notice in writing is furnished to Non-Operators of the proposed charge prior to billing Non-Operators for such Material. Each Non-Operator shall have the right, by so electing and notifying Operator within ten days after receiving notice from Operator, to furnish in kind all or part of his share of such Material suitable for use and acceptable to Operator.

4. **Warranty of Material Furnished by Operator**

Operator does not warrant the Material furnished. In case of defective Material, credit shall not be passed to the Joint Account until adjustment has been received by Operator from the manufacturers or their agents.

V. INVENTORIES

The Operator shall maintain detailed records of Controllable Material.

1. **Periodic Inventories, Notice and Representation**

At reasonable intervals, Inventories shall be taken by Operator of the Joint Account Controllable Material. Written notice of intention to take inventory shall be given by Operator at least thirty (30) days before any inventory is to begin so that Non-Operators may be represented when any inventory is taken. Failure of Non-Operators to be represented at an inventory shall bind Non-Operators to accept the inventory taken by Operator.

2. **Reconciliation and Adjustment of Inventories**

Reconciliation of a physical inventory with the Joint Account shall be made, and a list of overages and shortages shall be furnished to the Non-Operators within six months following the taking of the inventory. Inventory adjustments shall be made by Operator with the Joint Account for overages and shortages, but Operator shall be held accountable only for shortages due to lack of reasonable diligence.

3. **Special Inventories**

Special Inventories may be taken whenever there is any sale or change of interest in the Joint Property. It shall be the duty of the party selling to notify all other Parties as quickly as possible after the transfer of interest takes place. In such cases, both the seller and the purchaser shall be governed by such inventory.

4. **Expense of Conducting Periodic Inventories**

The expense of conducting periodic Inventories shall not be charged to the Joint Account unless agreed to by the Parties.

EXHIBIT "D"

ATTACHED TO AND MADE A PART OF OPERATING AGREEMENT
DATED _____, 197__, BETWEEN

PROPOSED INSURANCE EXHIBIT TO BE ATTACHED
AND MADE A PART OF OPERATING AGREEMENTS

ADDITIONAL INSURANCE PROVISIONS

OPERATOR, during the term of this Agreement, shall carry specific insurance for the benefit and at the expense of the parties hereto as follows:

(A) Workmen's Compensation Insurance as contemplated by the laws of the state in which operations will be conducted, and Employers' Liability Insurance with limits of $100,000 per employee, and $100,000 per accident;

(B) Public Liability Insurance with limits of $100,000 applicable to bodily injury, sickness or death in any one occurrence and $100,000 for loss of or damage to property in any one occurrence.

(C) Automobile Public Liability Insurance covering all automotive equipment used under this Agreement, with limits of $100,000 for bodily injury for one person and $100,000 for more than one person in any one accident, and $100,000 for property damage in any one accident (If automotive equipment used is owned exclusively by OPERATOR, no charge will be made to the joint account for premiums for this coverage except as provided in Section IV, Paragraph 5 of the Accounting Procedure - Exhibit " ".)

(D) Operator shall require contractors and subcontractors performing work for the joint account to provide such insurance as deemed necessary by operator in relation to the work to be performed by said contractors or subcontractors.

Liability, except that covered by the above specified insurances against any of the parties hereto for damages to property of third persons or injury to or death of third persons arising out of the joint operations, including expenses incurred in defending claims or actions asserting liability of this character, shall be borne severally and not jointly by the parties hereto in proportion to their respective undivided interests in the joint operation. Any party hereto individually may acquire such additional insurance as it desires to protect itself against any liability not covered by the above specified insurances at its own cost. All insurance purchased individually by a party to this agreement shall contain a waiver by the insurance company of all rights of subrogation in favor of the parties to this agreement.

No other insurances shall be carried by operator for the joint account unless mutually agreed to by the parties hereto. All losses not covered by the above specified insurances shall be borne by the parties in proportion to their interest in the venture at the time of any loss.

Inasmuch as OPERATOR has agreed with each party to this agreement to acquire, construct, operate and maintain the joint account operations on a cost basis without profit to OPERATOR, each such party hereby releases from all claims for loss by or damage to, such party arising out of, in connection with, or as an incident to, any act or omission, including negligence (but excluding gross negligence, willful misconduct, or intentional breach of any provision of the operating agreement) of OPERATOR or, to the extent of OPERATOR'S legal liability, its employees, agents or contractors, in acquiring, operating or maintaining the joint account; provided this release shall not apply to OPERATOR'S pro-rata share of the cost and expenses as otherwise provided in this agreement. The obligations of each party under this agreement are several and not joint with any other party hereto.

OPERATOR shall promptly notify non-operators of any loss, damage or claim not covered by insurance carried by OPERATOR for the joint account. Except as authorized by Section 27 and by this Exhibit "D", OPERATOR shall not make any charge to the joint account for insurance premiums.

EXHIBIT "E"

GAS BALANCING AGREEMENT
FOR GAS WELL PRODUCTION

Attached to and made a part of the Operating Agreement between_____

_____

_____

The parties to the Operating Agreement to which this Gas Balancing Agreement is attached own the working interest in the gas rights underlying the Joint Property covered by such agreement and are entitled to share in the percentages as stated in the Operating Agreement.

In accordance with the terms of the Operating Agreement, each party thereto has the right to take its share of gas produced from the Unit Area and market the same. In the event any of the parties hereto does not market its share of gas or has contracted to sell its share of gas produced from the Joint Property to a purchaser which, at any time while this agreement is in effect fails to take the share of gas attributable to the interest of such party, the terms of this storage agreement shall automatically become effective.

1.

During any period or periods when the market of a party is not sufficient to take that party's full share of the gas produced from the Joint Property, or its purchaser is unable to take its share of gas produced from the Joint Property, the other party or parties shall be entitled to produce from said Joint Property (and take or deliver to a purchaser), each month, all or a part of that portion of the allowable gas production assigned to such Joint Property by the regulatory body having jurisdiction. That party shall be entitled to take and deliver to its or their purchaser all of such gas production, provided; however, that no party shall be entitled to take or deliver to a purchaser gas production in excess of 200% (percent) of its share of the allowable gas production assigned thereto by the regulatory body having jurisdiction, unless that party has gas in storage or unless the other parties mutually agree to a greater percentage. All parties hereto shall share in and own the liquid hydrocarbons recovered from such gas by primary separation equipment in accordance with their respective interests and subject to the terms of the above described Operating Agreement.

2.

Each party unable to market its share of the gas produced, and taking less than its full share of the gas produced shall be credited with gas in storage equal to its share of the gas produced under this agreement, less such party's share of the gas taken, gas used in Joint Property operations, vented, or lost. Each party taking gas shall furnish the Joint Property operator a monthly statement of gas taken. The operator of the Joint Property will maintain a running account of the gas balance between the parties hereto and will furnish each party monthly statements showing the total quantity of gas produced, the amount thereof used in Joint Property operations, vented or lost, and the total quantity of gas delivered to markets. Measurement of gas for over and under production shall be accomplished by use of sales meters, and lease measurement shall be in accordance with AGA requirements.

3.

After written notice to the operator, any party may at any time begin taking or delivering to its purchaser its full share of the gas produced from said Joint Property (less any used in Joint operations, vented, or lost). To allow for the recovery of gas in storage and to balance the gas account of the parties in accordance with their respective interests, a party with gas in storage shall be entitled to take or deliver to a purchaser its full share of gas produced from said Joint Property (less any used in Joint operations, vented, or lost) plus an amount determined by multiplying fifty percent (50%) of the interest of the party or parties without gas in storage by a fraction, the numerator of which is the interest in the Joint Property of such party with gas in storage and the denominator of which is the total percentage interest in the Joint Property of all parties with gas in storage.

4.

Nothing herein shall be construed to deny any party the right, from time to time to produce and take or deliver to its purchaser its full share of the allowable gas production to meet the deliverability tests required by its purchaser. Each party, shall at all times, use its best efforts to regulate its takes and deliveries from said Joint Property so that said Joint Property will not be shut-in for over producing the allowable assigned thereto by the regulatory body having jurisdiction.

5.

During the terms of this agreement, while gas is being produced from the Joint Property, each party shall make settlement with its own respective royalty owners (and the term "royalty owners" shall include owners of royalties, overriding royalties, production payments and similar interests), based on such royalty owner's respective interests in the Joint Property and on total volumes of gas produced, saved and taken or delivered to purchasers. Each party hereto agrees to hold each other party harmless from any and all claims for royalty payments asserted by royalty owners to whom each party is accountable.

6.

Each party producing and taking or delivering gas to its purchaser shall pay, or cause to be paid, all production taxes due on such gas.

7.

In the event production of gas from said Joint Property shall be discontinued before the gas account is balanced, a complete balancing will be made between the parties for gas remaining in storage. In making such settlement, the party or parties with gas remaining in storage will be paid by the other party or parties a sum of money equal to that which said other party or parties received, less applicable taxes heretofore paid, for the latest delivery of a volume of gas equal to that for which settlement is made. The operator shall be responsible for determining the final accounting of the underproduction and overproduction and the amounts due to be paid to, or by, each party.

8.

This agreement shall remain in force and effect as long as the operating agreement, to which it is attached, and shall inure to the benefit of and be binding upon the parties hereto, their successors, legal representatives and assigns.

9.

Nothing herein shall change or affect each party's obligations to pay its proportionate share of all costs and liabilities incurred in Joint operations, as its share thereof is set forth in the above-described Operating Agreement.

10.

The provisions of this agreement shall be applied to each well and/or each formation separately as if each well and/or formation was a separate well and covered by separate but identical agreements.

11.

Notwithstanding any foregoing provisions hereof, each party failing to commence marketing or taking its share of the produced gas (in whole or in part) within six months from date of commencement of marketing or taking of its or their share by another party or parties agrees to accept, at the election of such other party or parties and in lieu of credit for gas in storage, a cash adjustment based on the actual revenues received and attributable to the underages as they occur from date of first deliveries by the party or parties owing the underages. This paragraph, however, is not to apply to any underages of a party accruing from and after the date such party first commences marketing or taking its share of the gas (in whole or in part).

Revised 2/11/77

EXHIBIT F

EQUAL EMPLOYMENT OPPORTUNITY PROVISION

During the performance of this contract, the Operator (meaning and referring separately to each party hereto) agrees as follows:

(1) The Operator will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Operator will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Operator agrees to post in conspicuous places available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Operator will in all solicitations or advertisements for employees placed by or on behalf of the Operator, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

(3) The Operator will send to each labor union or representative of workers with which Operator has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the Operator's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Operator will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Operator will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to Operator's books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Operator's non-compliance with the non-discrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Operator may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Operator will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Operator will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event the Operator becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Operator may request the United States to enter into such litigation to protect the interests of the United States.

Operator acknowledges that Operator may be required to file Standard Form 100 (EEO-1) promulgated jointly by the Office of Federal Contract Compliance, the Equal Employment Opportunity Commission and Plans for Progress with the appropriate agency within 30 days of the date of contract award if such report has not been filed for the current year and otherwise comply with or file such other compliance reports as may be required under Executive Order 11246, as amended and Rules and Regulations adopted thereunder.

Operator further acknowledges that Operator may be required to develop a written affirmative action compliance program as required by the Rules and Regulations approved by the Secretary of Labor under authority of Executive Order 11246 and supply each other party hereto with a copy of such program if so requested.

CERTIFICATION OF NONSEGREGATED FACILITIES

By entering into this contract, the Operator certifies that Operator does not and will not maintain or provide for Operator's employees any segregated facilities at any of Operator's establishments, and that Operator does not and will not permit Operator's employees to perform their services at any location, under Operator's control, where segregated facilities are maintained. The Operator agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means, but is not limited to, any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom or otherwise. Operator further agrees that (except where Operator has obtained identical certifications from proposed contractors and subcontractors for specific time periods) Operator will obtain identical certifications from proposed contractors and subcontractors prior to the award of contracts or subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that Operator will retain such certifications in Operator's files and that Operator will forward the following notice to such proposed contractors and subcontractors (except where the proposed contractors or subcontractors have submitted identical certifications for specific time periods): Notice to prospective contractors and subcontractors of requirement for certifications of nonsegregated facilities. A Certificate of Nonsegregated Facilities must be submitted prior to the award of a contract or subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each contract and subcontract or for all contracts and subcontracts during a period (i.e., quarterly, semiannually, or annually).

MARK F. SCHWEINFURTH
501 C. & K. PETR. SECURITY BUILDING
MIDLAND, TEXAS 79701

CONSULTING GEOLOGIST

915/684-7762

December 1, 1978

Cotton Petrleum Corporation
420 Wall Towers West
Midland, TX 79701

Re: Maralo Farmout
S/2 S/2 of Section 24,
21S-23E, Eddy County, New Mexico

Gentlemen:

In accordance with and pursuant to our letter agreement dated September 13, 1977, this letter shall serve as an assignment of rights granted me in that farmout agreement from Maralo, Inc., dated September 8, 1978. By accepting in the space provided below, Cotton agrees to fulfill the obligations of the farmoutee as set out in the subject farmout agreement.

Yours very truly,

Mark F. Schweinfurth

Mark F. Schweinfurth

AGREED TO AND ACCEPTED
this 18th day of December, 1978

COTTON PETROLEUM CORPORATION

By: H H Blanchard III

Cotton Petroleum Corporation
A United Energy Resources, Inc. Company

420 Wall Towers West/Midland, Texas 79701 (915) 683-5211

November 3, 1978

Maralo, Inc.
P. O. Box 832
Midland, TX 79702

Re: Farmout Agreement
Section 24, 21S-23E
Eddy County, New Mexico
CPC Marathon Prospect
Lowe Lease #2728

Gentlemen:

Enclosed are two executed copies of our farmout agreement covering the captioned area. As you know, Mark Schweinfurth has assigned this agreement to Cotton Petroleum.

Since it will be necessary to force pool the section in order to acquire the interest of Marathon, Cotton does hereby request that the commencement date set forth in Article I of the farmout agreement be extended to March 1, 1979. If you are agreeable to this extension, please indicate by signing in the space provided below and returning one copy of this letter to our office at your earliest possible convenience.

Yours very truly,

COTTON PETROLEUM CORPORATION

H. L. Blomquist III
Division Landman

HLB/sp
Enclosure

AGREED TO AND ACCEPTED this
10th day of November, 1978

MARALO, INC.

By: Mary Ralph Lowe
Mary Ralph Lowe, President

Erma Lowe

REC'D
NOV 8 1978
LAND DEPT.

RECEIVED
NOV 6 1978
MARALO, INC

September 8, 1978

Mr. Mark F. Schweinfurth
501 C&K Petroleum Building
Midland, Texas 79701

Re: Farmout Agreement
S/2 S/2 of Section 24
T-21-S, R-23-E
Eddy County, New Mexico
Lowe Lease #2728

Dear Mr. Schweinfurth:

The undersigned parties, hereinafter referred to as "Owners," agree to assign to you, subject to the conditions herein stated, an interest in a certain oil and gas lease insofar only as such lease, hereinafter referred to as "The Lease," covers the following described land in Eddy County, New Mexico:

United States lease number NM 020342, insofar and only insofar as it pertains to the S/2 S/2 of Section 24, T-21-S, R-23-E, NMPM

said land hereinafter referred to as "Lease Premises."

I.

In order to earn an interest in the Lease, you agree to drill the following test well, hereinafter referred to as "First Test Well":

A. Commence actual drilling: On or before December 31, 1978.

B. Location: At a legal location of your choice in the SE/4 of Section 24, T-21-S, R-23-E, Eddy County, New Mexico.

C. Objective depth: To a subsurface depth of at least 7,700 feet or to a depth sufficient, in Owner's opinion, to adequately test the Cisco-Canyon formations, whichever is the lesser depth.

D. Complete: Within sixty (60) days after reaching total depth. This means a well equipped to produce, if capable, or a shut-

in gas well, or a well, if a dry hole, plugged and abandoned in compliance with applicable laws and regulations.

Should you fail to reach the objective depth set out above for said First Test Well due to mechanical difficulties or because of encountering conditions which are normally considered in the industry to be impenetrable and which, in the opinion of Owners' representatives, would make further drilling impractical by ordinary drilling methods, you shall have the right, within ninety (90) days after the abandonment of or good faith discontinuance of operations on said First Test Well, to commence the actual drilling of a substitute well at a location of your choice in Section 24, T-21-S, R-23-E, Eddy County, New Mexico, under the terms and conditions prescribed for the First Test Well. Should you timely drill the substitute well, is shall be treated as the First Test Well for the purposes of this Letter Agreement.

II.

In the event you complete the First Test Well and/or any successor well as a commercial producer of oil and/or gas, Owners shall execute and deliver to you an assignment of their rights as to the particular Tract upon which such well shall have been so completed from the surface down to a depth of 100 feet below the total depth drilled, but in no event to be deeper than the base of the Cisco-Canyon formation. Such assignment shall be subject to the exceptions, reservations, conditions and other provisions hereinafter set out to be included therein. A dry hole shall earn you no interest whatsoever.

III.

In any assignment of interest earned by you and executed by Owners pursuant to the terms of this agreement, Owners shall except therefrom and reserve to themselves, their heirs, successors and assigns, as to their respective original interest in the assigned Tract, the following:

A. An overriding royalty, free and clear of all costs of development and operations and all other costs whatsoever, of 1/16th of 8/8ths of all the oil and gas (Including all liquid and gaseous hydrocarbons) which may be produced and saved from the assigned premises. The overriding royalty so reserved by Owners shall be in addition to any and all existing overriding royalties, production payments and other burdens, if any, affecting or payable out of the oil and gas leasehold estate in the assigned premises, or any part thereof.

B. All rights and easements with respect to interests included in assignments which may be necessary or convenient to Owners in investigating, exploring, prospecting, drilling, mining and operating for and producing, storing, transporting and owning oil, gas and all other minerals from all depths and well formations not covered by such assignment.

C. Any assignment of interest in the Lease Premises shall cover and include any oil, gas and its substances produced as a result of and with said oil and gas. All other lease interests to all other minerals and mineral substances are hereby reserved and excepted by Owners and Owners reserve all rights thereto including but not limited to the right to mine and remove same.

D. At "payout" (as the term "payout" is hereinafter defined), Owners shall elect to either retain their 1/16th of 8/8ths overriding royalty provided for in Subparagraph A above, or convert such overriding royalty to an undivided leasehold estate and working interest in the Lease Premises assigned equal to 33-1/3% of that owned by Owners therein immediately prior to the execution of the assignment to you. The following provisions shall govern the time and manner of exercising such election and the duties of the Owners and yourself in connection therewith:

1. Promptly after "payout (as the term "payout" is hereinafter defined) of the well that earned you an assignment under the provisions of this agreement you shall notify the Owners in writing of such fact. The Owners shall, within a reasonable time after actual receipt of such notice, notify you of their election as herein provided to either retain their 1/16th of 8/8ths overriding royalty or to convert such overriding royalty to an undivided leasehold estate and working interest in the Lease Premises assigned as provided above. Should Owners elect to convert such overriding royalty into an undivided leasehold estate and working interest in the Lease Premises assigned, you shall promptly assign to Owners the above stated leasehold estate and working interest in the Lease Premises assigned and Owners shall terminate the above described overriding royalty, both effective as of 7:00 a.m. on the day following the day of payout.

2. "Payout" means at such time as you have recovered from the proceeds of all production from a well (after having made all payments out of production burdening the Tract assigned when assigned to you including any overriding royalty reserved by Owners) all of your otherwise unrecovered costs of drilling, testing, completing and equipping to produce such well and your costs of operating such well during the recovery period. The pertinent provisions of the 1974 - COPAS Model Form of Accounting Procedure shall be followed in computing such costs to be recovered.

3. You shall keep an accurate record of all costs of drilling, completing, testing, equipping and operating such earning well, which record shall be available at all reasonable times for the examination and inspection of Owners, their employees and authorized representatives. You shall furnish Owners once each month, and within 30 days after the calendar month for which the computations were made, a statement showing the total proceeds of productions (and the amount of the above authorized deductions therefrom) from each earning well for the previous month and well costs for each such month. Such statement shall also show the cumulative well-cost and production proceeds figures so that the then-current "Payout" status of the earning well can be readily ascertained. Owners representatives shall have the right to audit your books to any extent necessary to ascertain the accuracy and legitimacy of costs, expenses, production proceeds figures, etc., pertaining to each earning well.

IV.

Until an assignment to you of the Lease, or any portion thereof, Owners shall pay all delay rentals and shut-in gas well payments payable under the Lease provided that:

A. Owners shall not be liable for error in any payment or for non-payment due to mistake or oversight.

B. Upon being billed therefore, you shall reimburse Owners for 100% of any payment that is due on or after the date of this Letter Agreement.

After assignment to you of the Lease hereunder, you shall bear the cost of and be responsible for paying to the Owners of the oil and gas fee of the lease assigned to you, 100% of all delay rentals and shut-in gas well payments due under the Lease on or after the effective date of such assignment.

In order to prevent loss of title to any assigned lease due to incorrect or untimely payment of delay rentals or shut-in gas royalties, you agree as follows:

1. To pay all delay rentals to the Owners of the oil and gas fee, the lease of which has been assigned to you, at least 30 days prior to the due date for such payment and to give notice to Owners of the time, manner and recipient of such payment.

2. To notify Owners immediately of any discovery of gas, so that Owners may take whatever action is necessary to assure them-

selves that any payment of shut-in royalty required to be made under the Lease is timely and properly made.

3. To notify Owners at least 10 days in advance of any voluntary cessation of production from any oil or gas well that has produced, and to notify Owners immediately of any involuntary cessation of production.

V.

Future operations and operations after payout of the earning well on any portion of the Lease Premises jointly owned by the parties hereto shall be conducted pursuant to the provisions of an Operating Agreement on the 1977 Mid-Continent (Ross-Martin) Model Form, designating you as Operator and containing the 1974 - COPAS Model Form of Accounting Procedure with such overhead charges as the parties may agree.

VI.

With respect to the First Test Well drilled hereunder and with respect to any subsequent well drilled on the Lease Premises, you will comply with the conditions set forth on the attached Exhibit "A", Geological Requirements. Owners, at their sole cost, risk and expense, shall have access at all times to the derrick floor and all drilling and completion information. The breach by you of any obligation or requirement arising under this paragraph shall subject this agreement to termination, at the option of Owners, if you fail or refuse to comply with such obligation or requirement within ten (10) days after notice by Owners to you of such breach.

VII.

Should you fail to commence, drill or complete a well as herein prescribed, all of your rights and privileges hereunder shall terminate. All test wells drilled and all work or services performed hereunder shall be at your sole risk, cost and expense, and you agree to indemnify and hold Owners harmless from any loss or damage of whatever kind resulting from operations conducted by you under the provisions of this agreement.

Owners make no representation as to their titles and nothing in this agreement shall be construed as a warranty, either expressed or implied, that Owners own a certain quantum of interest in any or any part of the land subject to this agreement.

In drilling any well hereunder, you agree to observe and comply with all applicable Federal and State Laws, Rules and Regulations and the terms and conditions of the Lease to Owners.

Any taxes (except income taxes) imposed by reason of any assignment hereunder will be paid by you and will be your sole responsibility.

You agree prior to conducting any operations on the captioned acreage to make satisfactory arrangements with the surface owners for ingress to and egress from the well site and to conduct your operations in such a manner as to use no more of said lands than is reasonably necessary in drilling any well.

Upon your abandonment of a well drilled on the Lease Premises, you agree to leave the premises on which such well is located in a clean, orderly and non-hazardous condition and you further agree to fill any earthen pits on such premises and to otherwise restore such premises, as near as possible, to the condition they were in prior to your drilling such well.

VIII.

Prior to commencing operations for drilling of any well on the Lease Premises or the proration unit the Lease Premises may be a part of, you shall obtain, at your expense, insurance policies as outlined below to cover all operations to be performed on such lands. You shall furnish to the Owners for approval prior to the commencement of such operations hereunder, certificates of insurance signed by authorized representatives of the insurance companies, certifying to insurance coverage in minimum amounts as follows:

A. Insurance which shall comply with all applicable workman's compensation, employer's liability and occupational disease law which shall cover all of your employees engaged in any work performed under this agreement. If any operations under this agreement are to be performed on or adjacent to navigable water, such insurance shall include coverage for claims under the United States Longshoremen and Harbor Worker's Act and the Jones Act (extended to include the Outer Continental Shelf if any operations are to be performed offshore).

B. Comprehensive general public liability insurance with bodily injury limits of not less than $100,000 for one person and $300,000 for one accident, and with a property damage limit of not less than $100,000 for one accident. Such insurance shall include coverage for all liability assumed by you under the terms of this agreement with limits of liability not less than those set out above.

C. Automobile public liability insurance covering all automotive equipment used on the lease, with limits of not less than $100,000 for bodily injury for one person and $300,000 for more than one person in any one accident.

Such certificates of insurance shall contain a statement that said insurance coverage shall not be cancelled or changed without at least ten (10) days prior

written notice to the Owners. Should the insurance coverage be allowed to terminate or be materially changed or cancelled during the term of this agreement, all of your rights to earn hereunder shall terminate unless new insurance coverage is obtained and certificates furnished to the Owners, meeting the requirements first set out for the certificates, within the ten day period following notice by the insurer to the Owners that the existing insurance coverage has been materially changed or cancelled. You shall determine that the insurance coverage obtained by you and set out in the certificate furnished to the Owners is sufficient to give protection from and for acts of your contractors and subcontractors or you shall require that your contractors and subcontractors have equivalent coverage.

IX.

You shall not, during the existing of the leasehold estate as to the Lease, execute any full or partial release thereof, or permit same to terminate as to all or any part for failure to pay delay rentals (or any other payment required) until you shall have given to Owners notice by certified mail of your intention to execute such release or not to pay such rentals or other payments. Any such notice shall be given at least sixty (60) days before the date such release is to be executed, or sixty (60) days before the date such delay rentals or other payments are due. Upon receipt of such notice, Owners shall have thirty (30) days thereafter within which to demand and receive from you a reassignment as to the Lease or portion thereof noticed to be surrendered or relinquished, such demand to be directed to you at the address hereinafter shown.

Similar notice shall be required and option exist if, during the primary term or after expiration of the primary term, production has been obtained and you intend to abandon all or any part of the Lease or wells thereupon. Upon Owners demand for reassignment under this numbered paragraph, you shall forthwith deliver to Owners an assignment of all of your right, title and interest in the Lease and the proration unit involved, and should Owners elect (and so specify in its demand) to take over any well to be abandoned located thereupon, you shall reassign to Owners such well or wells, material and equipment, and Owners shall pay to you the fair market value of any salvable materials and equipment thereon, or used in connection therewith, less estimated costs of salvage thereof. The assignment as to any well or wells shall include all Leases in the drilling or proration unit attributable thereto.

Any reassignment made to Owners pursuant to the provisions of this Paragraph shall be free and clear of all liens, burdens and encumbrances except those existing as of the date of Owners' assignment to you under the terms of this agreement.

X.

Time shall be of the essence in this agreement and no provision hereof shall be amended or waived except in writing. You may assign this agreement in whole or

in part, but you shall notify Owners of any assignment within ten (10) days after the assignment is made. In the event of any assignment by you, your assignee(s) shall be fully subject to the terms and conditions of this agreement. In addition, you shall have no right to bind or subject Owners undivided interest, if any, in the Lease Premises to any Gas Sales Contracts, Operating Agreements or any other agreements without first obtaining Owner's written consent.

XI.

Nothing herein shall be construed as creating a partnership, joint venture or any other relationship by which one party is liable for the obligations or acts, either of omission or commission, of the other party. The parties elect not to be treated as a partnership under the Internal Revenue Code of 1954 and any applicable laws. The Parties hereby agree to execute such additional evidence of such election as may be required by the Federal Internal Revenue Service, including specifically all of the material and date required by Federal Regulations 1.761.1(a), and should there be a requirement of any further election, the parties hereby agree to execute such additional documents as may be required by the Federal Internal Revenue Service.

This letter has been prepared and executed by Owners in triplicate, but shall not be binding upon Owners unless it is also executed by you in the space provided below and two fully signed copies are returned to Owners within ten (10) days from your receipt hereof, whereupon the provisions hereof shall become covenants running with the land and being binding upon and inure to the benefit of Owners and you and the respective heirs, devisees, legal representatives, successors and assigns of each.

Addresses for Notices:

Maralo, Inc.
2200 West Loop South, Suite 130
Houston, Texas 77027

Erma Lowe
2200 West Loop South, Suite 130
Houston, Texas 77027

Mr. Mark F. Schweinfurth
501 C&K Petroleum Building
Midland, Texas 79701

Yours very truly,

MARALO, INC.

By: Mary Ralph Lowe
Mary Ralph Lowe, President

By: Erma Lowe
Erma Lowe

Accepted and Agreed to

this 10 day of October, 1978.

By: Mark F. Schweinfurth
Mark F. Schweinfurth

Exhibit "A" to Farmout Agreement
to Mark F. Schweinfurth
Dated September 8, 1978

Geological Requirements
S/2 S/2 of Section 24
T-21-S, R-23-E, NMPM
Eddy County, New Mexico
Lowe Lease #2728

Please furnish the following people with one (1) copy each of the information as indicated below under "Copies Required":

Mr. William G. Thorsen
Maralo, Inc.
P. O. Box 832
Midland, Texas 79702

Mr. John R. Burke
Maralo, Inc.
2200 West Loop South, Suite 130
Houston, Texas 77027

Copies Required:

1. Location plat and all state forms.
2. 10-foot drilling time.
3. Daily and final mud logs.
4. 10-foot sample descriptions.
5. Field and final prints of all logs run.
6. DST with fluid and gas analysis.
7. Test and treatment reports.
8. Core analysis.

Other Requirements:

1. A daily drilling report, by telephone, to our Midland Office (915-684-7441) by 10:00 a.m.
2. One (1) set of Core Chips to Midland Office.
3. Notification prior to DST, logging and coring to one of the following people: William G. Thorsen, Vernon J. Hines, or John R. Burke (phone numbers listed below).
4. Decisions concerning the well should be discussed with one of the following people.

William G. Thorsen - Midland Office - (915) 684-7441
Midland Home - (915) 683-5925

Vernon J. Hines - Midland Office - (915) 684-7441
Midland Home - (915) 684-4248

John R. Burke - Houston Office - (713) 622-5420
Houston Home - (713) 784-9584

cc: Mr. Bill Thorsen

COTTON PETROLEUM CORPORATION

Prospect: Marathon

AUTHORITY FOR EXPENDITURE

AFE No. _____ Lease Name FEDERAL 24 Well No. 1

Description 660' FS & EL Sec. 24, 7-21-S R-23-E Parish/County Eddy

State New Mexico Area Midland Operator COTTON PETROLEUM CORPORATION

Project _____ Prepared by L. G. Langley

Exploration ☐ Development ☒ Recompletion ☐ Workover ☐ T. D. 7600' Date 2/3/79

DRILLING INTANGIBLES	Dry Hole Without Pipe	Completed Well	Actual Cost	Over (Under)
Location, Roads, Damages	$ 9,000	$ 9,000		
Footage 7,600 ft. @ 16 ft.	121,600	121,600		
Day Work 3 days WDP @ $ _____ /day	10,800	10,800		
_____ days WODP @ $ _____ day				
Rig Move Costs				
Cement, Cementing and Services	10,000	21,000		
Testing and Coring	8,000	8,000		
Logging	21,000	21,000		
Professional Services	3,500	3,500		
Mud Materials, Water	20,000	20,000		
Bits				
Fuel				
Coreheads and Rentals				
Geological	5,000	5,000		
Miscellaneous (Inc. Labor & Transportation)	10,000	10,000		
Total Drilling	218,900	229,900		
COMPLETION INTANGIBLES:				
Completion Unit 10 days/hrs. @ $ _____		$ 10,000		
Cement and Cementing				
Floating Equipment, Centralizers, Scratchers				
Perforating and Logging		6,000		
Frac and or Acid		12,000		
Fuel, Water, Power				
Battery Construction - Dirt Work, etc.		3,000		
Completion Tools and Equipment - Rentals		2,000		
Professional Services		3,000		
Miscellaneous Services (Inc. Marine)		3,500		
Other (Including Labor & Transportation)				
Total Completion		39,600		
Total Intangibles	218,900	$ 269,500		
EQUIPMENT:				
Casing 300 ft. 13-3/8 @ $ _____ /ft.	5,300	$ 5,300		
2000 ft. 8-5/8 @ $ _____ /ft.	17,800	17,800		
7600 ft. 4-1/2 @ $ _____ /ft.		45,600		
_____ ft. _____ @ $ _____ /ft.				
Tubing 7600 ft. 2-3/8 @ $ _____ /ft.		22,800		
Wellhead Equipment	2,000	10,000		
Rods _____ ft. _____ @ $ _____ /ft.				
Subsurfaces Equipment - BH Pump, Pkrs., etc.		1,000		
Line Pipe _____ ft. _____ @ $ _____ /ft.		1,500		
Tanks, Treaters, Separators, etc.		10,000		
Gas Processing Unit		3,500		
Marine - Barges, Platforms, etc.				
Pumping Unit and Engine				
Other Miscellaneous Equipment		5,000		
Total Equipment Cost	25,100	$ 122,500		
Total Well Cost	$ 244,000	$ 392,000		

APPROVALS

Operator Cotton Petr. Corp. By L G Langley WI _____ % Date _____

Company _____ By _____ WI _____ % Date _____

Company _____ By _____ WI _____ % Date _____

Company _____ By _____ WI _____ % Date _____

Company _____ By _____ WI _____ % Date _____

Company _____ By _____ WI _____ % Date _____

P-25 (REV. 8/77)

BEFORE EXAMINER HUNTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 4
CASE NO. 6458 & 6459

MARK F. SCHWEINFURTH
501 C & K PETROLEUM BUILDING
MIDLAND, TEXAS 79701

CONSULTING GEOLOGIST

915/684-7762

December 1, 1978

Cotton Petroleum Corporation
420 Wall Towers West
Midland, TX 79701

Re: ARCO Farmout
Sec. 24, 21S-23E,
Eddy County, New Mexico
CPC Marathon Prospect

Gentlemen:

In accordance with and pursuant to our letter agreement dated September 13, 1977, this letter shall serve as an assignment of rights granted me in that farmout agreement from Atlantic Richfield Company dated September 1, 1978. By accepting in the space provided below Cotton agrees to fulfill the obligations of the farmoutee as set out in the subject farmout agreement.

Yours very truly,

Mark F. Schweinfurth

AGREED TO AND ACCEPTED
this 1st day of December, 1978

COTTON PETROLEUM CORPORATION

By: _____

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 5
CASE NO. 6458 & 6459

Cotton Petroleum Corporation
A United Energy Resources, Inc. Company

420 Wall Towers West/Midland, Texas 79701 (915) 683-5211

November 3, 1978

Atlantic Richfield Company
P. O. Box 1610
Midland, TX 79702

Attention: Mr. Glenn Zellner

Re: Farmout Agreement
Section 24, 21S-23E
Eddy County, New Mexico
CPC Marathon Prospect
Lowe Lease #2728

Gentlemen:

Enclosed are two executed copies of our farmout agreement covering the captioned area. As you know, Mark Schweinfurth has assigned this agreement to Cotton Petroleum.

Since it will be necessary to force pool the section in order to acquire the interest of Marathon, Cotton does hereby request that the commencement date set forth in Article II of the farmout agreement be extended to March 1, 1979. If you are agreeable to this extension, please indicate by signing in the space provided below and returning one copy of this letter to our office at your earliest possible convenience.

Yours very truly,

COTTON PETROLEUM CORPORATION

H. L. Blomquist III
Division Landman

HLB/sp
Enclosure

AGREED TO AND ACCEPTED this
6th day of November, 1978

ATLANTIC RICHFIELD COMPANY

By: Glenn A. Zellner

FARMOUT AGREEMENT

Re: Lease No. S-NM-239
& S-NM-251
Eddy County, New Mexico
Area: Indian Basin

THIS AGREEMENT, made and entered into this 1st day of September, 1978, by and between ATLANTIC RICHFIELD COMPANY, a Pennsylvania Corporation having a permit to do business as a foreign corporation in the State of New Mexico and whose mailing address is Post Office Box 1610, Midland, Texas, hereinafter called Atlantic and

MARK F. SCHWEINFURTH

501 C & K Petroleum Building

Midland, Texas 79701

hereinafter called Farmoutee;

WITNESSETH: THAT,

-I-

Atlantic agrees to assign to Farmoutee without warranty of title of any kind, either expressed or implied, all of its leasehold interest in the oil and gas for a period of 90 days and as long thereafter as oil and/or gas is produced in commercial quantities, subject to all the terms, conditions, provisions and limitations of this agreement in the following described tracts of land, Eddy County, New Mexico:

Township 21 South, Range 23 East, N.M.P.M.

TRACT 1: N/2 of Section 24

TRACT 2: S/2 of S/2 of Section 24

-II-

Farmoutee hereby agrees to commence on or before December 1, 1978 the actual drilling of a test well to be located at a legal location in the SE/4 of Section 24, T-21-S, R-23-E,
and to pursue the drilling of this test well with due diligence and in a good and workmanlike manner until Farmoutee has thoroughly tested the Cisco-Canyon formation as identified by and to the satisfaction of Atlantic, or Farmoutee has reached a total depth of 7700 feet, whichever is the lesser depth. The test is to be completed within 90 days from the date of commencement.

-III-

Within 90 days from the completion of the first well as a well capable of producing oil and/or gas, Farmoutee agrees to conduct a continuous drilling program, with not more than 90 days elapsing between the completion of one well and the commencement of another well, until the acreage subject hereto is developed to a density of one well for each standard spacing and proration unit prescribed by orders of the New Mexico Oil Conservation Commission or if there are no applicable spacing and proration rules, then one well for each 40 acre tract in the event of oil production and one well for each 320 acre tract in the event of gas production. The second well and all additional wells are to be

drilled to a depth sufficient to test adequately the deepest producing interval encountered in the first well. If Farmoutee fails to conduct the continuous drilling program within the time and in the manner herein specified, all interest in the premises assigned to Farmoutee pursuant to this agreement shall automatically revert to Atlantic, except as to each tract as aforesaid for which Farmoutee has a producing well, and forthwith, Farmoutee shall reassign to Atlantic all interest in such forfeited acreage acquired by Farmoutee hereunder, warranting the same to be free and clear of all liens, claims or encumbrances created by, through or under Farmoutee.

At the time of completion of the last well drilled hereunder, Farmoutee shall reassign to Atlantic all said premises insofar as concerns rights below 100 feet below the deepest producing interval as to each respective tract or proration unit on or for which Farmoutee has a producing well, warranting the same to be free and clear of all liens, claims or encumbrances suffered by, through or under Farmoutee.

-IV-

Farmoutee agrees to properly test to Atlantic's satisfaction any formation that, either before or after logging as hereinafter provided, appears favorable to Atlantic for the production of oil and/or gas. Farmoutee agrees to provide and perform those services outlined in Exhibit 1, attached to this agreement and made a part hereof.

Atlantic's representative shall have full access to the well and all records thereof during all operations. Atlantic shall be given all information as and when obtained in connection with drilling progress and all operations and shall be permitted to observe all operations. In the event the test is a dry hole, Atlantic shall have the opprtunity to run a velocity survey to the bottom of the hole at Atlantic's expense before the well is plugged and abandoned. Upon abandonment of any and all wells drilled hereunder, Farmoutee agrees to plug same in accordance with the rules and regulations established by the New Mexico Oil Conservation Commission and pay for all damage to the surface which may have been suffered by reason of Farmoutee's drilling plugging operations. Farmoutee shall indemnify, save and keep Atlantic harmless from any and all risk, liability, expense and claims of every kind and character that might arise out of Farmoutee's operations hereunder.

-V-

Upon completion of the first well as a well capable of producing oil and/or gas in paying quantities and if drilled in accordance with all the terms and conditions of this agreement, Atlantic will furnish to Farmoutee upon Farmoutee's written request an assignment as set out above, on a form approved by Atlantic's attorneys, covering its interest in the above described land. The assignment will be to a depth of 100 feet below the depth drilled in the first well as set out above but in no event below the base of the Cisco-Canyon formation

and Atlantic expressly reserves all rights not hereinabove specifically stated to be assigned.

Atlantic shall also reserve a 1/16th of 8/8ths overriding royalty on all oil and/or gas produced, which shall be in addition to all royalties, overriding royalties, production payments and similar lease burdens existing as of this date. Atlantic's overriding royalty is to be free and clear of all cost, expense and taxes, including ad valorem taxes and excepting gross production taxes. Such overriding royalty shall extend to the oil and gas leases that may be assigned hereunder and to any renewals or extension thereof or top leases thereon that may be taken or become owned by Farmoutee within five (5) years after the surrender, termination or expiration of such leases insofar as such renewals, extensions or top leases apply to the above described land. This shall be a covenant running with the land; provided that Atlantic's overriding royalty shall not

extend to any renewal, extension or top lease which is acquired at a date subsequent to twenty (20) years from the date of above assignment. The request for the assignment must be made within 30 days from the completion of the first well. If such written request is not made, it is hereby agreed that Farmoutee shall relinquish any right and interest Farmoutee may have acquired under the terms of this agreement in the above described acreage. Any assignment prepared under the terms hereof shall contain the usual "lesser estates" clause.

-VI-

In addition to the overriding royalty interest hereinabove provided, Atlantic shall reserve unto itself, its successors and assigns, the right and option to convert its overriding royalty interest, after payout of any well drilled hereunder, to 50 % of the working interest in and to the oil and gas leasehold estate assigned and created hereunder, proportionately reduced, however, to accord with the interests involved herein if less than the full interest, together with a like interest in all lease equipment and personal property in or used in connection therewith, subject to a proportionate part of any royalty, overriding royalty, or similar lease burdens reserved and outstanding. For these purposes, "payout" shall be deemed to occur when proceeds or market value of production from any well completed on the above described lands, (after deducting production taxes, royalty, overriding royalty and like burdens) shall equal 100% of Farmoutee's actual cost of drilling, testing, equipping and completing the well, including the actual cost of any reworking, deepening or plugging back, plus 100% of the actual cost of operations of the well; the proceeds of production and the cost of such development and operations to be attributable only to the undivided interest subject hereto if less than the full interest in the oil and gas. Payout shall be determined and the option shall be exercised separately as to the proration unit around each well drilled on the above described land. Upon demand, Farmoutee shall execute and deliver an appropriate assignment, evidencing Atlantic's interest after election.

Farmoutee shall notify Atlantic in writing within 15 days after payout occurs and Atlantic shall have 30 days after receipt of such notice in which to exercise its option. If Atlantic exercises its option, the conversion shall be effective as of 7:00 a.m. on the first day of the month following date of payout. In computing Farmoutee's recoupment out of production of the above defined costs of a well or wells, Farmoutee agrees to furnish Atlantic monthly, or at such other times as may be requested by Atlantic, a statement showing the current payout status of the well or wells. Payout status reports should be mailed to:

Atlantic Richfield Company
Joint Operations Accounting
P. O. Box 2819
Dallas, Texas 75221

At such time as any well drilled on said land becomes jointly owned as between Farmoutee and Atlantic, the acreage allocated to said well shall become subject to the terms of the Operating Agreement attached hereto as Exhibit "2" and the provisions of the Accounting Procedure (Exhibit "C") attached to said Operating Agreement shall govern the "rates" and "charges" during "Payout" as defined above.

-VII-

Atlantic shall have the continuing right and option to purchase all oil and other liquid hydrocarbons, except any used for operating purposes, which may be produced and saved from the assigned premises. Any such purchases shall be at the price posted by Atlantic Richfield in the same field for the grade and quality of oil produced in effect at the time of purchase; provided that if there is no such Atlantic Richfield posting then any such purchases shall be at the average

of the two highest prices posted by others in the same field for the grade and quality of oil produced in effect at the time of purchase or, if there are no price postings in such field, then, in like sequence, at the price posted by Atlantic Richfield or at the average of the two highest prices posted by others in effect at the time of purchase in the oil producing area nearest to such field which produces the same kind and quality of crude oil. Before disposing of any oil or liquid hydrocarbons which Atlantic Richfield has the option to purchase under this agreement, you agree to contact Atlantic Richfield at the following address:

Atlantic Richfield Company
Midcontinent Crude Oil Supply
P. O. Box 2819
Dallas, Texas 75221

for the purpose of permitting Atlantic Richfield to act with respect to its options. Should Atlantic elect not to exercise its rights and option to purchase, such action shall not be held a waiver of the privilege to do so at any later time, but nothing herein shall be construed as requiring Atlantic Richfield to purchase or furnish a market for such production.

Before Farmoutee enters into any contract for the sale, purchase or processing of gaseous hydrocarbons from the interests involved herein, Farmoutee shall submit to Atlantic in writing the contract into which Farmoutee proposes to enter. Atlantic shall have the right and option, as its election, to (1) purchase all of such gas on the terms submitted, (2) take in kind or otherwise dispose of Atlantic's share of the gas on such terms and conditions as it deems advisable, or (3) allow Farmoutee to dispose of all of the gas and account to Atlantic, all in accordance with the terms of the proposal submitted, provided, however, that if Farmoutee is in any way affiliated with the purchaser of such gas, then Farmoutee shall account to Atlantic on the basis of the highest price offered or paid in the area by any purchaser or prospective purchaser. If Atlantic fails to notify Farmoutee of its election hereunder within sixty (60) days after receipt of such notice from Farmoutee, then it shall be considered that Atlantic made election (3) above. For the purpose of election (3) above the interest of Atlantic shall be considered to be only the overriding royalty interest reserved under this farmout agreement and shall not include Atlantic's working interest gas. In the event that Atlantic exercises its reserved option to convert its overriding royalty to a working interest upon payout of any well herein provided for, or at any time during which Atlantic may have a working interest in any well, Atlantic shall at all times have the express right to take its proportionate share of the working interest gas in kind or to independently market or dispose of the same and nothing herein contained shall be construed as giving or granting to Farmoutee the right to market or otherwise dispose of the proportionate share of the working interest gas of Atlantic without express authorization from time to time to do so.

-VIII-

It is further agreed that Atlantic shall continue to pay the annual rentals that may be payable under any of the leases that may be assigned hereunder and any shut-in gas royalty payments that may be required to maintain said leases in force and effect and Farmoutee agrees to promptly reimburse Atlantic for same. Nevertheless, Atlantic shall not be held liable in damages for failure to pay said rentals and/or royalty through mistake, clerical error or oversight.

-IX-

Before Farmoutee plugs and abandons the initial test well, Farmoutee hereby agrees to immediately notify Atlantic of Farmoutee's intention to do so. Atlantic shall then have forty-eight (48) hours (exclusive of Saturdays, Sundays and holidays) after receipt of said notice to decide whether we wish to take over said well. In the event Atlantic elects to take said well over, such

take over shall be without any prior cost to Atlantic except that Atlantic agrees to pay Farmoutee the reasonable salvage value of any and all lease and in-hole well equipment (except surface casing) less the reasonable estimated cost of salvaging said equipment then existing in the well or upon the drill site and further, Farmoutee shall relinquish to Atlantic any and all rights to which Farmoutee may be entitled in the above described acreage and well under the terms of this agreement. Operations on the above well from and after date of take over shall be at Atlantic's sole cost, risk and expense.

Further, prior to the abandonment of the last producing well hereafter drilled by Farmoutee on the premises involved herein, Farmoutee shall give Atlantic at least thirty (30) days advance notice prior to abandonment of the well. Atlantic thereupon shall have the right and option to take over the well in its then condition for additional testing by any method Atlantic desires, including but not limited to deepening or plugging back for the completion attempts at any depth, by paying to Farmoutee the reasonable salvage value of any salvable material in the hole, less the cost of salvaging same. If Atlantic elects not to take over the well, Farmoutee shall plug and abandon same at its sole cost, risk and expense. If Atlantic elects to take over the well, Farmoutee shall immediately assign to Atlantic all rights acquired by Farmoutee hereunder. All operations on any well taken over by Atlantic shall be at its sole cost, risk and expense and Atlantic shall plug and abandon any well taken over by it whenever Atlantic shall determine to abandon same.

-X-

Atlantic shall have no control over the drilling, testing and completing operations provided for in this agreement, said operations to be conducted at Farmoutee's sole cost, risk, and expense. None of such operations shall be considered as joint, it being expressly understood that this agreement does not constitute or provide any type of partnership or joint venture. It is understood that time is of the essence in fulfilling the provisions of this agreement as provided herein. No provisions of this agreement or assignment herein provided for shall be modified, altered, waived, or assigned except by written consent of Atlantic.

If this agreement correctly expresses the agreement between us, please signify Farmoutee's acceptance by executing and returning to Atlantic two copies of this agreement. This agreement shall be effective only upon the return of these executed copies within ten days from the date hereof.

ATLANTIC RICHFIELD COMPANY

BY: Alan C. Zellner

ACCEPTED, APPROVED AND AGREED THIS 24 DAY OF October, 1978.

MARK F. SCHWEINFURTH

BY: Mark F. Schweinfurth

Form NM-F/O-1
(4-15-77)

EXHIBIT "1"

You agree to run logs and provide all information on each well involved with this agreement as indicated below:

1. Daily drilling and/or operations report describing all action commencing with staking of location and continuing through final completion or plugging of the well. Report must be daily by telephone or telegraph to A.R.Co. Scouting Department: Midland, Texas - Phone 915-684-0273 or 300 N. Pecos.

2. Drilling time:

   (a) Rate of penetration tabulation (1 copy) in no greater than 10' increments shall be delivered weekly to A.R.Co. Scouting Department, P. O. Box 1610, Midland, Texas, 79702.

   (b) In addition, if a geolograph or other such penetration rate or drilling monitoring device is used during drilling, copies of accumulated charts shall be delivered or sent weekly to the above named representative.

3. Well Cutting Samples:

   (a) Samples of at least every 10' from surface to bottom of hole shall be provided in cloth bags and delivered weekly to Midland Sample Cut, 704 S. Pecos, Midland, Texas. If a "tight-hole" operation is conducted, delivery may be to back door of 105 N. Ft. Worth St., Midland, Texas. Exception will be considered by D. E. Daugherty, District Geologist (Phone 915-684-0247) for near surface or shallow fast drilling zones like allurium and red beds if there is no critical reason for acquiring information such cuttings could provide.

   (b) If a mud logging unit is used, a set of cuttings caught and packaged by mud logger shall be delivered to Charles Andrews*, 300 N. Pecos, Midland, Texas - when each standard box is filled. Two copies of mud log will be mailed daily to Scouting Dept., Charles Andrews, P.O. Box 1610, Midland, Texas 79702.

4. One copy of each form submitted to a State or Federal oil or gas regulatory agency shall be mailed to Land Department, Attention: Glenn Zellner, P. O. Box 1610, Midland, Texas 79702.

5. Prior to drillstem testing, coring, logging and potentialing, notify one of the following in order listed in due time to allow an Atlantic Richfield representative to witness operation.

	Office Phone	Home Phone
Charles Andrews	684-0100	694-5797
John McBride	684-0100	697-1584
Glen Luff	684-0100	684-5354

6. *Three copies of each report and analysis, commercial or proprietary pertaining to or based on cores, drillstem test, porosity or fluid saturations from logs, and fluids, gas, or well cutting samples will be sent to the following:

   Scouting, Attention: Charles Andrews
   P. O. Box 1610, Midland, Texas 79702

   Chief Geologist, Room ATL-833
   P. O. Box 2819, Dallas, Texas 75221

7. *Weekly production data during the first 90 days production from the initial well and each subsequent well involved shall be sent to Scouting Dept., Charles Andrews, P.O. Box 1610, Midland, Texas 79702

8. Logs required under the agreement:

   (a) A gamma ray curve must be run from surface to bottom of hole, with the top 3,000' of the hole recorded at a logging speed not greater than 30' per minute for acceptable validity of measured natural rock strata gamma radiation. Gamma ray log must be a companion to any other logging curve operator desires. If shallow gamma ray is a separate log, please mail to Charles Andrews, P. O. Box 1610, Midland, Texas 79702.

   (b) A porosity measuring log from base of surface casing to bottom of hole - neutron, density or sonic.

   (c) A resistivity measuring log of a type compatible with mud system from base of surface casing to bottom of hole, run in open hole.

   (d) Additional logs required -

   (e) Plus any other logs operator elects to run.

9. *Copies of all logs run in wells involved with this agreement, including dipmeter log and velocity survey report will be sent as follows:

   Field or preliminary prints of all logs run, including dipmeter monitor, must be delivered within 24 hours after all logging at a given depth is completed. Verbal approval by Atlantic Richfield representative, listed above, for delay of delivery until Monday is usual for weekend logging if no immediate decision is anticipated using log information. Should logging be interrupted for more than 1 day, reasonable diligence in delivering completed logs is expected, rather than wait until all the planned logging at that depth is completed.

   Deliver preliminary and final copies to:

   Scouting Department
   Charles Andrews
   P. O. Box 1610
   Midland, Texas 79702

   Copies Required:
   Preliminary - 2 copies
   Final - 4 copies
   Vel. Surv. Rpt. - 1 copy

   (or hand carry to 300 N. Pecos)

10. You shall furnish Atlantic Richfield without warranty one true copy of all title opinions and curative data obtained by you covering or affecting title to lands subject to this agreement. Abstracts and other title material owned or controlled by you covering such lands shall, upon request, be made available to Atlantic for examination.

*If operator desires "tight hole" handling of nonpublic information pertaining to the well (1) notify Charles Andrews, Scouting, P. O. Box 1610, Midland, Texas 79702, (2) try to stamp or label each required log, record or other document "Tight Hole" or other similar indication of desired special confidential handling.

Revised
5/20/77

EXHIBIT "2"

A.A.P.L. FORM 610

MODEL FORM OPERATING AGREEMENT—1956

Non-Federal Lands

OPERATING AGREEMENT

DATED

_____, 19____,

FOR UNIT AREA IN TOWNSHIP 21 SOUTH, RANGE 23 EAST

EDDY COUNTY, STATE OF NEW MEXICO

SECTION 24

AMERICAN ASSOCIATION OF PETROLEUM LANDMEN
APPROVED FORM. A.A.P.L. NO. 610
MAY BE ORDERED DIRECTLY FROM THE PUBLISHER
ROSS-MARTIN COMPANY, BOX 800, TULSA 74101

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A.A.P.L. FORM 610

OPERATING AGREEMENT

THIS AGREEMENT, entered into this_____ day of_____, 19____, between COTTON PETROLEUM CORPORATION hereafter designated as "Operator", and the signatory parties other than Operator.

WITNESSETH, THAT:

WHEREAS, the parties to this agreement are owners of oil and gas leases covering and, if so indicated, unleased mineral interests in the tracts of land described in Exhibit "A", and all parties have reached an agreement to explore and develop these leases and interests for oil and gas to the extent and as hereinafter provided;

NOW, THEREFORE, it is agreed as follows:

1. DEFINITIONS

As used in this agreement, the following words and terms shall have the meanings here ascribed to them.

(1) The words "party" and "parties" shall always mean a party, or parties, to this agreement.

(2) The parties to this agreement shall always be referred to as "it" or "they", whether the parties be corporate bodies, partnerships, associations, or persons real.

(3) The term "oil and gas" shall include oil, gas, casinghead gas, gas condensate, and all other liquid or gaseous hydrocarbons, unless an intent to limit the inclusiveness of this term is specifically stated.

(4) The term "oil and gas interests" shall mean unleased fee and mineral interests in tracts of land lying within the Unit Area which are owned by parties to this agreement.

(5) The term "Unit Area" shall refer to and include all of the lands, oil and gas leasehold interests and oil and gas interests intended to be developed and operated for oil and gas purposes under this agreement. Such lands, oil and gas leasehold interests and oil and gas interests are described in Exhibit "A".

(6) The term "drilling unit" shall mean the area fixed for the drilling of one well by order or rule of any state or federal body having authority. If a drilling unit is not fixed by any such rule or order, a drilling unit shall be the drilling unit as established by the pattern of drilling in the Unit Area or as fixed by express agreement of the parties.

(7) All exhibits attached to this agreement are made a part of the contract as fully as though copied in full in the contract.

(8) The words "equipment" and "materials" as used here are synonymous and shall mean and include all oil field supplies and personal property acquired for use in the Unit Area.

2. LOSS OF TITLE

In the event of loss or failure of title, in whole or in part, of any party hereto to any lease or interest covered by this agreement, the interests of the parties in the remainder of the Unit Area will be revised on a net surface leasehold acreage basis so that the party whose title has failed or has been lost will not be given credit for the interest affected by such loss or failure. Such revision of ownership shall not be retroactive as to investment or operating costs, or as to production, but each party whose title has been lost or has failed shall indemnify the other party or parties hereto against, and hold such other party or parties harmless from, all loss, cost, damage and expense which may result from, or in any manner arise because of, the delivery to such party of production obtained hereunder from acreage covered hereby or the payment of such party of the proceeds from the sale of such production prior to the date said loss or failure of title is determined.

The expiration of any lease because of the failure of the parties to extend same, in accordance with the provisions thereof, beyond its primary term shall not be considered as a loss or failure of title within the meaning of this Section 2. Any loss of a lease because of its expiration under its own terms at or after the expiration of its primary term shall be a common loss of the parties. Likewise, where all of the parties consent to a surrender of a lease (whether during or after its primary term) such loss shall be a common loss of the parties.

3. UNLEASED OIL AND GAS INTERESTS

If it develops that any interest owned and contributed by a party hereto is an unleased interest in the oil and gas rights, then such unleased interest shall be treated for all purposes of this agreement as if it were an oil and gas lease covering such unleased interest on a form providing for the usual and customary three-sixteenths 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 production equivalent to the royalty which would be payable if such unleased interest were subject to an oil and gas lease as provided in the preceding sentence. Where any provision of this agreement shall operate to require an assignment from any party contributing an unleased mineral interest, such provision shall be construed (insofar as such unleased mineral interest is concerned) as requiring instead the execution and delivery by such party of an oil and gas lease, for a primary term of one year from the date of its delivery and so long thereafter as oil or gas is produced, which lease shall reserve unto the Lessor a three-sixteenths royalty and contain the usual "lesser interest clause."

4. INTERESTS OF PARTIES

Exhibit "A" lists all of the parties, and their respective percentage of fractional interest under this agreement. Unless changed by other provisions, all costs and liabilities incurred in operations under this contract shall be borne and paid, and all equipment and material acquired in operations on the Unit Area shall be owned, by the parties as their interests are given in Exhibit "A". All production of oil and gas from the Unit Area, subject to the payment of the Lessor's usual three-sixteenths royalties, shall also be owned by the parties in the same manner.

If the interest of any party in any oil and gas lease covered by this agreement is subject to an overriding royalty, production payment, or other charge over and above the usual one-eighth (⅛) royalty, such party shall assume and alone bear all such excess obligations and shall account for them to the owners thereof out of its share of the working interest production of the Unit Area.

5. OPERATOR OF UNIT

COTTON PETROLEUM CORPORATION shall be the Operator of the Unit Area, and shall conduct and direct and have full control of all operations on the Unit Area as permitted and required by, and within the limits of, this agreement. It shall conduct all such operations in a good and workmanlike manner, but it shall have no liability as Operator to the other parties for losses sustained, or liabilities incurred, except such as may result from gross negligence or from willful breach of the provisions of this agreement.

6. EMPLOYEES

The number of employees and their selection, and the hours of labor and the compensation for services performed, shall be determined by Operator. All employees shall be the employees of Operator.

7. TEST WELL

On or before the_____ day of_____, 19____, Operator shall commence the drilling of a well for oil and gas in the following location:

and shall thereafter continue the drilling of the well with due diligence to

unless granite or other practically impenetrable substance is encountered at a lesser depth or unless all parties agree to complete the well at a lesser depth.

Operator shall make reasonable tests of all formations encountered during drilling which give indication of containing oil and gas in quantities sufficient to test, unless this agreement shall be limited in its application to a specific formation or formations, in which event Operator shall be required to test only the formation or formations to which this agreement may apply.

If in Operator's judgment the well will not produce oil or gas in paying quantities, and it wishes to plug and abandon the test as a dry hole, it shall first secure the consent of all parties to the plugging, and the well shall then be plugged and abandoned as promptly as possible.

8. COSTS AND EXPENSES

Except as herein otherwise specifically provided, Operator shall promptly pay and discharge all costs and expenses incurred in the development and operation of the Unit Area pursuant to this agreement and shall charge each of the parties hereto with their respective proportionate shares upon the cost and expense basis provided in the Accounting Procedure attached hereto and marked Exhibit "C". If any provision of Exhibit "C" should be inconsistent with any provision contained in the body of this agreement, the provisions in the body of this agreement shall prevail.

Operator, at its election, shall have the right from time to time to demand and receive from the other parties payment in advance of their respective shares of the estimated amount of the costs to be incurred in operations hereunder during the next succeeding month, which right may be exercised only by submission to each such party of an itemized statement of such estimated costs, together with an invoice for its share thereof. Each such statement and invoice for the payment in advance of estimated costs shall be submitted on or before the 20th day of the next preceding month. Each party shall pay to Operator its proportionate share of such estimate within fifteen (15) days after such estimate and invoice is received. If any party fails to pay its share of said estimate within said time, the amount due shall bear interest at the rate of ten percent (10%) per annum until paid. Proper adjustment shall be made monthly between advances and actual cost, to the end that each party shall bear and pay its proportionate share of actual costs incurred, and no more.

9. OPERATOR'S LIEN

Operator is given a first and preferred lien on the interest of each party covered by this contract, and in each party's interest in oil and gas produced ~~[illegible]~~ the proceeds from the sale of and upon each party's interest in material and equipment, to secure the payment of all sums due from each such party to Operator.

In the event any party fails to pay any amount owing by it to Operator as its share of such costs and expense or such advance estimate within the time limited for payment thereof, Operator, without prejudice to other existing remedies including reasonable attorney fees in the event of suit to collect any delinquenc is authorized, at its election, to collect from the purchaser or purchasers of oil or gas, the proceeds accruing to the working interest or interests in the Unit Area of the delinquent party up to the amount owing by such party, and each purchaser of oil or gas is authorized to rely upon Operator's statement as to the amount owing by such party.

In the event of the neglect or failure of any non-operating party to promptly pay its proportionate part of the cost and expense of development and operation when due, the other non-operating parties and Operator, within thirty (30) days after the rendition of statements therefor by Operator, shall proportionately contribute to the payment of such delinquent indebtedness and the non-operating parties so contributing shall be entitled to the same lien rights as are granted to Operator in this section. Upon the payment by such delinquent or defaulting party to Operator of any amount or amounts on such delinquent indebtedness, or upon any recovery on behalf of the non-operating parties under the lien conferred above, the amount or amounts so paid or recovered shall be distributed and paid by Operator to the other non-operating parties and Operator proportionately in accordance with the contributions theretofore made by them.

10. TERM OF AGREEMENT

This agreement shall remain in full force and effect for as long as any of the oil and gas leases subjected to this agreement remain or are continued in force as to any part of the Unit Area, whether by production, extension, renewal or otherwise; provided, however, that in the event the first well drilled hereunder results in a dry hole and no other well is producing oil or gas in paying quantities from the Unit Area, then at the end of one hundred eighty (180) days ~~[illegible]~~ after abandonment of the first test well, this agreement shall terminate unless one or more of the parties are then engaged in drilling a well or wells pursuant to Section 12 hereof, or all parties have agreed to drill an additional well or wells under this agreement, in which event this agreement shall continue in force until such well or wells shall have been drilled and completed. If production results therefrom this agreement shall continue in force thereafter as if said first test well had been productive in paying quantities, but if production in paying quantities does not result therefrom this agreement shall terminate at the end of one hundred eighty (180) days ~~[illegible]~~ after abandonment of such well or wells. It is agreed, however, that the termination of this agreement shall not relieve any party hereto from any liability which has accrued or attached prior to the date of such termination.

11. LIMITATION ON EXPENDITURES

Without the consent of all parties: (a) No well shall be drilled on the Unit Area except any well expressly provided for in this agreement and except any well drilled pursuant to the provisions of Section 12 of this agreement, it being understood that the consent to the drilling of a well shall include consent to all necessary expenditures in the drilling, testing, completing,* and equipping of the well, including necessary tankage; (b) No well shall be reworked, plugged back or deepened except a well reworked, plugged back or deepened pursuant to the provisions of Section 12 of this agreement, it being understood that the consent to the reworking, plugging back or deepening of a well shall include consent to all necessary expenditures in conducting such operations and completing* and equipping of said well to produce, including necessary tankage; (c) Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of ----TEN THOUSAND AND NO/100 ---------- Dollars ($ 10,000.00) except in connection with a well the drilling, reworking, deepening, or plugging back of which has been previously authorized by or pursuant to this agreement; provided, however, that in case of explosion, fire, flood, or other sudden emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion are required to deal with the emergency and to safeguard life and property, but Operator shall, as promptly as possible, report the emergency to the other parties. Operator shall, upon request, furnish copies of its "Authority for Expenditures" for any single project costing in excess of $ 5,000.00

12. OPERATIONS BY LESS THAN ALL PARTIES*

If all the parties cannot mutually agree upon the drilling of any well on the Unit Area other than the test well provided for in Section 7, or upon the reworking, deepening or plugging back of a dry hole drilled at the joint expense of all parties or a well jointly owned by all the parties and not then producing in paying quantities on the Unit Area, any party or parties wishing to drill, rework, deepen or plug back such a well may give the other parties written notice of the proposed operation, specifying the work to be performed, the location, proposed depth, objective formation and the estimated cost of the operation. The parties receiving such a notice shall have thirty (30) days (except as to reworking, plugging back or drilling deeper, where a drilling rig is on location, the period shall be limited to forty-eight (48) hours exclusive of Saturday and Sunday and legal holidays) after receipt of the notice within which to notify the parties wishing to do the work whether they elect to participate in the cost of the proposed operation. Failure of a party receiving such a notice to so reply to it within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.

If any party receiving such a notice elects not to participate in the proposed operation (such party or parties being hereafter referred to as "Non-Consenting Party"), then in order to be entitled to the benefits of this section, the party or parties giving the notice and such other parties as shall elect to participate in the operation (all such parties being hereafter referred to as the "Consenting Parties") shall, within thirty (30) days after the expiration of the notice period of thirty (30) days (or as promptly as possible after the expiration of the 48-hour period where the drilling rig is on location, as the case may be) actually commence work on the proposed operation and complete it with due diligence.

The entire cost and risk of conducting such operations shall be borne by the Consenting Parties in the proportions that their respective interests as shown in Exhibit "A" bear to the total interests of all Consenting Parties. Consenting Parties shall keep the leasehold estates involved in such operations free and clear of all liens and encumbrances of every kind created by or arising from the operations of the Consenting Parties. If such an operation results in a dry hole, the Consenting Parties shall plug and abandon the well at their sole cost, risk and expense. If any well drilled, reworked, deepened or plugged back under the provisions of this section results in a producer of oil and/or gas in paying quantities, the Consenting Parties shall complete and equip the well to produce at their sole cost and risk, and the well shall then be turned over to Operator and shall be operated by it at the expense and for the account of the Consenting Parties. Upon commencement of operations for the drilling, reworking, deepening or plugging back of any such well by Consenting Parties in accordance with the provisions of this section, each Non-Consenting Party shall be deemed to have relinquished to Consenting Parties, and the Consenting Parties shall own and be entitled to receive, in proportion to their respective interests, all of such Non-Consenting Party's interest in the well, its leasehold operating rights, and share of production therefrom until the proceeds or market value thereof (after deducting production taxes, royalty, overriding royalty and other interests existing on the effective date hereof payable out of or measured by the production from such well accruing with respect to such interest until it reverts) shall equal the total of the following:

(A) 100% of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment beyond the wellhead connections (including, but not limited to, stock tanks, separators, treaters, pumping equipment and piping), plus 100% of each such Non-Consenting Party's share of the cost of operation of the well commencing with first production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other provisions of this section, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that interest which would have been chargeable to each Non-Consenting Party had it participated in the well from the beginning of the operation; and

(B) 300% ~~200%~~ of that portion of the costs and expenses of drilling, reworking, deepening or plugging back, testing and completing, after deducting any cash contributions received under Section 25, and 300% ~~200%~~ of that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections), which would have been chargeable to such Non-Consenting Party if it had participated therein.

In the case of any reworking, plugging back or deeper drilling operation, the Consenting Parties shall be permitted to use, free of cost, all casing, tubing and other equipment in the well, but the ownership of all such equipment shall remain unchanged; and upon abandonment of a well after such reworking, plugging back or deeper drilling, the Consenting Parties shall account for all such equipment to the owners thereof, with each party receiving its proportionate part in kind or in value.

Within sixty (60) days after the completion of any operation under this section, the party conducting the operations for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to the well, and an itemized statement of the cost of drilling, deepening, plugging back, testing, completing, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement of such costs of operation, may submit a detailed statement of monthly billings. Each month thereafter, during the time the Consenting Parties are being reimbursed as provided above, the Consenting Parties shall furnish the Non-Consenting Parties with an itemized statement of all costs and liabilities incurred in the operation of the well, together with a statement of the quantity of oil and gas produced from it and the amount of proceeds realized from the sale of the well's working interest production during the preceding month. Any amount realized from the sale or other disposition of equipment newly acquired in connection with any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited against the total unreturned costs of the work done and of the equipment purchased, in determining when the interest of such Non-Consenting Party shall revert to it as above provided; if there is a credit balance it shall be paid to such Non-Consenting Party.

If and when the Consenting Parties recover from a Non-Consenting Party's relinquished interest the amounts provided for above, the relinquished interests of such Non-Consenting Party shall automatically revert to it and from and after such reversion such Non-Consenting Party shall own the same interest in such well, the operating rights and working interest therein, the material and equipment in or pertaining thereto, and the production therefrom as such Non-Consenting Party would have owned had it participated in the drilling, reworking, deepening or plugging back of said well. Thereafter, such Non-Consenting Party shall be charged with and shall pay its proportionate part of the further costs of the operation of said well in accordance with the terms of this agreement and the accounting procedure schedule, Exhibit "C", attached hereto.

Notwithstanding the provisions of this Section 12, it is agreed that without the mutual consent of all parties, no wells shall be completed in or produced from a source of supply from which a well located elsewhere on the Unit Area is producing, unless such well conforms to the then-existing well spacing pattern for such source of supply.

The provisions of this section shall have no application whatsoever to the drilling of the initial test well on the Unit Area, but shall apply to the reworking, deepening, or plugging back of the initial test well after it has been drilled to the depth specified in Section 7, if it is, or thereafter shall prove to be, a dry hole or non-commercial well, and to all other wells drilled, reworked, deepened, or plugged back, or proposed to be drilled, reworked, deepened, or plugged back, upon the Unit Area subsequent to the drilling of the initial test well.

13. RIGHT TO TAKE PRODUCTION IN KIND

Each party shall take in kind or separately dispose of its proportionate share of all oil and gas produced from the Unit Area, exclusive of production which may be used in development and producing operations and in preparing and treating oil for marketing purposes and production unavoidably lost. Each party shall pay or deliver, or cause to be paid or delivered, all royalties, overriding royalties, or other payments due on its share of such production, and shall hold the other parties free from any liability therefor. Any extra expenditure incurred in the taking in kind or separate disposition by any party of its proportionate share of the production shall be borne by such party.

Each party shall execute all division orders and contracts of sale pertaining to its interest in production from the Unit Area, and shall be entitled to receive payment direct from the purchaser or purchasers thereof for its share of all production.

In the event any party shall fail to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the oil and gas produced from the Unit Area, Operator shall have the right, subject to revocation at will by the party owning it, but not the obligation, to purchase such oil and gas or sell it to others for the time being, at not less than the market price prevailing in the area, which shall in no event be less than the price which Operator receives for its portion of the oil and gas produced from the Unit Area. Any such purchase or sale by Operator shall be subject always to the right of the owner of the production to exercise at any time its right to take in kind, or separately dispose of, its share of all oil and gas not previously delivered to a purchaser. Notwithstanding the foregoing, Operator shall not make a sale into interstate commerce of any other party's share of gas production without first giving such other party sixty (60) days notice of such intended sale. Any contract made by OPERATOR specifically for the sale of non-taking party's share of Unit production shall not be for a term longer than is commensurate with the minimum needs of the industry under the circumstances and shall in no event be for a term exceeding one year.

14. ACCESS TO UNIT AREA

Each party shall have access to the Unit Area at all reasonable times, at its sole risk, to inspect or observe operations, and shall have access at reasonable times to information pertaining to the development or operation thereof, including Operator's books and records relating thereto. Operator shall, upon request, furnish each of the other parties with copies of all drilling reports, well logs, tank tables, daily gauge and run tickets and reports of stock on hand at the first of each month, and shall make available samples of any cores or cuttings taken from any well drilled on the Unit Area.

15. DRILLING CONTRACTS

All wells drilled on the Unit Area shall be drilled on a competitive contract basis at the usual rates prevailing in the area. Operator, if it so desires, may employ its own or rental tools and equipment in the drilling of wells, but its charges therefor shall not exceed the prevailing rates in the field, and the rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced, and such work shall be performed by 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.

16. ABANDONMENT OF WELLS

No well, other than any well which has been drilled or reworked pursuant to Section 12 hereof for which the Consenting Parties have not been fully reimbursed as therein provided, which has been completed as a producer shall be plugged and abandoned without the consent of all parties; provided, however, if* all parties do not agree to the abandonment of any well, those wishing to continue its operation shall tender to each of the other parties its proportionate share of the value of the well's salvable material and equipment, determined in accordance with the provisions of Exhibit "C", less the estimated cost of salvaging and the estimated cost of plugging and abandoning. Each abandoning party shall then assign to the non-abandoning parties, without warranty, express or implied, as to title or as to quantity, quality, or fitness for use of the equipment and material, all of its interest in the well and its equipment, together with its interest in the leasehold estate as to, but only as to, the interval or intervals of the formation or formations then open to production. The assignments so limited shall encompass the "drilling unit" upon which the well is located. The payments by, and the assignments to, the assignees shall be in a ratio based upon the relationship of their respective percentages of participation in the Unit Area to the aggregate of the percentages of participation in the Unit Area of all assignees. There shall be no readjustment of interest in the remaining portion of the Unit Area.

After the assignment, the assignors shall have no further responsibility, liability, or interest in the operation of or production from the well in the interval or intervals then open. Upon request of the assignees, Operator shall continue to operate the assigned well for the account of the non-abandoning parties at the rates and charges contemplated by this agreement, plus any additional cost and charges which may arise as the result of the separate ownership of the assigned well.

*within fifteen (15) days after receipt of notice of the proposed abandonment of

17. DELAY RENTALS AND SHUT-IN WELL PAYMENTS.

Delay rentals and shut-in well payments which may be required under the terms of any lease shall be paid by the party who has subjected such lease to this agreement, at its own expense. Proof of each payment shall be given to Operator at least ten (10) days prior to the rental or shut-in well payment date. Operator shall furnish similar proof to all other parties concerning payments it makes in connection with its leases. Any party may request, and shall be entitled to receive, proper evidence of all such payments. If, through mistake or oversight, any delay rental or shut-in well payment is not paid or is erroneously paid, and as a result a lease or interest therein terminates, there shall be no monetary liability against the party who failed to make such payment. Unless the party who failed to pay a rental or shut-in well payment secures and subjects to this agr a new lease covering the same interest within ninety (90) days from the discovery of the failure to make proper payment, the interests of the parties shall be revised on an acreage basis effective as of the date of termination of the lease involved, and the party who failed to make proper payment will no longer be credited with an interest in the Unit Area on account of the ownership of the lease which has terminated. In the event the party who failed to pay the rental or the shut-in well payment shall not have been fully reimbursed, at the time of the loss, from the proceeds of the sale of oil and gas attributable to the lost interest, calculated on an acreage basis, for the development and operating costs theretofore paid on account of such interest, it shall be reimbursed for unrecovered actual costs theretofore paid by it (but not for its share of the cost of any dry hole previously drilled or wells previously abandoned) from so much of the following as is necessary to effect reimbursement:

(1) Proceeds of oil and gas, less operating expenses, theretofore accrued to the credit of the lost interest, on an acreage basis, up to the amount of unrecovered costs;

(2) proceeds, less operating expenses thereafter incurred attributable to the lost interest on an acreage basis, of that portion of oil and gas thereafter produced and marketed (excluding production from any wells thereafter drilled) which would, in the absence of such lease termination, be attributable to the lost interest on an acreage basis, up to the amount of unrecovered costs, the proceeds of said portion of the oil and gas to be contributed by the other parties in proportion to their respective interests; and

(3) any moneys, up to the amount of unrecovered costs, that may be paid by any party who is, or becomes, the owner of the interest lost, for the privilege of participating in the Unit Area or becoming a party to this contract.

Operator shall attempt to notify all parties when a gas well is shut-in or returned to production, but assumes no liability whatsoever for failure to do so.

18. PREFERENTIAL RIGHT TO PURCHASE

Should any party desire to sell all or any part of its interests under this contract, or its rights and interests in the Unit Area, it shall promptly give written notice to the other parties, with full information concerning its proposed sale, which shall include the name and address of the prospective purchaser (who must be ready, willing and able to purchase), the purchase price, and all other terms of the offer. The other parties shall then have an optional prior right, for a period of ten (10) days after receipt of the notice, to purchase on the same terms and conditions the interest which the other party proposes to sell; and, if this optional right is exercised, the purchasing parties shall share the purchased interest in the proportions that the interest of each bears to the total interest of all purchasing parties. However, there shall be no preferential right to purchase in those cases where any party wishes to mortgage its interests, or to dispose of its interests by merger, reorganization, consolidation, or sale of all of its assets, or a sale or transfer of its interests to a subsidiary or parent company, or subsidiary of a parent company, or to any company in which any one party owns a majority of the stock.

19. SELECTION OF NEW OPERATOR

Should a sale be made by Operator of its rights and interests, the other parties shall have the right within sixty (60) days after the date of such sale, by majority vote in interest, to select a new Operator. If a new Operator is not so selected, the transferee of the present Operator shall assume the duties of and act as Operator. In either case, the retiring Operator shall continue to serve as Operator, and discharge its duties in that capacity under this agreement, until its successor Operator is selected and begins to function, but the present Operator shall not be obligated to continue the performance of its duties for more than 120 days after the sale of its rights and interests has been completed.

20. MAINTENANCE OF UNIT OWNERSHIP

For the purpose of maintaining uniformity of ownership in the oil and gas leasehold interests covered by this contract, and notwithstanding any other provisions to the contrary, no party shall sell, encumber, transfer or make other disposition of its interest in the leases embraced within the Unit Area and in wells, equipment and production unless such disposition covers either:

(1) the entire interest of the party in all leases and equipment and production; or

(2) an equal undivided interest in all leases and equipment and production in the Unit Area.

Every such sale, encumbrance, transfer or other disposition made by any party shall be made expressly subject to this agreement, and shall be made without prejudice to the rights of the other parties.

If at any time the interest of any party is divided among and owned by four or more co-owners, Operator may, at its discretion, require such co-owners to appoint a single trustee or agent with full authority to receive notices, approve expenditures, receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with, and with power to bind, the co-owners of such party's interests within the scope of the operations embraced in this contract; however, all such co-owners shall enter into and execute all contracts or agreements for the disposition of their respective shares of the oil and gas produced from the Unit Area and they shall have the right to receive, separately, payment of the sale proceeds thereof.

21. RESIGNATION OF OPERATOR

Operator may resign from its duties and obligations as Operator at any time upon written notice of not less than ninety (90) days given to all other parties. In this case, all parties to this contract shall select by majority vote in interest, not in numbers, a new Operator who shall assume the responsibilities and duties, and have the rights, prescribed for Operator by this agreement. The retiring Operator shall deliver to its successor all records and information necessary to the discharge by the new Operator of its duties and obligations.

22. LIABILITY OF PARTIES

The liability of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations, and shall be liable only for its proportionate share of the costs of developing and operating the Unit Area. Accordingly, the lien granted by each party to Operator in Section 9 is given to secure only the debts of each severally. It is not the intention of the parties to create, nor shall this agreement be construed as creating, a mining or other partnership or association, or to render them liable as partners.

23. RENEWAL OR EXTENSION OF ~~XXXXXXX~~ JOINT LOSS LEASES

If any party secures a renewal of any oil and gas lease subject to this contract, the loss of which would be a joint loss under Section 2 hereof, each and all of the other parties shall be notified promptly, and shall have the right if exercised within thirty (30) days after receipt of such notice, to participate in the ownership of the renewal lease by paying to the party who acquired it their several proper proportionate shares of the acquisition cost, which shall be in proportion to the interests held at that time by the parties in the Unit Area.

If some, but less than all, of the parties elect to participate in the purchase of a renewal lease, it shall be owned by the parties who elect to participate therein, in a ratio based upon the relationship of their respective percentage of participation in the unit area to the aggregate of the percentages of participation in the unit area of all parties participating in the purchase of such renewal lease. Any renewal lease in which less than all the parties elect to participate shall not be subject to this agreement.

Each party who participates in the purchase of a renewal lease shall be given an assignment without warranty of its proportionate interest therein by the acquiring party.

The provisions of this section shall apply to renewal leases whether they are for the entire interest covered by the expiring lease or cover only a portion of its area or an interest therein. Any new or renewal lease taken before the expiration of its predecessor lease, or taken or contracted for within six (6) months after the expiration of the existing lease shall be subject to this provision; but any lease taken or contracted for more than six (6) months after the expiration of an existing lease shall not be deemed a new or renewal lease and shall not be subject to the provisions of this section.

The provisions in this section shall apply also and in like manner to extensions of oil and gas leases.

24. SURRENDER OF LEASES

The leases covered by this agreement, in so far as they embrace acreage in the Unit Area, shall not be surrendered in whole or in part unless all parties consent.

However, should any party desire to surrender its interest in any lease or in any portion thereof, and other parties not agree or consent, the party desiring to surrender shall assign, without express or implied warranty of title, all of its interest in such lease, or portion thereof, and any well, material and equipment which may be located thereon and any rights in production thereafter secured, to the parties not desiring to surrender it. Upon such assignment, the assigning party shall be relieved from all obligations thereafter accruing, but not theretofore accrued, with respect to the acreage assigned and the operation of any well thereon, and the assigning party shall have no further interest in the lease assigned and its equipment and production. The parties assignee shall pay to the party assignor the reasonable salvage value of the latter's interest in any wells and equipment on the assigned acreage, determined in accordance with the provisions of Exhibit "C", less the estimated cost of salvaging and the estimated cost of plugging and abandoning. If the assignment is in favor of more than one party, the assigned interest shall be shared by the parties assignee in the proportions that the interest of each bears to the interest of all parties assignee.

Any assignment or surrender made under this provision shall not reduce or change the assignors' or surrendering parties' interest, as it was immediately before the assignment, in the balance of the Unit Area; and the acreage assigned or surrendered, and subsequent operations thereon, shall not thereafter be subject to the terms and provisions of this agreement.

25. ACREAGE OR CASH CONTRIBUTIONS

If any party receives while this agreement is in force a contribution of cash toward the drilling of a well or any other operation on the Unit Area, such contribution shall be paid to the party who conducted the drilling or other operation and shall be applied by it against the cost of such drilling or other operation. If the contribution be in the form of acreage, the party to whom the contribution is made shall promptly tender an assignment of the acreage, without warranty of title, to all parties to this agreement in proportion to their interests in the Unit Area at that time, if such tender is accepted by all parties and such acreage shall become a part of the Unit Area and be governed by all the provisions of this contract. Each party shall promptly notify all other parties of all acreage or money contributions it may obtain in support of any well or any other operation on the Unit Area.

26. PROVISION CONCERNING TAXATION

Each of the parties hereto elects, under the authority of Section 761(a) of the Internal Revenue Code of 1954, to be excluded from the application of all of the provisions of Subchapter K of Chapter 1 of Subtitle A of the Internal Revenue Code of 1954. If the income tax laws of the state or states in which the property covered hereby is located contain, or may hereafter contain, provisions similar to those contained in the Subchapter of the Internal Revenue Code of 1954 above referred to under which a similar election is permitted, each of the parties agrees that such election shall be exercised. Each party authorizes and directs the Operator to execute such an election or elections on its behalf and to file the election with the proper governmental office or agency. If requested by the Operator so to do, each party agrees to execute and join in such an election.

Operator shall render for ad valorem taxation all property subject to this agreement which by law should be rendered for such taxes, and it shall pay all such taxes assessed thereon before they become delinquent. Operator shall bill all other parties for their proportionate share of all tax payments in the manner provided in Exhibit "C".

If any tax assessment is considered unreasonable by Operator, it may at its discretion protest such valuation within the time and manner prescribed by law, and prosecute the protest to a final determination, unless all parties agree to abandon the protest prior to final determination. When any such protested valuation shall have been finally determined, Operator shall pay the assessment for the joint account, together with interest and penalty accrued, and the total cost shall then be assessed against the parties, and be paid by them, as provided in Exhibit "C".

27. INSURANCE

At all times while operations are conducted hereunder, Operator shall comply with the Workmen's Compensation Law of the State where the operations are being conducted. Operator shall also carry or provide insurance for the benefit of the joint account of the parties as may be outlined in Exhibit "D" attached to and made a part hereof. Operator shall require all contractors engaged in work on or for the Unit Area to comply with the Workmen's Compensation Law of the State where the operations are being conducted and to maintain such other insurance as Operator may require.

In the event Automobile Public Liability Insurance is specified in said Exhibit "D", or subsequently receives the approval of the parties, no direct charge shall be made by Operator for premiums paid for such insurance for operator's fully owned automotive equipment.

28. CLAIMS AND LAWSUITS

If any party to this contract is sued on an alleged cause of action arising out of operations on the Unit Area, or on an alleged cause of action involving title to any lease or oil and gas interest subjected to this contract, it shall give prompt written notice of the suit to the Operator and all other parties.

The defense of lawsuits shall be under the general direction of a committee of lawyers representing the parties, with Operator's attorney as Chairman. Suits may be settled during litigation only with the joint consent of all parties. No charge shall be made for services performed by the staff attorneys for any of the parties, but otherwise all expenses incurred in the defense of suits, together with the amount paid to discharge any final judgment, shall be considered costs of operation and shall be charged to and paid by all parties in proportion to their then interests in the Unit Area. Attorneys, other than staff attorneys for the parties, shall be employed in lawsuits involving Unit Area operations only with the consent of all parties; if outside counsel is employed, their fees and expenses shall be considered Unit Area expense and shall be paid by Operator and charged to all of the parties in proportion to their then interests in the Unit Area. The provisions of this paragraph shall not be applied in any instance where the loss which may result from the suit is treated as an individual loss rather than a joint loss under prior provisions of this agreement, and all such suits shall be handled by and be the sole responsibility of the party or parties concerned.

Damage claims caused by and arising out of operations on the Unit Area, conducted for the joint account of all parties, shall be handled by Operator and its attorneys, the settlement of claims of this kind shall be within the discretion of Operator so long as the amount paid in settlement of any one claim does not exceed one thousand ($1000.00) dollars and, if settled, the sums paid in settlement shall be charged as expense to and be paid by all parties in proportion to their then interests in the Unit Area.

29. FORCE MAJEURE

If any party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, other than the obligation to make money payments, that party shall give to all other parties prompt written notice of the force majeure with reasonably full particulars concerning it; thereupon, the obligations of the party giving the notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure. The affected party shall use all possible diligence to remove the force majeure as quickly as possible.

The requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes; how all such difficulties shall be handled shall be entirely within the discretion of the party concerned.

The term "force majeure" as here employed shall mean an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood, explosion, governmental restraint, unavailability of equipment, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

30. NOTICES

All notices authorized or required between the parties, and required by any of the provisions of this agreement, shall, unless otherwise specifically provided, be given in writing by United States mail or Western Union Telegram, postage or charges prepaid, and addressed to the party to whom the notice is given at the

addressees listed on Exhibit "A". 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 notice in response thereto shall run from the date the originating notice is received. The second or any responsive notice shall be deemed given when deposited in the United States mail or with the Western Union Telegraph Company, with postage or charges prepaid. Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to all other parties.

31. **OTHER CONDITIONS, IF ANY, ARE:**

(a) No well drilled or completed by less than all parties pursuant to the provisions of Section 12 hereof shall be completed as a gas well in the same formation as any other gas well then producing, or capable of producing, gas in commercial quantities from the Unit Area if, as a result of the completion of said well, there would exist on the Unit Area a well density in the same formation of more than one producing gas well to _____ acres; provided that, if any regulatory body having jurisdiction should establish or prescribe a smaller drilling unit, less than all of the parties may complete such a gas well pursuant to the provisions of Section 12 hereof so long as its completion does not result in a well density in the same formation greater than that established or prescribed by the aforesaid regulatory body. No well drilled or completed by less than all of the parties pursuant to the provisions of Section 12 hereof shall be completed as an oil well in the same formation as any other oil well then producing from the Unit Area if, as a result of the completion of said well, there would exist on the Unit Area a well density in the same formation of more than one producing oil well to _____ acres; provided that, if any regulatory body having jurisdiction should establish or prescribe a smaller drilling unit, less than all of the parties may complete such an oil well pursuant to the provisions of Section 12 hereof so long as its completion does not result in a well density in the same formation greater than that established or prescribed by the aforesaid regulatory body.

(b) In spite of any provision to the contrary appearing in Sections 11 and 12 hereof, consent to the drilling of a well shall not be deemed as consent to the setting of casing and a completion attempt. After any well drilled pursuant to this agreement has reached its authorized depth, Operator shall give immediate notice to Non-Operators. The parties receiving such notice shall have forty-eight (48) hours (exclusive of Saturday or Sunday) in which to elect whether or not they desire to set casing and to participate in a completion attempt. Failure of a party receiving such notice so to reply within the period above fixed shall constitute an election by that party not to participate in the cost of a completion attempt. If all of the parties elect to plug and abandon the well, Operator shall plug and abandon same at the expense of all of the parties. If one or more, but less than all, of the parties elect to set pipe and to attempt a completion, the provisions of Section 12 shall apply to the operations thereafter conducted by less than all parties.

(c) If any party hereto hereafter should create any overriding royalty, production payment, or other burden against its working interest production and if any other party or parties should conduct non-consent operations pursuant to any provision of this agreement and, as a result, become entitled to receive the working interest production otherwise belonging to the non-participating party, the party or parties entitled to receive the working interest production of the non-participating party shall receive such production free and clear of burdens against such production which may have been created subsequent to this agreement and the non-participating party creating such subsequent burdens shall save the participating party or parties harmless with respect to the receipt of such working interest production.

(d) It is recognized by the parties hereto that in addition to each party's share of working interest production as shown in Exhibit "A", such party shall have the right, subject to existing contracts, to market the royalty gas attributable to each lease which it contributes to the Unit Area and to receive payments due for such royalty gas produced from or allocated to such lease or leases. It is agreed that, regardless of whether each party markets or contracts for its share of gas, including the royalty gas under the leases which it contributed to the Unit, such party agrees to pay or cause to be paid to the royalty owners under its lease or leases the proceeds attributabl to their respective royalty interest and to hold all other parties harmless for its failure to do so. If a lease is owned in undivided interests, the leasehold owners under such lease shall designate a single party to receive and to pay or cause to be paid all royalty due under such lease and to hold all other parties hereto harmless for failure to do so.

This agreement may be signed in counterpart, and shall be binding upon the parties and upon their heirs, successors, representatives and assigns.

ATTEST:

_____ _____

OPERATOR

ATTEST:

_____ _____

ATTEST:

_____ _____

THE STATE OF TEXAS)
)
COUNTY OF MIDLAND)

BEFORE ME, the undersigned authority, on this day personally appeared _____, Attorney-in-Fact for ATLANTIC RICHFIELD COMPANY, a corporation, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same as the act and deed of said Atlantic Richfield Company, for the purposes and considerations and in the capacity therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 1970.

_____
Notary Public

CORPORATION ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

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

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

_____
NOTARY PUBLIC

CORPORATION ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

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

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

_____
NOTARY PUBLIC

PERSONAL ACKNOWLEDGMENT

STATE OF _____
COUNTY OF _____

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ _____ _____known to me to be the person_____whose name_____subscribed to the foregoing instrument, and acknowledged to me that _____he_____ executed the same for the purposes and consideration therein expressed.

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

_____
NOTARY PUBLIC

OIL AND GAS LEASE

THIS AGREEMENT made this _____ day of _____, 19____, between

_____

_____

as Lessor, and _____
as Lessee, WITNESSETH:

1. Lessor in consideration of Ten and No/100 Dollars ($10.00) in hand paid, of the royalties herein provided, and of the agreements of Lessee herein contained, hereby grants, leases and lets exclusively unto Lessee, for the purpose of investigating, exploring, prospecting, drilling and mining for and producing oil and gas, laying pipe lines, building roads, tanks, power stations, telephone lines and other structures thereon to produce, save, take care of, treat, transport, and own said products, the following described land in _____ County, Texas, to-wit:

and containing _____ acres, more or less. In the event a recurvey of said lands shall reveal the existence of excess and/or vacant lands lying adjacent to the lands above described and the Lessor, his heirs, or assigns, shall by virtue of his ownership of the lands above described, have preference right to acquire said excess and/or vacant lands, then in that event this lease shall cover and include all such excess and/or vacant lands which the Lessor, its successors or assigns, shall have the preference right to acquire by virtue of its ownership of the lands above described as and when acquired by the Lessor; and the Lessee shall pay the Lessor for such excess and/or vacant lands at the same rate per acre as the cash consideration paid for the acreage hereinabove mentioned.

2. Subject to the other provisions herein contained, this lease shall be for a term of 180 days from this date (called "primary term") and as long thereafter as oil or gas is produced from said land hereunder.

3. The royalties to be paid Lessor are: (a) on oil, three-sixteenths (3/16) of that produced and saved from said land, the same to be delivered at the wells or to the credit of Lessor into the pipe line to which the wells may be connected; Lessee may from time to time purchase any royalty oil in its possession, paying the market price therefor prevailing for the field where produced on the date of purchase; and (b) on gas, including casinghead gas or other gaseous substance, produced from said land and sold or used off the premises or in the manufacture of gasoline or other products therefrom, the market value at the well of three-sixteenths (3/16) of the gas so sold or used, provided that on gas sold at the wells, the royalty shall be three-sixteenths (3/16) of the amount realized from such sale; where gas from a well producing gas only is not sold or used, Lessee may pay as annual royalty, commencing ninety (90) days after such well is first shut in, the sum of $1.00 per acre per well per year, and upon such payment it will be considered that gas is being produced within the meaning of Paragraph 2 hereof; provided, however, that such shut in payments shall not continue this lease in force for any consecutive period of more than 2 years. Lessee shall have free use of oil, gas, ~~[illegible]~~ and water from said land, except water from Lessor's wells, for all operations hereunder, and the royalty on oil, gas ~~[illegible]~~ shall be computed after deducting any so used.

4. If prior to discovery of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if after discovery of oil or gas, the production thereof should cease from any cause, this lease shall not terminate if Lessee commences additional drilling or re-working operations within sixty (60) days thereafter. If at the expiration of the primary term, oil or gas is not being produced on said land, but Lessee is then engaged in drilling or re-working operations thereon, the lease shall remain in force so long as operations on said well or for drilling or re-working of any additional well are prosecuted with no cessation of more than sixty (60) consecutive days, and if they result in the production of oil or gas so long thereafter as oil or gas is produced from said land. In the event a well or wells producing oil or gas in paying quantities should be brought in on adjacent land and draining the leased premises, Lessee agrees to drill such offset wells as a reasonably prudent operator would drill under the same or similar circumstances.

5. Lessee shall have the right at any time until six months after the expiration of this lease to remove all property and fixtures placed by Lessee on said land, including the right to draw and remove all casing. When required by Lessor, Lessee will bury all pipe lines below ordinary plow depth, and no well shall be drilled within two hundred (200) feet of any residence or barn now on said land without Lessor's consent.

6. The rights of either party hereunder may be assigned in whole or in part, and the provisions hereof shall extend to the heirs, successors and assigns, but no change or division in ownership of the land, or royalties, however accomplished, shall operate to enlarge the obligations or diminish the rights of Lessee. No sale or assignment by either party shall be binding on the other party hereto until such party shall have been furnished with a certified copy of recorded instrument evidencing same. If six or more parties become entitled to royalty hereunder, Lessee may withhold payment thereof unless and until furnished with a recordable instrument executed by all such parties designating an agent to receive payment for all.

7. Lessor herein makes no warranty of title, either express or implied. Lessee hereby agrees that Lessee at its option may discharge any tax, mortgage, or other lien upon said land and in the event Lessee does so, it shall be subrogated to such lien with the right to enforce same and apply royalties accruing hereunder toward satisfying same. It is agreed that if Lessor owns an interest in said land less than the entire fee simple estate, then the royalties to be paid Lessor shall be reduced proportionately.

8. If any operation permitted or required hereunder, or the performance by Lessee of any covenant, agreement or requirement hereof is delayed or interrupted directly or indirectly by any past or future acts, orders, regulations, or requirements of the Government of the United States or of any state or other governmental body, or any agency, officer, representative or authority of any of them, the period of such delay or interruption shall not be counted against the Lessee, and the primary term of this lease shall automatically be extended after the expiration of the primary term set forth in Section 2 above, so long as the cause or causes for such delay or interruptions continue and for a period of six (6) months thereafter; and such extended term shall constitute and shall be considered for the purposes of this lease as a part of the primary term hereof. The Lessee shall not be liable to Lessor in damages for failure to perform any operation permitted or required hereunder or to comply with any covenant, agreement, or requirement hereof during the time Lessee is relieved from the obligations to comply with such covenants, agreements, or requirements.

IN WITNESS WHEREOF, this instrument is executed on the date first above written.

_____

_____

THE STATE OF TEXAS)
)
COUNTY OF MIDLAND)

BEFORE ME, the undersigned authority, on this day personally appeared _____, Attorney-in-Fact for ATLANTIC RICHFIELD COMPANY, a corporation, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same as the act and deed of said Atlantic Richfield Company, for the purposes and considerations and in the capacity therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 1970.

_____
Notary Public

CORPORATION ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

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

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the_____day of_____A.D., 19_____

_____
NOTARY PUBLIC

CORPORATION ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

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

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the_____day of_____A.D., 19_____

_____
NOTARY PUBLIC

PERSONAL ACKNOWLEDGMENT

STATE OF_____
COUNTY OF_____

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared _____ _____ _____known to me to be the person_____whose name_____subscribed to the foregoing instrument, and acknowledged to me that _____he_____ executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the_____day of_____A.D., 19_____

_____
NOTARY PUBLIC

Recommended by the Council of Petroleum Accountants Societies of North America

EXHIBIT "C"

Attached to and made a part of _____

_____

_____

_____

ACCOUNTING PROCEDURE
JOINT OPERATIONS

I. GENERAL PROVISIONS

1. Definitions

"Joint Property" shall mean the real and personal property subject to the agreement to which this Accounting Procedure is attached.

"Joint Operations" shall mean all operations necessary or proper for the development, operation, protection and maintenance of the Joint Property.

"Joint Account" shall mean the account showing the charges paid and credits received in the conduct of the Joint Operations and which are to be shared by the Parties.

"Operator" shall mean the party designated to conduct the Joint Operations.

"Non-Operators" shall mean the parties to this agreement other than the Operator.

"Parties" shall mean Operator and Non-Operators.

"First Level Supervisors" shall mean those employees whose primary function in Joint Operations is the direct supervision of other employees and/or contract labor directly employed on the Joint Property in a field operating capacity.

"Technical Employees" shall mean those employees having special and specific engineering, geological or other professional skills, and whose primary function in Joint Operations is the handling of specific operating conditions and problems for the benefit of the Joint Property.

"Personal Expenses" shall mean travel and other reasonable reimbursable expenses of Operator's employees.

"Material" shall mean personal property, equipment or supplies acquired or held for use on the Joint Property.

"Controllable Material" shall mean Material which at the time is so classified in the Material Classification Manual as most recently recommended by the Council of Petroleum Accountants Societies of North America.

2. Statement and Billings

Operator shall bill Non-Operators on or before the last day of each month for their proportionate share of the Joint Account for the preceding month. Such bills will be accompanied by statements which identify the authority for expenditure, lease or facility, and all charges and credits, summarized by appropriate classifications of investment and expense except that items of Controllable Material and unusual charges and credits shall be separately identified and fully described in detail.

3. Advances and Payments by Non-Operators

Unless otherwise provided for in the agreement, the Operator may require the Non-Operators to advance their share of estimated cash outlay for the succeeding month's operation. Operator shall adjust each monthly billing to reflect advances received from the Non-Operators.

Each Non-Operator shall pay its proportion of all bills within fifteen (15) days after receipt. If payment is not made within such time, the unpaid balance shall bear interest monthly at the rate of twelve percent (12%) per annum or the maximum contract rate permitted by the applicable usury laws in the state in which the Joint Property is located, whichever is the lesser, plus attorney's fees, court costs, and other costs in connection with the collection of unpaid amounts.

4. Adjustments

Payment of any such bills shall not prejudice the right of any Non-Operator to protest or question the correctness thereof; provided, however, all bills and statements rendered to Non-Operators by Operator during any calendar year shall conclusively be presumed to be true and correct after twenty-four (24) months following the end of any such calendar year, unless within the said twenty-four (24) month period a Non-Operator takes written exception thereto and makes claim on Operator for adjustment. No adjustment favorable to Operator shall be made unless it is made within the same prescribed period. The provisions of this paragraph shall not prevent adjustments resulting from a physical inventory of Controllable Material as provided for in Section V.

5. Audits

A Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit Operator's accounts and records relating to the Joint Account for any calendar year within the twenty-four (24) month period following the end of such calendar year; provided, however, the making of an audit shall not extend the time for the taking of written exception to and the adjustments of accounts as provided for in Paragraph 4 of this Section I. Where there are two or more Non-Operators, the Non-Operators shall make every reasonable effort to conduct joint or simultaneous audits in a manner which will result in a minimum of inconvenience to the Operator. Operator shall bear no portion of the Non-Operators' audit cost incurred under this paragraph unless agreed to by the Operator.

6. Approval by Non-Operators

Where an approval or other agreement of the Parties or Non-Operators is expressly required under other sections of this Accounting Procedure and if the agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, Operator shall notify all Non-Operators of the Operator's proposal, and the agreement or approval of a majority in interest of the Non-Operators shall be controlling on all Non-Operators.

II. DIRECT CHARGES

Operator shall charge the Joint Account with the following items:

1. Rentals and Royalties

Lease rentals and royalties paid by Operator for the Joint Operations.

2. Labor

A. (1) Salaries and wages of Operator's field employees directly employed on the Joint Property in the conduct of Joint Operations.

(2) Salaries of First Level Supervisors in the field.

(3) Salaries and wages of Technical Employees directly employed on the Joint Property if such charges are excluded from the Overhead rates.

B. Operator's cost of holiday, vacation, sickness and disability benefits and other customary allowances paid to employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II. Such costs under this Paragraph 2B may be charged on a "when and as paid basis" or by "percentage assessment" on the amount of salaries and wages chargeable to the Joint Account under Paragraph 2A of this Section II. If percentage assessment is used, the rate shall be based on the Operator's cost experience.

C. Expenditures or contributions made pursuant to assessments imposed by governmental authority which are applicable to Operator's costs chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II.

D. Personal Expenses of those employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II.

3. Employee Benefits

Operator's current costs of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of a like nature, applicable to Operator's labor cost chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II shall be Operator's actual cost not to exceed twenty per cent (20%).

4. Material

Material purchased or furnished by Operator for use on the Joint Property as provided under Section IV. Only such Material shall be purchased for or transferred to the Joint Property as may be required for immediate use and is reasonably practical and consistent with efficient and economical operations. The accumulation of surplus stocks shall be avoided.

5. Transportation

Transportation of employees and Material necessary for the Joint Operations but subject to the following limitations:

A. If Material is moved to the Joint Property from the Operator's warehouse or other properties, no charge shall be made to the Joint Account for a distance greater than the distance from the nearest reliable supply store, recognized barge terminal, or railway receiving point where like material is normally available, unless agreed to by the Parties.

B. If surplus Material is moved to Operator's warehouse or other storage point, no charge shall be made to the Joint Account for a distance greater than the distance to the nearest reliable supply store, recognized barge terminal, or railway receiving point unless agreed to by the Parties. No charge shall be made to the Joint Account for moving Material to other properties belonging to Operator, unless agreed to by the Parties.

C. In the application of Subparagraphs A and B above, there shall be no equalization of actual gross trucking cost of $200 or less excluding accessorial charges.

6. Services

The cost of contract services, equipment and utilities provided by outside sources, except services excluded by Paragraph 9 of Section II and Paragraph 1. ii of Section III. The cost of professional consultant services and contract services of technical personnel directly engaged on the Joint Property if such charges are excluded from the Overhead rates. The cost of professional consultant services or contract services of technical personnel not directly engaged on the Joint Property shall not be charged to the Joint Account unless previously agreed to by the Parties.

7. Equipment and Facilities Furnished by Operator

A. Operator shall charge the Joint Account for use of Operator owned equipment and facilities at rates commensurate with costs of ownership and operation. Such rates shall include costs of maintenance, repairs, other operating expense, insurance, taxes, depreciation, and interest on investment not to exceed eight per cent (8%) per annum. Such rates shall not exceed average commercial rates currently prevailing in the immediate area of the Joint Property.

B. In lieu of charges in Paragraph 7A above, Operator may elect to use average commercial rates prevailing in the immediate area of the Joint Property less 20%. For automotive equipment, Operator may elect to use rates published by the Petroleum Motor Transport Association.

8. Damages and Losses to Joint Property

All costs or expenses necessary for the repair or replacement of Joint Property made necessary because of damages or losses incurred by fire, flood, storm, theft, accident, or other cause, except those resulting from Operator's gross negligence or willful misconduct. Operator shall furnish Non-Operator written notice of damages or losses incurred as soon as practicable after a report thereof has been received by Operator.

9. Legal Expense

Expense of handling, investigating and settling litigation or claims, discharging of liens, payment of judgments and amounts paid for settlement of claims incurred in or resulting from operations under the agreement or necessary to protect or recover the Joint Property, except that no charge for services of Operator's legal staff or fees or expense of outside attorneys shall be made unless previously agreed to by the Parties. All other legal expense is considered to be covered by the overhead provisions of Section III unless otherwise agreed to by the Parties, except as provided in Section I, Paragraph 3.

10. Taxes

All taxes of every kind and nature assessed or levied upon or in connection with the Joint Property, the operation thereof, or the production therefrom, and which taxes have been paid by the Operator for the benefit of the Parties.

11. Insurance

Net premiums paid for insurance required to be carried for the Joint Operations for the protection of the Parties. In the event Joint Operations are conducted in a state in which Operator may act as self-insurer for Workmen's Compensation and/or Employers Liability under the respective state's laws, Operator may, at its election, include the risk under its self-insurance program and in that event, Operator shall include a charge at Operator's cost not to exceed manual rates.

12. Other Expenditures

Any other expenditure not covered or dealt with in the foregoing provisions of this Section II, or in Section III, and which is incurred by the Operator in the necessary and proper conduct of the Joint Operations.

III. OVERHEAD

1. Overhead - Drilling and Producing Operations

i. As compensation for administrative, supervision, office services and warehousing costs, Operator shall charge drilling and producing operations on either:

( ) Fixed Rate Basis, Paragraph 1A, or
( ) Percentage Basis, Paragraph 1B.

Unless otherwise agreed to by the Parties, such charge shall be in lieu of costs and expenses of all offices and salaries or wages plus applicable burdens and expenses of all personnel, except those directly chargeable under Paragraph 2A, Section II. The cost and expense of services from outside sources in connection with matters of taxation, traffic, accounting or matters before or involving governmental agencies shall be considered as included in the Overhead rates provided for in the above selected Paragraph of this Section III unless such cost and expense are agreed to by the Parties as a direct charge to the Joint Account.

ii. The salaries, wages and Personal Expenses of Technical Employees and/or the cost of professional consultant services and contract services of technical personnel directly employed on the Joint Property shall ( ) shall not ( ) be covered by the Overhead rates.

A. Overhead - Fixed Rate Basis

(1) Operator shall charge the Joint Account at the following rates per well per month:

Drilling Well Rate $_____
Producing Well Rate $_____

(2) Application of Overhead - Fixed Rate Basis shall be as follows:

(a) Drilling Well Rate

[1] Charges for onshore drilling wells shall begin on the date the well is spudded and terminate on the date the drilling or completion rig is released, whichever is later, except that no charge shall be made during suspension of drilling operations for fifteen (15) or more consecutive days.

[2] Charges for offshore drilling wells shall begin on the date when drilling or completion equipment arrives on location and terminate on the date the drilling or completion equipment moves off location or rig is released, whichever occurs first, except that no charge shall be made during suspension of drilling operations for fifteen (15) or more consecutive days

[3] Charges for wells undergoing any type of workover or recompletion for a period of five (5) consecutive days or more shall be made at the drilling well rate. Such charges shall be applied for the period from date workover operations, with rig, commence through date of rig release, except that no charge shall be made during suspension of operations for fifteen (15) or more consecutive days.

(b) Producing Well Rates

[1] An active well either produced or injected into for any portion of the month shall be considered as a one-well charge for the entire month.

[2] Each active completion in a multi-completed well in which production is not commingled down hole shall be considered as a one-well charge providing each completion is considered a separate well by the governing regulatory authority.

[3] An inactive gas well shut in because of overproduction or failure of purchaser to take the production shall be considered as a one-well charge providing the gas well is directly connected to a permanent sales outlet.

[4] A one-well charge may be made for the month in which plugging and abandonment operations are completed on any well.

[5] All other inactive wells (including but not limited to inactive wells covered by unit allowable, lease allowable, transferred allowable, etc.) shall not qualify for an overhead charge.

(3) The well rates shall be adjusted as of the first day of April each year following the effective date of the agreement to which this Accounting Procedure is attached. The adjustment shall be computed by multiplying the rate currently in use by the percentage increase or decrease in the average weekly earnings of Crude Petroleum and Gas Production Workers for the last calendar year compared to the calendar year preceding as shown by the index of average weekly earnings of Crude Petroleum and Gas Fields Production Workers as published by the United States Department of Labor, Bureau of Labor Statistics, or the equivalent Canadian index as published by Statistics Canada, as applicable. The adjusted rates shall be the rates currently in use, plus or minus the computed adjustment.

B. Overhead - Percentage Basis

(1) Operator shall charge the Joint Account at the following rates:

(a) Development

_____ Percent (%) of the cost of Development of the Joint Property exclusive of cost provided under Paragraph 9 of Section II and all salvage credits.

(b) Operating

_____ Percent (%) of the cost of Operating the Joint Property exclusive of costs provided under Paragraphs 1 and 9 of Section II, all salvage credits, the value of injected substances purchased for secondary recovery and all taxes and assessments which are levied, assessed and paid upon the mineral interest in and to the Joint Property.

(2) Application of Overhead - Percentage Basis shall be as follows:
For the purpose of determining charges on a percentage basis under Paragraph 1B of this Section III, development shall include all costs in connection with drilling, redrilling, deepening or any remedial operations on any or all wells involving the use of drilling crew and equipment; also, preliminary expenditures necessary in preparation for drilling and expenditures incurred in abandoning when the well is not completed as a producer, and original cost of construction or installation of fixed assets, the expansion of fixed assets and any other project clearly discernible as a fixed asset, except Major Construction as defined in Paragraph 2 of this Section III. All other costs shall be considered as Operating.

2. Overhead - Major Construction

To compensate Operator for overhead costs incurred in the construction and installation of fixed assets, the expansion of fixed assets, and any other project clearly discernible as a fixed asset required for the development and operation of the Joint Property, Operator shall either negotiate a rate prior to the beginning of construction, or shall charge the Joint Account for Overhead based on the following rates for any Major Construction project in excess of $ 50,000 :

A. 5 % of total costs if such costs are more than $ 50,000 but less than $500,000 ; plus

B. 3 % of total costs in excess of $ 500,000 but less than $1,000,000; plus

C. 2 % of total costs in excess of $1,000,000.

Total cost shall mean the gross cost of any one project. For the purpose of this paragraph, the component parts of a single project shall not be treated separately and the cost of drilling and workover wells shall be excluded.

3. Amendment of Rates

The Overhead rates provided for in this Section III may be amended from time to time only by mutual agreement between the Parties hereto if, in practice, the rates are found to be insufficient or excessive.

IV. PRICING OF JOINT ACCOUNT MATERIAL PURCHASES, TRANSFERS AND DISPOSITIONS

Operator is responsible for Joint Account Material and shall make proper and timely charges and credits for all material movements affecting the Joint Property. Operator shall provide all Material for use on the Joint Property; however, at Operator's option, such Material may be supplied by the Non-Operator. Operator shall make timely disposition of idle and/or surplus Material, such disposal being made either through sale to Operator or Non-Operator, division in kind, or sale to outsiders. Operator may purchase, but shall be under no obligation to purchase, interest of Non-Operators in surplus condition A or B Material. The disposal of surplus Controllable Material not purchased by the Operator shall be agreed to by the Parties.

1. Purchases

Material purchased shall be charged at the price paid by Operator after deduction of all discounts received. In case of Material found to be defective or returned to vendor for any other reason, credit shall be passed to the Joint Account when adjustment has been received by the Operator.

2. Transfers and Dispositions

Material furnished to the Joint Property and Material transferred from the Joint Property or disposed of by the Operator, unless otherwise agreed to by the Parties, shall be priced on the following bases exclusive of cash discounts:

A. New Material (Condition A)

(1) Tubular goods, except line pipe, shall be priced at the current new price in effect on date of movement on a maximum carload or barge load weight basis, regardless of quantity transferred, equalized to the lowest published price f.o.b. railway receiving point or recognized barge terminal nearest the Joint Property where such Material is normally available.

(2) Line Pipe

(a) Movement of less than 30,000 pounds shall be priced at the current new price, in effect at date of movement, as listed by a reliable supply store nearest the Joint Property where such Material is normally available.

(b) Movement of 30,000 pounds or more shall be priced under provisions of tubular goods pricing in Paragraph 2A (1) of this Section IV.

(3) Other Material shall be priced at the current new price, in effect at date of movement, as listed by a reliable supply store or f.o.b. railway receiving point nearest the Joint Property where such Material is normally available.

B. Good Used Material (Condition B)

Material in sound and serviceable condition and suitable for reuse without reconditioning:

(1) Material moved to the Joint Property

(a) At seventy-five percent (75%) of current new price, as determined by Paragraph 2A of this Section IV

(2) Material moved from the Joint Property

(a) At seventy-five percent (75%) of current new price, as determined by Paragraph 2A of this Section IV if Material was originally charged to the Joint Account as new Material, or

(b) at sixty-five percent (65%) of current new price, as determined by Paragraph 2A of this Section IV, if Material was originally charged to the Joint Account as good used Material at seventy-five percent (75%) of current new price.

The cost of reconditioning, if any, shall be absorbed by the transferring property.

C. Other Used Material (Condition C and D)

(1) Condition C

Material which is not in sound and serviceable condition and not suitable for its original function until after reconditioning shall be priced at fifty percent (50%) of current new price as determined by Paragraph 2A of this Section IV. The cost of reconditioning shall be charged to the receiving property, provided Condition C value plus cost of reconditioning does not exceed Condition B value.

(2) Condition D

All other Material, including junk, shall be priced at a value commensurate with its use or at prevailing prices. Material no longer suitable for its original purpose but usable for some other purpose, shall be priced on a basis comparable with that of items normally used for such other purpose. Operator may dispose of Condition D Material under procedures normally utilized by the Operator without prior approval of Non-Operators.

D. Obsolete Material

Material which is serviceable and usable for its original function but condition and/or value of such Material is not equivalent to that which would justify a price as provided above may be specially priced as agreed to by the Parties. Such price should result in the Joint Account being charged with the value of the service rendered by such Material.

E. Pricing Conditions

(1) Loading and unloading costs may be charged to the Joint Account at the rate of fifteen cents (15¢) per hundred weight on all tubular goods movements, in lieu of loading and unloading costs sustained, when actual hauling cost of such tubular goods are equalized under provisions of Paragraph 5 of Section II.

(2) Material involving erection costs shall be charged at applicable percentage of the current knocked-down price of new Material.

3. Premium Prices

Whenever Material is not readily obtainable at published or listed prices because of national emergencies, strikes or other unusual causes over which the Operator has no control, the Operator may charge the Joint Account for the required Material at the Operator's actual cost incurred in providing such Material, in making it suitable for use, and in moving it to the Joint Property; provided notice in writing is furnished to Non-Operators of the proposed charge prior to billing Non-Operators for such Material. Each Non-Operator shall have the right, by so electing and notifying Operator within ten days after receiving notice from Operator, to furnish in kind all or part of his share of such Material suitable for use and acceptable to Operator.

4. Warranty of Material Furnished by Operator

Operator does not warrant the Material furnished. In case of defective Material, credit shall not be passed to the Joint Account until adjustment has been received by Operator from the manufacturers or their agents.

V. INVENTORIES

The Operator shall maintain detailed records of Controllable Material.

1. Periodic Inventories, Notice and Representation

At reasonable intervals, Inventories shall be taken by Operator of the Joint Account Controllable Material. Written notice of intention to take inventory shall be given by Operator at least thirty (30) days before any inventory is to begin so that Non-Operators may be represented when any inventory is taken. Failure of Non-Operators to be represented at an inventory shall bind Non-Operators to accept the inventory taken by Operator.

2. Reconciliation and Adjustment of Inventories

Reconciliation of a physical inventory with the Joint Account shall be made, and a list of overages and shortages shall be furnished to the Non-Operators within six months following the taking of the inventory. Inventory adjustments shall be made by Operator with the Joint Account for overages and shortages, but Operator shall be held accountable only for shortages due to lack of reasonable diligence.

3. Special Inventories

Special Inventories may be taken whenever there is any sale or change of interest in the Joint Property. It shall be the duty of the party selling to notify all other Parties as quickly as possible after the transfer of interest takes place. In such cases, both the seller and the purchaser shall be governed by such inventory.

4. Expense of Conducting Periodic Inventories

The expense of conducting periodic Inventories shall not be charged to the Joint Account unless agreed to by the Parties.

EXHIBIT "D"

ATTACHED TO AND MADE A PART OF OPERATING AGREEMENT
DATED _____, 197__, BETWEEN

PROPOSED INSURANCE EXHIBIT TO BE ATTACHED
AND MADE A PART OF OPERATING AGREEMENTS

ADDITIONAL INSURANCE PROVISIONS

OPERATOR, during the term of this Agreement, shall carry specific insurance for the benefit and at the expense of the parties hereto as follows:

(A) Workmen's Compensation Insurance as contemplated by the laws of the state in which operations will be conducted, and Employers' Liability Insurance with limits of $100,000 per employee, and $100,000 per accident;

(B) Public Liability Insurance with limits of $100,000 applicable to bodily injury, sickness or death in any one occurrence and $100,000 for loss of or damage to property in any one occurrence.

(C) Automobile Public Liability Insurance covering all automotive equipment used under this Agreement, with limits of $100,000 for bodily injury for one person and $100,000 for more than one person in any one accident, and $100,000 for property damage in any one accident (If automotive equipment used is owned exclusively by OPERATOR, no charge will be made to the joint account for premiums for this coverage except as provided in Section IV, Paragraph 5 of the Accounting Procedure - Exhibit " ".)

(D) Operator shall require contractors and subcontractors performing work for the joint account to provide such insurance as deemed necessary by operator in relation to the work to be performed by said contractors or subcontractors.

Liability, except that covered by the above specified insurances against any of the parties hereto for damages to property of third persons or injury to or death of third persons arising out of the joint operations, including expenses incurred in defending claims or actions asserting liability of this character, shall be borne severally and not jointly by the parties hereto in proportion to their respective undivided interests in the joint operation. Any party hereto individually may acquire such additional insurance as it desires to protect itself against any liability not covered by the above specified insurances at its own cost. All insurance purchased individually by a party to this agreement shall contain a waiver by the insurance company of all rights of subrogation in favor of the parties to this agreement.

No other insurances shall be carried by operator for the joint account unless mutually agreed to by the parties hereto. All losses not covered by the above specified insurances shall be borne by the parties in proportion to their interest in the venture at the time of any loss.

Inasmuch as OPERATOR has agreed with each party to this agreement to acquire, construct, operate and maintain the joint account operations on a cost basis without profit to OPERATOR, each such party hereby releases from all claims for loss by or damage to, such party arising out of, in connection with, or as an incident to, any act or omission, including negligence (but excluding gross negligence, willful misconduct, or intentional breach of any provision of the operating agreement) of OPERATOR or, to the extent of OPERATOR'S legal liability, its employees, agents or contractors, in acquiring, operating or maintaining the joint account; provided this release shall not apply to OPERATOR'S pro-rata share of the cost and expenses as otherwise provided in this agreement. The obligations of each party under this agreement are several and not joint with any other party hereto.

OPERATOR shall promptly notify non-operators of any loss, damage or claim not covered by insurance carried by OPERATOR for the joint account. Except as authorized by Section 27 and by this Exhibit "D", OPERATOR shall not make any charge to the joint account for insurance premiums.

EXHIBIT "E"

GAS BALANCING AGREEMENT
FOR GAS WELL PRODUCTION

Attached to and made a part of the Operating Agreement between_____

_____

_____

The parties to the Operating Agreement to which this Gas Balancing Agreement is attached own the working interest in the gas rights underlying the Joint Property covered by such agreement and are entitled to share in the percentages as stated in the Operating Agreement.

In accordance with the terms of the Operating Agreement, each party thereto has the right to take its share of gas produced from the Unit Area and market the same. In the event any of the parties hereto does not market its share of gas or has contracted to sell its share of gas produced from the Joint Property to a purchaser which, at any time while this agreement is in effect fails to take the share of gas attributable to the interest of such party, the terms of this storage agreement shall automatically become effective.

1.

During any period or periods when the market of a party is not sufficient to take that party's full share of the gas produced from the Joint Property, or its purchaser is unable to take its share of gas produced from the Joint Property, the other party or parties shall be entitled to produce from said Joint Property (and take or deliver to a purchaser), each month, all or a part of that portion of the allowable gas production assigned to such Joint Property by the regulatory body having jurisdiction. That party shall be entitled to take and deliver to its or their purchaser all of such gas production, provided; however, that no party shall be entitled to take or deliver to a purchaser gas production in excess of 200% (percent) of its share of the allowable gas production assigned thereto by the regulatory body having jurisdiction, unless that party has gas in storage or unless the other parties mutually agree to a greater percentage. All parties hereto shall share in and own the liquid hydrocarbons recovered from such gas by primary separation equipment in accordance with their respective interests and subject to the terms of the above described Operating Agreement.

2.

Each party unable to market its share of the gas produced, and taking less than its full share of the gas produced shall be credited with gas in storage equal to its share of the gas produced under this agreement, less such party's share of the gas taken, gas used in Joint Property operations, vented, or lost. Each party taking gas shall furnish the Joint Property operator a monthly statement of gas taken. The operator of the Joint Property will maintain a running account of the gas balance between the parties hereto and will furnish each party monthly statements showing the total quantity of gas produced, the amount thereof used in Joint Property operations, vented or lost, and the total quantity of gas delivered to markets. Measurement of gas for over and under production shall be accomplished by use of sales meters, and lease measurement shall be in accordance with AGA requirements.

3.

After written notice to the operator, any party may at any time begin taking or delivering to its purchaser its full share of the gas produced from said Joint Property (less any used in Joint operations, vented, or lost). To allow for the recovery of gas in storage and to balance the gas account of the parties in accordance with their respective interests, a party with gas in storage shall be entitled to take or deliver to a purchaser its full share of gas produced from said Joint Property (less any used in Joint operations, vented, or lost) plus an amount determined by multiplying fifty percent (50%) of the interest of the party or parties without gas in storage by a fraction, the numerator of which is the interest in the Joint Property of such party with gas in storage and the denominator of which is the total percentage interest in the Joint Property of all parties with gas in storage.

4.

Nothing herein shall be construed to deny any party the right, from time to time to produce and take or deliver to its purchaser its full share of the allowable gas production to meet the deliverability tests required by its purchaser. Each party, shall at all times, use its best efforts to regulate its takes and deliveries from said Joint Property so that said Joint Property will not be shut-in for over producing the allowable assigned thereto by the regulatory body having jurisdiction.

5.

During the terms of this agreement, while gas is being produced from the Joint Property, each party shall make settlement with its own respective royalty owners (and the term "royalty owners" shall include owners of royalties, overriding royalties, production payments and similar interests), based on such royalty owner's respective interests in the Joint Property and on total volumes of gas produced, saved and taken or delivered to purchasers. Each party hereto agrees to hold each other party harmless from any and all claims for royalty payments asserted by royalty owners to whom each party is accountable.

6.

Each party producing and taking or delivering gas to its purchaser shall pay, or cause to be paid, all production taxes due on such gas.

7.

In the event production of gas from said Joint Property shall be discontinued before the gas account is balanced, a complete balancing will be made between the parties for gas remaining in storage. In making such settlement, the party or parties with gas remaining in storage will be paid by the other party or parties a sum of money equal to that which said other party or parties received, less applicable taxes heretofore paid, for the latest delivery of a volume of gas equal to that for which settlement is made. The operator shall be responsible for determining the final accounting of the underproduction and overproduction and the amounts due to be paid to, or by, each party.

8.

This agreement shall remain in force and effect as long as the operating agr ement, to which it is attached, and shall inure to the benefit of and be binding upon the parties hereto, their successors, legal representatives and assigns.

9.

Nothing herein shall change or affect each party's obligations to pay its proportionate share of all costs and liabilities incurred in Joint operations, as its share thereof is set forth in the above-described Operating Agreement.

10.

The provisions of this agreement shall be applied to each well and/or each formation separately as if each well and/or formation was a separate well and covered by separate but identical agreements.

11.

Notwithstanding any foregoing provisions hereof, each party failing to commence marketing or taking its share of the produced gas (in whole or in part) within six months from date of commencement of marketing or taking of its or their share by another party or parties agrees to accept, at the election of such other party or parties and in lieu of credit for gas in storage, a cash adjustment based on the actual revenues received and attributable to the underages as they occur from date of first deliveries by the party or parties owing the underages. This paragraph, however, is not to apply to any underages of a party accruing from and after the date such party first commences marketing or taking its share of the gas (in whole or in part).

Revised 2/11/77

L .L EMPLOYMENT OPPORTUNITY PR(SION

During the performance of this contract, the Operator (meaning and referring separately to each party hereto) agrees as follows:

(1) The Operator will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Operator will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Operator agrees to post in conspicuous places available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Operator will in all solicitations or advertisements for employees placed by or on behalf of the Operator, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin

(3) The Operator will send to each labor union or representative of workers with which Operator has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the Operator's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Operator will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Operator will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to Operator's books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Operator's non-compliance with the non-discrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Operator may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Operator will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Operator will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event the Operator becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Operator may request the United States to enter into such litigation to protect the interests of the United States.

Operator acknowledges that Operator may be required to file Standard Form 100 (EEO-1) promulgated jointly by the Office of Federal Contract Compliance, the Equal Employment Opportunity Commission and Plans for Progress with the appropriate agency within 30 days of the date of contract award if such report has not been filed for the current year and otherwise comply with or file such other compliance reports as may be required under Executive Order 11246, as amended and Rules and Regulations adopted thereunder.

Operator further acknowledges that Operator may be required to develop a written affirmative action compliance program as required by the Rules and Regulations approved by the Secretary of Labor under authority of Executive Order 11246 and supply each other party hereto with a copy of such program if so requested.

CERTIFICATION OF NONSEGREGATED FACILITIES

By entering into this contract, the Operator certifies that Operator does not and will not maintain or provide for Operator's employees any segregated facilities at any of Operator's establishments, and that Operator does not and will not permit Operator's employees to perform their services at any location, under Operator's control, where segregated facilities are maintained. The Operator agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means, but is not limited to, any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom or otherwise. Operator further agrees that (except where Operator has obtained identical certifications from proposed contractors and subcontractors for specific time periods) Operator will obtain identical certifications from proposed contractors and subcontractors prior to the award of contracts or subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that Operator will retain such certifications in Operator's files and that Operator will forward the following notice to such proposed contractors and subcontractors (except where the proposed contractors or subcontractors have submitted identical certifications for specific time periods): Notice to prospective contractors and subcontractors of requirement for certifications of nonsegregated facilities. A Certificate of Nonsegregated Facilities must be submitted prior to the award of a contract or subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each contract and subcontract or for all contracts and subcontracts during a period (i.e., quarterly, semiannually, or annually).

MARK F. SCHWEINFURTH
501 C & K PETROLEUM BUILDING
MIDLAND, TEXAS 79701

CONSULTING GEOLOGIST

915/684-7762

December 1, 1978

Cotton Petrleum Corporation
420 Wall Towers West
Midland, TX 79701

Re: Maralo Farmout
S/2 S/2 of Section 24,
21S-23E, Eddy County, New Mexico

Gentlemen:

In accordance with and pursuant to our letter agreement dated September 13, 1977, this letter shall serve as an assignment of rights granted me in that farmout agreement from Maralo, Inc., dated September 8, 1978. By accepting in the space provided below, Cotton agrees to fulfill the obligations of the farmoutee as set out in the subject farmout agreement.

Yours very truly,

Mark F. Schweinfurth

Mark F. Schweinfurth

AGREED TO AND ACCEPTED
this 1st day of December, 1978

COTTON PETROLEUM CORPORATION

By: H Blanchard III

Cotton Petroleum Corporation
A United Energy Resources, Inc. Company

420 Wall Towers West/Midland, Texas 79701 (915) 683-5211

November 3, 1978

Maralo, Inc.
P. O. Box 832
Midland, TX 79702

Re: Farmout Agreement
Section 24, 21S-23E
Eddy County, New Mexico
CPC Marathon Prospect
Lowe Lease #2728

Gentlemen:

Enclosed are two executed copies of our farmout agreement covering the captioned area. As you know, Mark Schweinfurth has assigned this agreement to Cotton Petroleum.

Since it will be necessary to force pool the section in order to acquire the interest of Marathon, Cotton does hereby request that the commencement date set forth in Article I of the farmout agreement be extended to March 1, 1979. If you are agreeable to this extension, please indicate by signing in the space provided below and returning one copy of this letter to our office at your earliest possible convenience.

Yours very truly,

COTTON PETROLEUM CORPORATION

H. L. Blomquist III
Division Landman

HLB/sp
Enclosure

AGREED TO AND ACCEPTED this
20th day of November, 1978

MARALO, INC.

By: Mary Ralph Lowe
Mary Ralph Lowe, President

Erma Lowe

REC'D
NOV 8 1978
LAND DEPT.

RECEIVED
NOV 6 1978
MARALO, INC

September 8, 1978

Mr. Mark F. Schweinfurth
501 C&K Petroleum Building
Midland, Texas 79701

Re: Farmout Agreement
S/2 S/2 of Section 24
T-21-S, R-23-E
Eddy County, New Mexico
Lowe Lease #2728

Dear Mr. Schweinfurth:

The undersigned parties, hereinafter referred to as "Owners," agree to assign to you, subject to the conditions herein stated, an interest in a certain oil and gas lease insofar only as such lease, hereinafter referred to as "The Lease," covers the following described land in Eddy County, New Mexico:

United States lease number NM 020342, insofar and only insofar as it pertains to the S/2 S/2 of Section 24, T-21-S, R-23-E, NMPM

said land hereinafter referred to as "Lease Premises."

I.

In order to earn an interest in the Lease, you agree to drill the following test well, hereinafter referred to as "First Test Well":

A. Commence actual drilling: On or before December 31, 1978.

B. Location: At a legal location of your choice in the SE/4 of Section 24, T-21-S, R-23-E, Eddy County, New Mexico.

C. Objective depth: To a subsurface depth of at least 7,700 feet or to a depth sufficient, in Owner's opinion, to adequately test the Cisco-Canyon formations, whichever is the lesser depth.

D. Complete: Within sixty (60) days after reaching total depth. This means a well equipped to produce, if capable, or a shut-

in gas well, or a well, if a dry hole, plugged and abandoned in compliance with applicable laws and regulations.

Should you fail to reach the objective depth set out above for said First Test Well due to mechanical difficulties or because of encountering conditions which are normally considered in the industry to be impenetrable and which, in the opinion of Owners' representatives, would make further drilling impractical by ordinary drilling methods, you shall have the right, within ninety (90) days after the abandonment of or good faith discontinuance of operations on said First Test Well, to commence the actual drilling of a substitute well at a location of your choice in Section 24, T-21-S, R-23-E, Eddy County, New Mexico, under the terms and conditions prescribed for the First Test Well. Should you timely drill the substitute well, is shall be treated as the First Test Well for the purposes of this Letter Agreement.

II.

In the event you complete the First Test Well and/or any successor well as a commercial producer of oil and/or gas, Owners shall execute and deliver to you an assignment of their rights as to the particular Tract upon which such well shall have been so completed from the surface down to a depth of 100 feet below the total depth drilled, but in no event to be deeper than the base of the Cisco-Canyon formation. Such assignment shall be subject to the exceptions, reservations, conditions and other provisions hereinafter set out to be included therein. A dry hole shall earn you no interest whatsoever.

III.

In any assignment of interest earned by you and executed by Owners pursuant to the terms of this agreement, Owners shall except therefrom and reserve to themselves, their heirs, successors and assigns, as to their respective original interest in the assigned Tract, the following:

A. An overriding royalty, free and clear of all costs of development and operations and all other costs whatsoever, of 1/16th of 8/8ths of all the oil and gas (Including all liquid and gaseous hydrocarbons) which may be produced and saved from the assigned premises. The overriding royalty so reserved by Owners shall be in addition to any and all existing overriding royalties, production payments and other burdens, if any, affecting or payable out of the oil and gas leasehold estate in the assigned premises, or any part thereof.

B. All rights and easements with respect to interests included in assignments which may be necessary or convenient to Owners in investigating, exploring, prospecting, drilling, mining and operating for and producing, storing, transporting and owning oil, gas and all other minerals from all depths and well formations not covered by such assignment.

C. Any assignment of interest in the Lease Premises shall cover and include any oil, gas and its substances produced as a result of and with said oil and gas. All other lease interests to all other minerals and mineral substances are hereby reserved and excepted by Owners and Owners reserve all rights thereto including but not limited to the right to mine and remove same.

D. At "payout" (as the term "payout" is hereinafter defined), Owners shall elect to either retain their 1/16th of 8/8ths overriding royalty provided for in Subparagraph A above, or convert such overriding royalty to an undivided leasehold estate and working interest in the Lease Premises assigned equal to 33-1/3% of that owned by Owners therein immediately prior to the execution of the assignment to you. The following provisions shall govern the time and manner of exercising such election and the duties of the Owners and yourself in connection therewith:

1. Promptly after "payout (as the term "payout" is hereinafter defined) of the well that earned you an assignment under the provisions of this agreement you shall notify the Owners in writing of such fact. The Owners shall, within a reasonable time after actual receipt of such notice, notify you of their election as herein provided to either retain their 1/16th of 8/8ths overriding royalty or to convert such overriding royalty to an undivided leasehold estate and working interest in the Lease Premises assigned as provided above. Should Owners elect to convert such overriding royalty into an undivided leasehold estate and working interest in the Lease Premises assigned, you shall promptly assign to Owners the above stated leasehold estate and working interest in the Lease Premises assigned and Owners shall terminate the above described overriding royalty, both effective as of 7:00 a.m. on the day following the day of payout.

2. "Payout" means at such time as you have recovered from the proceeds of all production from a well (after having made all payments out of production burdening the Tract assigned when assigned to you including any overriding royalty reserved by Owners) all of your otherwise unrecovered costs of drilling, testing, completing and equipping to produce such well and your costs of operating such well during the recovery period. The pertinent provisions of the 1974 - COPAS Model Form of Accounting Procedure shall be followed in computing such costs to be recovered.

3. You shall keep an accurate record of all costs of drilling, completing, testing, equipping and operating such earning well, which record shall be available at all reasonable times for the examination and inspection of Owners, their employees and authorized representatives. You shall furnish Owners once each month, and within 30 days after the calendar month for which the computations were made, a statement showing the total proceeds of productions (and the amount of the above authorized deductions therefrom) from each earning well for the previous month and well costs for each such month. Such statement shall also show the cumulative well-cost and production proceeds figures so that the then-current "Payout" status of the earning well can be readily ascertained. Owners representatives shall have the right to audit your books to any extent necessary to ascertain the accuracy and legitimacy of costs, expenses, production proceeds figures, etc., pertaining to each earning well.

IV.

Until an assignment to you of the Lease, or any portion thereof, Owners shall pay all delay rentals and shut-in gas well payments payable under the Lease provided that:

A. Owners shall not be liable for error in any payment or for non-payment due to mistake or oversight.

B. Upon being billed therefore, you shall reimburse Owners for 100% of any payment that is due on or after the date of this Letter Agreement.

After assignment to you of the Lease hereunder, you shall bear the cost of and be responsible for paying to the Owners of the oil and gas fee of the lease assigned to you, 100% of all delay rentals and shut-in gas well payments due under the Lease on or after the effective date of such assignment.

In order to prevent loss of title to any assigned lease due to incorrect or untimely payment of delay rentals or shut-in gas royalties, you agree as follows:

1. To pay all delay rentals to the Owners of the oil and gas fee, the lease of which has been assigned to you, at least 30 days prior to the due date for such payment and to give notice to Owners of the time, manner and recipient of such payment.

2. To notify Owners immediately of any discovery of gas, so that Owners may take whatever action is necessary to assure them-

selves that any payment of shut-in royalty required to be made under the Lease is timely and properly made.

3. To notify Owners at least 10 days in advance of any voluntary cessation of production from any oil or gas well that has produced, and to notify Owners immediately of any involuntary cessation of production.

V.

Future operations and operations after payout of the earning well on any portion of the Lease Premises jointly owned by the parties hereto shall be conducted pursuant to the provisions of an Operating Agreement on the 1977 Mid-Continent (Ross-Martin) Model Form, designating you as Operator and containing the 1974 - COPAS Model Form of Accounting Procedure with such overhead charges as the parties may agree.

VI.

With respect to the First Test Well drilled hereunder and with respect to any subsequent well drilled on the Lease Premises, you will comply with the conditions set forth on the attached Exhibit "A", Geological Requirements. Owners, at their sole cost, risk and expense, shall have access at all times to the derrick floor and all drilling and completion information. The breach by you of any obligation or requirement arising under this paragraph shall subject this agreement to termination, at the option of Owners, if you fail or refuse to comply with such obligation or requirement within ten (10) days after notice by Owners to you of such breach.

VII.

Should you fail to commence, drill or complete a well as herein prescribed, all of your rights and privileges hereunder shall terminate. All test wells drilled and all work or services performed hereunder shall be at your sole risk, cost and expense, and you agree to indemnify and hold Owners harmless from any loss or damage of whatever kind resulting from operations conducted by you under the provisions of this agreement.

Owners make no representation as to their titles and nothing in this agreement shall be construed as a warranty, either expressed or implied, that Owners own a certain quantum of interest in any or any part of the land subject to this agreement.

In drilling any well hereunder, you agree to observe and comply with all applicable Federal and State Laws, Rules and Regulations and the terms and conditions of the Lease to Owners.

Any taxes (except income taxes) imposed by reason of any assignment hereunder will be paid by you and will be your sole responsibility.

You agree prior to conducting any operations on the captioned acreage to make satisfactory arrangements with the surface owners for ingress to and egress from the well site and to conduct your operations in such a manner as to use no more of said lands than is reasonably necessary in drilling any well.

Upon your abandonment of a well drilled on the Lease Premises, you agree to leave the premises on which such well is located in a clean, orderly and non-hazardous condition and you further agree to fill any earthen pits on such premises and to otherwise restore such premises, as near as possible, to the condition they were in prior to your drilling such well.

VIII.

Prior to commencing operations for drilling of any well on the Lease Premises or the proration unit the Lease Premises may be a part of, you shall obtain, at your expense, insurance policies as outlined below to cover all operations to be performed on such lands. You shall furnish to the Owners for approval prior to the commencement of such operations hereunder, certificates of insurance signed by authorized representatives of the insurance companies, certifying to insurance coverage in minimum amounts as follows:

A. Insurance which shall comply with all applicable workman's compensation, employer's liability and occupational disease law which shall cover all of your employees engaged in any work performed under this agreement. If any operations under this agreement are to be performed on or adjacent to navigable water, such insurance shall include coverage for claims under the United States Longshoremen and Harbor Worker's Act and the Jones Act (extended to include the Outer Continental Shelf if any operations are to be performed offshore).

B. Comprehensive general public liability insurance with bodily injury limits of not less than $100,000 for one person and $300,000 for one accident, and with a property damage limit of not less than $100,000 for one accident. Such insurance shall include coverage for all liability assumed by you under the terms of this agreement with limits of liability not less than those set out above.

C. Automobile public liability insurance covering all automotive equipment used on the lease, with limits of not less than $100,000 for bodily injury for one person and $300,000 for more than one person in any one accident.

Such certificates of insurance shall contain a statement that said insurance coverage shall not be cancelled or changed without at least ten (10) days prior

written notice to the Owners. Should the insurance coverage be allowed to terminate or be materially changed or cancelled during the term of this agreement, all of your rights to earn hereunder shall terminate unless new insurance coverage is obtained and certificates furnished to the Owners, meeting the requirements first set out for the certificates, within the ten day period following notice by the insurer to the Owners that the existing insurance coverage has been materially changed or cancelled. You shall determine that the insurance coverage obtained by you and set out in the certificate furnished to the Owners is sufficient to give protection from and for acts of your contractors and subcontractors or you shall require that your contractors and subcontractors have equivalent coverage.

IX.

You shall not, during the existing of the leasehold estate as to the Lease, execute any full or partial release thereof, or permit same to terminate as to all or any part for failure to pay delay rentals (or any other payment required) until you shall have given to Owners notice by certified mail of your intention to execute such release or not to pay such rentals or other payments. Any such notice shall be given at least sixty (60) days before the date such release is to be executed, or sixty (60) days before the date such delay rentals or other payments are due. Upon receipt of such notice, Owners shall have thirty (30) days thereafter within which to demand and receive from you a reassignment as to the Lease or portion thereof noticed to be surrendered or relinquished, such demand to be directed to you at the address hereinafter shown.

Similar notice shall be required and option exist if, during the primary term or after expiration of the primary term, production has been obtained and you intend to abandon all or any part of the Lease or wells thereupon. Upon Owners demand for reassignment under this numbered paragraph, you shall forthwith deliver to Owners an assignment of all of your right, title and interest in the Lease and the proration unit involved, and should Owners elect (and so specify in its demand) to take over any well to be abandoned located thereupon, you shall reassign to Owners such well or wells, material and equipment, and Owners shall pay to you the fair market value of any salvable materials and equipment thereon, or used in connection therewith, less estimated costs of salvage thereof. The assignment as to any well or wells shall include all Leases in the drilling or proration unit attributable thereto.

Any reassignment made to Owners pursuant to the provisions of this Paragraph shall be free and clear of all liens, burdens and encumbrances except those existing as of the date of Owners' assignment to you under the terms of this agreement.

X.

Time shall be of the essence in this agreement and no provision hereof shall be amended or waived except in writing. You may assign this agreement in whole or

in part, but you shall notify Owners of any assignment within ten (10) days after the assignment is made. In the event of any assignment by you, your assignee(s) shall be fully subject to the terms and conditions of this agreement. In addition, you shall have no right to bind or subject Owners undivided interest, if any, in the Lease Premises to any Gas Sales Contracts, Operating Agreements or any other agreements without first obtaining Owner's written consent.

XI.

Nothing herein shall be construed as creating a partnership, joint venture or any other relationship by which one party is liable for the obligations or acts, either of omission or commission, of the other party. The parties elect not to be treated as a partnership under the Internal Revenue Code of 1954 and any applicable laws. The Parties hereby agree to execute such additional evidence of such election as may be required by the Federal Internal Revenue Service, including specifically all of the material and date required by Federal Regulations 1.761.1(a), and should there be a requirement of any further election, the parties hereby agree to execute such additional documents as may be required by the Federal Internal Revenue Service.

This letter has been prepared and executed by Owners in triplicate, but shall not be binding upon Owners unless it is also executed by you in the space provided below and two fully signed copies are returned to Owners within ten (10) days from your receipt hereof, whereupon the provisions hereof shall become covenants running with the land and being binding upon and inure to the benefit of Owners and you and the respective heirs, devisees, legal representatives, successors and assigns of each.

Addresses for Notices:

Maralo, Inc.
2200 West Loop South, Suite 130
Houston, Texas 77027

Erma Lowe
2200 West Loop South, Suite 130
Houston, Texas 77027

Mr. Mark F. Schweinfurth
501 C&K Petroleum Building
Midland, Texas 79701

Yours very truly,

MARALO, INC.

By: Mary Ralph Lowe
Mary Ralph Lowe, President

By: Erma Lowe
Erma Lowe

Accepted and Agreed to
this 10 day of October, 1978.

By: Mark F. Schweinfurth Jr.
Mark F. Schweinfurth

Exhibit "A" to Farmout Agreement
to Mark F. Schweinfurth
Dated September 8, 1978

Geological Requirements
S/2 S/2 of Section 24
T-21-S, R-23-E, NMPM
Eddy County, New Mexico
Lowe Lease #2728

Please furnish the following people with one (1) copy each of the information as indicated below under "Copies Required":

Mr. William G. Thorsen
Maralo, Inc.
P. O. Box 832
Midland, Texas 79702

Mr. John R. Burke
Maralo, Inc.
2200 West Loop South, Suite 130
Houston, Texas 77027

Copies Required:

1. Location plat and all state forms.
2. 10-foot drilling time.
3. Daily and final mud logs.
4. 10-foot sample descriptions.
5. Field and final prints of all logs run.
6. DST with fluid and gas analysis.
7. Test and treatment reports.
8. Core analysis.

Other Requirements:

1. A daily drilling report, by telephone, to our Midland Office (915-684-7441) by 10:00 a.m.
2. One (1) set of Core Chips to Midland Office.
3. Notification prior to DST, logging and coring to one of the following people: William G. Thorsen, Vernon J. Hines, or John R. Burke (phone numbers listed below).
4. Decisions concerning the well should be discussed with one of the following people.

William G. Thorsen - Midland Office - (915) 684-7441
Midland Home - (915) 683-5925

Vernon J. Hines - Midland Office - (915) 684-7441
Midland Home - (915) 684-4248

John R. Burke - Houston Office - (713) 622-5420
Houston Home - (713) 784-9584

cc: Mr. Bill Thorsen

LAW OFFICES
HINKLE, COX, EATON, COFFIELD & HENSLEY
1000 FIRST NATIONAL BANK TOWER
POST OFFICE BOX 3580
MIDLAND, TEXAS 79702
(915) 683-4691

LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.
JAMES H. BOZARTH

DOUGLAS L. LUNSFORD
PAUL M. BOHANNON
J. DOUGLAS FOSTER
K. DOUGLAS PERRIN
C. RAY ALLEN
JACQUELINE W. ALLEN
T. CALDER EZZELL, JR.

OF COUNSEL
CLARENCE E. HINKLE

W. E. BONDURANT, JR. (1914-1973)

ROSWELL, NEW MEXICO OFFICE
600 HINKLE BUILDING
(505) 622-6510

ONLY ATTYS. COFFIELD, MARTIN, BOZARTH, BOHANNON, FOSTER, ALLEN & ALLEN LICENSED IN TEXAS

JAN 26 1979

January 24, 1979

Mr. Dan Nutter
Chief Engineer
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87501

Dear Dan:

Transmitted herewith you will find triplicate executed copies of an Application for Cotton Petroleum Corporation for an unorthodox well location in Section 24, Township 21 South, Range 23 East, N.M.P.M., Eddy County, New Mexico.

It is my understanding that the docket setting for February 14 is still available for this matter, and accordingly, we request that it be heard on that date.

I trust that the enclosed copies of the Application are all that is needed in order for this to be set for the February 14 hearing. However, if anything is needed in addition, please let me know.

Very truly yours,

HINKLE, COX, EATON,
COFFIELD & HENSLEY

Conrad E. Coffield

CEC:rf
Enclosures

xc: Mr. Harry L. Blomquist III
Cotton Petroleum Corporation
420 Wall Towers West
Midland, Texas 79701

BEFORE THE OIL CONSERVATION DIVISION OF

THE DEPARTMENT OF ENERGY AND MINERALS

STATE OF NEW MEXICO

Case 6458

APPLICATION OF COTTON PETROLEUM)
CORPORATION FOR AN UNORTHODOX)
WELL LOCATION, EDDY COUNTY,)
NEW MEXICO)

APPLICATION

Cotton Petroleum Corporation hereby makes application for approval of an unorthodox gas well location and states:

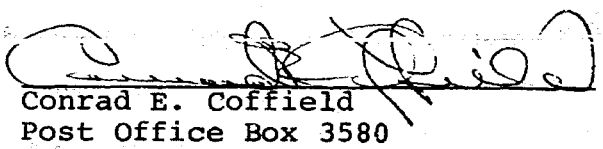
1. Applicant seeks approval of an unorthodox gas well location for its Federal 24 Well No. 1 to be drilled at a point 660 feet from the South line and 660 feet from the East line of Section 24, Township 21 South, Range 23 East, N.M.P.M., to test the Upper Pennsylvanian formation, Eddy County, New Mexico. Said location is in the Indian Basin Upper Pennsylvanian Pool.

2. That All of said Section 24 is to be dedicated to the well.

3. Approval of the unorthodox location will be in the interest of conservation, prevention of waste and protection of correlative rights.

4. Applicant requests that this matter be heard at the February 14, 1979 Examiner's hearing.

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: 

Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for
Cotton Petroleum Corporation

BEFORE THE OIL CONSERVATION DIVISION OF [illegible] 1979

THE DEPARTMENT OF ENERGY AND MINERALS

STATE OF NEW MEXICO

Case 6458

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4. Applicant requests that this matter be heard at the February 14, 1979 Examiner's hearing.

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: [signature]
Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for
Cotton Petroleum Corporation

BEFORE THE OIL CONSERVATION DIVISION OF

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4. Applicant requests that this matter be heard at the February 14, 1979 Examiner's hearing.

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By: _____
Conrad E. Coffield
Post Office Box 3580
Midland, Texas 79702
Attorneys for
Cotton Petroleum Corporation

Conrad Caffield by phone 2pm 1-23
2 cases for 2/14

Cotton Petroleum Corp

unorthodox gas well location

Federal 24 #1 660 FSL
660 FEL
24-21S-23E Eddy

~~Dime Canyon formation~~

Indian Basin-Upper Penn Gas Pool
all of 24 should be dedicated

Cotton Petroleum Corp.

Compulsory pooling of 24 as well
Marathon only party.

DRAFT

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 6458

ORDER NO. R- 5942

APPLICATION OF COTTON PETROLEUM CORPORATION FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on February 14, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of February, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Cotton Petroleum Corporation, for its Federal 24 Well No. 1 to be located at a point seeks approval of an unorthodox gas well location, 660 feet from the South line and 660 feet from the East line of Section 24, Township 21 South, Range 23 East, NMPM, ~~to test the formation~~, Indian Basin-Upper Pennsylvanian Pool, Eddy County, New Mexico.

(3) That ~~the~~ all of said Section 24 is to be dedicated to the well.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(5) That no offset operator appeared at the hearing and objected to the proposed unorthodox location.

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location ~~for the formation~~ the Cotton Petroleum Corporation Federal 24 Well No. 1 is hereby approved for ~~a well~~ to be located at a point 660 feet from the South line and 660 feet from the East line of Section 24, Township 21 South, Range 23 East NMPM, Indian Basin-Upper Pennsylvanian Pool, Eddy County, New Mexico.

(2) That ~~the~~ all of said Section 24 shall be dedicated to the above-described well.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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