

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 4, 1962

EXAMINER HEARING

IN THE MATTER OF:

Application of Newmont Oil Company for approval of a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West Loco Hills Grayburg No. 4 Sand Unit Agreement, covering 5320 acres, more or less, in Townships 17 and 18 South, Ranges 29 and 30 East, Eddy County, New Mexico.

Application of Newmont Oil Company for expansion of its Loco Hills Waterflood Project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks permission to expand its Loco Hills Waterflood Project to include the proposed West Loco Hills Grayburg No. 4 Sand Unit Area, comprising 5320 acres, more or less, in Townships 17 and 18 South, Ranges 29 and 30 East, Eddy County, New Mexico.

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 2472.

MR. MORRIS: Application of Newmont Oil Company for approval of a unit agreement, Eddy County, New Mexico.

MR. CAMPBELL: Mr. Examiner, I'm Jack M. Campbell, Campbell and Russell, Roswell, New Mexico, appearing on behalf

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file

Case 2472

Case 2473



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of the Applicant. I would like to suggest that perhaps this case could be consolidated for the purpose of hearing only with Case No. 2473, which is the next case on the docket, involving a proposed waterflood operation in this unitized area. Some of the exhibits, one of the principal exhibits is to be used in both cases, and I thought perhaps it might save time to combine them for the purpose of the hearing only.

MR. NUTTER: Is there objection to the consolidation-- We will have to call it first. We will call next 2473.

MR. MORRIS: Application of Newmont Oil Company for expansion of its Loco Hills Waterflood Project, Eddy County, New Mexico.

MR. NUTTER: Is there objection to the consolidation, for the purpose of taking the testimony of Cases 2472 and 2473? The cases will be consolidated for hearing purposes.

MR. CAMPBELL: Mr. Examiner, I have one witness, Mr. Darden, in these cases. This will be Exhibit 1.

(Whereupon, Applicant's Exhibit No. 1 was marked for identification.)

MR. MORRIS: Mr. Darden, would you stand and be sworn?

(Witness sworn.)

FRANK DARDEN

called as a witness, having been first duly sworn, testified as follows:



DIRECT EXAMINATIONBY MR. CAMPBELL:

Q Will you state your name, please?

A Frank Darden.

Q Where do you live, Mr. Darden?

A Fort Worth, Texas.

Q By whom are you employed and in what capacity?

A I am manager of operations for Newmont Oil Company.

Q What is your profession?

A Petroleum engineer.

Q Have you testified previously before the Commission or its Examiners in your professional capacity?

A I have.

MR. CAMPBELL: Are the witness's qualifications acceptable?

MR. NUTTER: Yes, sir. In view of the fact that we advised people that this case would not be heard before 11:00 o'clock, I want to point out it's two minutes before 11:00. We advised them it would be approximately 11:00 o'clock. It is approximately 11:00 o'clock, if you wish to proceed.

Q (By Mr. Campbell) Are you familiar with the applications which are involved in this case?

A I am.

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Q I refer you to what has been identified as Applicant's Exhibit 1, which is on the wall there, and ask you if you'll please step up to that exhibit. Now, Mr. Darden, referring first to the application for approval of the unit, will you point out on Exhibit No. 1 the area that is involved in the proposed unit and identifying it by the nature of the markings which appear on Exhibit No. 1?

A Yes, the proposed West Loco Hills unit is outlined in heavy red line as shown here on Exhibit 1.

Q Will you point out in general the location of the presently operating Newmont Oil Company Loco Hills waterflood in relation to this proposed unit area?

A The Newmont Oil Company project is directly offsetting the unit on the North and on the East, and the active injection wells in the Newmont project are designated by red circles surrounding the injection wells.

Q Referring first to the Unit Agreement and the unit area, have there been a series of operators' meetings held in connection with the formation of this proposed unit?

A Yes, sir, there have.

Q Have copies of minutes of these meetings been furnished to the United States Geological Survey and to the office of the Commissioner of Public Lands?



A They have.

Q Are the working interest owners in this area in substantial agreement as to the unit area and the Unit Agreement?

A They are.

Q Can you state what percentage of the operators and working interest owners have indicated their approval affirmatively?

A Approximately 89.33%.

Q Now, as to the balance, has there been any objection voiced to your knowledge?

A There has been no objection.

Q The 89.33% are those who have attended the operators' meetings, is that correct?

A That is correct.

Q And have all owners of working interest in this area been advised of these operators' meetings?

A They have.

MR. CAMPBELL: Will you mark this Exhibit No. 2, please?

(Whereupon, Applicant's Exhibit No. 2 was marked for identification.)

Q Mr. Darden, I refer you to what has been identified as Applicant's Exhibit No. 2 in this case and ask you to state what that is.

A This is the Unit Agreement for the development operation



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of the West Loco Hills Grayburg No. 4 Sand Unit area.

Q There appears to be some portions of this exhibit, some changes in the identification of the exhibit numbers. Are you aware of that?

A I am.

Q There are two exhibits which will be introduced here to be attached to this Unit Agreement, Exhibits A and B, are there not?

A That's correct.

Q And the corrections have been made here only to change the identification of the exhibits to conform to the exhibits actually attached, is that correct?

A That's right.

Q I believe there is an interlineation in ink appearing in the agreement. Is it your understanding that this is for the purpose of clarifying the language and including some omitted language in the mimeographed form?

A That is my understanding.

Q That they do not change the substance of the agreement?

A No.

Q Those have been shown in the draft that has been provided here as Exhibit No. 2, is that correct?

A That's correct.



MR. CAMPBELL: Will you mark this 2-A, please?

(Whereupon, Applicant's Exhibit 2-A was marked for identification.)

Q Now, Mr. Darden, I hand you what has been identified as Applicant's Exhibit 2-A and ask you to state what that is, please.

A This is a map outlining the unit limits and designating the participating and non-participating acreage which would be encompassed by the unit.

Q Does this exhibit number the various tracts that are involved in this proposed unit?

A It does.

Q And this is the Exhibit A which is referred to and will be attached to the Unit Agreement, is that correct?

A That's correct.

MR. CAMPBELL: Will you mark this 2-B?

(Whereupon, Applicant's Exhibit 2-B was marked for identification.)

Q I now refer you to what has been identified as Applicant's Exhibit 2-B and ask you to state what that is, please.

A This is a table which presents the description by tract number with the amount of acreage and the cumulative production to December 1st, 1960. It also presents the tract participation percentage in the unit. It also shows the total unit participation by each working interest owner.



Q Mr. Darden, has the formation of the unit and the method of allocating the production from the unit been discussed with both the United States Geological Survey and the office of the Commissioner of Public Lands informally?

A It has.

Q Are you aware of any present objection to the formation of the unit?

A No.

Q Has an application been filed with the United States Geological Survey for the designation of the unit area?

A It has.

Q What is the proposed basis for the allocation of production from this particular unit?

A The participation formula is based 100% upon cumulative primary production from Zone 4 of the Loco Hills or the Grayburg, commonly called the Loco Hills Sand cumulative production to 12-1, 1960.

Q Have those consenting operators to which you have referred also agreed to this method of allocating the production?

A They have.

Q Will you state in general terms, Mr. Darden, how and why you arrived at this cumulative primary as the sole factor in the allocation of production from this proposed unit?



A This is an old field, and when the wells were originally drilled, very little reservoir data such as core analyses or radioactive or electric logs were taken. Therefore, there's not any tangible reservoir data which could be used, and it is the consensus of the operators that cumulative primary production from the Loco Hills Sand is the most representative basis for unitization.

Q In your opinion, Mr. Darden, will the approval of this Unit Agreement for secondary recovery purposes be in the best interest of conservation?

A Decidedly so.

Q If the unit is established, who will be the unit operator?

A Newmont Oil Company.

Q Newmont Oil Company, as I understood you, is now operating the waterflood project immediately to the East and North of the proposed unit area, is that correct?

A That's right.

Q If the unit is approved, do you intend to initiate additional waterflooding efforts in the unitized area?

A As soon as possible, yes.

Q Would you return to Exhibit No. 1 there, please? Will you point out to the Examiner, as you see fit, the present



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operation and what is proposed to be done with regard to adding injection wells, and proceeding with the development of secondary recovery in the proposed unit area?

A As I said before, the active injection wells in the Newmont project are circled in red. Also on Exhibit 1 we have underlined in orange the producing wells in the Newmont project which have responded to injection. As you will note, there are wells that directly offset the unit that have responded to Newmont's injection. So it is our plan to put injection wells on offsetting the Newmont project which will adequately protect correlative rights both to Newmont and to the participants in the unit in the manner which is portrayed on this Exhibit 1.

I would like to point out that this is only a tentative development plan and that there will necessarily be changes in some of the injection wells as the project is developed. However, we will at all times keep the pattern consistent with the best interest of conservation.

Q Do you believe, Mr. Darden, that the formation of this unit and the development of the unit acreage is in the best interest of conservation?

A I certainly do.

Q Do you believe that this is the best method of adequately protecting the correlative rights of the owners of property



in this area insofar as secondary recovery is concerned?

A I certainly do.

Q Do you consider this unitized area and the operations therein to be a reasonable extension of the presently existing waterflood project which Newmont Oil Company now operates?

A I do.

Q Mr. Darden, have you made any projection of the additional production that may be expected from the Newmont area and any projection as to the anticipated production from the unitized area insofar as peak production is concerned?

A I have. We have prepared this exhibit, which will be Exhibit No. 3. It gives an estimate of the production rate which Newmont expects of its present project, and which it expects by development of the West Loco Hills Unit on the basis which we have proposed.

(Whereupon, Applicant's Exhibit No. 3 was marked for identification.)

Q Now, referring to Exhibit 3, will you state the basis upon which these calculations are made and explain to the Examiner what, in general, it indicates?

A Well, we relied very heavily upon the performance of Newmont's present project in estimating what the individual wells in the unit will do as far as response and performance. We also have projected Newmont's production rate to the best of our

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engineering ability, and both of these things are portrayed there.

The Newmont project future production is in the dark dotted line and the West Loco Hills unit production is in the lighter dotted line.

Q Does this indicate that the production from the unitized area here to the West will be increasing at the time that the presently producing wells are declining?

A Yes. We estimate that the present Newmont project will peak hit its highest production rate in 1962, and thereafter will commence to decline as shown on Exhibit No. 3. We estimate that the West Loco Hills project will hit its peak production in the latter part of 1964, and will hold that peak for approximately two years and then will commence declining in a manner similar to the present Newmont project.

Q And that the peak of this unit area would be around 13,000 barrels in the latter part of 1964 based on your present projections, is that correct?

A I don't know this 13,000 figure.

Q Here.

A That's 130,000 barrels per month.

Q 130,000 barrels per month, yes.

A Yes.

Q Have you made any comparative calculations between the



allowable production which would be in existence under the development of this project as an extension of the existing flood and the development of the project with a unit allowable where permission was granted to make transfers of the allowable?

A Yes, I have. There are presently 92 active wells in the proposed unit, and when fully developed we expect to have a total of 128 wells, including injection wells. There will be 110 40-acre proration units within the unit, and based upon 42 barrels per 40-acre tract plus one-third of 42 barrels for each additional well within a 40, the total unit allowable would be 4872 barrels per day.

Q Have you made any calculations as to what the production would actually be, assuming that you proceeded under the same operation as you are conducting in the Newmont Loco Hills flood to the East?

A Yes, we estimate that the project will peak at approximately 4300 barrels per day.

Q So that the amount of the allowable under a unit allowable with transfers would be greater than the production you estimate under the extension of the presently existing flood, is that correct?

A That is correct.

Q Why is that?



A Well, that is due primarily to the system of control on rate of expansion. The Commission requires evidence of response of producing wells before the next row of injection wells can be put on. We have found in the Newmont project that that has very effectively limited the peak at which our project could hit.

We had originally estimated in our engineering before the flood was started that if it were a successful flood it would peak, I'm speaking now of the Newmont project, it would peak at around 5200 barrels per day. Well, it now appears that we will not peak at over approximately 3500 barrels, but, of course, in our original engineering we had expected to go to full development as soon as we had a successful pilot. And for that reason we believe that expanding on the same basis in the West Loco Hills Unit will achieve approximately the same sort of results.

Q Where do you anticipate obtaining the water for the development of this area?

A From the Yucca Water Company.

Q Is that the same source of water that's being used in the present Newmont flood?

A It is.

Q A few questions about the present flood and what you contemplate in connection with the unit area. Would you state for the record what you are doing in connection with the



injection of water relative to injecting it through the casing or injecting it through the tubing in the injection wells?

A We have a standard procedure of testing each injection well to the plant injection pressure testing the casing in the well. If we find that the casing is in good condition and will hold that pressure with no evidence of any type of leakage, then we inject down the casing. In the event that there is any evidence either on that test or in subsequent injection that the water is not going into the desired sand, we then run tubing and set it on a packer and inject through tubing.

Q Do you believe, Mr. Darden, that if this project is approved as an extension of the existing Newmont flood, that it will be in the interest of conservation insofar as ultimate recovery of oil is concerned?

A I definitely do.

Q Do you believe that the Unit Agreement, coupled with the development of the unit area on the same basis as you have presently developed the Newmont flood, will protect correlative rights?

A I do.

Q Do you believe that the development of this area on this basis will better protect correlative rights than the development of the area on an individual lease basis would do?



A I certainly do.

MR. CAMPBELL: I would like to offer Applicant's Exhibits 1, 2 and 3 in evidence, Mr. Examiner.

MR. NUTTER: Applicant's Exhibits 1, 2 and 3 will be entered in evidence.

MR. CAMPBELL: That's all the questions I have at this time.

MR. NUTTER: Are there any questions of Mr. Darden?

MR. MORRIS: Yes, sir.

MR. NUTTER: Mr. Morris.

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Darden, your original pilot waterflood project in the Loco Hills area was authorized, I believe, by Order No. R-1267, Case No. 1511. The order was dated on October 25, 1958, is that correct?

A I'm not certain of the number, but I assume that is correct. It was approximately that time.

Q Right. Could you tell me what the original pilot area was in this project?

A Yes. We had six injection wells located in Section No. 1, Township 29 East, 18 South, and Section No. 6, Township 30 East, Range 18 South. The wells were the Ballard No. 5-B,



the Yates A No. 2, the Yates A No. 11, the Yates No. 2, the Yates No. 3, and the Yates No. 5.

Q Yes. So five of those injection wells were in Section 6 and one was over in Section 1?

A That is correct.

Q How many producing wells did you have in the original pilot area?

A Well, there were two wells that were completely closed, Yates No. 8-A and Yates No. 9-A. There was one producing well which had what we call a three-way push. It was open on one side and that was the Yates No. 6.

Q So the six injection wells and the three producing wells constituted the entire pilot area?

A That's correct.

Q Then after the approval of that pilot area you expanded that particular project, did you not?

A Yes.

Q And in which direction did you first expand the project?

A I believe that our first expansion was with the drilling of our No. 13-A. Now, I would have to check the records to be certain, but we did expand it towards the East, and about the same time we re-entered Well No. 7 and put that well on injection. We put No. 12-A on to give some backup for No. 4, a producing well.



We then put the Carper No. 2 Well on, we moved in this direction and put the Ballard --

MR. CAMPBELL: Which direction?

A To the West. On to the Ballard lease, and put the Ballard 4-B on, we drilled the Ballard 6-B to give a more efficient pattern. We have recently put the Brigham No. 1-A on, which is located in Section 31, Township 17 South, Range 30 East. We have drilled Brigham No. 4 on that same lease, an injection well, we have drilled Carper Talmadge No. 4 as an injection well in Section 32, so we have moved in both East and West directions as response dictated.

Q I see. How many injection wells do you have in the project at the present time?

A Well, I had better count them -- fifteen.

Q Fifteen injection wells at the present time, and the exhibit will reflect how many producing wells you have at the present time?

A Yes.

Q Would you say, Mr. Darden, that the project then has gone definitely beyond the stage of a pilot waterflood?

A Yes, sir.

Q And your most recent expansion of the pilot waterflood has been in the easterly direction?



A That's true.

Q Mr. Darden, I believe we're all familiar with the present Rule 701 under which the Commission now operates. Was the pilot waterflood project authorized before present Rule 701 was promulgated by this Commission?

A Yes, it was.

Q I believe the records of the Commission will show that the present Rule 701, concerning waterflood projects, was promulgated by Order 1525, dated November 9th, 1959 following an extended hearing held in Roswell. If I might interrupt the cross examination for just one moment, I would like to read into the record a particular provision of the order promulgating our present Rule 701, for the purposes of discussion.

I'm reading now from Order R-1525, after the findings, the order reads as follows: "It is therefore ordered Paragraph 1 that Rule 701 of the Commission rules and regulations be, and the same is hereby revised to read in its entirety as hereinafter set forth, provided, however, that the allowable provisions contained in revised Rule 701 shall not apply to waterflood projects heretofore authorized by the Commission or to legitimate expansions thereof."

Are you familiar with that particular working of the rule?

A Yes, sir.

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Q Now, Mr. Darden, what was the allowable of this particular pilot project area when it was first authorized. Was it operating under any restrictions?

A There were no restrictions on the producing rates.

Q What is your proposal concerning the allowables to be assigned to your proposed extension of the project area?

A We propose that the unit will be operated under the same rule and basis as our present project as a logical expansion of that project.

Q Now, referring to the language that I just read in Order No. R-1525, the allowable provisions of our present Rule 701 would not apply to this project if it were considered a legitimate expansion of the old project, is that correct?

A I didn't understand it that way. Maybe you had better rephrase the question.

Q All right, I'll rephrase it.

A Or just repeat it, possibly, would be all right.

Q The only reason that your present extension, your proposed extension here of your waterflood project would not be governed by the allowable provisions of our present Rule 701 is because of the language that I just read which, in effect, states that the allowable provisions of Rule 701 will not apply to legitimate expansions of a waterflood project authorized before



the promulgation of this rule?

A That's true.

Q So far as the allowable issue in this hearing is concerned, it depends upon what we mean by a legitimate expansion of a flood, does it not?

A Well, that's the Commission -- yes, I suppose it is.

Q That's the issue as far as the allowables are concerned?

A I would say probably so. However, I would emphasize that we do consider this to be an expansion of an existing flood. It's in the same reservoir, there is no evidence of any separation, so consequently for us it is an expansion of an existing project.

Q Now, I believe that the order refers to the word "legitimate" expansion, and I'm not sure any of us know what legitimate means. What factors do you think the Commission should take into consideration in determining whether or not an expansion of a flood is a legitimate expansion? Do you have any thoughts on that subject?

A No.

MR. CAMPBELL: May I answer that?

MR. MORRIS: I'll be happy to have you do that.

MR. CAMPBELL: I think it's almost a legal question if you are defining the term legitimate. I think we would take the position that the Commission should consider whether it is in the



same reservoir, whether the projects are geographically adjacent to each other, whether there is a risk of the abuse of correlative rights in the event there is a change in method of operation of the adjacent waterflood properties.

I believe the findings in the order establishing Rule 701 make some reference to the fact, or to the Commission's conclusion that there is a question at least, a possibility as I recall the word, that to change rates of injection in a waterflood project might result in waste, and I think this is a factor that the Commission should consider. There are probably others, but certainly I think those are important factors in determining whether it is a logical expansion, and it is difficult for me to see how within the same reservoir, from the point of view of efficient operation of the flood and the protection of correlative rights of producers or owners in that field, you can alter the method of allocation of allowables once a project is approved.

MR. MORRIS: Mr. Campbell, since the word legitimate expansion was used in the order promulgating Rule 701, it might be a reasonable inference to make that expansions were contemplated that might be illegitimate.

MR. CAMPBELL: I'm unable and was unable at the time to construe what the Commission had in mind when it made that differentiation between legitimate and illegitimate expansions. I

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think that the Commission, as in other cases, simply must reach a conclusion as to whether or not it is in the interest of the prevention of waste by way of efficiency of the operation of the project, and whether it's in the interest of protection of correlative rights that the same procedures be followed in immediately adjacent properties in the same common reservoir.

I think that's the basic question. If that means that's the definition of legitimate or illegitimate, well, that would be the way I would construe it. I don't think it alters the basic responsibility of the Commission.

MR. MORRIS: Do you think that a difference in ownership between the two areas would be the factor to consider in determining whether particular expansion of a project were legitimate?

MR. CAMPBELL: I do not think so from the point of view of the Commission, and the Commission has in the past apparently considered who the operator is as a factor. Though I have never fully agreed with that, but in this instance, of course, the operator is the same. There might be some justification where the operator isn't the same, on the assumption that the project would not be operated in exactly the same fashion.

Therefore, there might be some doubt as to whether correlative rights would be protected the same by different operators, but

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I don't think that who owns the property is the basic question in this determination as far as, certainly as far as efficient operation and prevention of waste is concerned. It perhaps would have a bearing to some extent on the protection of correlative rights.

MR. MORRIS: Do you feel that one factor that might be considered would be the direction in which the flood was moving at the time the extension to the flood was projected?

A Well --

MR. CAMPBELL: Well, I certainly think it has to, because obviously as you approach an area over which you have no control or no line agreement or no unitized area, your correlative rights begin to be affected, and I think that is a consideration. I think if somebody just blindly moved off in a direction which made it necessary to expand the flood without consideration of efficiency factors in the method of development, that might be a question that they were simply trying to get more allowable, that could be a consideration I suppose, though I don't think that exists here. As long as I'm testifying, I might as well throw that in.

A I might mention, Mr. Morris, that in my description of how this project was expanded, I did not mean to infer that that was the most sound engineering basis for expansion, but we had other considerations; since we did not have lease line cooperation



we did not have offsetting injection wells on other properties which would have protected correlative rights, we were forced to keep our expansion within our own property.

Q Mr. Darden, do you have an active flood front at the present time in the Northeast Quarter and the North Half of the Southeast Quarter of Section 1?

A Well, by a flood front, if you mean do we have oil moving as a result of our water injection, we do have. Of course, in a pattern waterflood you have a flood front in each five spot, or each pattern, and, of course, since our patterns are not closed up here or over here, we have, you might call it, a flood front, although we wouldn't think of it exactly that way.

We are moving oil as indicated by the response of this well here, Ballard 3-B, and by the response of Ballard 2-B.

Q Mr. Darden, if you drill your injection wells as proposed here, I'm referring specifically to your Well No. 1-B in Section 1, your Well No. 1, Well No. 4-A and Well No. 2 just coming right down your line in Section 1, if you drill those injection wells or convert them to injection wells and begin injecting water into those wells, do you feel that you would have to produce your next row of producing wells immediately to the West of those injection wells at a rate greater than the allowable which you would receive under our present Rule 701?



A If we could produce them at no more than 84 barrels per day, for example, if there was one injection and one producing well?

Q Right.

A I would say that very definitely we're going to have to produce them at higher rates than that in order to recover the oil, because your production rate is a definite function of your injection rate. If you are putting the water in at a certain rate and you don't withdraw the fluids that come into the producing well at approximately the same rate, then you are going to have oil driven by that producer and trapped in the formation, and it probably will never be recovered.

Q You are assuming there that you are going to have to inject water in the injection wells mentioned at a rate so high that you would have to produce the wells at a higher rate than 84 barrels a day?

A I'm assuming that because experience in Newmont's project has given us definite proof that injection at rates and pressures below the maximum which we can achieve below the formation's breakdown pressure do not force water into all of the productive sands, so consequently at lower injection rates and lower pressures we are bypassing a considerable volume of oil which will never be recovered.



Q Moving westward, if you come to the next general tier of injection wells, would you have to inject water into those wells at the same rate you would have to into the tier of injection wells closer to the present project?

A Yes, we would have to, and there are several reasons for it. First is the reason which I have mentioned, that in order to get maximum recovery by waterflooding in this field we know that we have to put the maximum volume at the maximum pressure that we can in each injection well, and that doesn't apply just to one side because if you just put it in say this side so you get efficient flooding on this side well, what are you doing over here? Are you going to be happy with only flooding half the sand on this side simply by reducing your injection rates?

Secondly, without some sort of balance in a pattern flood, you have premature water breakthrough. You have additional waste and loss of the oil in that respect.

Q It's your feeling, I take it, Mr. Darden, that the reservoir characteristics of this particular formation lends itself only to a capacity type flood?

A That's correct.

Q Then, if I may presuppose answers from you, you would not feel that any buffer zone that might be established in this



area between the present project and the proposed extension would be feasible?

A You are correct. We have looked into that idea and have tried to see where it might be workable, and from a recovery standpoint we don't believe that a buffer zone in this field is workable. In other words, we believe that the use of a buffer zone would cause loss of ultimate recovery.

Q Mr. Darden, generally do you remember when your Wells 4-B and 6-B in Section 1 were put on injection?

A It will have to be very generally.

Q That's all right.

A I don't have the data with me on that. I would say they've been on injection approximately a year.

Q Approximately a year?

A Now one other thing I might point out while we are discussing this Newmont performance, we have had the injection rate cut back on these wells for this 4-B and 6-B Ballard for more than six months. By cutback, I mean we have restricted the injection rates to roughly half of what those wells would take, simply because we had evidence that the producing wells offsetting them were responding, and we have hoped that we would be able to accomplish some type of lease line cooperation before we drove any oil off our property. We know this is not the most efficient

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way to flood this, but we have an obligation to protect the correlative rights of our royalty owners, and our own company's oil, so we have had to restrict our injection rates in 5-B, 4-B and 6-B from the Ballard to prevent migration of oil off our property.

That is one additional reason why we are so positive that the formation of this unit and the immediate waterflood development of the unit is necessary to protect correlative rights and from a conservation standpoint.

Q Mr. Darden, is the formation of the unit in any way contingent upon the allowable provisions that are included in the order as a result of the hearing on your waterflood project?

A I would say no. I feel that Newmont, as well as the other operators in the field, recognize that the unit formation is necessary for the most efficient development of the property for the protection of correlative rights, as I've mentioned. I would say that we feel there will definitely be a loss of ultimate recovery if the Commission rules in such a way that we have to artificially restrict injection rates and producing rates.

Q But the formation of the unit itself is not contingent upon the outcome of the waterflood case?

A Well, of course, I don't know.

Q There's nothing in the Unit Agreement to that effect?



MR. CAMPBELL: No.

A No.

MR. CAMPBELL: No one has signed it yet either.

A No, the Unit Agreement is not signed.

MR. MORRIS: I have no further questions.

MR. NUTTER: Does anyone else have any questions of Mr. Darden?

MR. CAMPBELL: No, I have no more questions.

CROSS EXAMINATION

BY MR. NUTTER:

Q What did this 89.33% of working interest actually represent again?

A That represents the working interest owners within the unit area that have given their tentative approval to the proposal of the unit and of the participation factor.

Q These are the operators that attended the operators' meetings and gave their consent at those meetings?

A Well, that isn't exactly true. There was one operator who was not there who has since given his firm approval. There was one operator who was represented there but who has not had authority from his top management, and we have not heard anything from them one way or the other. So the 89.33% is of the operators that have given positive indication of their approval.



Q How about royalty ownership in this area, is it all either Federal or state land?

A Yes.

Q Or is there any fee land?

A It's all state or Federal. As a matter of fact, the state owns 40.7% of the acreage in the unit.

Q As to the participation formula, I presume these 89.33% of working interest owners have approved this participation formula based on cumulative primary production up to 12-1-60?

A Yes.

Q Has the regional supervisor of the United States Geological Survey given his consent to the participation formula?

A Yes.

Q Has the Commissioner of Public Lands given his tentative consent to the participation formula?

A He has.

Q The participation formula is the tract percentage formula in direct proportion to the cumulative production in the next column to the left?

A Yes.

Q How was the estimated recovery for the two undrilled tracts determined, Mr. Darden?

A It was determined by the preparation of an isocumulative



map based on the cumulative production from the Loco Hills Sand, and those two 40-acre tracts which are to be developed in the immediate development pattern, were given a psuedo cumulative credit based upon the menterium of the contours of the isocumulative map.

Q So, in effect, the offsetting wells were the ones that contributed the figures for the isocumulative map and, in effect, determined how much credit these 40's would get, I presume?

A That's correct.

Q You have actually, in this particular case, requested authority to convert three wells to injection, have you not?

A I believe that's correct.

Q And are each of those three wells direct or diagonal offsets to wells which do offset current injection wells, or wells which have responded to the water injection program?

A Yes, sir, they do.

Q So the three wells for which you have requested authority to convert to water injection are the Ballard B No. 1 in the Southeast Northwest Quarter of 1, 18, 29?

A That's right.

Q The Dixon-Yates Federal No. 2, Southeast Southeast 1, 18, 29 and the Newmont Canfield 1-A in the Northwest Northwest of 7, 18, 30?



A That's right.

Q And presumably any additional wells which would be converted to water injection, you would request administrative approval for those after the response features of Rule 701 have been met?

A Yes.

Q Now, Mr. Darden, you stated that under Rule 701, with the 110 40-acre proration units and the proration units for which additional credit would be given for second or third well on the 40, you would have how much allowable when the thing was fully converted?

A 4872 barrels per day.

Q And your estimated peak, according to Exhibit No. 3, is 4300 barrels per day?

A That's right.

Q You are going to purchase water from Yucca Water Company, will Yucca Water Company have sufficient water available in this area to complete the waterflood project?

A Yes.

Q That's the source of water for your adjoining flood also, is it not?

A That's correct.

Q Now, the Commission recently authorized three additional



waterfloods just North of this area. Do you know whether the source of water for those projects will be Yucca Water Company or not?

A No, I don't. We have talked with those operators, and it's my understanding that one of the operators has made a contract with another company for water. We have not heard what the other operators are going to do.

Q Has any of those three floods been commenced as yet?

A No, sir.

Q But Yucca does assure there will be sufficient water to carry your flood to its conclusion?

A Yes, sir.

Q Mr. Darden, referring to the three factors which Mr. Campbell mentioned as being important considerations in determining whether a project was a legitimate or logical expansion, he mentioned that the first would be the same reservoir. This is in the same reservoir, I presume?

A Yes, it is.

Q His second consideration was the geographic adjacency of the projects. Are they geographically adjacent?

A Yes, and Exhibit 1 shows that.

Q The third factor he mentioned was the risk of correlative rights being damaged. Do you consider that a factor?



A I consider that probably the most single important factor in this hearing.

Q Since we're referring to No. R-1525 in this hearing, I'd ask you if you are acquainted with finding No. 9 of that order which reads as follows: "That the establishment of buffer zones between waterflood projects may be necessary when offsetting waterflood projects have varying allowable provision." Rule 701 should, therefore, include a provision for the assignment of special allowables in such buffer zones where it is established at a hearing that correlative rights can not adequately be protected otherwise.))

I take it from your previous testimony with regard to the buffer zones that you feel that a buffer zone could not be established which would adequately protect correlative rights?

A That is correct.

Q Or is it that you feel that a buffer zone couldn't be established that wouldn't result in waste?

A Well, I think they're the same problem. If your property within the buffer zone is flooded effectively and there's no waste created, however, if the next stepover where injection rates are reduced, as I understand the buffer zone idea, then you aren't flooding efficiently based on our experience in this field, then consequently you are not only damaging correlative rights for the

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people in the zone or in the area that does not have full injection rates, but you are also creating waste at the same time by not effectively flooding their property.

Q Would you agree that it would be possible to establish a barrier between two projects in which sufficient water was placed into the ground to prevent a pressure differential from one side of the barrier to the other?

A That has been done in some fields, not for that purpose, but, as I understand it, to prevent water from migrating or oil migrating into a gas cap, or something like that. It's possible. I don't see that it would serve any useful purpose here.

Q You do know of water barriers being established between particular areas in pools, though, do you not?

A I have read of some, yes.

MR. NUTTER: Are there any other questions of Mr. Darden?

MR. MORRIS: I have one further question.

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Darden, you have testified that the daily expected peak in the waterflood project, when all wells are converted to the project, will be some 572 barrels per day less than the peak that you would be entitled to receive if the project were operated



under the allowable provisions of Rule 701. With that in mind, would you explain why Rule 701 would not be, and its allowable provisions would not be satisfactory to you in this case?

A Well, frankly, I'm not well enough versed in the ramifications of Rule 701, since we have no projects that operate under it, to know how that would affect us. I would say if we were given a unit allowable with sufficient latitude and transfer of allowables so that we could be assured of not artificially restricting injection rates or producing rates in the portion of the unit which was under development at that time, it probably would not hurt the flood.

MR. MORRIS: No further questions.

MR. NUTTER: Are there any further questions?

REDIRECT EXAMINATION

BY MR. CAMPBELL:

Q The response to the last question will have to be predicated upon the operation of this unit with a unit allowable, would it not?

A Yes.

MR. CAMPBELL: No further questions at this time.

MR. NUTTER: Are there any other questions? Mr. Darden may be excused.

(Witness excused.)



MR. NUTTER: Do you have anything further, Mr. Campbell?

MR. CAMPBELL: No, not unless I want to respond to some statements.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2472 or Case 2473?

MR. MORRIS: I have a telegram.

MR. NUTTER: Mr. Morris.

MR. MORRIS: I have a telegram from Graridge Corporation which I will make part of the record in this case, generally concurring with the application of Newmont in this case.

"Graridge Corporation, as a working interest owner in the proposed West Loco Hills Grayburg 4 sand unit, supports Newmont Oil Company's application for approval of this unit for the purpose of conducting secondary recovery operations. Newmont's current secondary recovery project in the Loco Hills Field in the Grayburg 4 sand has demonstrated water flooding to be a sound conservation measure in recovering oil which otherwise would remain in the Grayburg reservoir. Graridge further supports Newmont's application to develop the subject unit as a logical expansion to its Loco Hills waterflood project and that operation of the unit should be conducted in accordance with the same sound engineering practices and program that have resulted in success in this field. We respectfully request that the Oil Conservation Commission grant

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approval of the applications made by Newmont through Cases 2472 and 2473 on Docket No. 1-62."

MR. MURPHY: Mr. Chairman, I would like to enter an appearance for Caprock Water Company, Inc. as their interest appears in this case, and state that they operate under Franchise 178 from the Public Service Commission, and they wanted me to state for them that they are ready, willing and able to furnish water to this project at the posted price.

MR. NUTTER: Would you identify yourself?

MR. MURPHY: Yes, I am Bert Murphy, I am a consulting engineer from Fort Worth, Texas representing Caprock Water Company.

MR. BRATTON: Howard Bratton on behalf of Humble Oil and Refining Company. Capacity allowables were reviewed in detail in Case 1787 in October of 1959. It is requested that the testimony in that case be considered and made a part of this Case 2473, if Newmont Oil Company's application for expansion of its Loco Hills waterflood project to include the proposed West Loco Hills Grayburg No. 4 sand unit is approved by the Commission, it is recommended that the expansion area be made subject to statewide Rule 701, and if considered appropriate, a buffer zone of reasonable size be established between the existing Loco Hills waterflood project and the proposed area.

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MR. NUTTER: Mr. Bratton, did I understand you to say that you wanted certain testimony in the other case incorporated in the record in this case?

MR. CAMPBELL: We object to that if they want the whole record.

MR. BRATTON: We would ask that if Mr. Campbell objects that the evidence of Humble in that case as to the basic question of the necessity of capacity allowables to prevent waste, that that evidence be considered and be made a part of this record.

MR. MORRIS: If the Examiner please, if Mr. Campbell has no objection, I certainly have no objection to the inclusion of the record of that case being incorporated into this case. However, this case was not advertised for a whole new consideration of the problem of capacity versus restricted allowables.

MR. CAMPBELL: I might say further, if that is done, then it would be incumbent on the Applicant here to present considerable additional evidence with regard to the operation in this particular field. We have not in this case made any attempt to attack the original order, we are seeking authority under the order, testimony is in the record as to the witness's opinion on this particular field, and we certainly would not like to see one side of the testimony in a case involving a particular application, incidentally, and not a general hearing, as I recall it,



included in this particular case. I think it will make the record unnecessarily large, and in the event that there was an appeal, we certainly would want to have an opportunity to present additional evidence.

MR. NUTTER: Would there be any objection to the Examiner or the Commission taking administrative notice of Case No. 1787?

MR. CAMPBELL: I have no objection. I am reasonably confident they will anyway.

MR. NUTTER: Is that satisfactory with you, Mr. Bratton?

MR. BRATTON: If the Commission please, yes, that's perfectly satisfactory.

MR. NUTTER: Mr. Kellahin.

MR. KELLAHIN: Kellahin, appearing on behalf of Amerada Petroleum Corporation. Amerada Petroleum Corporation certainly has no objection to the formation of this unit, nor the water-flood project as such, but it does object to the allowable features which would be incorporated as a result of this expansion, and urges that the project be placed under the provision of Rule 701.

This, in its essence, amounts to the expansion of a project which consists of something in the vicinity of three sections to something between 11 and 12 sections of land. It appears to be a



situation of the tail wagging the dog in order to extend the allowable provisions of a going project.

On that basis we don't feel it complies with the provisions of Order No. R-1525, as a legitimate expansion of an existing flood. We second the statement which was made in behalf of Humble Oil and Refining that the project be placed under Rule 701 with a buffer zone provision, if that appears appropriate and necessary. In essence, the testimony of the witness presented on behalf of Newmont is solely to the effect that in his opinion the formation lends itself only to a capacity type flood, a matter which we feel was settled by the Commission when it adopted its Order R-1525.

MR. NUTTER: Anything further?

MR. CAMPBELL: I would like to make a statement in that regard.

MR. NUTTER: Mr. Campbell.

MR. CAMPBELL: This question was, in my judgment, not settled as to each reservoir in that case definitely, and the Commission recognized this in making provision in several respects for exceptions under the rule, or for different treatment under certain conditions, and I think the examination of the evidence offered in this case, the percentage of ownership of Newmont, the operator of the present flood, will definitely



reveal that they do not own a majority interest in this unit area.

It has been my impression that the Commission has consistently encouraged the formation of units, particularly for secondary recovery, rather than facing a situation where constant lease line agreements had to be initiated and entered into to expand these waterfloods, and I would like to state again that it is the position of the applicant here that this is, in effect, a legitimate and not an illegitimate expansion of the existing waterflood.

MR. NUTTER: Thank you. Anyone else? We'll take these cases under advisement and recess the hearing until 1:30.

(Whereupon, a recess was taken until 1:30 P.M.)

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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 5th day of January, 1962.

Ada Dearnley
 Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examined Hearing of Case No. *2472 and 2473* heard by me on *1/4*, 19*62*.
Asst. Commissioner, Examiner
 New Mexico Oil Conservation Commission

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GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER



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

P. O. BOX 871
SANTA FE

March 22, 1962

Mr. A. J. Losee
Losee & Stewart
Carper Building
P. O. Drawer 239
Artesia, New Mexico

Dear Jerry:

Since I am sure the reporter would have difficulty in supplying you with a copy of the transcript in Case 2473 by April 1st, I am enclosing one of the Commission's copies for your use. The return of this transcript to the Commission files after your hearing on April 10th will be appreciated.

Very truly yours,

RICHARD S. MORRIS
Attorney

RSM/ir

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UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT AREA
COUNTY OF EDDY
STATE OF NEW MEXICO
NO. 2472

THIS AGREEMENT, entered into as of the _____ day of _____, 1961, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as the "parties hereto,"

W I T N E S S E T H:

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

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

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature, Sec. 1, Chap. 88, Laws 1943, (Sec. 7-11-39 N.M. Statutes Annotated 1953 Compilation), to consent to and approve the development or operation of State lands under agreements made by lessees of State land jointly or severally with other lessees of State

lands, with lessees of the United States, or with others, where such agreements provide for unit operation or development of part or all of any oil or gas pool, field or area; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by Sec. 3, Chap. 88, Laws 1943, as amended by an Act of the Legislature, Sec. 1, Chap. 162, Laws 1951, (Sec. 7-11-41 N.M. Statutes Annotated 1953 Compilation) to amend with the approval of lessee, evidenced by the lessee's execution of such agreement or otherwise, any oil and gas lease embracing State lands so that the provisions and the length of the secondary term of said lease as to lands within such unit area will conform and coincide with the provisions and the term of such agreement for the unit operation and development or part of all of any oil or gas pool, field, or area; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature, Chap. 72, Laws 1935 as amended by Chap. 193, Laws 1937, by Chap. 166, Laws 1941 and by Chap. 168, Laws 1949 (Sec. 65-3-1 et seq., N. M. Statutes Annotated 1953 Compilation) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the West Loco Hills Grayburg No. 4 Sand Unit covering the land hereinafter described to give reasonably effective control of operations herein; and

WHEREAS, it is the purpose of the parties hereto to enable institution and consummation of secondary recovery operations, to conserve natural resources, prevent waste, and secure other benefits obtainable through development and operation of the Grayburg No. 4 Sand under the terms, conditions and limitations herein set forth.

NOW, THEREFORE, in consideration of the premises and

the promises herein contained, the parties hereto commit to this Agreement their respective interests in the below defined Unit Area, and agree severally among themselves as follows:

1. ENABLING ACT AND REGULATIONS: The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent and reasonable regulations hereafter issued thereunder are accepted and made a part of this Agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this Agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State of New Mexico, are hereby accepted and made a part of this Agreement.

2. UNIT AREA: The area specified on the map attached hereto, marked Exhibit "A", is hereby designated and recognized as constituting the West Loco Hills Grayburg No. 4 Sand Unit Area, hereinafter referred to as "Unit Area," containing 5320 acres, more or less.

Exhibit "A" shows, in addition to the boundary of the Unit Area, the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator the acreage, percentage and kind of ownership of oil and gas interests in all land in the Unit Area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the Unit Area render such revision necessary,

or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor," or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Commissioner," and not less than seven copies of the revised exhibits shall be filed with the Supervisor and copies thereof shall be filed with the Commissioner and with the Oil Conservation Commission of the State of New Mexico, hereinafter referred to as "Commission."

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

(a) Unit Operator, with concurrence of at least 65% of the voting interest or on demand of the Director of the Geological Survey, hereinafter referred to as "Director," after preliminary concurrence by the Director, or on demand of the Commissioner and Commission, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the Unit Area, the reasons therefor, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

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

(c) Upon expiration of the 30-day period provided

in the preceding item (b) hereof, Unit Operator shall file with the Supervisor, Commissioner and the Commission evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit Operator, together with an application in sufficient number, for approval of such expansion or contraction and with appropriate joinders.

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

(e) All legal subdivisions of unitized lands (i.e. 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular surveys, however, unusually large lots or tracts shall be considered in multiples of 40 acres, or the nearest aliquot equivalent thereof, for the purpose of elimination under this subsection), no parts of which are entitled to be in a participating area within 7 years after the first day of the month following the effective date of this agreement, shall be eliminated automatically from this agreement, effective as of the first day thereafter, and such lands shall no longer be a part of the Unit Area and shall no longer be subject to this agreement, unless at the expiration of said 7-year period diligent drilling or reworking operations are in progress on unitized lands not entitled to participation, in which event all such lands shall remain subject hereto for so long as drilling or reworking operations are continued diligently, with not more than 90 days' time elapsing between the completion of one such well and the commencement of drilling or reworking the next such well, except that the time allowed between such wells shall not expire earlier than 30 days after the expiration of any period of

time during which drilling or reworking operations are prevented by a matter beyond the reasonable control of Unit Operator as set forth in the section hereof entitled "Unavoidable Delay"; provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within 10 years after said first day of the month following the effective date of this agreement shall be eliminated as above specified.

Determination of creditable "Unavoidable Delay" time shall be made by Unit Operator and subject to the approval of the Director and Commissioner. The Unit Operator shall, within 90 days after the effective date of any elimination hereunder, describe the area so eliminated to the satisfaction of the Director, Commissioner and the Commission and promptly notify all parties in interest.

If conditions warrant extension of the 10-year period specified in this subsection 2(e), a single extension of not to exceed 2 years may be accomplished by consent of the owners of 90% of the current unitized working interest and 60% of the current unitized basic royalty interests (exclusive of the basic royalty interests of the United States or of the State of New Mexico), on a total nonparticipating-acreage basis, respectively, with approval of the Director and Commissioner, provided such extension is submitted to the Director and Commissioner not later than 60 days prior to the expiration of the said 10-year period.

Any expansion of the Unit Area pursuant to this section which embraces lands theretofore eliminated pursuant to this subsection 2(3) shall not be considered automatic commitment or recommitment of such lands.

3. UNITIZED LAND AND UNITIZED SUBSTANCES. All oil

and gas in the hereinabove described land and subsequently admitted land effectively committed to this agreement only as to the Loco Hills Grayburg No. 4 Sand, together with the surface rights of ingress and egress, are unitized under the terms of this agreement and are herein referred to as "Unitized Substances," and said land, as to the Unitized Substances, shall constitute the land herein referred to as "Unitized Land" or "Land Subject to this Agreement." The parties hereto recognize the existence of that certain Agreement dated April 1, 1958, between the Loco Hills Pressure Maintenance Association, Inc., as "Association" The Individual Stockholders of the Loco Hills Pressure Maintenance Association, Inc., as "Operators," and Valley Gas Corporation, as "Valley." The unitization of gas in the Loco Hills Grayburg No. 4 Sand under this Unit Agreement is subject to all of the rights and privileges held by Valley Gas Corporation under said Agreement of April 1, 1958.

The Loco Hills Grayburg No. 4 Sand shall be construed to mean the sand and reservoir encountered in the drilling of the Newmont-Ballard Well No. B-6 between the depths of 2767 feet and 2792 feet, as shown on the Gamma Ray Neutron Log of said well, which well is located in the SE/4 SW/4 NE/4 of Section 1, Township 18 South, Range 29 East, Eddy County, New Mexico, and will herein be referred to as "Unitized Formation."

4. UNIT OPERATOR. Newmont Oil Company is hereby designated as Unit Operator and by signature hereto as Unit Operator for the development and production of Unitized Substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interest in Unitized Substances, and the term "Working Interest Owner" when used herein shall include or refer to Unit Operator as the

owner of a working interest when such interest is owned by it.

The term "Working Interest Owner," as used herein shall mean the owner of such an interest committed hereto as may be obligated to pay or bear, either in cash or out of production, or otherwise, a portion of all costs and expenses of drilling, developing, producing and operating the Unitized Land under this agreement and the Unit Operating Agreement.

The term "Royalty Interest Owner," as used herein shall mean a party who owns a right to or interest in any portion of the Unitized Substances or proceeds thereof, other than a Working Interest Owner.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six (6) months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, Commissioner and the Commission, unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

The Unit Operator shall be subject to removal by at least two committed working interest owners owning at least seventy-five per cent (75%) of the voting interests, based on the percentage participations assigned to tracts in the participating area, exclusive of the working interest owner who is the Unit Operator. Such removal shall be effective upon notice thereof to the Director and Commissioner.

In all such instances of resignation or removal, until a successor Unit Operator is selected and approved, as hereinafter provided, the working interest owners shall be jointly responsible for the performance of the duties of Unit Operator and shall, not later than 30 days before such resignation or removal becomes effective, appoint a common agent to represent them in any action to be taken hereunder.

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

6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator, or shall be removed as hereinabove provided, the working interest owners shall, by majority vote based on the percentage participations assigned to tracts in the participating area, select a successor Unit Operator; provided that if a majority but less than seventy-five per cent (75%) of the working interest owners qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners shall be required to select a new Operator and provided, further, no working interest owner who has just been removed as the Unit Operator may vote for self-succession.

Such selection shall not become effective until (a) Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator, and (b) the selection shall have been approved by the Director and Commissioner.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. All costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the working interest owners in accordance with the agreement or agreements entered into by and between the Unit Operator and the working interest owners, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator, as provided in this section, whether one or more, are herein referred to as the "Unit Operating Agreement." Such Unit Operating Agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by the Unit Operator and the working interest owners; however, no such Unit Operating Agreement shall be deemed either to modify the terms and conditions of this Unit Agreement or to relieve the Unit Operator of any right or obligation established under this Unit Agreement, and in case of any inconsistency or conflict between the Unit Agreement and the Unit Operating Agreement, this Unit Agreement shall prevail. Three (3) true copies of any Unit Operating Agreement executed pursuant to this section shall be filed with the Supervisor and two (2) true copies filed with the Commissioner, prior to approval of this Agreement.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto including surface rights, which are necessary or convenient for the prospecting for, producing, storing, allocating and distributing the unitized substances are hereby granted and delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this Agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease, or to any operating agreement or to any royalty or working interest, it being understood that under this Agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. DISCOVERY. Inasmuch as wells capable of producing unitized substances in paying quantities (to-wit: quantities sufficient to repay the cost of drilling and producing operations with a reasonable profit) from the Loco Hills Grayburg No. 4 Sand have already been drilled, tested and completed within the Unit Area and production in paying quantities is currently being taken therefrom, no initial test well is required under the terms of this Unit Agreement. The respective working interest owners as to the NW/4SE/4 of Section 7 and the NE/4 SW/4 of Section 12, both in Township 18 South, Range 29 East, agree to drill wells upon said tracts prior to the time said tracts can reasonably be expected to respond from any water injection and such working interest owners agree that said tracts shall not be entitled to participate until such time as said wells have been completed and are capable

of production.

10. PLAN OF OPERATION. It is recognized and agreed by the parties hereto that the object and purpose of this Agreement is to formulate and to put into effect a secondary recovery project in order to effect the greatest recovery of unitized substances, prevent waste and conserve natural resources. The Unit Operator is authorized to inject gas, oil, liquefied petroleum gas, brine, water or a combination of said substances and any one or more of said substances, irrespective of where said substances are produced, into the Grayburg No. 4 Sand through any well or wells now or hereafter completed therein; provided, however, that the above operations may be conducted by Unit Operator only in accordance with a plan of operation approved by the working interest owners, Supervisor, Commissioner and the Commission. Insofar as the parties hereto have the power and authority, they grant to the Unit Operator the use of brine or water or both from any formation within the Unit Area for injecting into the Grayburg No. 4 Sand.

On or before the effective date of this agreement, Unit Operator shall submit for the approval of the Supervisor, Commissioner and Commission an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor, Commissioner and the Commission, shall constitute the further drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Supervisor, Commissioner and Commission a plan or plans for an additional specified period for the development and operation of the unitized land. Said initial plan and all revisions thereof shall be as complete and

adequate as the Supervisor and Commissioner may determine to be necessary for timely operations and development consistent herewith. Said plan or plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of development and operation. After the effective date hereof, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor, Commissioner and Commission, shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION. The lands platted on Exhibit "A" and described in Exhibit "B" hereto are recognized as reasonably proved to be productive of unitized substances in paying quantities and are hereby designated and fixed as the "initial participating area."

In said Exhibit "B", attached hereto and made a part hereof, there is listed and numbered the various tracts within the initial participating area, and set opposite each tract is a figure which represents the percentage participation to which such tract shall be entitled if all of said tracts are committed hereto as of the effective date of this agreement. In the event less than all tracts within the initial participating area are committed hereto as of the effective date of this Agreement, Unit Operator, as soon as practicable after the effective date of this agreement shall file with the Supervisor, Commissioner and Commission a schedule of those tracts within the initial participating area committed hereto as of said effective date, which said schedule shall be designated "Revised Exhibit B" and considered for all purposes as a part

of this agreement. Such Revised Exhibit "B" shall set forth opposite each such committed tract within the initial participating area a revised percentage participation therefor, which shall be calculated by applying the proportion that the total of the committed tract percentage participation factors bear to each of the committed tract percentage participation factors as they are now set out in Exhibit "A", so that the revised percentage participations of the respective tracts will remain in the same ratio one to the other. Such Revised Exhibit "B" unless disapproved by the Director, Commissioner or Commission within 30 days after filing, shall supersede, effective as of the effective date hereof, the percentage participations set forth in Exhibit "C" attached hereto until a further revision or revisions thereof are filed with and approved by the Director, Commissioner and Commission as hereinafter provided. The percentage participation for each tract as shown on Exhibit "B" attached hereto was determined entirely by the total cumulative oil production of each tract and such percentage participation factors, or as may be shown on the Revised Exhibit "B", as above provided, shall govern the allocation of production on and after the effective date of this Unit Agreement until the participating area is revised and the revised percentage participations are filed with and approved by the Director, Commissioner and Commission as hereinafter provided.

Whenever it appears proper to revise the initial participating area to include land then regarded as reasonably proven to be productive of unitized substances in paying quantities or determined to be essential to unit operations, the Unit Operator and the working interest owner or owners of such tracts shall meet and seek to determine, on the basis of estimated recoverable reserves of unitized substances, the

tract percentage participation factor that should be assigned to such tract. If and when such parties agree upon the tract participation percentage factor that should be assigned to such tract the Operator shall submit the matter of revision of the participating area and the percentage participation factors to be assigned to each new tract proposed to be included in the revised participating area, to the working interest owners in the participating area prior to such enlargement. If 75% of the voting interests of such working interest owners approve the revision and tract participating factors then, subject to the approval of the Director, Commissioner and Commission, the participating area shall be revised and the participating percentage for each tract in the enlarged participating area shall be revised, provided, however, that in any such revision the revised percentage participation of the respective tracts which were participating prior to such revision shall remain in the same ratio one to another. Unit Operator shall, within eight (8) months from and after the official date of completion of a unit well occasioning a revision of the participating area, file with the Director, Commissioner and the Commission appropriate instruments outlining and establishing the revised participating area occasioned by such well. The effective date of any enlargement or contraction of the participating area shall be determined by the Unit Operator, subject to the approval of the Director, Commissioner and Commission, in advance of the vote by the working interest owners to consider a revision of the participating area. No land shall be excluded from a participating area on account of depletion of the unitized substances. It is the intent of this section that the participating area shall be comprised of adjoining parcels of land consisting of one or

more Government survey quarter-quarter sections, or lot equivalents in instances of irregular surveys, on each of which parcels there is a well capable of producing unitized substances in paying quantities or which, in the absence of such well thereon, are nevertheless determined to be essential for unit operations; but regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the revision of the participating area.

In the absence of agreement at any time between the Unit Operator and the Director, Commissioner and Commission as to the proper definition or redefinition of a participating area, the portion of all payment affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due (a) the United States and, (b) the State of New Mexico, which shall be determined by the Supervisor and the Commissioner, respectively, to be held as unearned money until a participating area as revised is finally approved and then applied as earned or returned in accordance with determination of the sum due as Federal and State royalty on the basis of such revised and approved participating area.

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

well shall be made as provided in the Unit Operating Agreement.

If, subsequent to the effective date of this agreement, any additional tract within the initial participating area becomes committed hereto under the provisions of Section 28 hereof, or any committed tract within the initial participating area is excluded herefrom under the provisions of Section 27, Unit Operator shall revise Exhibit "E" to show the new percentage participations of the committed tracts in the initial participating area, which revised Exhibit shall, upon its filing and approval by the Director, Commissioner and Commission, supersede as of its effective date, the last previously effective Exhibit "E". In any such revision of Exhibit "E" the revised percentage participations of the respective tracts which were committed hereto prior to such revision shall remain in the same ratio one to another.

12. ALLOCATION OF PRODUCTION. For the purpose of determining any and all benefits accruing under this Agreement each tract committed hereto within the participating area shall have allocated to it a proportion, equal to its percentage participation of all unitized substances produced from the unitized land except any part thereof used in conformity with good operating practices within the participating area for drilling, operating, camp and other production or development purposes for pressure maintenance or secondary recovery operations in accordance with a plan of operation approved by the Supervisor, Commissioner and Commission, or unavoidably lost. The amount of unitized substances allocated to each tract in the participating area shall be deemed to be produced from such tract. It is hereby agreed that production of unitized substances from any part of the participating area shall be allocated as provided herein regardless of whether oil or gas is being produced from any particular tract

committed hereto. If the working interests or the royalty interests in any committed tract are divided with respect to separate parcels or portions of such tract and owned severally by different persons, the percentage participation assigned to such tract shall, in the absence of a recordable instrument among all owners fixing the division of ownership, be divided among such parcels or portions in proportion to the number of surface acres in each.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND. Any party or parties hereto owning or controlling the working interest or a majority of the working interest in any unitized land having thereon a regular well location may, with the approval of the Supervisor as to Federal land and the Commissioner as to State land, and subject to the provisions of the Unit Operating Agreement, at such party's sole risk, cost and expense, drill or work over a well to test the Grayburg No. 4 Sand formation if such location is not within a participating area.

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

If any well drilled or worked over, as aforesaid, by a working interest owner obtains production of unitized substances in quantities insufficient to justify the inclusion in a participating area of the land upon which such well is situated, such well may be operated and produced by the party drilling or working over the same subject to the conservation

requirements of this Agreement. The royalties in amount or value of production from any such well shall be paid as specified in the underlying lease and agreements affected.

14. ROYALTY SETTLEMENT. The United States and the State of New Mexico and all royalty owners who, under existing substances produced from any tract, shall hereafter be entitled to take in kind their share of the unitized substances allocated to such tract, and Unit Operator shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for royalty interests not taken in kind shall be made by working interest owners responsible therefor under existing contracts, laws and regulations on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases except that said royalties shall be computed in accordance with the terms of this agreement.

If gas obtained from lands not subject to this agreement is introduced into the unitized land for use in pressure maintenance, stimulation of production or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor, Commissioner and Commission, a like amount of gas, less appropriate deductions for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal shall be pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor and the Commissioner; and, provided further, that such right of withdrawal shall terminate on the termination of this agreement. If

liquified petroleum gases obtained from lands or formations not subject to this agreement be injected into the unitized land for the purpose of increasing ultimate recovery, which shall be in conformance with a plan first approved by the Supervisor and Commissioner, part of all of such liquefied petroleum gases may be withdrawn royalty free pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor and Commissioner.

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

Royalty due on account of State lands shall be computed and paid on the basis of all unitized substances allocated to such lands, in lieu of actual production from such lands.

15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their leases. Rental or minimum royalty for lands of the United States subject to this agreement shall be paid at the rate specified in the respective

leases from the United States unless such rental or minimum royalty is waived, suspended or reduced by law or by approval of the Secretary of the Interior or his duly authorized representative.

Rentals on State of New Mexico lands subject to this agreement shall be paid at the rate specified in the respective leases, or may be reduced or suspended under the order of the Commissioner pursuant to applicable laws and regulations.

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

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

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operation for oil or gas of lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary as to Federal leases and the Commissioner as to State leases shall and each by his approval hereof, or by the approval hereof by his duly authorized representative, does hereby establish, alter, change or revoke the drilling, producing, rental,

minimum royalty and royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement, and without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

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

(b) Drilling and producing operations performed hereunder upon any tract of unitized lands will be accepted and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

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

(d) Each lease, sublease or contract relating

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

(e) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the land committed so long as such lease remains subject hereto.

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

(g) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Section 17 (b) of the Act, as amended by the Act of July 29, 1954, (68 Stat. 583, 585): "Any Federal lease

hereafter committed to any such unit plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization: Provided, however, that any such lease as to the nonunitized portion shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities."

(h) Any lease embracing lands of the State of New Mexico which is made subject to this Agreement shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof.

(i) Any lease embracing lands of the State of New Mexico having only a portion of its land committed hereto, shall be segregated as to the portion committed and as to the portion not committed, and the terms of such lease shall apply separately as to such segregated portions commencing as of the effective date hereof. Notwithstanding any of the provisions of this agreement to the contrary, any lease embracing lands of the State of New Mexico having only a portion of its land committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced in such lease (whether within or without the Unit Area),
(i) if, and for so long as Unitized Substances are capable of being produced in paying quantities from some part of the lands embraced in such lease com-

mitted to this agreement, or (ii) if, and for so long as some part of the lands embraced in such State lease are included in the Participating Area; or (iii) if, at the expiration of the secondary term, the lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced therein and for so long as such operations are being diligently prosecuted, and if they result in the production of United Substances, said lease shall continue in full force and effect as to all of the lands embraced therein, as provided in (i) or (ii) above.

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

20. EFFECTIVE DATE AND TERM. This agreement shall become effective upon approval by the Director and Commissioner, or their duly authorized representatives, as of the first day

of the month following the date of approval by the Director and the Commissioner and shall remain in effect so long as unitized substances can be produced from the unitized land in paying quantities, i.e. in this particular instance, in quantities sufficient to pay for the cost of producing same, and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production and so long thereafter as such unitized substances can be produced as aforesaid. This agreement shall remain in effect during any period of suspension approved by the Director and the Commissioner as provided for in Section 18 (c) hereof.

This Agreement may be terminated at any time by the working interest owners whose voting interests aggregate not less than ninety percent (90%), subject to the approval of the Director and the Commissioner; notice of any such approval shall be given by Unit Operator to all parties hereto.

Upon termination of this Agreement, the further development and operation of the Unit Area as a unit shall be abandoned, unit operations shall cease and thereafter the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate tracts.

If not otherwise covered by the leases unitized under this Agreement, royalty owners hereby grant working interest owners a period of six (6) months after termination of this Agreement in which to salvage, sell, distribute or otherwise dispose of the personal property and facilities used in connection with unit operations.

21. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION.

The Director is hereby vested with authority to alter or modify from time to time in his discretion the quantity and rate of production under this Agreement when such quantity and rate is not fixed pursuant to Federal or State law or does not conform

to any state-wide voluntary conservation or allocation program, which is established, recognized, and generally adhered to by the majority of operators in such State, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time in his discretion the rate of prospecting and development and the quantity and rate of production under this agreement when such alteration or modification is in the interest of attaining the conservation objectives stated in this agreement and is not in violation of any applicable Federal or State Law. It is agreed, further, that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Commissioner and as to the quantity and rate of production in the absence of specific written approval thereof by the Commission.

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

22. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department of the Interior and the Commission and to appeal from orders issued under the regulations of said department and/or Commission or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commission or other legally constituted

authority; provided, however, that any other interested party shall also have the right, at his own expense, to be heard in any such proceeding.

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

24. NO WAIVER OF CERTAIN RIGHTS. Nothing in this Agreement contained shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State of New Mexico or of the United States or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

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

26. FAIR EMPLOYMENT. In connection with the performance of work on Federal lands under this Agreement, the Operator agrees not to discriminate against any employee or applicant for employment because of race, religion, color or national origin. The aforesaid provision 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 hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of the non-discrimination clause.

The Operator agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

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

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

28. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial interest is a tract within the Unit Area fails or refuses to subscribe or consent to this Agreement, the owner of the working interest in that tract may withdraw said tract from this Agreement by written notice to the Director, the Commissioner and the Unit Operator prior to the approval of this Agreement by the Director. Any such tract effectively committed as to the working interest and not so withdrawn shall be considered unitized, and any necessary adjustments of royalty occasioned by failure of the royalty and record owner to join will be for the account of the corresponding working interest owner. Any oil or gas interest in lands within the Unit Area not committed hereto prior to submission hereto by the owner or owners thereof subscribing or consenting to this Agreement and, if the interest is a working interest, by the owner of such interest also subscribing to the Unit Operating Agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is subject to such requirements or approvals, if any, pertaining to such joinder, as may be provided for in the Unit Operating Agreement. After final approval hereof, joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. Joinder by any owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as effectively committed hereto. Joinder to the Unit Agreement by a working interest

owner, at any time, must be accompanied by appropriate joinder to the Unit Operating Agreement if more than one committed working interest owner is involved, in order for the interest to be regarded as effectively committed to this Unit Agreement. Except as may otherwise herein be provided, subsequent joinders to this Agreement shall be effective as of the first day of the month following the filing with the Supervisor and the Commissioner of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this Agreement unless objection to such joinder is duly made within sixty (60) days by the Director or the Commissioner.

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

30. TAXES. The working interest owners shall render and pay for their account and the account of the royalty owners all valid taxes on or measured by the unitized substances in and under or that may be produced, gathered and sold from the land subject to this contract after the effective date of this Agreement, or upon the proceeds or net proceeds derived therefrom. The working interest owners of each tract shall and may charge the proper proportion of said taxes to the royalty owners having interest in said tract, and may currently retain and deduct sufficient of the unitized

substances or derivative products, or net proceeds thereof from the allocated share of each royalty owner to secure reimbursement for the taxes so paid. No such taxes shall be charged to the United States or the State of New Mexico or to any lessor who has a contract with his lessee which requires the lessee to pay such taxes.

31. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the working interest owners or any of them shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provisions thereof to the extent that the said Unit Operator, working interest owners or any of them are hindered, delayed or prevented from complying therewith by reason of the failure of the Unit Operator to obtain, in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or things concerning which it is required herein that such concurrence be obtained. The parties hereto, including the Commission, agree that all powers and authority vested in the Commission in and by any provisions of this contract are vested in the Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

32. NO PARTNERSHIP. It is expressly agreed that the relation of the parties hereto is that of independent contractors and nothing in this agreement contained, express or implied, or any operations conducted hereunder, shall create or be deemed to have created a partnership or association

between the parties hereto or any of them.

33. BORDER AGREEMENTS. Subject to the approval of the Director and the Commissioner, the Unit Operator, with concurrence of sixty-five per cent (65%) of the working interest owners may enter into a border-protection agreement or agreements with the working interest owners of adjacent lands along the exterior boundary of the Unit Area with respect to the operations in the border area for the maximum ultimate recovery, conservation purposes and proper protection of the parties and interests.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written and have set opposite their respective names the date of execution and the address of each of the respective executing parties.

UNIT OPERATOR AND WORKING INTEREST OWNER
NEWMONT OIL COMPANY

By _____
President

ATTEST:

Secretary

Date of Signature: _____

R - 29E

R - 30E

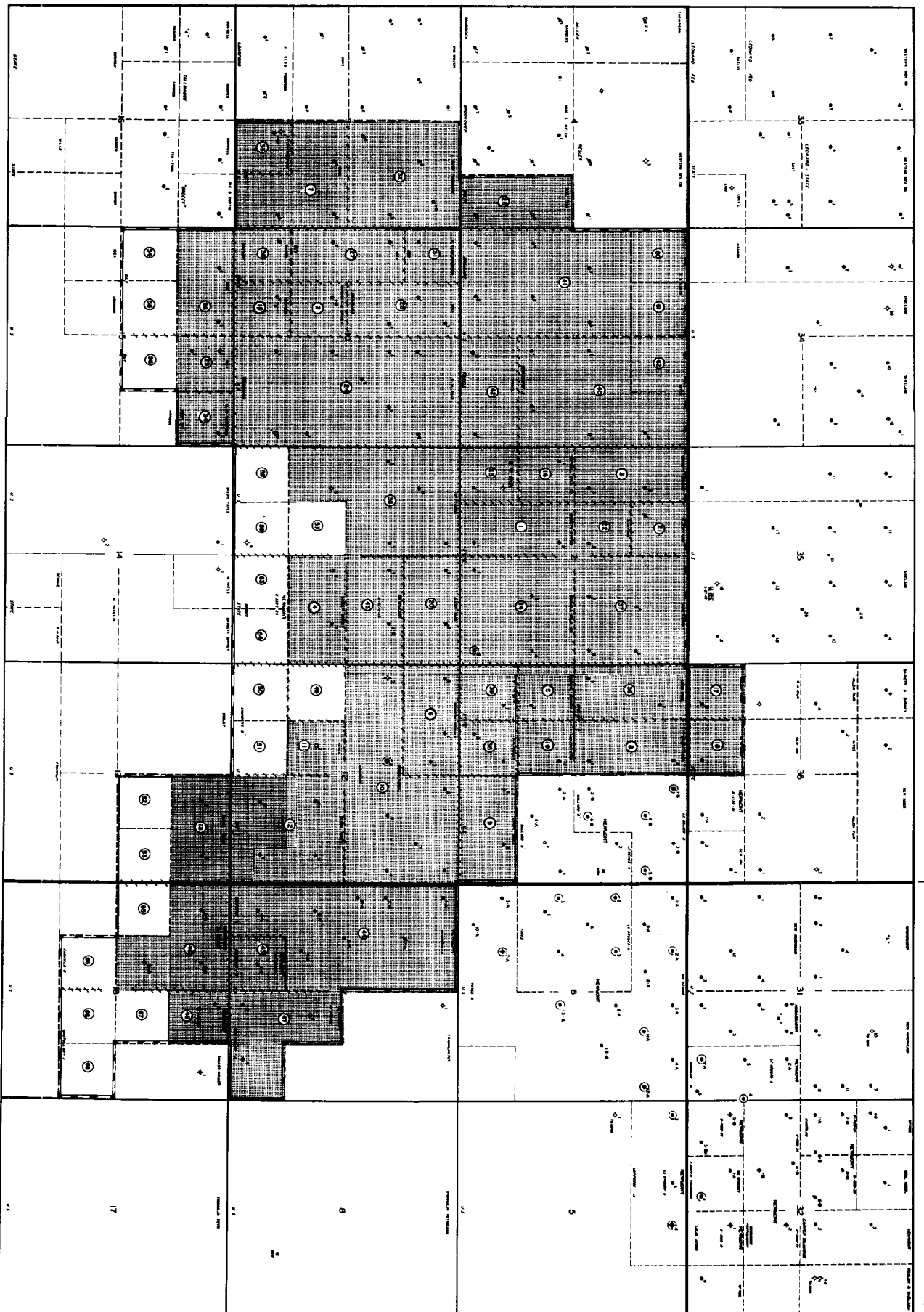


EXHIBIT
ATTACHED TO UNIT AGREEMENT
WEST LOCO HILLS UNIT
EDDY COUNTY, NEW MEXICO

LOCO HILLS
NEWPORT OIL COMPANY
EDDY COUNTY, NEW MEXICO

LEGEND
UNIT BOUNDARY
TRACT BOUNDARY
TRACT NUMBER
PARTICIPATING AREA

Legend
UNIT BOUNDARY
TRACT BOUNDARY
TRACT NUMBER
PARTICIPATING AREA

EXHIBIT B

West Loco Hills Unit
Eddy County, New Mexico

Working Interest Owner	Tract No.	Description	Acreage	Cumulative Production to 12-1-60	Tract Per Cent Participation in Unit	Total Unit Per Cent Participating
<u>Participating Acreage - 4,480 Acres</u>						
Bassett and Birney	1	E/2 SW/4 Section 2-18S-29E	80	218,385	2.4064	5.8357
	2	NE/4 SW/4 Section 10-18S-29E	40	118,446	1.3052	
	3	W/2 NW/4 Section 2-18S-29E	80	108,569	1.1964	
	4	N/2 SE/4 Section 11-18S-29E	80	84,184	0.9277	
	5	NW/4 SW/4 Section 1-18S-29E	40	130,700	1.4402	
	6	N/2 NW/4 Section 12-18S-29E	80	142,760	1.5731	
	7	N/2 SE/4 Section 9-18S-29E	120	265,287	2.9233	
	8	SE/4 SE/4 Section 9-18S-29E	80	225,468	2.4845	
	9	E/2 NW/4 Section 1-18S-29E	80	261,976	2.8868	
	10	S/2 SE/4 Section 1-18S-29E	80			
Dixon-Yates		NE/4 & S/2 NW/4				2.9233
		Section 12-18S-29E	240	459,571	5.0642	
	11	NE/4 SW/4 Section 12-18S-29E	40	65,550 *	0.7223	
	12	SE/4 Section 12-18S-29E	160	369,046	4.0666	
	13	N/2 NE/4 Section 13-18S-29E	80	38,542	0.4247	
	14	SE/4 Section 2-18S-29E	160	353,495	3.8953	
	15	NW/4 SW/4 Section 2-18S-29E	40	113,013	1.2453	
	16	SE/4 SW/4 Section 10-18S-29E	40	91,549	1.0088	
	17	SW/4 SW/4 Section 36-17S-29E	40	78,781	0.8681	
	18	SE/4 SW/4 Section 36-17S-29E	40	122,470	1.3495	
Donnell Drilling Co.	19	NE/4 SW/4 Section 1-18S-29E	40	123,924	1.3656	6.1494
	20	N/2 NE/4 Section 11-18S-29E	80	157,604	1.7367	
	21	NE/4 NW/4 Section 2-18S-29E	40	13,014	0.1434	
	22	SE/4 NW/4 Section 2-18S-29E	40	112,292	1.2374	
	23	SW/4 SW/4 Section 2-18S-29E	40	46,553	0.5130	
	24	E/2 Section 10-18S-29E	320	526,898	5.8061	
	25	E/2 SE/4 Section 4-18S-29E	80	148,533	1.6367	
	26	E/2 NW/4 Section 10-18S-29E	80	179,454	1.9775	
	27	SW/4 NW/4 and NW/4 SW/4				
		Section 10-18S-29E	80	175,131	1.9298	14.6565
Fair	28	N/2 NW/4 Section 15-18S-29E	80	101,219	1.1154	
	29	NW/4 NE/4 Section 15-18S-29E	40	22,901	0.2523	
Graridge						5.2750

<u>Working Interest Owner</u>	<u>Tract No.</u>	<u>Description</u>	<u>Acreage</u>	<u>Cumulative Production to 12-1-60</u>	<u>Tract Per Cent Participation in Unit</u>	<u>Total Unit Per Cent Particip</u>
Loco Hills Pressure Maintenance	30	SW/4 SW/4 Section 10-18S-29E	40	53,522	0.5898	0.5898
J. Cleo Thompson	31	NW/4 NW/4 Section 10-18S-29E	40	87,058	0.9593	
	32	NE/4 Section 9-18S-29E	160	295,784	3.2594	
	33	SW/4 SE/4 Section 9-18S-29E	40	88,496	0.9752	
Van S. Welch	34	NE/4 NE/4 Section 15-18S-29E	40	6,246	0.0688	5.2627
Yates Brothers	35	SE/4 SW/4 Section 1-18S-29E	40	146,480	1.6141	1.6141
	36	W/2 NW/4 Section 1-18S-29E	80	222,503	2.4518	
	37	NE/4 Section 2-18S-29E	160	376,710	4.1511	
	38	NW/4 and NW/4 SW/4 Section 11-18S-29E	200	354,410	3.8723	10.4752
Martin Yates	39	SW/4 SW/4 Section 1-18S-29E	40	130,682	1.4400	1.4400
S. P. Yates	40	S/2 NE/4, NE/4 NE/4 & N/2 SE/4 Section 3-18S-29E	200	288,186	3.1756	
	41	SW/4 and S/2 NW/4 Section 3-18S-29E	240	444,766	4.9010	
	42	S/2 SE/4 Section 3-18S-29E	80	124,305	1.3698	9.4464
Newmont	43	S/2 NE/4 Section 11-18S-29E	80	220,574	2.4306	
	44	W/2 Section 7-18S-30E				
		Except SE/4 SW/4	280	850,440	9.3713	
	45	SE/4 SW/4 Section 7-18S-30E	40	110,358	1.2161	
	46	N/2 NW/4 and SE/4 NW/4 Section 18-18S-30E	120	159,966	1.7627	
	47	S/2 SE/4 and NW/4 SE/4 Section 7-18S-30E	120	200,345 **	2.2077	
		NW/4 NE/4 Section 18-18S-30E	40	61,815	0.6811	
	48		4,480	9,074,961	100.0000	17.6695
<u>Non-Participating Acreage - 840 Acres</u>						100.0000
Dixon-Yates	49	NW/4 SW/4 Section 12-18S-29E	40			
	50	SW/4 SW/4 Section 12-18S-29E	40			
	51	SE/4 SW/4 Section 12-18S-29E	40			
	52	SW/4 NE/4 Section 13-18S-29E	40			
	53	SE/4 NE/4 Section 13-18S-29E	40			
Graridge	54	SW/4 NW/4 Section 15-18S-29E	40			
	55	SE/4 NW/4 Section 15-18S-29E	40			
	56	SW/4 NE/4 Section 15-18S-29E	40			

<u>Working Interest Owner</u>	<u>Tract No.</u>	<u>Description</u>	<u>Acreage</u>	<u>Cumulative Production to 12-1-60</u>	<u>Tract Per Cen Participation in Unit</u>
Yates Brothers	57	NE/4 SW/4 Section 11-18S-29E	40		
	58	SW/4 SW/4 Section 11-18S-29E	40		
	59	SE/4 SW/4 Section 11-18S-29E	40		
	60	NW/4 NW/4 Section 3-18S-29E	40		
S. P. Yates	61	NE/4 NW/4 Section 3-18S-29E	40		
	62	NW/4 NE/4 Section 3-18S-29E	40		
	63	SW/4 SE/4 Section 11-18S-29E	40		
	64	SE/4 SE/4 Section 11-18S-29E	40		
Newmont	65	SW/4 NW/4 Section 18-18S-30E	40		
	66	NE/4 SW/4 Section 18-18S-30E	40		
	67	SW/4 NE/4 Section 18-18S-30E	40		
	68	NW/4 SE/4 Section 18-18S-30E	40		
	69	NE/4 SE/4 Section 18-18S-30E	40		
			<u>840</u>		

* Includes estimated 65,550 barrels for undrilled location NE SW Section 12-18S-29E.
 ** Includes estimated 52,095 barrels for undrilled location NW SE Section 7-18S-30E.

NEWMONT OIL COMPANY

1135 TEXAS NATIONAL BANK BUILDING

1300 MAIN • AT POLK

HOUSTON, TEXAS 77002

December 6, 1963

CHARLES C. LANGDON
VICE PRESIDENT
LAND AND LEGAL

RECEIVED 1963

1963 DEC 9 AM 8 27

2472

Mr. A. L. Porter, Jr.
Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

In Re: Case No. 2472
Order No. R-2166 dated
1-17-62, West Loco Hills
Grayburg No. 4 Sand Unit,
Eddy County, New Mexico

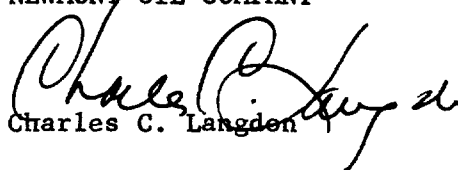
Dear Mr. Porter:

In connection and in compliance with the captioned Order,
we hand to you herewith a Ratification of the Unit Agreement executed
by the following parties, to-wit:

J. Eustace Guest
Estate of Fayette B. Dow, Deceased
Mrs. Cecile Mann
Bert H. Murphy
Josephine D. Hawley
Eudora Hawley Heilman, Widow
Cordellia Williamson
John Lucas
R. F. Travis, Sr.

Very truly yours,

NEWMONT OIL COMPANY


Charles C. Langdon

CCL:lh
Enclosures

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2-A, 2-B, 2-C

J. Enolate Smith

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF Dallas.) ss.

The foregoing instrument was acknowledged before me this 7 day
of October, 1963, by J EUSTACE GUEST

~~and his wife,~~ _____

My Commission Expires:

June 1, 1965

E. H. Prew
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

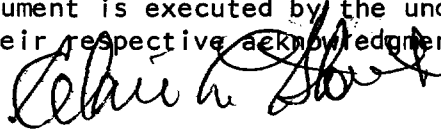
That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

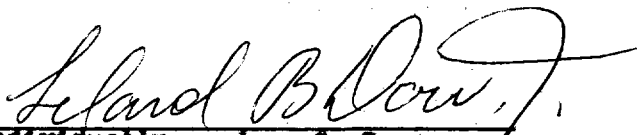
TRACT(S) 1, 2-A & 22



Co-Executor of the Estate of
Fayette B. Dow, Deceased

INTEREST COMMITTED:

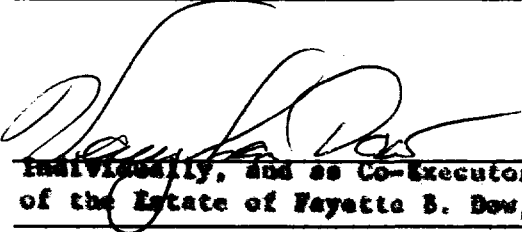
TRACT(S) 1, 2-A & 22



Individually, and as Co-Executor
of the Estate of Fayette B. Dow, Deceased

INTEREST COMMITTED:

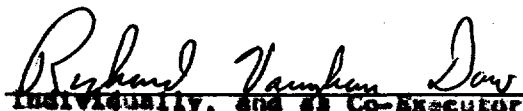
TRACT(S) 1, 2-A & 22



Individually, and as Co-Executor
of the Estate of Fayette B. Dow, Deceased

INTEREST COMMITTED:

TRACT(S) 1, 2-A & 22



Individually, and as Co-Executor
of the Estate of Fayette B. Dow, Deceased

INTEREST COMMITTED:

TRACT(S) _____

~~STATE OF~~ ~~NEW YORK~~)
~~COUNTY OF~~ ~~ALBANY~~)

SS.

The foregoing instrument was acknowledged before me this 20th day
of September, 1963, by Clair L. Stout
~~in the capacity therein stated~~ in the capacity therein stated

My Commission Expires:

Sept. 14, 1966

Dorothy E. Jones
NOTARY PUBLIC

STATE OF NEW YORK)
COUNTY OF ALBANY)

SS.

The foregoing instrument was acknowledged before me this 23rd day
of September, 1963, by Isabel B. Dow, Jr.
~~in the capacity therein stated~~ in the capacity therein stated

My Commission Expires:

6/16/65

Jessie B. Gregory
NOTARY PUBLIC

STATE OF NEW YORK)
COUNTY OF ALBANY)

SS.

The foregoing instrument was acknowledged before me this 23rd day
of September, 1963, by Vernon Dow
~~in the capacity therein stated~~ in the capacity therein stated

My Commission Expires:

6/16/65

Jessie B. Gregory
NOTARY PUBLIC

STATE OF NEW YORK)
COUNTY OF ALBANY)

SS.

The foregoing instrument was acknowledged before me this 30th day
of September, 1963, by Richard Vernon Dow
~~in the capacity therein stated~~ in the capacity therein stated

My Commission Expires:

65

Richard Vernon Dow
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____)

SS.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2-A AND 2-B

Mrs. Cecile Mann

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF HIDALGO) ss.

The foregoing instrument was acknowledged before me this 17 day
of June, 1967, by MRS. CECILE MANN

~~XXXXXX~~, _____

My Commission Expires:

June 1, 1968

R. W. Pierson

NOTARY PUBLIC

R. W. PIERSON
NOTARY PUBLIC IN AND FOR
HIDALGO COUNTY, TEXAS

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 1, 2A, 2B, 2C,
21A, 21B, 22, 30, 35

INTEREST COMMITTED:

TRACT(S) ATTEST
By: [Signature]
Assistant Cashier

#399 24 3371
[Signature]
Martha M. Murphy
c/o Fort Worth National Bank
Fort Worth, Texas
The Fort Worth National Bank
FORT WORTH, TEXAS

[Signature]
asst. Vice Pres.

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

For acknowledgments, see reverse side.

^{UNIT AGREEMENT}
This division order is executed by the Fort Worth National Bank as a lienholder without guarantee or warranty on its part, either expressed or implied.

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 12th day
of June, 1963, by Bert H. Murphy

and his wife, Martha R. Murphy

My Commission Expires:

August 28, 1965

Guanta Brannum
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF Texas)
COUNTY OF Tarrant) ss.

The foregoing instrument was acknowledged before me this 18 day
of June, 1962, by Peter A. MacQueen

My Commission Expires:

My Commission Expires June 1, 1965

Pat Kniffin
NOTARY PUBLIC

PAT KNIFFIN, Notary Public
Tarrant County, Texas

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 9

John Lucas
Eva G. Lucas

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS

County of Ellis) ss

The foregoing instrument was acknowledged before me this

13

June day of ~~May~~, 1963, by John Lucas, and his wife

Ana G. Lucas

My Commission Expires

June - 1 - 1965

H. G. Alley
Notary Public

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 9

R. B. Toward
Nellie Brooks Toward RFT, SR.

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)

County of El Paso)

ss

The foregoing instrument was acknowledged before me this

8th day of July, 1963, by R. F. Travis, Sr., and

his wife

Netta L. Travis

My Commission Expires:

Maulyn R. LaRue
Notary Public

June 1, 1964

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 9

Josephine D. Hawley
Josephine D. Hawley, a widow ^{JDH}

INTEREST COMMITTED:

TRACT(S) _____

~~EDH~~

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico }
COUNTY OF Bernalillo } ss.

The foregoing instrument was acknowledged before me this 17 day
of June, 1963, by Josephine D. Hawley, widow
and his wife, _____

My Commission Expires:
June 11, 1966

William J. Rughan
NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 9

Eudora Hawley Heilman
EHH
Widow

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF California)
COUNTY OF Los Angeles) ss.

The foregoing Instrument was acknowledged before me this 18 day
of June, 1963, by Eudora H. Heilman
~~and her husband~~

My Commission Expires:

My Commission Expires March 18, 1967,


NOTARY PUBLIC
W. V. DEITWEILER

NOTARY PUBLIC in and for the County
of Los Angeles, State of California.

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2-A, 2-B & 2-C

Karl E. Williamson
Cordellia Williamson

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF WISCONSIN)
COUNTY OF MILWAUKEE) ss.

The foregoing instrument was acknowledged before me this 12 day
of JUNE, 1962, by KARL E. WILLIAMSON
and his wife, CORDELIA WILLIAMSON.

My Commission Expires:

PERMANENT

Stewart K. Kasper
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

2472

NEWMONT OIL COMPANY

FORT WORTH NATIONAL BANK BUILDING

FORT WORTH 2, TEXAS

July 26, 1963

Mr. A. L. Porter, Jr.
Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

In Re: Case No. 2472
Order No. R-2166
West Loco Hills Grayburg No. 4
Sand Unit, Eddy County,
New Mexico

Dear Mr. Porter:

In compliance with the above captioned Order, which was dated January 17, 1962, enclosed please find an executed counterpart of the West Loco Hills Grayburg No. 4 Sand Unit Agreement which became effective according to its terms with the effective date being July 1, 1963. Attached to said Unit Agreement are Certificates reflecting that same was approved by the Commissioner of Public Lands of the State of New Mexico on June 5, 1963 and on behalf of the Director of the United States Geological Survey on June 27, 1963.

If it is necessary for us to furnish any additional information or to take any further action at this time in connection with this matter, kindly advise.

Very truly yours,

NEWMONT OIL COMPANY



Ted Long

TL:rm

Encl.

CERTIFICATION - DETERMINATION

14-08-0001 85 28

Pursuant to the authority vested in the Secretary of Interior, under the act approved February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. secs. 181, et seq., and delegated to the Director of the Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, I do hereby:

A. Approve the attached agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit Area, State of New Mexico.

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

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

JUN 27 1963

Dated _____.



Acting Director, United States Geological Survey

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

RECEIVED

JUN - 5 1963

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

THIS AGREEMENT, entered into as of the 17th day of September, 1962, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "parties hereto",

WITNESSETH: That,

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

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 3, Chap. 88, Laws 1943 as amended by Sec. 1 of Chap. 162, Laws of 1951, Chap. 7, Art. 11, Sec. 39, N.M.S. 1953 anno) to consent to or approve this Agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 3, Chap. 88, Laws of 1943, as amended by Sec. 1, Chap. 162, Laws of 1951, Chap. 7, Art. 11, Sec. 41, N.M.S. 1953 anno) to amend with the approval of the lessee, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such unitized development and operation of State lands; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by law (Chap. 72, Laws of 1935, as amended by Chap. 193, Laws of 1937, Chap. 166, Laws of 1941, and Chap. 168, Laws of 1949) to approve this Agreement, and the conservation provisions hereof; and

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

WHEREAS, the parties hereto hold sufficient interests in the West Loco Hills Grayburg No. 4 Sand Unit covering the land hereinafter described to give reasonably effective control of operation therein; and

WHEREAS it is the purpose of the parties hereto, to enable institution and consummation of secondary recovery operations, conserve natural resources, prevent waste and secure the other benefits obtainable through development and operation of the area subject to this Agreement under the terms, conditions and limitations herein set forth.

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this Agreement their entire respective interests in the below defined Unit Area, and agree severally among themselves as follows:

SECTION 1. ENABLING ACT AND REGULATIONS: The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid, pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder

and valid, pertinent and reasonable regulations hereafter issued thereunder are accepted and made a part of this Agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this Agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this Agreement.

SECTION 2. UNIT AREA AND DEFINITIONS: For the purpose of this Agreement, the following terms and expressions as used herein shall mean:

(a) "Unit Area" is defined as those lands specified on Exhibit "A" hereof, and such land is hereby designated and recognized as constituting the Unit Area; the lands described in said Exhibit "A" are described as follows, to-wit:

Township 17 South, Range 29 East, NMPM

Section 36: $S\frac{1}{2}SW\frac{1}{4}$

Township 18 South, Range 29 East, NMPM

Section 1: $W\frac{1}{2}, S\frac{1}{2}SE\frac{1}{4}$

Section 2: All

Section 3: All

Section 4: $E\frac{1}{2}SE\frac{1}{4}$

Section 9: $E\frac{1}{2}$

Section 10: All

Section 11: All

Section 12: All

Section 13: $NE\frac{1}{4}$

Section 15: $N\frac{1}{2}N\frac{1}{2}, S\frac{1}{2}NW\frac{1}{4}, SW\frac{1}{4}NE\frac{1}{4}$

Township 18 South, Range 30 East, NMPM

Section 7: Lots 1, 2, 3, 4,
 $E\frac{1}{2}W\frac{1}{2}, W\frac{1}{2}SE\frac{1}{4}, SE\frac{1}{4}SE\frac{1}{4}$

Section 18: Lots 1, 2, $E\frac{1}{2}NW\frac{1}{4},$
 $W\frac{1}{2}NE\frac{1}{4}, N\frac{1}{2}SE\frac{1}{4}, NE\frac{1}{4}SW\frac{1}{4}$

Containing 5,307.73 acres, more or less.

(b) "Commissioner" is defined as the Commissioner of Public Lands of the State of New Mexico.

(c) "Commission" is defined as the Oil Conservation Commission of the State of New Mexico.

(d) "Director" is defined as the Director of the United States Geological Survey.

(e) "Secretary" is defined as the Secretary of the Interior of the United States of America.

(f) "Department" is defined as the Department of the Interior of the United States of America.

(g) "Supervisor" is defined as the Oil and Gas Supervisor of the United States Geological Survey.

(h) "The Loco Hills Grayburg No. 4 Sand" is defined and shall

mean that heretofore established underground reservoir, the top of which is found at 2767 feet, and the base of which is found at 2792 feet, on the Gamma Ray Neutron Log of the Newmont-Ballard Well No. B-6 located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 1, Township 18 South, Range 29 East, Eddy County, New Mexico, together with Grayburg Sand Stringers encountered at varying intervals between the depths from 100 feet above the top and 50 feet below the bottom of the principal sand body shown by said log, insofar as the same lies within the Unit Area.

(i) "Unitized Formation" is defined as the portion of the Loco Hills Grayburg No. 4 Sand effectively committed to this agreement.

(j) "Unitized Substances" is defined as and shall mean all oil, gas, gaseous substances, sulphur contained in gas, condensate, distillate and all associated and constituent liquids or liquefiable hydrocarbons within or produced from the Unitized Formation.

(k) "Working Interest" is defined as the right to search for, produce and acquire Unitized Substances whether held as an incident of ownership of mineral fee simple title, under an oil and gas lease, or otherwise held.

(l) "Working Interest Owner" is defined and shall mean any party hereto owning a Working Interest, including a carried working interest owner, holding an interest in Unitized Substances by virtue of a lease, operating agreement, fee title or otherwise, which interest is chargeable with and obligated to pay or bear, either in cash or out of production, or otherwise, all or a portion of the cost of drilling, developing and producing the Unitized Substances from the Unitized Formation and operating thereof hereunder.

(m) "Royalty Interest" or "Royalty" is defined as an interest other than a Working Interest in or right to receive a portion of the Unitized Substances or the proceeds thereof and includes the royalty interest reserved by the lessor by an oil and gas lease and any overriding royalty interest, oil payment interest, net profit contracts, or any other payment or burden which does not carry with it the right to search for and produce Unitized Substances.

(n) "Royalty Owner" is defined as and shall mean the owner of a Royalty Interest.

(o) "Unit Operating Agreement" is defined as and shall mean any agreement or agreements (whether one or more) entered into (separately or collectively) by and between the Unit Operator and the Working Interest Owners as provided in Section 10, infra, and shall be styled "Unit Operating Agreement, West Loco Hills Grayburg No. 4 Sand Unit, Eddy County, New Mexico".

(p) "Paying Quantities" is defined as production of Unitized Substances in quantities sufficient to pay for the cost of producing same from wells on the unitized lands.

(q) "Unit Manager" is defined as the person or corporation appointed by the Working Interest Owners to perform the duties of the Unit Operator until the selection and qualification of a successor Unit Operator as provided for in Section 9 hereof.

(r) "Cumulative Oil Production" is defined as that cumulative volume of oil produced and saved from each tract upon which a producing well has been completed prior to December 1, 1960, insofar as such production was reported to the Commission. For each tract upon which a well has not been completed or was completed subsequent to December 1, 1960, which are included within the Unit Area, "Cumulative Oil Production" is defined as that value assigned to each of said tracts by the Working Interest Owners.

(s) "Surface Acres" is defined as the number of acres committed to this Agreement based upon computations on the surface of the earth from courses and distances shown on the last approved public-land survey as of the effective date hereof.

(t) "Tract" means each parcel of land described as such and given a Tract number in Exhibit "B".

(u) "Initial Participating Area" or "Participating Area" shall refer to the total of all tracts within the Unit Area that are entitled to share in the production of Unitized Substances removed, saved or sold from the Unit Area, as shown on Exhibit "A" and described in Exhibit "B" attached hereto.

(v) "Non-participating" shall refer to and mean those tracts not entitled to share in production of unitized substances saved, sold and removed from the Unit Area.

SECTION 3. EXHIBITS: Exhibit "A" attached hereto is a map showing, to the extent known to the Unit Operator, the Unit Area and the boundaries and identity of tracts and leases in said Unit Area. Exhibit "B" attached hereto is a schedule showing, to the extent known to the Unit Operator, the acreage comprising each tract, percentage ownership of each Working Interest Owner in each tract, and the percentage of participation each tract has in the Unit Area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes render such revision necessary (voluntarily or when requested by the Supervisor), and at least two copies of such revision shall be filed with the Commissioner, and not less than six copies thereof shall be filed with the Supervisor.

SECTION 4. EXPANSION: The above described Unit Area may when practicable be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purposes of this Agreement to conform with the purposes of this Agreement. Such expansion shall be effected in the following manner:

(a) The Working Interest Owners or owners of a tract or tracts desiring to bring such tract or tracts into this Unit, shall file an application therefor with the Unit Operator requesting such admission.

(b) Unit Operator shall circulate a notice to each Working Interest Owner of the proposed expansion, setting out the basis for admission, the unit participation to be assigned to such tract or tracts, and other pertinent data. After negotiation (at Working Interest Owners' meeting or otherwise) if 65 percent of the Working Interest Owners (on the basis of unit participation) have agreed to such tract or tracts being brought into the Unit, then Unit Operator shall:

(1) Prepare a notice of proposed expansion describing the contemplated changes in the boundaries of the Unit Area, the reason therefor, the basis for admission of the additional tract or tracts, the unit participation to be assigned thereto and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice; and

(2) Deliver copies of said notice to the Commissioner and the Supervisor and mail a copy of such notice to the last known address of each Working Interest Owner, lessee, and lessor whose interests are affected, advising that thirty (30) days will be allowed for submission to the Unit Operator of any objection to such proposed expansion; and

(3) Upon the expiration of said thirty (30) day period as set out in (2) immediately above and provided that objections of not more than 10 percent of the previously committed Working Interest Owners have been filed thereto, file with the Commissioner, the Commission and the Supervisor the following: (a) Comprehensive statement as to mailing such notice of expansion; (b) An application for such expansion; and (c) An instrument containing the appropriate joinders in compliance with the participation requirements of Section 14, infra.

The expansion shall, after due consideration of all pertinent information and upon approval by the Commissioner, the Director and the Commission, become effective as of the date prescribed in the notice thereof or on such other more appropriate date as may be set by the Commissioner, the Director, and the Commission in the order or instrument approving such expansion.

SECTION 5. ELIMINATION: All legal subdivisions of unitized lands (i.e. 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular surveys, however, unusually large lots or tracts shall be considered in multiples of 40 acres, or the nearest aliquot equivalent thereof, for the purpose of elimination under this subsection), no parts of which are entitled to be in a participating area within 5 years following the effective date of this agreement, shall be eliminated automatically from this agreement, and such lands shall no longer be a part of the Unit Area and shall not longer be subject to this agreement.

Any expansion of the Unit Area which embraces lands theretofore eliminated pursuant to this section shall not be considered automatic commitment or recommitment of such lands.

SECTION 6. UNITIZED LAND AND UNITIZED SUBSTANCES: All Unitized Substances in all of the hereinabove described and subsequently admitted land effectively committed to this Agreement, insofar only as the same may be found in the Unitized Formation, together with pertinent surface rights, are unitized under the terms of this Agreement and said land shall constitute land referred to herein as "Unitized Land" or "Land Subject to this Agreement".

Nothing herein shall be construed to unitize, pool, or in any way affect the oil, gas and other minerals contained in or that may be produced from any formation other than the Unitized Formation.

SECTION 7. UNIT OPERATOR: Newmont Oil Company is hereby designated as Unit Operator, and by signing this instrument as Unit Operator it agrees and consents to accept the duties and obligations of Unit Operator for the operation, development and production of Unitized Substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interests in Unitized Substances, and the term "Working Interest Owner" when used herein shall include or refer to Unit Operator as the owner of a Working Interest when such an interest is owned by it.

SECTION 8. RESIGNATION OR REMOVAL OF UNIT OPERATOR: Unit Operator shall have the right to resign at any time, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six (6) months after written notice of intention to resign has been given by Unit Operator to all Working Interest Owners, the Commissioner and the Director, unless a new Unit Operator shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

effective date of its resignation.

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by 75 percent of the committed Working Interest Owners (on the basis of Unit participation) exclusive of the Working Interest Owner who is the Unit Operator. Such removal shall be effective upon notice thereof to the Commissioner and the Supervisor.

In all such instances of effective resignation or removal, until a successor to Unit Operator is selected and approved as hereinafter provided, the Working Interest Owners shall be jointly responsible for the performance of the duties of the Unit Operator and shall, not later than thirty (30) days before such resignation or removal become effective, appoint a Unit Manager to represent them in any action to be taken hereunder.

The resignation or removal of Unit Operator under this Agreement shall not terminate its right, title or interest as the owner of a Working Interest or other interest in Unitized Substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all equipment, books, and records, materials, appurtenances and any other assets, used in conducting the Unit operations and owned by the Working Interest Owners (including any and all data and information which it might have gained or assembled by reason of its operation of the Unit Area) to the new duly qualified successor Unit Operator or to the Unit Manager if no such new Unit Operator is elected, to be used for the purpose of conducting Unit Operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells. Nothing herein contained shall be construed to relieve or discharge any Unit Operator who resigns or is removed hereunder for any liability or duties accruing or performable by it prior to the effective date of such resignation or removal.

SECTION 9. SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator shall tender its resignation as Unit Operator or shall be removed as hereinabove provided, the Working Interest Owners shall by affirmative vote of at least 65 percent of their voting interests, based upon the percentages of participation assigned to tracts in the Unit Area, select a successor Unit Operator, provided, however, that should any Working Interest Owner own a voting interest of more than 35 percent, the vote of said party shall not serve to disapprove the selection of a new Unit Operator approved by 80 percent or more of the voting interests of the remaining Working Interest Owners, and provided further that the Unit Operator shall not vote to succeed itself. Such selection shall not become effective until (a) a Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator, and (b) the selection shall have been furnished the Commissioner and the Supervisor. If no successor Unit Operator or Unit Manager is selected and qualified as herein provided, the Commissioner and the Director, at their election, may declare this Agreement terminated.

SECTION 10. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT: Costs and expenses incurred by Unit Operator in conducting Unit operations hereunder shall be paid, apportioned among and borne by the Working Interest Owners in accordance with the Unit Operating Agreement. Such Unit Operating Agreement shall also provide the manner in which the Working Interest Owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases or other independent contracts and such other rights and obligations as between Unit Operator and the Working Interest Owners as may be agreed upon by the Unit Operator and the Working Interest Owners; however, no such Unit Operating Agreement shall be deemed either to modify any of the terms and conditions of this Unit Agreement or to relieve the Unit Operator of any right or obligation established under this Agreement, and in case of

any inconsistency or conflict between this Agreement and the Unit Operating Agreement, this Agreement shall prevail. Two true copies of any Unit Operating Agreement executed pursuant to this Section shall be filed with the Commissioner and three true copies thereof shall be filed with the Supervisor, prior to approval of this Agreement.

SECTION 11. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the Unitized Substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and together with this Agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this Agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

SECTION 12. PLAN OF OPERATIONS: It is recognized and agreed by the parties hereto that all of the land within the participating area subject to this agreement is reasonably proved to be productive of Unitized Substances in paying quantities and that the object and purpose of this Agreement is to formulate and to put into effect a secondary recovery project in order to effect additional recovery of Unitized Substances, prevent waste and conserve natural resources. The parties hereto agree that the Unit Operator may, subject to the consent and approval of a plan of operation by the Working Interest Owners, the Supervisor, the Commission, and the Commissioner, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil, liquefied petroleum gas, or any other substance or a combination of any of said substances, whether produced from the Unit Area or not, and that the location of input wells and the rates of injection therein and the rate of production shall be governed by standards of good geologic and petroleum engineering practices and conservation methods. After commencement of secondary operations, Unit Operator shall furnish the Commission, the Commissioner, and the Supervisor monthly, injection and production reports for each well in the Unit. The Working Interest Owners, the Supervisor, the Commission, and the Commissioner, shall be furnished periodical reports on the progress of the plan of operation and any revision or changes thereto; provided, however, that any major revisions of the plan of operation involving a basic deviation from the initial plan of operation shall be subject to the consent and approval of the Working Interest Owners, the Supervisor, the Commission, and the Commissioner.

The initial plan of operation shall be filed with the Supervisor, the Commission, and the Commissioner concurrently with the filing of this Unit Agreement for final approval. Said initial plan of operation and all revisions thereof shall be as complete and adequate as the Supervisor, the Commission, and the Commissioner may determine to be necessary for timely operation consistent herewith. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of operation.

Notwithstanding anything to the contrary herein contained, the Unit Operator shall commence secondary recovery operations on the Unit Area within six (6) months after the effective date of this Agreement, or any extension thereof approved by the Commission, the Commissioner and the Director, or this Agreement shall terminate automatically, in which latter event Unit Operator shall notify all interested parties. After secondary recovery operations are commenced, Unit Operator shall carry on such operations as would a reasonably prudent operator under the same or similar circumstances.

SECTION 13. TRACT PARTICIPATION: In Exhibit "B" attached hereto there are listed and numbered the various tracts within the Unit Area and set forth opposite each tract is a statement that the tract is "non-participating" or there is a figure which represents the percentage of participation allocated to such tract calculated on 100 percent tract commitment. The participation of each tract was determined as follows:

$$\begin{array}{lcl} \text{Percentage} & & \\ \text{Participation} & = & \frac{\text{Tract Cumulative Production}}{\text{Participating Area Cumulative Oil Production}} \\ \text{of each Tract} & & \end{array}$$

Those tracts as shown on Exhibit "A" and as described in Exhibit "B" as being entitled to a percentage of unit participation are hereby designated and fixed as constituting the initial participating area.

However, if the Unit Agreement is approved with less than 100 percent tract commitment, said participation percentage shall be revised to fit the commitment status as of the effective date hereof, and thereafter, as needed pursuant to Section 17 (Allocation of Unitized Substances).

SECTION 14. TRACTS QUALIFIED FOR UNIT PARTICIPATION: On and after the effective date hereof the tracts within the Unit Area which shall be entitled to participation in the production of Unitized Substances therefrom shall be those tracts within the participating area and more particularly described in said Exhibit "B" that are qualified as follows:

(a) Each and all of those tracts as to which Working Interest Owners owning 100% of the Working Interests in said tract and Royalty owners owning 75%, or more, of the Royalty Interests in said tract have subscribed, ratified or consented to this agreement; and

(b) Each and all of those tracts as to which Working Interest Owners owning less than 100% of the Working Interests have become parties to this agreement, regardless of the percentage of Royalty Interests therein that is committed hereto, and as to which the Working Interest Owner who operated the Tract and all of the other Working Interest Owners in such Tract who have become parties to this agreement have joined in a request for inclusion of such Tract and have executed and delivered an indemnity agreement indemnifying and agreeing to hold harmless the other Working Interest Owners in the Unit Area against all claims and demands that may be made by the owners of Interests in such Tract who are not parties to this agreement, and which arise out of the inclusion of the Tract in the Unit Area.

If, on the effective date of this Agreement, there is any tract or tracts which have not been effectively committed to or made subject to this Agreement by qualifying as above provided, then such tract or tracts shall not be entitled to participate hereunder. Unit Operator shall, when submitting this Agreement for final approval by the Commissioner and the Director, or as soon thereafter as practicable, file therewith a schedule of those tracts which have been committed and made subject to this Agreement and are entitled to participate in the production from the participating area hereunder. Said schedule shall set forth opposite each such committed tract the lease number and assignment number, the owner of record of the lease, and the percentage participation of such tract which shall be computed according to the participation formula set out in Section 13 (Tract Participation) above. This schedule of participation shall be a part of Exhibit "B" and upon approval thereof by the Commissioner and the Supervisor shall become a part of this Agreement and shall govern the allocation of production of Unitized Substances until the effective date of a new schedule approved by the Commissioner and the Director or the Supervisor.

SECTION 15. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND:

Any party or parties hereto owning or controlling the working interest or a majority of the working interest in any unitized land having thereon a regular well location may, with the approval of the Supervisor as to Federal land and the Commissioner as to State land, and subject to the provisions of the Unit Operating Agreement, at such party's sole risk, cost and expense, drill or work over a well to test the Grayburg No. 4 Sand formation if such location is not within a participating area.

If any well drilled or worked over, as aforesaid, by a working interest owner results in production of unitized substances such that the land upon which it is situated may properly be included in a participating area, or is determined to be essential to unit operations, such participating area shall be enlarged as provided in this Agreement, and the well shall thereafter be operated by Unit Operator in accordance with the terms of this Agreement and the Unit Operating Agreement.

If any well drilled or worked over, as aforesaid, by a working interest owner obtains production of unitized substances in quantities insufficient to justify the inclusion in a participating area of the land upon which such well is situated, or is determined not to be essential to unit operations, such well may be operated and produced by the party drilling or working over the same subject to the conservation requirements of this Agreement. The royalties in amount of value of production from any such well shall be paid as specified in the underlying lease and agreements affected.

SECTION 16. ENLARGEMENT OF PARTICIPATING AREA: Whenever it appears proper to revise the initial participating area to include land then regarded as reasonably proven to be productive of unitized substances in paying quantities or determined to be essential to unit operations, the Unit Operator and the working interest owner or owners of such tracts shall meet and seek to determine, on the basis of estimated recoverable reserves of unitized substances, and the essentiality to unit operations, the tract percentage participation factor that should be assigned to such tract. If and when such parties agree upon the tract participation percentage factor that should be assigned to such tract, the Operator shall submit the matter or revision of the participating area and the percentage participation factors to be assigned to each new tract proposed to be included in the revised participating area, to the working interest owners in the existing participating area. If 75% of the voting interests of such working interest owners approve the revision and tract participating factors, then, subject to the approval of the Director, Commissioner and Commission, the participating area shall be revised and the participating percentage for each tract in the enlarged participating area shall be revised, provided, however, that, in any such revision, the revised percentage participation of the respective tracts or portions thereof which were participating prior to such revision shall remain in the same ratio one to another. Unit Operator shall, within six (6) months from and after the official date of completion of a unit well occasioning a revision of the participating area, file with the Supervisor, Commissioner and the Commission appropriate instruments outlining and establishing the revised participating area occasioned by such well. The effective date of any enlargement of the participating area shall be determined by the Unit Operator, subject to the approval of the Director, Commissioner and Commission, in advance of the vote by the working interest owners to consider a revision of the participating area. It is the intent of this section that the participating area shall be comprised of adjoining parcels of land consisting of one or more Government survey quarter-quarter sections, or lot equivalents in instances of irregular surveys, on each of which parcels there is a well capable of producing unitized substances in paying quantities or which, in the absence of such well thereon, are nevertheless determined to be essential for unit operations; but regardless of any revision of the participating area, nothing

herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the revision of the participating area.

In the absence of agreement at any time between the Unit Operator and the Director, Commissioner and Commission as to the proper definition or redefinition of a participating area, the portion of all payment affected may be impounded in a manner mutually acceptable to the owners of working interest, except royalties due (a) the United States and, (b) the State of New Mexico, which shall be determined by the Supervisor and the Commissioner, respectively, and the amount thereof deposited, as directed by the Supervisor and the Commissioner, to be held as unearned money until a participating area as revised is finally approved and then applied as earned or returned in accordance with determination of the sum due as Federal and State royalty on the basis of such revised and approved participating area.

SECTION 17. ALLOCATION OF UNITIZED SUBSTANCES: All Unitized Substances produced and saved (less, save and except any part of such Unitized Substances used in conformity with good operating practices on unitized land for drilling, operating, camp, and other production or development purposes and for pressure maintenance or unavoidable loss) shall be apportioned among and allocated to the committed tracts within the participating area in accordance with the respective tract participation effective hereunder during the respective periods such Unitized Substances were produced, as set forth in the schedule of participation in Exhibit "B". The amount of Unitized Substances so allocated to each tract, and only that amount (regardless of whether it be more or less than the amount of the actual production of Unitized Substances from the well or wells, if any, on such tract), shall, for all intents, uses and purposes, be deemed to have been produced from such tract.

The Unitized Substances allocated to each tract shall be distributed among, or accounted for to the parties executing, consenting to or ratifying this Agreement entitled to share in the production from such tract in the same manner, in the same proportions, and upon the same conditions, as they would have participated and shared in the production from such tracts, or in the proceeds thereof, had this Agreement not been entered into; and with the same legal force and effect.

No tract committed to this Agreement and qualified for participation as above provided shall be subsequently excluded from participation hereunder on account of depletion of Unitized Substances, and nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the joinder of any tract.

If the Working Interest and the Royalty Interest in any tract are divided with respect to separate parcels or portions of such tract and owned severally by different persons, the percentage participation assigned to such tract shall, in the absence of a recordable instrument executed by all owners and furnished to Unit Operator fixing the divisions of ownership, be divided among such parcels or portion in proportion to the number of surface acres in each.

The Unitized Substances allocated to each tract shall be delivered in kind to the respective Working Interest Owners and parties entitled thereto by virtue of the ownership of oil and gas rights therein or by purchase from such owners. Each Working Interest Owner and the parties entitled thereto shall have the continuing right to receive such production in kind at a common point within the Unit Area and to sell or dispose of the same as it sees fit. Each such party shall have the right to construct, maintain and operate all necessary facilities for that purpose on unitized land, provided the same are so constructed, maintained and operated as not

to interfere with operations carried on pursuant hereto. Subject to Section 18 hereof, any extra expenditure incurred by Unit Operator by reason of the delivery in kind of any portion of the Unitized Substances shall be borne by the party receiving the same in kind. In the event any party hereto shall fail to take or otherwise adequately dispose of its proportionate share of the production from the Unit Area currently as and when produced, then so long as such conditions continue, Unit Operator, for the account and at the expense of such party and in order to avoid curtailing the operation of the Unit Area, may sell or otherwise dispose of such production to itself or others on a day-to-day basis at not less than the prevailing market price in the area for like production, and the account of such party shall be charged therewith as having received such production. The net proceeds, if any, of the Unitized Substances so disposed of by Unit Operator shall be paid to the party entitled thereto.

Any party receiving in kind or separately disposing of all or any part of the Unitized Substances allocated to any tract, or receiving the proceeds therefrom if the same is sold or purchased by Unit Operator, shall be responsible for the payment of all Royalty on the lease or leases and tracts contributed by it and received into the Unit, and each such party shall hold each other party hereto harmless against all claims, demands and causes of action for such Royalty on the lease or leases and tracts contributed by it and received into the unitized land.

If, after the effective date of this Agreement, there is any tract or tracts that are subsequently committed hereto, as provided in Section 4 (Expansion), or Section 16 (Enlargement of Participating Area) hereof, or any tract or tracts within the Unit Area not committed hereto as of the effective date hereof but which are subsequently committed hereto under the provisions of Section 33 (Nonjoinder and Subsequent Joinder), or if any tract is excluded from the Unit Area as provided for in Section 32 (Loss of Title), the schedule of participation as shown in Exhibit "B", subject to Section 13 (Tract Participation) or Section 33 (Nonjoinder and Subsequent Joinder), whichever is appropriate, shall be revised by the Unit Operator and distributed to the Working Interest Owners, the Commissioner and the Supervisor to show the new percentage participation of all the then effectively committed tracts; and the revised schedule, upon approval by the Commissioner and the Director or the Supervisor, shall govern all the allocation of production from and after the effective date thereof until the effective date of a new schedule so approved.

SECTION 18. ROYALTY SETTLEMENT: The State of New Mexico and the United States of America and all Royalty Owners who, under an existing contract, are entitled to take in kind a share of the substances produced from any tract unitized hereunder, shall continue to be entitled to such right to take in kind their share of the Unitized Substances allocated to such tract, and the Unit Operator shall make deliveries of such Royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for Royalty Interest not taken in kind shall be made by Working Interest Owners responsible therefor under existing contracts, laws and regulations, on or before the last day of each month for Unitized Substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any Royalty due under their leases, except that such Royalty shall be computed in accordance with the terms of this Unit Agreement.

If gas obtained from lands not subject to this Agreement is introduced into the Unitized Formation, for use in repressuring, stimulation of production or increasing ultimate recovery in conformity with a plan approved pursuant to Section 12 (Plan of Operation), a like amount of gas, less appropriate deductions for loss from any cause, may be withdrawn from

the Unitized Formation, Royalty free as to dry gas but not as to the products extracted therefrom; provided such withdrawal shall be pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor and the Commissioner; and provided further that such right of withdrawal shall terminate as of the effective date of termination of the Unit Agreement. If liquefied petroleum gases obtained from lands or formations not subject to this Agreement be injected into the unitized land for the purpose of increasing ultimate recovery, which shall be in conformance with a plan first approved by the Supervisor and the Commissioner, part or all of such liquefied petroleum gases may be withdrawn royalty free pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor and the Commissioner. Insofar as the parties hereto have the power and authority, they grant to the Unit Operator the use of brine or water or both from any formation within the Unit Area for injecting into the Grayburg No. 4 Sand.

All Royalty due the State of New Mexico and the United States of America and the other Royalty Owners hereunder shall be computed and paid on the basis of all Unitized Substances allocated to the respective tract or tracts committed hereto, in lieu of actual production from such tract or tracts.

Each Royalty Owner (other than the State of New Mexico and the United States of America) that executes this Agreement represents and warrants that it is the owner of a Royalty Interest in a tract or tracts within the Unit Area as its interest appears in Exhibit "B" attached hereto. If any Royalty Interest in a tract or tracts should be lost by title failure or otherwise in whole or in part, during the terms of this Agreement, then the Royalty interest of the party representing himself to be the owner thereof shall be reduced proportionately and the interest of all parties shall be adjusted accordingly.

SECTION 19. RENTAL SETTLEMENT: Rentals or minimum royalties due on leases committed hereto shall be paid by Working Interest Owners responsible therefor under existing contracts, laws and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof, due under their leases. Rental for lands of the State of New Mexico subject to this Agreement shall be paid at the rate specified in the respective leases from the State of New Mexico. Rental or minimum royalty for lands of the United States of America subject to this Agreement shall be paid at the rate specified in the respective leases from the United States of America, unless rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

SECTION 20. CONSERVATION: Operations hereunder and production of Unitized Substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to Federal and State laws and regulations.

SECTION 21. DRAINAGE: The Unit Operator shall take appropriate and adequate measures to prevent drainage of Unitized Substances from unitized land by wells on land not subject to this Agreement.

SECTION 22. LEASES AND CONTRACTS CONFORMED AND EXTENDED: The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operation for oil or gas on land committed to this Agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect, and the parties hereto hereby consent that the Secretary and the Commissioner, respectively,

shall and by their approval hereof, or by the approval hereof by their duly authorized representatives, do hereby establish, alter, change or revoke the drilling, producing, rental, minimum royalty and royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this Agreement.

Without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

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

(b) Drilling, producing or secondary recovery operations performed hereunder upon any tract of unitized lands shall be accepted and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on land therein embraced.

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

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

(e) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this Agreement shall continue in force beyond the term provided therein until the termination hereof. Any other Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the committed land so long as such land remains committed hereto, or in the event actual drilling operations are commenced on unitized land, in accordance with the provisions of this Agreement, prior to the end of the primary term of such lease and are being diligently prosecuted at that time, such lease shall be extended for two years and so long thereafter as oil or gas is produced in paying quantities in accordance with the provisions of the Mineral Leasing Act Revision of 1960.

(h) The segregation of any Federal lease committed to this Agreement is governed by the following provisions of the fourth paragraph of Sec. 17(j) of said Act of February 25, 1920, as amended by the Act of September 2, 1960, (74 Stat. 781-784): "Any (Federal) lease hereafter committed to any such plan (unit) embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization; provided, however, that any such lease as to the nonunitized portion shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities."

(i) Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall be segregated as to the portion committed and as to the portion not committed and the terms of such lease shall apply separately as to such segregated portions commencing as of the effective date hereof. Notwithstanding any of the provisions of this agreement to the contrary, any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced in such lease, if Unitized Substances are discovered and are capable of being produced in paying quantities from some part of the lands embraced in such lease committed to this agreement or some part of the lands embraced in such State lease is included in the Participating Area at the expiration of the secondary term of such lease; or if, at the expiration of the secondary term, the lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced therein, any such lease shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of Unitized Substances, said lease shall continue in full force and effect as to all of the lands embraced therein, so long thereafter as Unitized Substances are produced in paying quantities from any portion of said lands.

SECTION 23. MATHEMATICAL ERRORS: It is hereby agreed by all parties to this Agreement that Unit Operator is empowered to correct any mathematical errors which might exist in the pertinent exhibits to this Agreement, with approval of the Commissioner, and the Supervisor.

SECTION 24. COVENANTS RUN WITH LAND: The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this Agreement terminates, and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer of any Working Interest subject hereto shall be binding upon Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, or acceptable photostatic or certified copy, of the recorded instrument of transfer; and no assignment or transfer of any Royalty Interest subject hereto shall be binding upon the Working Interest Owner responsible therefor until the first day of the calendar month after said Working Interest Owner is furnished with the original, or acceptable photostatic or certified copy, of the recorded instrument of transfer.

SECTION 25. EFFECTIVE DATE AND TERM: This Agreement shall become binding upon each party who executes or ratifies it as of the date of execution or ratification by such party and shall become effective as of 7:00 o'clock a.m. of the first day of the month next following:

(a) The execution or ratification of this Agreement and the Unit Operating Agreement by Working Interest Owners owning a combined unit participation of at least 95 percent, and the execution or ratification of this Agreement by Royalty Owners owning a combined interest of at least 75 percent of the Royalty Interests in said unit area; and

(b) The approval of this Agreement by the Commissioner, the Secretary or his duly authorized representative, and the Commission.

If (a) and (b) above are not accomplished on or before January 1, 1964, this Agreement shall be ipso facto expire on said date (hereinafter called "expiration date") and thereafter be of no further force or effect, unless prior thereto this Agreement has been executed or ratified by Working Interest Owners owning a combined unit participation of at least ninety (90%) percent, and the Working Interest Owners owning a combined unit participation of at least ninety (90%) percent committed to this

Agreement have decided to extend said expiration date for a period not to exceed six (6) months (hereinafter called "extended expiration date"). If said expiration date is so extended and (a) and (b) are not accomplished on or before said extended expiration date, this Agreement shall ipso facto expire on said extended expiration date and thereafter be of no further force or effect. For the purpose of this Section, ownership shall be computed on the basis of unit participation as determined from Exhibit "B" attached to the Unit Operating Agreement.

Unit Operator shall, within thirty (30) days after the effective date of this Agreement, file for record a certificate to the effect that this Agreement has become effective according to its terms and stating further the effective date and the location of the governmental agency offices where copies of this Agreement are filed.

The term of this Agreement shall be for and during the time that Unitized Substances are produced in paying quantities from the Unit Area and as long thereafter as drilling, reworking or other operations (including secondary recovery operations) are prosecuted thereon without cessation of more than ninety (90) consecutive days, unless sooner terminated by Working Interest Owners in the manner hereinafter provided.

This Agreement may be terminated with the approval of the Commissioner and the Director by Working Interest Owners owning ninety (90%) percent unit participation whenever such Working Interest Owners determine that Unit Operations are no longer profitable, feasible or in the interest of conservation. Notice of any such termination shall be given by Unit Operator to all parties hereto.

Upon termination of this Agreement, the further development and operation of the Unit Area as a Unit shall be abandoned, Unit operations shall cease, and thereafter the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate tracts.

If not otherwise covered by the leases unitized under this Agreement, Royalty Owners hereby grant Working Interest Owners a period of six (6) months after termination of this Agreement in which to salvage, sell, distribute or otherwise dispose of the personal property and facilities used in connection with Unit operations.

SECTION 26. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION: All production and the disposal thereof shall be in conformity with allocations and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute. The Director is hereby vested with authority to alter or modify from time to time, in his discretion, the rate of prospecting and development and, within the limits made or fixed by the Commission, to alter or modify the quantity and rate of production under this Agreement, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification; provided, further, that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Commission and as to any lands of the State of New Mexico or privately-owned lands subject to this Agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Commission.

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

SECTION 27. NONDISCRIMINATION: In the performance of work under this Agreement the Operator agrees to comply with all of the provisions of Sec. 301 (1) to (7) inclusive of Executive Order 10925 (26 F.R. 1977), which are hereby incorporated by reference in this Agreement.

SECTION 28. APPEARANCES: Unit Operator shall have the right to appear for or on behalf of any and all interests affected hereby before the Commissioner, the Department, and the Commission, and to appeal from any order issued under the rules and regulations of the Commissioner, the Department, or the Commission, or to apply for relief from any of said rules and regulations or in any proceedings relative to operations before the Commissioner, the Department, or the Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his or its own expense to be heard in any such proceeding.

SECTION 29. NOTICES: All notices, demands, objections or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if made in writing and personally delivered to the party or parties or sent by postpaid certified mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to such other address as any such party or parties may have furnished in writing to the party sending the notice, demand or statement.

SECTION 30. NO WAIVER OF CERTAIN RIGHTS: Nothing in this Agreement contained shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State wherein said unitized lands are located, or rules or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

SECTION 31. UNAVOIDABLE DELAY: All obligations under this Agreement requiring the Unit Operator to commence or continue secondary recovery operations or to operate on or produce Unitized Substances from any of the lands covered by this Agreement shall be suspended while, but only so long as the Unit Operator despite the exercise of due care and diligence, is prevented from complying with such obligations, in whole or in part, by strikes, acts of God, Federal, State or municipal law or agency, unavoidable accident, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

SECTION 32. LOSS OF TITLE: In the event title to any tract of unitized land shall fail so as to render the tract inoperable under this Agreement and the true owner cannot be induced to join this Unit Agreement, such tract shall be automatically regarded as not committed hereto and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any Royalty, Working Interest or other interest subject thereto, payment or delivery on account thereof may be withheld without liability or interest until the dispute is finally settled, provided, that as to State or Federal land or leases, no payments of funds due the State of New Mexico or the United States of America shall be withheld, but such funds shall be deposited as directed by the Commissioner or the Supervisor (as the case may be), to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

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

SECTION 33. NONJOINDER AND SUBSEQUENT JOINDER: If the owner of any substantial interest in a tract within the Unit Area fails or refuses to subscribe, ratify, or consent in writing to this Agreement, the Working Interest Owner in that tract who has executed or ratified this Agreement may withdraw said tract from this Agreement by written notice to the Director, the Commissioner, and Unit Operator prior to the effective date of this Agreement. Joinder by any Royalty Owner, at any time, must be accompanied by appropriate joinder of the corresponding Working Interest Owner in order for the interest of such Royalty Owner to be regarded as effectively committed. Joinder to the Unit Agreement by a Working Interest Owner, at any time, must be accompanied by appropriate joinder to the Unit Operating Agreement in order for such interest to be regarded as effectively committed to this Unit Agreement.

Any oil or gas interest in the lands in the Unit Area not committed hereto prior to submission of this Agreement to the Commissioner and the Director for final approval may thereafter be committed hereto upon compliance with the applicable provisions of this Section and of Section 14 (Tracts Qualified for Unit Participation) hereof, at any time up to the effective date hereof and for a period to and including six (6) months thereafter, on the same basis of participation as provided in said Section 14, by the owner or owners thereof subscribing, ratifying, or consenting in writing to this Agreement and, if the interest is a Working Interest, by the owner of such interest subscribing also to the Unit Operating Agreement.

It is understood and agreed, however, that from and after six (6) months from the effective date hereof the right of subsequent joinder as provided in this Section shall be subject to such requirements or approvals and on such basis as may be agreed upon by ninety (90%) percent of the Working Interest Owners (based upon percentage participation in the Unit Area). Such joinder by a proposed Working Interest Owner must be evidenced by his execution or ratification of this Agreement and the Unit Operating Agreement. Such joinder by a proposed Royalty Owner must be evidenced by his execution, ratification or consent of this Agreement and must be consented to in writing by the Working Interest Owner responsible for the payment of any benefits that may accrue hereunder in behalf of such proposed Royalty Owner. Except as may be otherwise herein provided, subsequent joinder to this Agreement shall be effective at 7:00 a.m. as of the first day of the month following the filing with the Commissioner and the Supervisor of duly executed counterparts of any and all documents necessary to establish effective commitment of any tract or interest to this Agreement, unless objection to such joinder by the Commissioner or the Director is duly made within sixty (60) days after such filing.

SECTION 34. COUNTERPARTS: This Agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties and may be ratified or consented to by separate instrument in writing specifically referring hereto, and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all parties had signed the same document, and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above described Unit Area.

SECTION 35. TAXES: Each party shall, for its own account, render and pay its share of any taxes levied against or measured by the amount or value of the Unitized Substances produced from the unitized land; provided, however, that if it is required or if it be determined that the Unit Operator or the several Working Interest Owners must pay or advance said taxes for the account of the parties hereto, it is hereby expressly agreed that the parties so paying or advancing said taxes shall be reimbursed therefor by the parties hereto, including Royalty Owners who may be responsible for the taxes on their respective allocated share of said Unitized Substances.

No such taxes shall be charged to the United States or to the State of New Mexico, nor to any lessor who has a contract with a lessee which requires his lessee to pay such taxes.

SECTION 36. CONFLICT OF SUPERVISION: Neither the Unit Operator nor the Working Interest Owners, nor any of them, shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provisions thereof to the extent that the said Unit Operator or the Working Interest Owners, or any of them, are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain, in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or things concerning which it is required herein that such concurrence be obtained. The parties hereto and the Commission agree that all powers and authority vested in the Commission in and by any provisions of this Agreement are vested in the Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

SECTION 37. LIMITATION OF APPROVALS: Notwithstanding anything herein contained to the contrary, if no Federal lands are committed to this Agreement, then no consents or approvals provided herein shall be required of the Department, the Secretary, the Director, or the Supervisor, and it shall not be necessary to file any instrument hereunder with said officers or agencies unless and until Federal lands are so committed to this Agreement; likewise, if no State lands are committed to this Agreement, then no consents or approvals provided herein shall be required of the Commissioner, and it shall not be necessary to file any instrument hereunder with said officer unless and until State lands are so committed to this Agreement.

SECTION 38. NO PARTNERSHIP: It is expressly agreed that the relation of the parties hereto is that of independent contractors and nothing in this Agreement contained, expressed or implied, or any operations conducted hereunder, shall create or be deemed to create a partnership or association between the parties hereto or any of them.

SECTION 39. OIL IN LEASE TANKAGE ON EFFECTIVE DATE: Unit Operator shall make a proper and timely gauge of all lease and other tanks within the Unit Area in order to ascertain the amount of merchantable oil in such tanks, above the pipe line connections, as of 7:00 a.m. on the effective date hereof. All such oil as is a part of the prior allowable of the well or wells from which the same was produced shall be and remain the property of the Working Interest Owners entitled thereto the same as if the Unit had not been formed, and such Working Interest Owners shall promptly remove said oil from the Unit Area. Any such oil not so removed may be sold by the Unit Operator for the account of such Working Interest Owners, subject to the payment of all Royalty to Royalty Owners under the terms and provisions of the applicable lease or leases and other contracts. All such oil and gas as is in excess of the prior allowable of the well or wells from which the same was produced shall be regarded and treated the same as Unitized Substances produced after the effective date hereof. If, as of the effective date hereof, any tract is overproduced with respect to the allowable of the well or wells on that tract and the amount of such overproduction has been sold or otherwise disposed of, such overproduction shall be regarded and included as a part of the Unitized Substances produced after the effective date hereof and the amount thereof charged to such tract as having been delivered to the persons entitled to Unitized Substances allocated to such tract.

SECTION 40. BORDER AGREEMENTS: Subject to the approval of the Supervisor and the Commissioner, the Unit Operator, with concurrence of 65% of the Working Interest Owners, may enter into a border-protection agreement or agreements with the Working Interest Owners of adjacent lands along the exterior boundary of the Unit Area with respect to the operations in the border area for the maximum ultimate recovery, conservation purposes and proper protection of the parties and interests.

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

Attest, if a corporation,
witness, if an individual

Date
Signed

Name

Attest:

Lucile Warren

5-29-63

Assistant Secretary, 20, 21A, 21B,
22, 30, 35

NEWMONT OIL COMPANY

By Charles B. Snyder

Vice, President

UNIT OPERATOR AND WORKING
INTEREST OWNER

WORKING INTEREST OWNERS

Attest:

Company

Secretary

By

President

Attest:

Company

Secretary

By

President

Attest:

Company

Secretary

By

President

Attest:

Company

Secretary

By

President

Attest:

Company

Secretary

By

President

Attest:

Company

Secretary

By

President

STATE OF TEXAS)
COUNTY OF TARRANT) ss.

The foregoing instrument was acknowledged before me this 29th day of May, 1963, by CHARLES C. LANGDON,
Vice President of NEWPORT OIL COMPANY,
Delaware a _____ corporation, on behalf of said corporation.

My Commission Expires:
June 1, 1963

Regina L. Landon
NOTARY PUBLIC **in and for**
TARRANT COUNTY, TEXAS

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

NOTARY PUBLIC

My Commission Expires:

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 19____, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

NOTARY PUBLIC

My Commission Expires:

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) No. 1

Roy Canfield
Roy Canfield
Ethel Ivey Canfield
Ethel Ivey Canfield

INTEREST COMMITTED:

TRACT(S) No. 1

H. B. Wright
H. B. Wright
Myrtle B. Wright
Myrtle B. Wright

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Arizona)
COUNTY OF Pima) ss.

The foregoing instrument was acknowledged before me this 4 day
of June, 1962, by Ray Campfield
and his wife, Ethel Grey Campfield
My Commission Expires:

May 12, 1966

STATE OF Arizona)
COUNTY OF Maricopa) ss.

The foregoing instrument was acknowledged before me this 6th day
of June, 1962, by H B Wright
and his wife, Myrtle B Wright

My Commission Expires:
My Commission Expires Jan. 13, 1964

Thornton S Earley
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____
My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B and 22,

ATTEST:

George D. Felt
Secretary

THE LIBERTY NATIONAL BANK AND TRUST COMPANY
OF OKLAHOMA CITY, EXECUTOR OF THE
Estate of Wirt ~~Company~~
Franklin, deceased

By: *[Signature]*

Vice President

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By: _____

President

Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By: _____

President

Secretary

STATE OF OKLAHOMA)
COUNTY OF OKLAHOMA) ss.

The foregoing instrument was acknowledged before me this 6th day
of June, 1962, by Robert D. Blinn,
Vice President of ~~The Liberty National Bank and Trust Company of Oklahoma City~~
a banking corporation, on behalf of said corporation.

My Commission Expires:

Feb. 19, 1966

Dorothea E. French
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West LoCo Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 24-2B-2C

Mr. Thomas Chandler
Karl W. Chandler

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF DALLAS) ss.

The foregoing instrument was acknowledged before me this 3rd day
of June 1963, ~~1962~~ by Karl D. Chandler

and his wife, Vivian Chandler.

My Commission Expires: Melona Lee
6-1-65 NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____.

My Commission Expires: _____
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____.

My Commission Expires: _____
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____.

My Commission Expires: _____
NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2-A, 2-B, 2-C


**T. F. Kindred, Administrator of the
Estate of C. E. Kindred, Deceased.**

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Ill.)
COUNTY OF Peoria) ss.

The foregoing instrument was acknowledged before me this 10th day
of June, 1962, by Gerald E. McAlister,
~~and his wife~~ in the capacity therein stated.

My Commission Expires:

My Commission Expires Dec. 7, 1964

Gerald E. McAlister
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

CRE

VE

EE

INTEREST COMMITTED:

TRACT(S) _____

DE

Robert Emmons
RE

ME

INTEREST COMMITTED:

TRACT(S) _____

Shannon Emmons
SE

Margaret Emmons
ME

MEM

INTEREST COMMITTED:

TRACT(S) _____

Laura E. Najar
KLM

Roland D. Najar
LEN

RDN

INTEREST COMMITTED:

TRACT(S) _____

Frances E. Netherlin
FEN

Raymond B. Netherlin
RBN

Marvin Emmons,

By

Attorney-in-fact.

For acknowledgments, see reverse side.

STATE OF NEW MEXICO)
) SS
COUNTY OF EDDY)

The foregoing instrument was acknowledged before me
this _____ day of _____, 1963, by Charles R. Emmons,
individually and as attorney-in-fact for Marvin Emmons, and
Vernice Emmons, his wife; Earl Emmons and Dixie Emmons, his wife;
Robert Emmons and Martha Emmons, his wife; and Frances E.
Netherlin and Raymond B. Netherlin, her husband.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF NEW MEXICO)
) SS
COUNTY OF CURRY)

The foregoing instrument was acknowledged before me
this _____ day of _____, 1963, by Mary E. Miller and
Kenneth L. Miller, her husband.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF INDIANA)
) SS
COUNTY OF Marion)

The foregoing instrument was acknowledged before me
this 3rd day of June, 1963 by Laura E. Najar and
R. D. Najar, her husband.

My Commission Expires: _____

B. H. Rosner
NOTARY PUBLIC

27 Jan 1964

STATE OF PENNSYLVANIA)
) SS
COUNTY OF Chester)

The foregoing instrument was acknowledged before me this
10th day of June, 1963, by Shannon Emmons and
Marjorie Emmons, his wife.

My Commission Expires: _____

Paul E. Keen
NOTARY PUBLIC

JUSTICE OF THE PEACE

Commission Expires _____

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

_____ CRE

_____ VE

_____ EE

INTEREST COMMITTED:

TRACT(S) _____

_____ DE

_____ RE

_____ ME

INTEREST COMMITTED:

TRACT(S) _____

_____ SE

_____ ME

Mary E. Miller

MEM

INTEREST COMMITTED:

TRACT(S) _____

Kenneth L Miller 5/6/63

KLM

_____ LEN

_____ RDN

INTEREST COMMITTED:

TRACT(S) _____

_____ FEN

_____ RBN

Marvin Emmons,

By

Attorney-in-fact.

For acknowledgments, see reverse side.

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 11th day
of June, 1963, by MARY E. MILLER and KENNETH L. MILLER,
~~and KENNETH L. MILLER,~~ her husband.

My Commission Expires:

12/15/63

Jack H. Miller
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Frances E. Netherlin
Raymond B. Netherlin

INTEREST COMMITTED:

TRACT(S) _____

Robert B. Emmons
ROBERT EMMONS, a married man dealing
~~in his sole and separate property.~~

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 11th day of June, 1963, by FRANCES E. NETHERLIN and RAYMOND B. NETHERLIN, her husband; and ROBERT EMMONS, a married man dealing in his sole and separate property.

My Commission expires:

12/15/63

Jack W. McLean
Notary Public in and for Eddy
County, New Mexico.

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Gus W. Arnold
Ella Mae Arnold

INTEREST COMMITTED:

TRACT(S) _____

PAIR N & N TRUST

BY: Gus W. Arnold
TRUSTEE

INTEREST COMMITTED:

TRACT(S) _____

Vera H. Herren
Vera H. Herren, widow of
H. H. Herren.

43

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF SMITH) ss.

The foregoing instrument was acknowledged before me this 30th day
of November, 1962, by GUS W. ARNOLD

and his wife, ELLA MAE ARNOLD

My Commission Expires:

6-1-63

Milma Lacy
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF TEXAS)
COUNTY OF SMITH) ss.

The foregoing instrument was acknowledged before me this 30th day
of November, 1962, by GUS W. ARNOLD, TRUSTEE OF FAIR N & N TRUST.

My Commission Expires:

6-1-63

Milma Lacy
NOTARY PUBLIC

STATE OF TEXAS,)
COUNTY OF HIDALGO.) ss.

The foregoing instrument was acknowledged before me this 10th day
of June, 1962, by Vera H. Herren, widow of H. H. Herren.

~~and his wife~~

My Commission Expires:

June 1, 1965.

W. M. JENKINES, JR.

W. M. Jenkins Jr.
NOTARY PUBLIC
Hidalgo County, Texas.

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B, 22, 30,
and 35

FRANKLIN, ASTON & FAIR, INC.

By: R. R. Aston
R. R. Aston, Vice President

INTEREST COMMITTED:

TRACT(S) _____

ATTEST:

By: Louis C. Todd
Louis C. Todd, Assistant Secretary

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 17th day
of December, 1962, by R. R. ASTON, Vice President of Franklin,
and his wife, Aston & Fair, Inc., a New Mexico corporation, on behalf of
said corporation.

My Commission Expires:

March 12, 1965

Mary Ann Morrison
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:


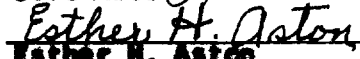
That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B, 22 and
35


Bert Aston

Esther H. Aston

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 17th day
of December, 1962, by BERT ASTON
and his wife, ESTHER H. ASTON.

My Commission Expires:

March 12, 1965

Mary Ann Morrison
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A and
22

Beatrice I. Anderson
Beatrice I. Anderson
Robert O. Anderson
Robert O. Anderson

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 21-A,
21-B and 22

Beatrice I. Anderson
Beatrice I. Anderson, Executrix of
the Estate of P. C. Fletter, deceased.

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Iowa)
COUNTY OF Polk) ss.

The foregoing instrument was acknowledged before me this 10th day
of December, 1962, by ROBERT O. ANDERSON
and his wife, BEATRICE I. ANDERSON

My Commission Expires:

July 4, 1963

Harriette E. Crane
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF Iowa)
COUNTY OF Polk) ss.

The foregoing instrument was acknowledged before me this 10th day
of December, 1962, by BEATRICE I. ANDERSON, Executrix of the
Estate of P. C. Fletter, deceased.

My Commission Expires:

July 4, 1963

Harriette E. Crane
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

10

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A and 22

F. C. Condon
F. C. Condon

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Gregg) ss.

The foregoing instrument was acknowledged before me this 13 day
of December, 1962, by F. C. CONDON
and his wife, _____

My Commission Expires:

6/1/63

Dean Scherell
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

12

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A and 22

x Gertrude W. Boyd
Gertrude W. Boyd

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF TEXAS)
COUNTY OF FREESTONE) ss.

The foregoing instrument was acknowledged before me this 18th day
of December, 1962, by GERTRUDE W. BOYD, A WIDOW.

My Commission Expires: _____

June 1, 1963

Paula Boyd
NOTARY PUBLIC
Freestone County, Texas

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

19

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B and 22

Maude L. Mackey
Maude L. Mackey

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF Michigan)
COUNTY OF Kent) ss.

The foregoing instrument was acknowledged before me this 11 day
of December, 1962, by MAUDE L. MACKEY.

My Commission Expires: _____

Don E. Lick
NOTARY PUBLIC

Feb. 7, 1965

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
 FOR THE DEVELOPMENT AND OPERATION OF THE
 WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
 EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

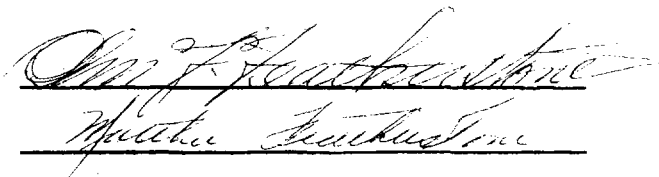
That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 1-2A-2B-2C-7A-7B-8A
8B-8C1-8B-8C-9-14-1B-2B-2TA
21B-22



INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 2 day
of May, 1963, by Olen F. Featherstone
and his wife, Martha Featherstone.

My Commission Expires:

October 26, 1963

[Signature]
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

DIXON YATES OIL CO., A Partnership
Tract Nos: 14-15

Gladys Dixon and Mary Dorothea Dugan, Individually
Tract Nos.: 4A-4B-6-7A-7B-13A-13B-14-15

YATES BROTHERS, A Partnership
Tract Nos.: 4A-4B-6-7A-7B-9-11A-11B-13A-13B-14-15-16-38-40

HARVEY E. YATES, Individually
Tract Nos.: 1-2A-2B-2C-4A-4B-6-7A-7B-9-10B-10C-11A-11B-13A-13B-21A-21B-22-26

MARTIN YATES III, Individually
Tract Nos.: 1-2A-2B-2C-4A-4B-6-7A-7B-9-10B-10C-11A-11B-13A-13B-14-15-21A-21B-22-26-40

S. P. YATES, Individually
Tract Nos.: 1-2A-2B-2C-4A-4B-6-7A-7B-9-10A-10B-10C-10D-11A-11B-13A-13B-21A-21B-22-26

JOHN A. YATES, Individually
Tract Nos.: 1-2A-2B-2C-4A-4B-6-7A-7B-9-10B-10C-11A-11B-13A-13B-21A-21B-22-26

INTEREST COMMITTED:

TRACT(S) _____

By

Estelle H. Yates
Estelle H. Yates, his wife

John A. Yates
John A. Yates, Individually and as a partner in Yates Brothers

Peggy A. Yates
Peggy A. Yates, his wife

Dixon & Yates Oil Company, a partnership, is composed of Martin Yates, III, Yates Brothers, a partnership, Gladys Dixon, Mary D. Duggan. Yates Brothers, a partnership, is composed of Martin Yates, III, Harvey E. Yates, John A. Yates, and S. P. Yates.

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

The foregoing instrument was acknowledged before me
this 2nd day of May, 1963, by Gladys Dixon,
a single woman.

My Commission Expires:

MY COMMISSION EXPIRES 12/15/63

Jack H. Haley
NOTARY PUBLIC

STATE OF TEXAS)
) ss.
COUNTY OF NUECES)

The foregoing instrument was acknowledged before me
this 8 day of May, 1963, by Mary
Dorothea Duggan and J. O. Duggan, her husband.

My Commission Expires:

June, 1963

La Rue Haley
Notary Public.

(LaRue Haley)

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

The foregoing instrument was acknowledged before me
this 2nd day of April, 1963, by Harvey E.
Yates and Louise D. Yates, his wife; Martin Yates, III and
Lillie M. Yates, his wife; S. P. Yates and Estelle H. Yates,
his wife; and John A. Yates and Peggy A. Yates, his wife.

My Commission Expires

MY COMMISSION EXPIRES 12/15/63

Jack H. Haley
NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 1. 2A-2B-2C-21A
21B. 22. 23-24-25-33.
35-36-37-43

R. W. Fair
Mrs. R. W. Fair (maude)

INTEREST COMMITTED:

TRACT(S) 31

George A. Laybourn
George A. Laybourn
Jennie M.

INTEREST COMMITTED:

TRACT(S) 23-43

Buren W. Williams
Mrs. Martha Ann Williams

INTEREST COMMITTED:

TRACT(S) 43
19-A

H. G. Watson
Mrs. H. G. Watson - (Mrs.)

INTEREST COMMITTED:

TRACT(S) 12

Borden M. Cone
Kathleen Cone

STATE OF California)
COUNTY OF Los Angeles) ss.

The foregoing instrument was acknowledged before me this 5 day
of January, 1963, by George L. Fair

and his wife, Mrs. Jennie M. Fairbourn

My Commission Expires:

Sam A. Wine
NOTARY PUBLIC
SAM A. WINE
My Commission Expires March 2, 1966

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 1st day
of May, 1963, by Buren W. Williams

and his wife, Mrs. Martha Ann Williams

My Commission Expires:

Donald R. Hand
NOTARY PUBLIC

14 Dec. 66

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 1st day
of May, 1963, by H. G. Watson

and his wife, Mrs. H. G. (Avis) Watson

My Commission Expires:

Donald R. Hand
NOTARY PUBLIC

14 Dec. 66

STATE OF NEW MEXICO)
COUNTY OF LEA) ss.

The foregoing instrument was acknowledged before me this 2nd day
of May, 1963, by Gordon H. Cone, and his wife, Kathleen Cone

My Commission Expires:

Mary Siebinger
NOTARY PUBLIC

April 23, 1966

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 15 day
of May, 1963, by R. W. Fair

and his wife, Maude Fair

My Commission Expires:

Mary Siebinger
NOTARY PUBLIC

6-1-63

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED: ~~1-24-21A-21B-22~~

TRACT(S) 24-33-36-37

ATTEST:

Marvin D. Wilson
Secretary

By:

THE R. W. FAIR FOUNDATION

Hilton H. Fair
President

INTEREST COMMITTED:

TRACT(S) 17A & 17B

FAIR N & N TRUST

Gus W. Arnold
Trustee

INTEREST COMMITTED:

TRACT(S) 43

Gus W. Arnold
 Ella Mae Arnold

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 24th day
of May, ¹⁹⁶³~~1962~~, by Wilton H. Fair

~~and his wife~~ President of The R. W. Fair Foundation, a Texas Corporation,

My Commission Expires:

6-1-63

Mary J. Nelson
NOTARY PUBLIC

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 28th day
of May, ¹⁹⁶³~~1962~~, by Gus W. Arnold

~~and his wife~~ Trustee of Fair N & N Trust

My Commission Expires:

6-1-63

Mary J. Nelson
NOTARY PUBLIC

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 28th day
of May, ¹⁹⁶³~~1962~~, by Gus W. Arnold

and his wife, Ella Mae Arnold

My Commission Expires:

6-1-63

Mary J. Nelson
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B and 22

R. R. Aston
R. R. Aston
Mary Ellen Aston
Mary Ellen Aston

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 14, 21-A, 21-B and 22

Laboro Lucas
Laboro Lucas

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B and 22

Louis C. Todd
Louis C. Todd
Suzanne Todd
Suzanne Todd

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B and 22

Otto M. Vaughan
Otto M. Vaughan
Alice Vaughan
Alice Vaughan

INTEREST COMMITTED:

TRACT(S) Nos. 1, 2-A, 2-B,
2-C, 21-A, 21-B and 22

Tom P. Stephens
Tom P. Stephens
Dolts H. Stephens
Dolts H. Stephens

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 19th day
of December, 1962, by R. R. ASTON
and his wife, MARY ELLEN ASTON

My Commission Expires:

March 12, 1965

Mary Ann Morrison
NOTARY PUBLIC

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 13th day
of December, 1962, by LOUIS C. TODD
and his wife, SUZANNE TODD

My Commission Expires:

March 12, 1965

Mary Ann Morrison
NOTARY PUBLIC

STATE OF OKLAHOMA)
COUNTY OF POTTAWATOMIE) ss.

The foregoing instrument was acknowledged before me this 28 day
of December, 1962 by OTTO M. VAUGHAN
and his wife, ALICE VAUGHAN

My Commission Expires:

June 9, 1963

M. M. Richardson
NOTARY PUBLIC

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 13th day
of December, 1962, by LADORA LUCAS

My Commission Expires:

March 12, 1965

Mary Ann Morrison
NOTARY PUBLIC

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 13th day
of December, 1962, by TOM P. STEPHENS
and his wife, DOLLIS H. STEPHENS

My Commission Expires:

March 12, 1965

Mary Ann Morrison
NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

~~1-24-25-21A-21B~~

TRACT(S)

~~25-26-35~~

Mary Luning Randall
Bill W. Randall

INTEREST COMMITTED:

TRACT(S)

INTEREST COMMITTED:

TRACT(S)

INTEREST COMMITTED:

TRACT(S)

INTEREST COMMITTED:

TRACT(S)

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF Kansas)
COUNTY OF Sedgewick) ss.

The foregoing instrument was acknowledged before me this 25 day
of May, 1962, by Bert D. Randall
and his wife Mary Daisy Randall

My Commission Expires:

Feb 23 1967

Vernon C. White
NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit 'B', do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit 'B' attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Curtis McBrown

Esther McBrown

1-2-A-21-22-23-24-25

22-23-35

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this 31st day
of May, 1962, by ARTIS KROON
and his wife, ESTHER KROON.

My Commission Expires:

June 1, 1963

Billie A. Van Rahn
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

Gustav M. Brown

INTEREST COMMITTED:

TRACT(S) _____

David C. Perkins
Mrs. David C. Perkins

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 4th day
of June, 1962, by Harold C. Porter
joined by ~~and~~ his wife, Mrs. Harold C. Porter.

My Commission Expires: _____

Edith M. Little
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 1, 2-A, 2-B, 2-C,
21-A, 21-B, 22, 30, 35

ATTEST:

Ona M. Hippold
Secretary

Texas Royalty Company

Company

By

[Signature]

President

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By

President

Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By

President

Secretary

STATE OF TEXAS)
COUNTY OF TARRANT) ss.

The foregoing instrument was acknowledged before me this 31st day
of MAY, 196³7, by E. A. NIPPOLD,
President of TEXAS ROYALTY COMPANY,
a TEXAS corporation, on behalf of said corporation.

My Commission Expires:

JUNE 1, 1963

Billie L. Van Loh
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 24, 25, 26
and 14.

Continental Illinois National Bank and Trust Company of Chicago, as Trustee under the last Will and Testament of William D. Sloan, deceased.

By

[Signature]
Vice President

ATTEST:

[Signature]
Assistant Secretary

The CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO executes this instrument not in its individual capacity, but solely in its capacity as trustee without covenants of warranty of any kind, express or implied, regardless of any provision hereof.

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By

President

Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By

President

Secretary

STATE OF ILLINOIS)
COUNTY OF COOK) ss.

The foregoing instrument was acknowledged before me this 31st day
of May, 1963, ~~1962~~, by J. J. BORLAND,

Vice President of CONTINENTAL ILLINOIS NATIONAL BANK AND TRUST COMPANY OF CHICAGO,
association
a national banking / corporation, on behalf of said ~~corporation~~ **Bank as Trustee**
aforsaid.

My Commission Expires:

May 9, 1967

Estelle B. Spacht
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,

President of _____,

a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,

President of _____,

a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
 FOR THE DEVELOPMENT AND OPERATION OF THE
 WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
 EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____
 2-A, 2-B, 2-C

Lee B. Gilpin
 Tilda M. Gilpin

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF California)
COUNTY OF Alameda) ss.

The foregoing instrument was acknowledged before me this 25th day
of May, 1962, by Lee B. Gilpin
and his wife, Hilda M. Gilpin.

My Commission Expires:
VIRGINIA JOHNSON
My Commission Expires June 13, 1966

Virginia Johnson
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____
2-A, 2-B, 2-C

Era I. Bernick

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Iowa)
COUNTY OF Monroe) ss.

The foregoing instrument was acknowledged before me this 10th day
of June, 1963, by Eva I. Cernich, single
and ~~his~~ wife, _____.

My Commission Expires:

July 4, 1963

David V. Grmie
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

2-A, 2-B, 2-C

Donelia Montellon Betz

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Florida)
COUNTY OF Pinellas) ss.

The foregoing instrument was acknowledged before me this 27th day
of May, 1963, by Cordelia Masteller Botzinger
and his wife, _____.

My Commission Expires:
Notary Public, State of Florida at Large
My Commission Expires March 16, 1965
Bonded By American Fire & Casualty Co.

John R. Todd
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____
NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

2-A, 2-B, 2-C

Leona J. Masteller

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Hidalgo) ss.

The foregoing instrument was acknowledged before me this 1 day
of June, 1962, by Leona I Masteller
and his wife, _____.

My Commission Expires:

June 1-1965

W. S. RAY, Notary Public
My Commission Expires
June 1st, 1965

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
 FOR THE DEVELOPMENT AND OPERATION OF THE
 WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
 EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:


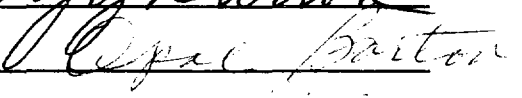
That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____



 : 1 9 6 2 :

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico)
COUNTY OF Lea) ss.

The foregoing instrument was acknowledged before me this 31st day
of May, 1962, by Roy O. Barton
and his wife, Opal Barton

My Commission Expires:

12-8-66

Randolph M. Richelson
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

2A - 2B - 2C

David B Crawford

INTEREST COMMITTED:

TRACT(S) _____

2A - 2B - 2C

Rebecca T Crawford

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

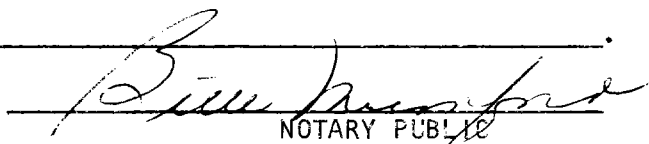
INTEREST COMMITTED:

TRACT(S) _____

STATE OF California)
COUNTY OF San Diego) ss.

The foregoing instrument was acknowledged before me this 28th day
of May, 1962³, by David B. Crawford
and his wife, _____.

My Commission Expires: _____

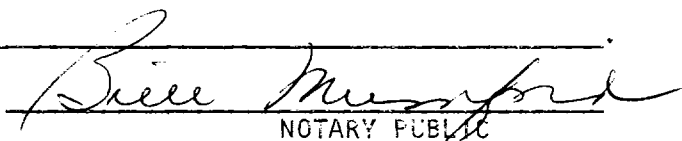

NOTARY PUBLIC

STATE OF California)
COUNTY OF San Diego) ss.

BETTE MUMFORD, Notary Public in and
for the County of San Diego, State of California
My Commission Expires March 10, 1963

The foregoing instrument was acknowledged before me this 28th day
of May, 1962³, by Rebecca L. Crawford
and his wife, _____.

My Commission Expires: _____


NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

BETTE MUMFORD, Notary Public in and
for the County of San Diego, State of California
My Commission Expires March 10, 1963

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

2A - 2B - 2C

Isabel Behemus Hensides

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF California)
COUNTY OF San Diego) ss.

The foregoing instrument was acknowledged before me this 29 day
of _____, 1962, by Chabel Polhemus Droudes
and his wife, _____.

My Commission Expires:
Nov. 29, 1966

Mario J. John
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Ernest Anderson

2A - 2B - 2C

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF California)
COUNTY OF Los Angeles) ss.

The foregoing instrument was acknowledged before me this 27 day
of May, 1962, by Donald A. Anderson

My Commission Expires:

February 7, 1966

Carol C. Cross

NOTARY PUBLIC CAROL C. CROSS

NOTARY PUBLIC in and for the County of
Los Angeles, State of California.

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:


That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____
2A - 2B - 2C - 14


Trustee for James Harvey Yates
and Samuel Mitchell Yates

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

State of New Mexico)
) ss
County of Eddy)

The foregoing instrument was acknowledged before me
this 24th day of May, 1963, by Harvey E. Yates, Trustee for
James Harvey Yates and Samuel Mitchell Yates.

My Commission Expires:



Notary Public.

MY COMMISSION EXPIRES 12/15/68

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

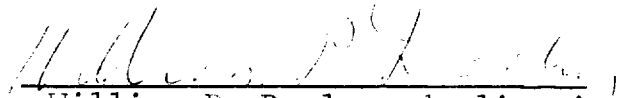
That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____
2A - 2B - 2C



William P. Dooley, dealing in
his separate property

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 25th day
of May, 1963, by William P. Dooley
and his wife, _____

My Commission Expires:
12/15/63

[Signature]
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____
2A - 2B - 2C

Zeola Masteller Smith
Zeola Masteller Smith
Ray Smith
Ray Smith

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Iowa)
COUNTY OF Tama) ss.

The foregoing instrument was acknowledged before me this 28th day
of May, 196³2, by Ray Smith

and his wife, Zeola Masteller Smith

My Commission Expires:

July 4, 1963

James E. Roan
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2A-2B-2C

Russell Rogers
Russell Rogers, Executor of
the Estates of Charles Rogers
and Jennie Rogers, Deceased.

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by Russell Rogers, Executor of the Estates
of Charles Rogers and Jennie Rogers, Deceased.

My Commission Expires: _____

~~MY COMMISSION EXPIRES 12/15/62~~

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2A-2B-4A-4B-6-
7A-7B-13A-13B

Florence M. Dooley
Florence M. Dooley, Executrix
of the Estate of William Dooley,
Deceased, and Individually.

INTEREST COMMITTED:

TRACT(S) 16-38

Vergil O. Hopp VOH
Leta M. Hopp LMH

INTEREST COMMITTED:

TRACT(S) 2A-2B-2C

Jack W. McCann
May Ann McCann

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF NEW MEXICO)
) ss
COUNTY OF EDDY)

The foregoing instrument was acknowledged before me
this 4th day of May, 1962, by Jack W. McCaw and Mary Ann
McCaw, his wife, and Florence M. Dooley, Executrix of the
Estate of William Dooley, Deceased, and Individually.

My Commission expires:

Bella F. Williams
Notary Public.

Aug 7, 1964

STATE OF TEXAS)
) ss.
County of Lubbock)

The foregoing instrument was acknowledged before me
this 18 day of May, 1962, by Vergil O. Hopp and Leota
M. Hopp, his wife.

My Commission Expires

Gordon Lee Moore
Notary Public.

June 1, 1962

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West LoCo Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2A-2B-2C

Robert B. Gates
Nada S. Gates

INTEREST COMMITTED:

TRACT(S) 2A-2B-2C

John W. Gates
Jean M. Gates

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 20th day
of May, 1963, by Robert B. Gates
and his wife, Jean M. Gates Nada S. Gates

My Commission Expires:
MY COMMISSION EXPIRES 12/15/63

[Signature]
NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 20th day
of May, 1963, by John W. Gates
and his wife, Jean M. Gates

My Commission Expires:
MY COMMISSION EXPIRES 12/15/63

[Signature]
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 43

B. A. Bowers
B. A. Bowers, a single man

INTEREST COMMITTED:

TRACT(S) 2A-2B-2C

14-27

B. A. Bowers
B. A. Bowers, sole heir of
Katherine J. Bowers, Deceased

INTEREST COMMITTED:

TRACT(S) _____

B

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

For acknowledgments, see reverse side.

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss.

The foregoing instrument was acknowledged before me this 21st day
of December, 1962, by B. A. BOWERS.

My Commission Expires: _____

6-2-65

Lincoln J. Martinez
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2A. 2B. 2C
2A. 2B. 2C

RC Gray
Calvin C. Smith
Julia E. Smith

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 16th day
of May, 1963, by R. C. Gray, dealing in his sole and
separate property

My Commission Expires:
12-8-66

Randolph M. Richardson
NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 16th day
of May, 1963, by Clarence C. Smith and
and his wife, Julia M. Smith

My Commission Expires:
12-8-66

Randolph M. Richardson
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____
3, 6, 13-A, 13-B

Neil H. Wells
Mary E. Wells ^{VCH}
LMH

INTEREST COMMITTED:

TRACT(S) _____
3, 6, 13-A, 13-B

Rubie C. Bell ^{Rubie Crosby Bell, a married woman, dealing herein in her sole and separate estate.}
Bryan Bell

INTEREST COMMITTED:

TRACT(S) _____
3, 13-A, 13-B

Harold J. Saunders
W. J. Saunders

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

~~Louisiana~~
~~STATE~~ OF ~~MISSISSIPPI~~)
COUNTY OF _____) ss.

~~My~~ The foregoing instrument ~~was~~ acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____
My Commission Expires: _____

NOTARY PUBLIC

STATE OF ~~New Mexico~~)
COUNTY OF ~~Alamy~~) ss.

The foregoing instrument was acknowledged before me this 7th day
of May, 1962, by Will E. Wille
and his wife, Mary E. Wille
My Commission Expires: _____

NOTARY PUBLIC

STATE OF Louisiana)
PARISH ~~JEFFERSON~~ OF Orleans) ss.

The foregoing instrument was acknowledged before me this 31 day
of May, 1962, by Bryan Bell
and his wife, Rubie C. Bell
My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires: _____

NOTARY PUBLIC

STATE OF TEXAS)
COUNTY OF DALLAS) ss.

The foregoing instrument was acknowledged before me this 3rd day
of June 1963, 1962, by Faye W. Brunders
and his wife, her husband, C. J. Brunders

My Commission Expires:
DORIS S. FORD, Notary Public in and for Dallas County, Texas
My Commission expires June 1, 1965

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Elyse J. Patterson
Ch. Patterson

INTEREST COMMITTED:

TRACT(S) _____

Sue S. Graham
Robert L. Graham

INTEREST COMMITTED:

TRACT(S) _____

Willie Saunders-John
J. Saunders

INTEREST COMMITTED:

TRACT(S) _____

Edward W. Conway, Sr.
Stanley W. Conway, Jr.

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Missouri)
COUNTY OF Jackson) ss.

The foregoing instrument was acknowledged before me this 21st day
of May, 1962, by R. M. Patterson
and his wife, Elyse S. Patterson.

My Commission Expires:

April 20, 1964

Jean Baker
NOTARY PUBLIC

STATE OF Utah)
COUNTY OF Salt Lake) ss.

The foregoing instrument was acknowledged before me this 28th day
of May, 1962, by Robert E. Graham
and his wife, Sue S. Graham.

My Commission Expires:

6-29-64

New Mexico

R. H. Gallagher
NOTARY PUBLIC

STATE OF Chaves)
COUNTY OF _____) ss.

4th

The foregoing instrument was acknowledged before me this _____ day
of _____, July 10, 1963
and his wife, _____.

My Commission Expires:

12/7/63
New Mexico

Virginia L. Jones
NOTARY PUBLIC

STATE OF Chaves)
COUNTY OF _____) ss.

4th

June, 1963 **Elisabeth W. Cheney, Guardian of**
Stanley W. Cheney, III. The foregoing instrument was acknowledged before me this _____ day
of 12/7/63, 1962, by _____.

My Commission Expires:

Virginia L. Jones
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 2

[Signature]
Company

ATTEST:

By *Anna Mae Brinson*
President

Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By _____
President

Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By _____
President

Secretary

STATE OF Texas)
COUNTY OF Midland) ss.

The foregoing instrument was acknowledged before me this 19 day
of May, 1963, ~~XXXX~~ by E. L. Brinson,
And Wife
~~XXXXXXXXXX~~ Anna Mae Brinson

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

My Commission Expires:

6-1-63



NOTARY PUBLIC

Midland County, Texas - R. A. Rick

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Julia Braum
5-8A-8B-8C1-8C2-8D-8E-19A-
19B-19C-20

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

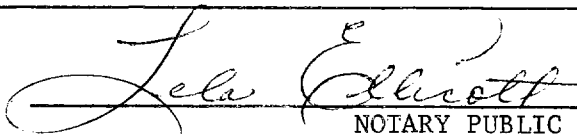
STATE OF New Mexico)
COUNTY OF Bddy) ss.

The foregoing instrument was acknowledged before me this 24th day
of May, 1963, by Julia Brainard,

~~and his wife,~~

My Commission Expires:

Oct. 8, 1966


NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____

and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____

and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____

and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 12.5 WI on #5, 8-A, 8-B, 8-C, 8-D & 8-E; .25 ORI on 8-C-1; .5 ORI on 8-D & 8-E

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) 4.16667 WI on #20; lessee of record on #5

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

CLYDE GUY & SONS, INC.

By: Clyde Guy
President

ATTEST:

Mary Jo Guy
Assistant Secretary

Clyde Guy
Clyde Guy
Mary Jo Guy
Mary Jo Guy

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 20 day
of May, 1963, by CLYDE GUY, President of CLYDE GUY & SONS,
INC., a New Mexico corporation, on behalf of said corporation.
~~XXXXXXXXXX~~

My Commission Expires:

April 7, 1964

Dwight Kidd
NOTARY PUBLIC

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 20 day
of May, 1963, by CLYDE GUY
and his wife, MARY JO GUY.

My Commission Expires:

April 7, 1964

Dwight Kidd
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

APPROVED
AS TO FORM

INTEREST COMMITTED:

TRACT(S) 5, 8-A, 8-B, 8-C-1, 8-C-2, 8-D, 8-E, 20

GRARIDGE CORPORATION

ATTEST:

J. L. McChesmond
ASSISTANT SECRETARY

BY

R. L. Elliott
VICE PRESIDENT

APPROVED
AS TO CONTENT
AS TO INTEREST
ADMINISTRATION

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

THE STATE OF TEXAS)
) ss.
COUNTY OF STEPHENS)

The foregoing instrument was acknowledged before me this 8th day of May, 1963, by R. L. ELLIOTT, Vice President of GRARIDGE CORPORATION, a Texas corporation, on behalf of said corporation.

My Commission Expires:

June 1, 1963

Charline Killian
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 58-A, 8-B, 8-C-1,
8-C-2, 8-D, 8-E, & 20

Kate G. Lumber

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF N. Mex.)
COUNTY OF Bernalillo) ss.

The foregoing instrument was acknowledged before me this 28th day
of January, 1963, by Kate L. Lawrence

My Commission Expires:

August 9, 1966

Hazel Wilson
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1963, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

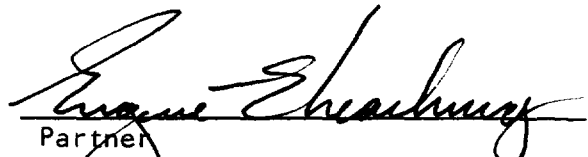
That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____



Partner

d/b/a Nearburg & Ingram, a partnership

INTEREST COMMITTED:

TRACT(S) **5-20** _____



Partner

d/b/a Nearburg & Ingram, a partnership

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 26th day
of February, 1963, by Eugene E. Nearburg and Tom L. Ingram,
~~and his wife,~~ partners, on behalf of Nearburg & Ingram, a partnership.

My Commission Expires:
February 2, 1965

Deloris Taylor
Deloris Taylor NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) all
5-10A-10B-10C-10D-11A-11B-
17A-17B

Ethel Windsor Watson
Ethel Windsor Watson

INTEREST COMMITTED:

TRACT(S) all
5-10A-10B-10C-10D-11A-11B-
17A-17B

Timothy B. Bessley

INTEREST COMMITTED:

TRACT(S) all

Martha Watson Bessley

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Oklahoma)
COUNTY OF Tulsa) ss.

The foregoing instrument was acknowledged before me this 31 day
of December, 1962, by Geneleon Boesche
and his wife, Martha Watson Boesche.

My Commission Expires:

July 29, 1963

Lawanda Miller
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF Oklahoma)
COUNTY OF Tulsa) ss.

The foregoing instrument was acknowledged before me this 31 day
of December, 1962, by Ethel Windsor Watson

My Commission Expires:

July 29, 1963

Lawanda Miller
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

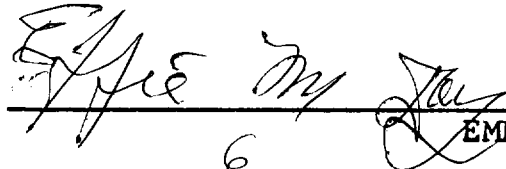
That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____


6 EMD

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
) ss.
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me
this 29 day of May, 1963, by Effie M. Day.

My Commission Expires:

G. E. WOLLER, Notary Public
in and for El Paso County, Texas

~~My commission expires June 1, 1963~~



Notary Public.

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

BASSETT-BIRNEY OIL CORPORATION
Company

ATTEST:

By: _____
President

Secretary

INTEREST COMMITTED:

TRACT(S) 6-7A-7B-11A-11B
13A-13B-16-38-40

YATES PETROLEUM CORPORATION
Company

ATTEST:

By: *[Signature]*
President

[Signature]
Assistant Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By: _____
President

Secretary

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of Bassett-Birney Oil Corporation,
a _____ corporation, on behalf of said corporation.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 25th day
of April, 1962, by S. P. Yates,
President of Yates Petroleum Corporation,
a New Mexico corporation, on behalf of said corporation.

My Commission Expires: _____

MY COMMISSION EXPIRES 12/15/63


NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 9, 10B, 10C,
11A, 11B, 39, 41 and 42

ATTEST:

[Signature]
Assistant Secretary

CONTINENTAL OIL COMPANY

By *[Signature]* Company
Attorney in Fact ~~James~~

[Handwritten initials]

INTEREST COMMITTED:

TRACT(S) _____

ATTEST:

Secretary

By _____
President

INTEREST COMMITTED:

TRACT(S) _____

ATTEST:

Secretary

By _____
President

For acknowledgments, see reverse side.

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF TEXAS

I

COUNTY OF TARRANT

I

The foregoing instrument was acknowledged before me
this 3rd day of June, 1963, by ROY M. MAYS,
Attorney in Fact of CONTINENTAL OIL COMPANY, a Delaware corpora-
tion, on behalf of said corporation.

Barbara Lee Nelson

Notary Public

Tarrant County, Texas

My Commission expires:

6-1-65

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 9

R. F. Travis Jr.
RFT, Jr.
Gene Young Travis (Wife)

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF CALIFORNIA)
County of SAN MATEO) ss

The foregoing instrument was acknowledged before me
this 17th day of May, 1963, by R. F. Travis, Jr.,
and his wife Gene Young Travis.

My Commission Expires:

MY COMMISSION EXPIRES
OCTOBER 25, 1968

James Arthur Pierce
Notary Public.
JAMES ARTHUR PIERCE

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

Jordan M. Cene
Kathleen Cene

INTEREST COMMITTED:

TRACT(S) 12 _____

Mrs. Lela Love

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico)
COUNTY OF Lea) ss.

The foregoing instrument was acknowledged before me this 10th day
of December, 1962, by Gordon M. Cone
and his wife, Kathleen Cone; and Mrs. Lula Cone, dealing in her separate estate. ~~Property.~~

My Commission Expires:

April 22, 1966

Mary Finckh
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Chuck PE Emmon
Vernice Emmon

INTEREST COMMITTED:

TRACT(S) _____

Morna E Emmon
by: Chuck PE Emmon

INTEREST COMMITTED:

TRACT(S) _____

Larry Emmon
Norma Fay Emmon

INTEREST COMMITTED:

TRACT(S) _____

15-11

INTEREST COMMITTED:

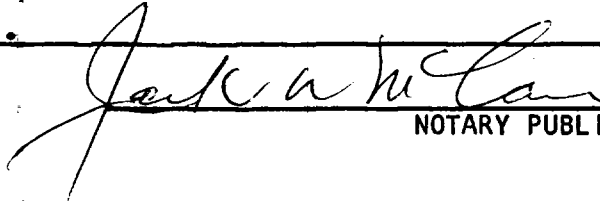
TRACT(S) _____

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 4th day
of June, 1962, by CHARLES R. EMMONS
and his wife, VERNICE EMMONS.

My Commission Expires:

MY COMMISSION EXPIRES 12/15/67

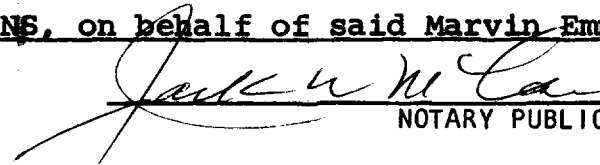

NOTARY PUBLIC

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 4th day
of June, 1962, by Charles R. Emmons, Attorney-in-Fact
and his wife for MARVIN EMMONS, on behalf of said Marvin Emmons.

My Commission Expires:

MY COMMISSION EXPIRES 12/15/67



NOTARY PUBLIC

STATE OF NEW MEXICO)
COUNTY OF EDDY) ss.

The foregoing instrument was acknowledged before me this 4th day
of June, 1962 by EARL EMMONS
and his wife, NORMA FAY EMMONS.

My Commission Expires:

MY COMMISSION EXPIRES 12/15/67


NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 19A-19B-19C-20

J. Cleo Thompson Jr.
Kristine Chandler Thompson

INTEREST COMMITTED:

TRACT(S) 19A

Helma Miller

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF TEXAS) ss.
DALLAS)

The foregoing instrument was acknowledged before me this 6th day
of December, 1962, by J. Cleo Thompson, Sr.

and his wife, Christine Chandler Thompson

My Commission Expires:

June 1, 1963

Alise L. Benson
NOTARY PUBLIC

STATE OF TEXAS)
COUNTY OF DALLAS) ss.

Dallas County, Texas

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
 FOR THE DEVELOPMENT AND OPERATION OF THE
 WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
 EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

Helma Miller Sanders

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Reese) ss.

The foregoing instrument was acknowledged before me this 2nd day
of June, 1963, ~~1962~~ by Thelma Miller Sanders, dealing in her sole and
and ~~separate~~ separate property

My Commission Expires: _____

12-8-66

Randolph M. Richardson
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

19A-19B-19C-20

J. Cleo Thompson Jr.
Dorothy Dundy Thompson

INTEREST COMMITTED:

TRACT(S) ^{12-19A} 19A-Exhibit B

1.7500000 Interest

Hattie Cone Williams
Val Williams

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

For acknowledgments, see reverse side.

STATE OF TEXAS)
COUNTY OF DALLAS) ss.

The foregoing instrument was acknowledged before me this 4 day
of DECEMBER, 1962, by J. CLEO THOMPSON, JR.

and his wife, DOROTHY EMMET THOMPSON

My Commission Expires:

6-1-63

Lisa Connolly
NOTARY PUBLIC

STATE OF TEXAS)
COUNTY OF LUBBOCK) ss.

The foregoing instrument was acknowledged before me this 20th day
of FEBRUARY, 1962, by VAL WILLIAMS

and his wife, HATTIE CONE WILLIAMS

My Commission Expires:

6-1-63

Sylvia Peek
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 14

Clyde C. Ballard
CCB
Harriet Brown Ballard

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS

County of El Paso) ss

The Foregoing instrument was acknowledged before me this

10th day of May, 1963 by Clint C. Ballard, and his wife

Harriett Brown Ballard

My Commission Expires:

5/3/63

Charles E. Lindsey
Notary Public

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

FAIR OIL COMPANY

TRACT(S) ~~27-A, 27-B, 24,~~²³

~~31, 33, 36, 37~~

ATTEST:

Mervin G. Wilson
Secretary

Company
By: James W. Fair
President

INTEREST COMMITTED:

BRIGHT & LANE CORP.

TRACT(S) ~~23~~ - 43

ATTEST:

Ruth Chapman
Secretary

Company
By: Sam Bright
President

INTEREST COMMITTED:

TEXAS GULF PRODUCING CO.

TRACT(S) 24

~~ATTEST:~~

Secretary

Company
By: W. J. Lang Jr
President
Attorney-in-Fact

STATE OF TEXAS)
COUNTY OF HARRIS) ss.

The foregoing instrument was acknowledged before me this 17 day
of January, 1962, by Wm. J. Craig, Jr.,

Attorney-in-Fact ~~President~~ of TEXAS GULF PRODUCING COMPANY,
a Delaware corporation, on behalf of said corporation.

My Commission Expires:

June 1, 1963

Mary F. Nelson
MARY F. NELSON NOTARY PUBLIC
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1963

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 3rd day
of December, 1962, by James W. Fair,

President of Fair Oil Company,
a Texas corporation, on behalf of said corporation.

My Commission Expires:

6-1-62

Mary F. Nelson
Mary F. Nelson NOTARY PUBLIC

STATE OF TEXAS)
COUNTY OF SMITH) ss.

The foregoing instrument was acknowledged before me this 3rd day
of December, 1962, by Sam Bright, President of Bright & Latta Corp.,
a Texas corporation, on behalf of said corporation.

My Commission Expires:

6/1/63

Hierna Lacy
NOTARY PUBLIC
NOTARY PUBLIC IN AND FOR SMITH COUNTY,
TEXAS.

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) No. 18

Clarice Randal
Clarice Randal

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico }
COUNTY OF Eddy } ss.

The foregoing instrument was acknowledged before me this 21st day
of May, 1963, by O. H. Randel
and his wife, Clarice Randel.

My Commission Expires:

August 12, 1964

Leota C. Crouch
NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____ }
COUNTY OF _____ } ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 18

Loco Hills Pressure
Maintenance Association, Inc.
Company

ATTEST:

Black E. Stone
Secretary

By: A. J. Hatis
President

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

Secretary

By: _____
President

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

Secretary

By: _____
President

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 15 day
of May, 1963, by S. P. Yates,

President of Loco Hills Pressure Maintenance Association, Inc.
a New Mexico corporation, on behalf of said corporation.

My Commission Expires:
December 15, 1963

[Signature]
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,

President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,

a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 29-1

CHILDRESS ROYALTY COMPANY

Company

By

Paul Childress

President

ATTEST:

M. H. Childress
Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By

President

Secretary

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

By

President

Secretary

STATE OF MISSOURI)
COUNTY OF JASPER) ss.

The foregoing instrument was acknowledged before me this 27th day
of December, 1962, by Paul Childress,
President of Childress Royalty Company,
a Delaware corporation, on behalf of said corporation.

My Commission Expires:

April 16, 1966

L. D. [Signature]
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

J. Lee Thompson Jr.
Coro. Lee Thompson

INTEREST COMMITTED:

TRACT(S) 19A

we 7 min
Flaint H. list

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF DALLAS) ss.

The foregoing instrument was acknowledged before me this 2 day
of January, 1962, by J. Clee Thompson, Jr.
and his wife, Dorothy Ranta Thompson.

My Commission Expires:
6-1-63

Laird Connolly
NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Dona Ana) ss.

The foregoing instrument was acknowledged before me this 2 day
of February, 1962, by W. E. Flint
and his wife, Elaine V. Flint.

My Commission Expires:
January 12, 1966

R. R. Perry
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

J. Lee Thompson
Dorothy King Thompson

INTEREST COMMITTED:

TRACT(S) 19A _____

W. T. Perry
Bernice Perry

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF DALLAS) ss.

The foregoing instrument was acknowledged before me this 4 day
of December, 1962, by J. CERO THOMPSON, JR.
and his wife, DOROTHY HUNTZ THOMPSON

My Commission Expires:

6-1-63

Luis Connolly
NOTARY PUBLIC

STATE OF Texas)
COUNTY OF Ector) ss.

The foregoing instrument was acknowledged before me this 14th day
of December, 1962, by J. W. Peery
and his wife, Bernice Peery

My Commission Expires:

June 1, 1963

Nelle Healy (Nelle Healy)
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

J. Leo Thompson Jr.
Dorothy L. Thompson

INTEREST COMMITTED:

TRACT(S) 19A _____

Lawrence Truitt

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

For acknowledgments, see reverse side.

STATE OF TEXAS)
COUNTY OF DALLAS) ss.

The foregoing instrument was acknowledged before me this 4 day
of DECEMBER, 1962, by J. CLEO THOMPSON, JR.

and his wife, DOROTHY KUNTE THOMPSON

My Commission Expires:

6-1-63

Laird Connolly
NOTARY PUBLIC

STATE OF ILLINOIS)
COUNTY OF MONTGOMERY) ss.

The foregoing instrument was acknowledged before me this 7TH day
of DECEMBER, 1962, by LAURENCE TROUT, A WIDOWER,
and ~~NEVER~~ NEVER REMARRIED

My Commission Expires:

Sept. 22-66

James L. Gurney
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

L G M COMPANY, A PARTNERSHIP

Sam Lett
by: Sam Lett, a partner

Mrs. Sam Lett

Mrs. Sam Lett

INTEREST COMMITTED:

TRACT(S) _____

Thomas Gay
by: Thomas Gay, a partner

Mrs. Thomas Gay

Mrs. Thomas Gay

INTEREST COMMITTED:

TRACT(S) _____

Harold M. Miller
by: Harold M. Miller, a partner

Mrs. Harold M. Miller

Mrs. Harold M. Miller

INTEREST COMMITTED:

TRACT(S) _____

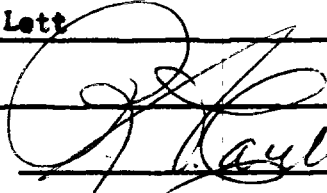
19A-19B-19C-20

INTEREST COMMITTED:

TRACT(S) _____

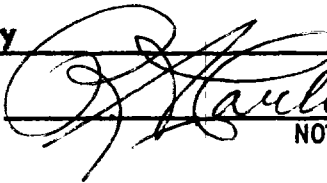
STATE OF Texas)
COUNTY OF Dallas) ss.

The foregoing instrument was acknowledged before me this 5th day
of December, 1962, by Sam Lett
and his wife, Mrs. Sam Lett
My Commission Expires:
June 1, 1963


NOTARY PUBLIC


STATE OF Texas)
COUNTY OF Dallas) ss.

The foregoing instrument was acknowledged before me this 5th day
of December, 1962, by Thomas Gay
and his wife, Mrs. Thomas Gay
My Commission Expires:
June 1, 1963


NOTARY PUBLIC

STATE OF Texas)
COUNTY OF Dallas) ss.

The foregoing instrument was acknowledged before me this 5th day
of December, 1962 by Harold M. Miller
and his wife, Mrs. Harold M. Miller
My Commission Expires:
June 1, 1963


NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____
My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 10 2 4 10 6

DALLAS H. SPENCER TRUST, INC.

Company

ATTEST:

J. A. Fairley
Secretary

By: Carl R. Spencer
President

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

Secretary

By: _____
President

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

Secretary

By: _____
President

STATE OF NEW MEXICO)
COUNTY OF SANTA FE) ss.

The foregoing instrument was acknowledged before me this 16th day
of May, 196³1, by CARL E. SPENCER,
Vice President of BALLARD E. SPENCER TRUST, INC.
a New Mexico corporation, on behalf of said corporation.

My Commission Expires:

July 3, 1966

Carl Lowery

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 192-193

Delhi-Taylor Oil Corporation
Company

ATTEST:

Katherine Vaughn
Asst. Secretary

By:

P. M. Crum
Vice

President



INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

Secretary

By:

President

INTEREST COMMITTED:

TRACT(S) _____

Company

ATTEST:

Secretary

By:

President

STATE OF Texas)
COUNTY OF Dallas) ss.

The foregoing instrument was acknowledged before me this 17 day
of December, 1962, by N. G. Miller,
Vice President of Delhi-Taylor Oil Corporation,
a Delaware corporation, on behalf of said corporation.

My Commission Expires:

Ruth Avery
NOTARY PUBLIC

RUTH AVERY, Notary Public,
in and for Dallas County, Texas
My Commission Expires June 1, 1963

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 23-43

James W. Fair
Wmcy Hood Fair

INTEREST COMMITTED:

TRACT(S) 43-43

Geo. L. Reese, Jr.
George L. Reese, Jr.
Lila Reese

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 5 day
of December, 1962, by James W. Fair
and his wife, Nancy Noel Fair.

My Commission Expires:
6-1-63

Mary F. Nelson
Mary F. Nelson NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Chaves) ss.

The foregoing instrument was acknowledged before me this 10th day
of December, 1962, by Geo. L. Reese, Jr.
and his wife, Lila Reese.

My Commission Expires:
11-21-66

Clarence G. Blair
Clarence G. Blair NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 23-43

Milton H. Fair
Imogene F. Fair

INTEREST COMMITTED:

TRACT(S) 43

Leona L. Stagner
Leona L. Stagner

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 6th day
of December, 1962, by Wilton E. Fair
and his wife, Imogene T. Fair

My Commission Expires:
6-1-63

Mary F. Nelson
NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Eddy) ss.

The foregoing instrument was acknowledged before me this 12 day
of December, 1962, by Leona L. Stagner, widow & single
~~and his wife~~ woman

My Commission Expires:
6-8-64

John B. Wilton
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 23-43

Richard L. Ray
Mary M. Ray

INTEREST COMMITTED:

TRACT(S) _____

~~Philip G. Layburn~~

INTEREST COMMITTED:

TRACT(S) 31

Alta Mae Reynolds Byrne
William F. Byrne

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 4th day
of December, 1962, by Richard L. Ray
and his wife, Mary H. Ray

My Commission Expires:

6-1-63

Mary F. Nelson
Mary F. Nelson NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF California)
COUNTY OF Los Angeles) ss.

The foregoing instrument was acknowledged before me this 5 day
of March, 1963, ~~1962~~ by William F. Byrne
and his wife, Alta Mae Reynolds Byrne

My Commission Expires:

My Commission Expires June 21, 1963

Eleanor Karchmer
ELEANOR KARCHMER NOTARY PUBLIC

NOTARY PUBLIC
In and for the County of Los Angeles, State of California

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 29

Larry Bright
Mary Bright
25-31

INTEREST COMMITTED:

TRACT(S) 31

Dorance & Dawn
Florence O. Hawn
Lyle R. Hawn

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Smith) ss.

The foregoing instrument was acknowledged before me this 3rd day
of December, 1962, ~~1962~~, by Sam Bright

and his wife, Mary Bright

My Commission Expires:

6-1-63

Mary F. Nelson
Mary F. Nelson NOTARY PUBLIC

STATE OF Iowa)
COUNTY OF Grundy) ss.

The foregoing instrument was acknowledged before me this 14 day
of December, 1962, by Lyle C. Hawn

and his wife, Florence O. Hawn

My Commission Expires:

July 3, 1963

Florence O. Hawn
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 26

Van S. Welch
Van S. Welch

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF New Mexico)
COUNTY OF Sandoval) ss.

The foregoing instrument was acknowledged before me this 3rd day
of May, 1963, by Van S. Welch
~~and his wife,~~

My Commission Expires:

November 19, 1966

Bernis Baldwin
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 31

Charley Reynolds
Charley Reynolds
Mary B. Reynolds

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Iowa)
COUNTY OF Grundy) ss.

The foregoing instrument was acknowledged before me this 10th day
of DECEMBER, 1962, by Charley Reynolds
and his wife, Myra B. Reynolds

My Commission Expires:

July 4, 1963

Sara Lee Goder
NOTARY PUBLIC in and for
Grundy County, Iowa

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) _____

SASSETT-BISSETT OIL CORPORATION

By: _____

James H. V. D.
Vice President

ATTEST:

By: _____

R. J. Moore

Secretary

28-29-32A-32B-32C-34

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

STATE OF Texas)
COUNTY OF El Paso) ss.

The foregoing instrument was acknowledged before me this 26th day
of April, 1963, by H.M. Daugherty, Vice President of
Bassett-Hirney Oil Corporation and on behalf of said corporation.
My Commission Expires: _____
Constance Pateman

NOTARY PUBLIC

CONSTANCE PATEMAN, Notary Public, in and for El Paso
County, Texas, My commission expires June 1, 1963

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires: _____

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 39-41-42

ATTEST:

E. C. Barnhart
Secretary

DONNELL DRILLING COMPANY

By [Signature]
Company
President

INTEREST COMMITTED:

TRACT(S) _____

ATTEST:

Secretary

By _____
President

INTEREST COMMITTED:

TRACT(S) _____

ATTEST:

Secretary

By _____
President

STATE OF COLORADO)
CITY &) ss.
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 7th day
of MAY, 1962, by E. M. Barnholt, Jr.,
President of Dennell Drilling Company,
a Texas corporation, on behalf of said corporation.

My Commission Expires:

March 23, 1964

Wanda B. Carey
NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____,
President of _____,
a _____ corporation, on behalf of said corporation.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 43


~~Betty O. Smith~~ Oliver H. Smith, Jr.

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF Texas)
COUNTY OF Harris) ss.

The foregoing instrument was acknowledged before me this 12th day
of December, 1962, by Oliver H. Smith, Jr.

~~and his wife,~~ _____.

My Commission Expires:

June 1, 1963

Kathryn Williams
NOTARY PUBLIC
Harris County, Texas

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962 by _____

and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____

and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

CONSENT TO AND RATIFICATION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit embracing lands situated in Eddy County, New Mexico, and which said Unit Agreement is dated September 17, 1962, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, being the owners of the interests in the lands or minerals embraced in said unit area, as shown on the Schedule of Ownership attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the above referred to Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof. The interests committed by the undersigned to said Unit Agreement are further identified by reference to the tract number as shown on Exhibit "B" attached to said Unit Agreement as indicated opposite the signatures of the undersigned parties.

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

INTEREST COMMITTED:

TRACT(S) 42

A. L. Cone
A. L. CONE
Annie Cone
ANNIE CONE

INTEREST COMMITTED:

TRACT(S) 42

J. R. Cone
J. R. CONE
Dorothy Cone
DOROTHY CONE

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

INTEREST COMMITTED:

TRACT(S) _____

STATE OF TEXAS)
COUNTY OF LUNDOCK) ss.

The foregoing instrument was acknowledged before me this 29th day
of MAY, ¹⁹⁶³~~1962~~, by A. L. COME
and his wife, ANNIE COME.

My Commission Expires:

6-1-63

Dorothy S. Bell
NOTARY PUBLIC DOROTHY S. BELL

STATE OF TEXAS)
COUNTY OF LUNDOCK) ss.

The foregoing instrument was acknowledged before me this 29th day
of MAY, ¹⁹⁶³~~1962~~, by J. R. COME
and his wife, DOROTHY COME.

My Commission Expires:

6-1-63

Dorothy S. Bell
NOTARY PUBLIC DOROTHY S. BELL

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____.

My Commission Expires:

NOTARY PUBLIC

STATE OF _____)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this _____ day
of _____, 1962, by _____
and his wife, _____.

My Commission Expires:

NOTARY PUBLIC

EXHIBIT "B"
WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO
SCHEDULE SHOWING OWNERSHIP AND UNIT
PARTICIPATION OF ALL TRACTS IN THE UNIT AREA

[illegible]

Continued

[illegible]

EXHIBIT 'B' - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To 12-1-60	T P P
2-A - Continued								
	Harvey E. Yates		.133333					
	Harvey E. Yates, Trustee for James Harvey Yates and Samuel Mitchell Yates		.133333					
	Cordellia Williamson		.125000					
	B. A. Bowers, Sole Heir of Katherine J. Bowers, Deceased		.266666					
	Curtis McBroom		.651800 (1)					
	Bert H. Murphy		.651800 (1)					
	Texas Royalty Co.		.343050 (1)					
	Harold C. Porter		.190580 (1)					
	Mary Rainey Randall		.068620 (1)					
	Beatrice I. Anderson		.850000 (2)					
	Beatrice I. Anderson, Ancillary Executrix of the Estate of P. C. Fletcher, Deceased		1.275000 (2)					
	Bert Aston		2.815630 (2)					
	R. R. Aston		.255000 (2)					
	Gertrude W. Boyd		1.700000 (2)					
	F. C. Condon		.531250 (2)					
	Florence M. Dooley, Individually and as Executrix of the Estate of Wm. Dooley, Deceased		.637500 (2)					
	William P. Dooley		.212500 (2)					
	Isabel Polhemus							
	Ironsides		.425000 (2)					
	Estates of Fayette B. Dow and Margaret Elder Dow, Deceased		1.700000 (2)					
	R. W. Fair		1.540630 (2)					
	The R. W. Fair Foundation		.637500 (2)					
	Olen F. Featherstone		.425000 (2)					

EXHIBIT "B" - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	lessee of Record And Percent	Overriding Royalty And Percent	Working interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
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2-A - Continued

Estate of Wirt
Franklin, Deceased 1.540630 (2)
Franklin, Aston
& Fair, Inc. 3.240620 (2)
Labora Lucas .998750 (2)
Maude L. Mackey .212500 (2)
Tom P. Stephens .255000 (2)
Louis C. Todd .255000 (2)
Otto M. Vaughan .255000 (2)
Harvey E. Yates 1.062500 (2)
Martin Yates III 1.062500 (2)
S. P. Yates 1.062500 (2)
John A. Yates 1.062500 (2)

* Includes estimated 52,095 barrels for undrilled location in NW/4 SE/4 Section 7, T-18-S, R-30-E.

2-B. T-18-S, R-30-E 40.00 LC-048468 1-1-40 Same as Tract 2-A 61,815 .6816
Sec. 18: NW/4 NE/4 Step scale

Oscar A. Anderson .016667
Roy G. Barton .108333
Cordelia Masteller
Betzling .125000
Russell Rogers, Execu-
tor of the Estates of
Charles Rogers and
Jennie Rogers, Deceased .066667
Eva I. Cernich .033333
Vivian Chandler .266666
Continental Illinois
Nat'l. Bank and Trust
Co. of Chicago, Trustee
under the Last Will and
Testament of William
D. Flynn, Deceased .133333
David B. Crawford .012500
Rebecca L. Crawford .004167
John W. Gates .088889
Robert B. Gates .088889
Lee B. Gilpin .041667

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
2-B - Continued								
	Zelwyn Graham				.002083			
	Elaine Graham Krasne				.002083			
	Mel M. Graham				.010416			
	John Willard McDonald				.000695			
	David Graham McDonald				.000695			
	Margot Suzanne McDonald				.000695			
	R. C. Gray				.133333			
	J. Eustace Guest				.016667			
	C. E. Kindred				.016667			
	Cecil Mann				.266667			
	Leona I. Masteller				.125000			
	Zeola Masteller Smith				.125000			
	Jack McGaw				.088889			
	Clarence C. Smith and Julia E. Smith				.066667			
	Harvey E. Yates				.133333			
	Harvey E. Yates, Trustee for James Harvey Yates and Samuel Mitchell Yates				.133333			
	Cordellia Williamson				.125000			
	B. A. Bowers, Sole Heir of Katherine J. Bowers, Deceased				.266666			
	Curtis McBroom				.651810(1)			
	Bert H. Murphy				.651810(1)			
	Texas Royalty Co.				.343050(1)			
	Harold C. Porter				.190580(1)			
	Mary Rainey Randall				.068620(1)			
	Bert Aston				3.585940(2)			
	R. R. Aston				.255000(2)			
	Florence M. Dooley, Individually and as Executrix of the Estate of Wm. Dooley, Deceased				.637500(2)			
	William P. Dooley				.212500(2)			

EXHIBIT "B" - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To 12-1-60	Tract Percent Part. In Unit
2-B - Continued								
	Isabel Polhemus							
	Ironsides				.425000(2)			
	R. W. Fair				2.310940(2)			
	The R. W. Fair							
	Foundation				.956250(2)			
	Olen F. Featherstone				.425000(2)			
	Otto M. Vaughan				.255000(2)			
	Franklin, Aston &							
	Fair, Inc.				6.295310(2)			
	LaDora Lucas				1.370630(2)			
	Maude L. Mackey				.212500(2)			
	Tom P. Stephens				.255000(2)			
	Louis C. Todd				.255000(2)			
	Harvey E. Yates				1.062500(2)			
	Martin Yates III				1.062500(2)			
	S. P. Yates				1.062500(2)			
	John A. Yates				1.062500(2)			
	Estate of Wirt							
	Franklin, Deceased				2.310930(2)			

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To 12-1-60	Tract Percent Part. In Unit
2-C.	T-18-S, R-30-E Sec. 18: SW/4 of NE/4 N/2 SE/4	120.00	LC-048468 1-1-40 Step scale	Same as Tract 2-A	Same as Tract 2-B	Same as Tract 2-A	Non-participating	
3.	T-18-S, R-29-E Sec. 12: N/2 NW/4	80.00	LC-050429(a) 9-1-59 Schedule "C"	H. L. Brinson All	Rubie C. Bell Elizabeth W. Chaney, Gdn. of Stanley W. Crosby III Sue Saunders Graham Elyse Saunders Patterson Faye N. and C. J. Saunders Sally Saunders Toles Neil H. Wills	H. L. Brinson and Anna Mae Brinson	All	142,760 1.5742
4-A.	T-18-S, R-29-E Sec. 12: NE/4 SW/4	40.00	LC-050429(b) 11-1-61 Schedule "D"	Harvey E. Yates Martin Yates III John A. Yates S. P. Yates Gladys Dixon Mary Dorothea Dugan Florence M. Dooley, Executrix of the Estate of Wm. Dooley, Deceased	None	Yates Bros. Martin Yates III Gladys Dixon Mary Dorothea Dugan Florence M. Dooley, Executrix of the Estate of Wm. Dooley, Deceased	31.66 31.67 19.79 11.88	65,550*** .7228
				<u>5.000</u> 100.000				

*** Includes estimated 65,550 barrels for undrilled location in NE/4 SW/4 Sec. 12, T-18-S, R-29-E.

EXHIBIT "B" - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To 12-1-60	Tract Percent Part. In Unit
4-B.	<u>T-18-S, R-29-E</u> Sec.12: S/2 SW/4	80.00	LC-050429(b) 11-1-61 Schedule "D"	Same as Tract 4-A	Same as Tract 4-A	Same as Tract 4-A	Non-participating	
5.	<u>T-18-S, R-29-E</u> Sec.10: E/2 NW/4	80.00	LC-054253 12-28-38 Step scale	Julia Brainard(6) 25.00 Clyde Guy 25.00 Graridge Corp. 25.00 Eugene E. Nearburg(5) # 12.50 Tom L. Ingram(5) #12.50 <u>100.00</u>	Fenelon Boesche Ethel Windsor Watson .75	Graridge Corp. Clyde Guy & Sons, Inc. Kate G. Lowrey Julia Brainard (6) <u>25.00</u> 12.50 <u>100.00</u>	50.00 179,454 1.9788	
6.	<u>T-18-S, R-29-E</u> Sec.12: SE/4	160.00	LC-055374 9-1-40 Step scale	Harvey E. Yates 3.9575 Martin Yates III 35.6275 S. P. Yates 3.9575 John A. Yates 3.9575 Florence M. Dooley, Execu- trix of the Estate of Wm. Dooley, Deceased 5.0000 Gladys Dixon 19.7900 Mary Dorothea Dugan 11.8800 Yates Pet. Corp. <u>15.8300</u> <u>100.0000</u>	Elizabeth W. Chaney, Gdn. of Stanley W. Crosby III Rubie C. Bell Effie M. Day Neil H. Willis Sue Saunders Graham Elyse Saunders Patterson Sally Saunders Toles Yates Brothers (3) 1.978750 .156250 .156250 .468750 1.468750 .234375 .234375 11.8800	Martin Yates III Gladys Dixon Mary Dorothea Dugan Florence M. Dooley, Executrix of the Estate of Wm. Dooley, Deceased 5.0000 Harvey E. Yates 3.9575 S. P. Yates 3.9575 John A. Yates 3.9575 Yates Pet. Corp. <u>15.8300*</u> <u>100.0000</u>	35.6275 369,046 4.0694	

* This interest is subject to and bears all of the Yates Brothers' overriding royalty interest.
D/b/a Nearburg & Ingram, a partnership.

EXHIBIT 'B' - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
7-A.	<u>T-18-S, R-29-E</u> Sec. 13: NE/4 NE/4	40.00	LC-055830 10-31-39 Step scale	Harvey E. Yates 3.9575 Martin Yates 111 35.6275 S. P. Yates 3.9575 John A. Yates 3.9575 Florence M. Doooley, Execu- trix of the Estate of Wm. Doooley, Deceased 5.0000 Gladys Dixon 19.7900 Mary Dorothea Dugan 11.8800 Yates Pet. Corp. <u>15.8300</u> 100.0000	Olen F. Featherstone Yates Brothers (3) Estate of Cyrus H. Jones, Deceased .50000 1.97875	Martin Yates 111 35.6275 Gladys Dixon 19.7900 Mary Dorothea Dugan 11.8800 Florence M. Doooley, Executrix of the Estate of Wm. Doooley, Deceased 5.0000 Harvey E. Yates 3.9575 S. P. Yates 3.9575 John A. Yates 3.9575 Yates Pet. Corp. <u>15.8300*</u> 100.0000	38,542	.4250
7-B.	<u>T-18-S, R-29-E</u> Sec. 13: W/2 NE/4, SE/4 NE/4	120.00	LC-055830 10-31-39 Step scale	Same as Tract 7-A	Same as Tract 7-A	Same as Tract 7-A		Non-participating
8-A.	<u>T-18-S, R-29-E</u> Sec. 10: SW/4 NW/4, NW/4 SW/4	80.00	LC-056014 5-10-39 Step scale	Graridge Corp. 50.00 Julia Brainard(6) <u>50.00</u> 100.00	Olen F. Featherstone 10.00	Graridge Corp. Clyde Guy & Sons, Inc. Kate G. Lowrey Julia Brainard(6) <u>25.00</u> 100.00	175,131	1.9312

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Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
8-B.	<u>T-18-S, R-29-E</u> Sec. 15: N/2 NW/4	80.00	LC-056014 5-10-39 Step scale	Same as Tract 8-A	Same as Tract 8-A	Same as Tract 8-A	101,219	1.1161
8-C. -1.	<u>T-18-S, R-29-E</u> Sec. 15: SW/4 NW/4	40.00	LC-056014 5-10-39 Step scale	Same as Tract 8-A	Olen F. Featherstone Clyde Guy & Sons, Inc. 10.00 .25	Same as Tract 8-A		Non-participating
8-C -2.	<u>T-18-S, R-29-E</u> Sec. 15: SE/4 NW/4	40.00	LC-056014 5-10-39 Step scale	Same as Tract 8-A	None	Same as Tract 8-A		Non-participating
8-D.	<u>T-18-S, R-29-E</u> Sec. 15: NW/4 NE/4	40.00	LC-056014 5-10-39 Step scale	Same as Tract 8-A	Julia Brainard (6) Clyde Guy & Sons, Inc. Olen F. Featherstone .50 .50 .50	Same as Tract 8-A	22,901	.2525
8-E.	<u>T-18-S, R-29-E</u> Sec. 15: SW/4 NE/4	40.00	LC-056014 5-10-39 Step scale	Same as Tract 8-A	Same as Tract 8-D	Same as Tract 8-A		Non-participating

EXHIBIT 'B' - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent
9.	<u>T-18-S, R-29-E</u> Sec.3: S/2 SE/4	80.00	LC-058125 12-31-38 Step scale	S. P. Yates Continental Oil Co.(5) <u>50.00</u> 100.00	Eudora H. Heilman Olen F. Featherstone Yates Brothers(3) R. F. Travis, Jr. R. F. Travis, Sr. John Lucas Josephine D. Hawley .26667 .53333 .26667 .33333 .25000 .08333 .26667	S. P. Yates Harvey E. Yates Martin Yates III John A. Yates <u>3.125</u> 100.000
10-A.	<u>T-18-S, R-29-E</u> Sec.3: S/2 NW/4, SW/4	240.00	LC-058480 12-28-38 Step scale	S. P. Yates All	Fenelon Boesche Ethel Windsor Watson .2500 .7500	S. P. Yates All
10-B.	<u>T-18-S, R-29-E</u> Sec.3: NE/4 NE/4, S/2 NE/4, N/2 SE/4	200.00	LC-058480 12-28-38 Step scale	S. P. Yates Continental Oil Co.(5) <u>50.00</u> 100.00	Same as Tract 10-A	S. P. Yates Harvey E. Yates Martin Yates III John A. Yates <u>3.125</u> 100.000
10-C.	<u>T-18-S, R-29-E</u> Sec.3: NW/4 NE/4	40.00	LC-058480 12-28-38 Step scale	Same as Tract 10-B	Same as Tract 10-A	Same as Tract 10-B
10-D.	<u>T-18-S, R-29-E</u> Sec.3: N/2 NW/4	80.00	LC-058480 12-28-38 Step scale	Same as Tract 10-A	Same as Tract 10-A	Same as Tract 10-A

EXHIBIT "B" - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
11-A.	<u>T-18-S, R-29-E</u> Sec. 11: NW/4	160.00	LC-058481 12-28-38 Step scale	Yates Petroleum Corporation Continental Oil Co. (5) <u>50.00</u> 100.00	Fenelon Boesche and Martha Watson Boesche Ethel Windsor Watson Yates Brothers (3) .250 .750 6.250	S. P. Yates Harvey E. Yates Martin Yates III John A. Yates Yates Petroleum Corporation <u>50.000*</u> 100.000	15.625 15.625 15.625 3.125 <u>50.000*</u> 100.000	351,410 3.8750
1-B.	<u>T-18-S, R-29-E</u> Sec. 11: SW/4	160.00	LC-058481 12-28-38 Step scale	Same as Tract 11-A	Same as Tract 11-A	Same as Tract 11-A		Non-participating
12.	<u>T-18-S, R-29-E</u> Sec. 9: N/2 SE/4, SE/4 SE/4	120.00	LC-059954 5-10-39 Step scale	Gordon M. Cone All	Lulu Cone Hattie Cone Williams 2.00 3.00	Gordon M. Cone All	265,287 2.9253	
13-A.	<u>T-18-S, R-29-E</u> Sec. 12: NE/4, SE/4 NW/4	200.00	LC-060904 9-1-59 Schedule "C"	Harvey E. Yates Martin Yates III S. P. Yates John A. Yates Florence M. Dooley, Execut- rix of the Estate of Wm. Dooley, Deceased Gladys Dixon Mary Dorothea Dugan Yates Petroleum Corporation <u>15.8300</u> 100.0000	Elizabeth W. Chaney, Adn. of Stanley W. Crosby III Rubie C. Bell Sue Saunders Graham Elyse Saunders Patterson Faye N. Saunders Sally Saunders Toles Neil H. Wills Yates Brothers (3) .62500 1.87500 .62500 1.87500 1.97875	Harvey E. Yates Martin Yates III S. P. Yates John A. Yates Florence M. Dooley, Executrix of the Estate of Wm. Dooley, Deceased Gladys Dixon Mary Dorothea Dugan Yates Petroleum Corporation <u>15.8300*</u> 100.0000	3.9575 35.6275 3.9575 3.9575 .93750 .93750 .62500 1.87500 1.97875 11.8800 <u>15.8300*</u> 100.0000	459,571 5.0677
13-B.	<u>T-18-S, R-29-E</u> Sec. 12: SW/4 NW/4, NW/4 SW/4	80.00	LC-060904 9-1-59 Schedule "C"	Same as Tract 13-A	Same as Tract 13-A	Same as Tract 13-A		Non-participating

* This interest is subject to and bears all of the Yates Brothers' overriding royalty interest.

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To 12-1-60	Tract Percent In Unit	
14.	<u>T-18-S, R-29-E</u> Sec.1: S/2 SE/4	80.00	LC-060905 (a) 3-1-59 Schedule "C"	Gladys Dixon Mary Dorothea Duggan Martin Yates 111 Yates Bros. (3) <u>33.334</u> 100.000	Clint C. Ballard B. A. Bowers, Sole Heir of Katherine J. Bowers, Deceased Olen F. Featherstone Ladora Lucas Harvey E. Yates, Trustee for James Harvey Yates and Samuel Mitchell Yates Yates Brothers(3) Continental Illinois Nat'l.Bank and Trust Co. of Chicago, Trustee under Last Will and Testament of William D. Flynn, Deceased 1.0000	Dixon & Yates Oil Co. All	261,976	2.8888	
15.	<u>T-18-S, R-29-E</u> Sec.1: E/2 NW/4	80.00	LC-060905 (b) 5-1-59 Schedule "D"	Gladys Dixon Mary Dorothea Duggan Martin Yates 111 Yates Bros. (3) <u>33.334</u> 100.000	None	Dixon & Yates Oil Co. All	225,468	2.4862	
16.	<u>T-18-S, R-29-E</u> Sec.1: W/2 NW/4	80.00	LC-060906 5-1-59 Schedule "D"	Yates Pet. Corporation All	Yates Brothers(3) 10.00	Yates Petroleum Corporation Vergil O. Hopp Laura E. Najar Marvin Emmons Charles Emmons Earl Emmons Mary E. Miller Frances E. Netherlin Shannon Emmons Robert Emmons <u>1.25</u> 100.00	80.00* 10.00 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25	222,503	2.4535

* This interest is subject to and bears all of the Yates Brothers' overriding royalty interest.

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
17-A.	<u>T-18-S, R-29-E</u> Sec. 10: <u>NE/4,</u> N/2 <u>SE/4,</u> SW/4 <u>SE/4</u>	280.00	LC-062072 12-28-38 Step scale	Fair Oil Co. Fair N. & N. Trust <u>50.00</u> 100.00	Fenelon Boesche Ethel Windsor Watson .7500	Fair Oil Company Fair N. & N. Trust <u>50.00</u> 100.00	526,898	5.8101
17-B.	<u>T-18-S, R-29-E</u> Sec. 10: <u>SE/4 SE/4</u>	40.00	LC-062072 12-28-38 Step Scale	Same as Tract 17-A	Same as Tract 17-A	Same as Tract 17-A	Non-participating	
18.	<u>T-18-S, R-29-E</u> Sec. 10: <u>SW/4 SW/4</u>	40.00	LC-065500 12-1-59 Schedule "C"	O. H. Randel All	Olen F. Featherstone H. B. Wright	1.0000 6.8333 Loco Hills Pressure Maintenance Association All	53,522	.5902

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To 12-1-60	Tract Percent Part. In Unit
19-A.	<u>T-18-S, R-29-E</u> Sec.9: SW/4 SE/4	40.00	NM-02426 5-10-39 Step scale	J. Cleo Thompson, All Sr.	Julia Brainard(6) Childress Royalty Company W. E. Flint Thelma Miller Sanders J. W. Peery J. E. Taylor Lawrence Truitt H. G. Watson Hattie Cone Williams	.0820325 J. Cleo Thompson, Sr. J. Cleo Thompson, Jr. L.G.M. Company (4)	33.33334 88,496 33.33333 33.33332 100.00000	.9758
19-B.	<u>T-18-S, R-29-E</u> Sec.9: NE/4	160.00	NM-02426 5-10-39 Step scale	Same as Tract 19-A	Ballard E. Spencer Trust, Inc. Delhi-Taylor Oil Corporation	1.5000000 Same as Tract 19-A	295,784	3.2616
19-C.	<u>T-18-S, R-29-E</u> Sec.15: NE/4 NE/4	40.00	NM-02426 5-10-39 Step scale	Same as Tract 19-A	Ballard E. Spencer Trust, Inc. Delhi-Taylor Oil Corporation	1.5000000 Same as Tract 19-A	Non-participating	
20.	<u>T-18-S, R-29-E</u> Sec.10: NW/4 NW/4	40.00	NM-02428 5-10-39 Step scale	J. Cleo Thompson, Sr. Clyde Guy Olen F. Featherstone Garridge Corp. Eugene E. Nearburg(5)* Tom L. Ingram(5)* <u>4.16667</u> 100.00000	None	J. Cleo Thompson, Sr. J. Cleo Thompson, Jr. L.G.M. Company (4) Julia Brainard (6) Olen F. Featherstone Clyde Guy Garridge Corp. Kate G. Lowrey <u>4.16667</u> 100.00000	16.66674 87,058 16.66663 8.33334 16.66666 4.16667 16.66666 4.16667 100.00000	.9600

* D/b/a Nearburg & Ingram, a partnership.

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To 12-1-60	Tract Percent Part. In Unit
21-A.	T-18-S, R-30-E Sec. 18: lot 1 (NW/4 NW/4), NE/4 NW/4	78.02	NM-025614 9-1-60 Schedule "D"	Franklin, Aston & Fair, Inc. Bert Aston Beatrice I. Anderson, An- cillary Execu- trix of the Estate of P. C. Fletcher, Deceased Olen F. Featherstone Maude L. Mackey Harvey E. Yates Martin Yates III John A. Yates S. P. Yates 100.0	Curtis McBroom Bert H. Murphy Texas Royalty Co. Harold C. Porter Mary Rainey Randall Beatrice I. Anderson, Ancillary Executrix of the Estate of P. C. Fletcher, Deceased Bert Aston R. R. Aston R. W. Fair The R. W. Fair Foundation Olen F. Featherstone John A. Yates Franklin, Aston & Fair, Inc. Labora Lucas Maude L. Mackey Tom P. Stephens Louis C. Todd Otto M. Vaughan Harvey E. Yates Martin Yates III S. P. Yates Estate of Wirt Franklin, Deceased	Newmont Oil Co. A11	159,966	1.7639
21-B.	T-18-S, R-30-E Sec. 18: Lot 2 (SW/4 NW/4), SE/4 NW/4, NE/4 SW/4	118.07	NM-025614 9-1-60 Schedule "D"	Same as Tract 21-A	Same as Tract 21-A	Same as Tract 21-A		Non-participating

[illegible]

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
State of New Mexico Lands								
23.	<u>T-17-S, R-29-E</u> Sec. 36: SE/4 SW/4	40.00	B-1778-20 3-10-33 12½%	Fair Oil Co. All	None	R. W. Fair James W. Fair Wilton H. Fair Richard L. Ray Gus W. Arnold Buren W. Williams Bright & LaRue Corporation <u>40.0</u> 100.0	20.0 10.0 10.0 10.0 5.0 5.0	122,470 1.3505
24.	<u>T-17-S, R-29-E</u> Sec. 36: SW/4 SW/4	40.00	B-2023-8 7-10-33 12½%	Fair Oil Co. R. W. Fair <u>67.0</u> <u>33.0</u> 100.0	Texas Gulf Prod. Co. The R. W. Fair Foundation R. W. Fair 6.250 25.000 12.500	Fair Oil Co. R. W. Fair <u>66.66667</u> <u>33.33333</u> 100.00000	78,781 .8687	
25.	<u>T-18-S, R-29-E</u> Sec. 1: NE/4 SW/4	40.00	B-5084-76 10-10-35 12½%	R. W. Fair Sam Bright <u>87.5</u> <u>12.5</u> 100.0	None	R. W. Fair Sam Bright <u>87.5</u> <u>12.5</u> 100.0	123,924 1.3665	
26.	<u>T-18-S, R-29-E</u> Sec. 1: SE/4 SW/4	40.00	B-5084-128 10-10-35 12½%	Van S. Welch All	Harvey E. Yates John A. Yates Martin Yates III S. P. Yates 1.0 1.0 1.0	Van S. Welch All	146,480 1.6152	
27.	<u>T-18-S, R-29-E</u> Sec. 1: NW/4 SW/4	40.00	B-5524-13 12-10-35 12½%	B. A. Bowers, Sole Heir of Katherine J. Bowers, Deceased All	None	B. A. Bowers, Sole Heir of Katherine J. Bowers, Deceased All	130,700 1.4412	
28.	<u>T-18-S, R-29-E</u> Sec. 10: NE/4 SW/4	40.00	B-5524-24 12-10-35 12½%	Bassett-Birney Oil Corp. All	None	Bassett-Birney Oil Corp. All	118,446 1.3061	
29.	<u>T-18-S, R-29-E</u> Sec. 2: E/2 SW/4	80.00	B-5524-24 12-10-35 12½%	Bassett Birney Oil Corp. All	None	Bassett-Birney Oil Corp. All	218,385 2.4081	

EXHIBIT 'B' - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
30.	<u>T-18-S, R-29-E</u> Sec. 11: S/2 SE/4	80.00	B-5524-25 12-10-35 12½%	Franklin, Aston & Fair, Inc. All	Curtis McBroom Bert H. Murphy Texas Royalty Co. Harold C. Porter Mary Rainey Randall Franklin, Aston & Fair, Inc. .70136(1) .70136(1) .36916(1) .20507(1) .07383(1) 21.87500(2)	Newmont Oil Co. All	Non-participating	
1.	<u>T-18-S, R-29-E</u> Sec. 2: SW/4 SW/4	40.00	B-5524-26 12-10-35 12½%	Fair Oil Co. All	Geo. A. Laybourn Sam Bright Florence O. Hawn Alta Mae Reynolds Byrne Charley Reynolds 1.36719 1.36719 .45573 1.82292 .45572	Fair Oil Co. All	46,553 .5133	
32-A.	<u>T-18-S, R-29-E</u> Sec. 11: NE/4 SE/4	40.00	B-6058-19 3-10-36 12½%	Bassett-Birney Oil Corp. All	None	Bassett-Birney Oil Corp. All	84,184 .9283	
32-B.	<u>T-18-S, R-29-E</u> Sec. 11: NW/4 SE/4	40.00	B-6058-19 3-10-36 12½%	Bassett-Birney Oil Corp. All	None	Bassett-Birney Oil Corp. All	Non-participating	
32-C.	<u>T-18-S, R-29-E</u> Sec. 2: NW/4 NW/4	40.00	B-6058-19 3-10-36 12½%	Bassett-Birney Oil Corp. All	None	Bassett-Birney Oil Corp. All	Non-participating	
33.	<u>T-18-S, R-29-E</u> Sec. 2: NE/4 NW/4	40.00	B-6058-21 3-10-36 12½%	Fair Oil Co. R. W. Fair 67.0 <u>33.0</u> 100.0	R. W. Fair The R. W. Fair Foundation 12.5 25.0	Fair Oil Co. R. W. Fair 66.66667 <u>33.33333</u> 100.00000	13,014 .1435	
34.	<u>T-18-S, R-29-E</u> Sec. 2: SW/4 NW/4	40.00	B-6570-19 6-10-36 12½%	Bassett-Birney Oil Corp. All	None	Bassett-Birney Oil Corp. All	108,569 1.1972	

EXHIBIT 'B' - Continued

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
35.	<u>T-18-S, R-29-E</u> <u>Sec.11: S/2 NE/4</u>	80.00	B-6570-23 6-10-36 12½%	Franklin, Aston & Fair, Inc. All	Franklin, Aston & Fair, Inc. Bert Aston R. W. Fair Curtis McBroome Bert H. Murphy Texas Royalty Co. Harold C. Porter Mary Rainey Randall 10.93750 5.46875 5.46875 .70136(1) .70136(1) .36916(1) .20507(1) .07383(1)	Newmont Oil Co.	All 220,574 2.4323	
36.	<u>T-18-S, R-29-E</u> <u>Sec.2: SE/4 NW/4</u>	40.00	B-6570-25 6-10-36 12½%	Fair Oil Co. R. W. Fair 67.0 33.0 100.0	R. W. Fair The R. W. Fair Foundation 12.5 25.0	Fair Oil Co. R. W. Fair 66.66667 33.33333 100.00000	112,292 1.2382	
37.	<u>T-18-S, R-29-E</u> <u>Sec.11: N/2 NE/4</u>	80.00	B-6631-24 8-10-36 12½%	Fair Oil Co. R. W. Fair 67.0 33.0 100.0	R. W. Fair The R. W. Fair Foundation 12.5 25.0	Fair Oil Co. R. W. Fair 66.66667 33.33333 100.00000	157,604 1.7379	
38.	<u>T-18-S, R-29-E</u> <u>Sec.2: NE/4</u>	160.00	B-6811-10 12-10-36 12½%	Yates Pet. Corporation All	Yates Brothers(3) 10.00	Yates Pet. Corporation Vergil O. Hopp Laura E. Najjar Marvin Emmons Charles Emmons Earl Emmons Mary E. Miller Frances E. Netherlin Shannon Emmons Robert Emmons 80.00* 10.00 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25 1.25 100.00	376,710 4.1540	
39.	<u>T-18-S, R-29-E</u> <u>Sec.2: SE/4</u>	160.00	B-6846 1-11-37 12½%	Continental Oil Co.(5) All	None	Donnell Drilg. Co. All 353,495 3.8980		

* This interest is subject to and bears all of the Yates Brothers' overriding royalty interest.

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
40.	<u>T-18-S, R-29-E</u> Sec. 1: SW/4 SW/4	40.00	B-7072-5 6-10-37 12½%	Martin Yates 111 Yates Pet. Corp. <u>50.0</u> 100.0	Yates Bros. (3) 4.16667	Martin Yates 111 Estate of Anna Witherspoon Frank- lin, Deceased Yates Pet. Corp. <u>33.33333</u> 33.33334* 100.00000	33.33333	130,682 1.4410
41.	<u>T-18-S, R-29-E</u> Sec. 2: NW/4 SW/4	40.00	B-7677 7-11-38 12½%	Continental Oil Co. (5) A11	None A11	Donnell Drilg. Co. A11	113,013	1.2462
42.	<u>T-18-S, R-29-E</u> Sec. 10: SE/4 SW/4	40.00	B-7677 7-11-38 12½%	Continental Oil Co. (5) A11	None A11	Donnell Drilg. Co. A11	91,549	1.0095
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Total: 22 State of New Mexico Tracts - 1,280.00 acres, 24.12% of Unit Area								
1,120.00 acres participating; 160.00 acres non-participating								
2,747,425 bbls. cumulative production - State Lands								
30.2957% of Unit Participation								

* This interest is subject to and bears all of the Yates Brothers' overriding royalty interest.

Tract No.	Description	Acres	Lease No., Date Basic Royalty	Lessee of Record And Percent	Overriding Royalty And Percent	Working Interest Owners and Percent	Cum. Prod. To	Tract Percent Part. In Unit
Patented Lands (Fee)								
43.	T-18-S, R-29-E Sec. 4: E/2 SE/4	80.00	(Fee) H. H. Herren H. G. Watson Oliver H. Smith, Jr. Geo. L. Reese, Jr. J. R. Cone B. A. Bowers Leona L. Stagner A. L. Cone	Fair Oil Co. All	None	R. W. Fair James W. Fair Wilton H. Fair Richard L. Ray Gus W. Arnold Buren W. Williams Bright & LaRue Corporation	35.00 5.00 5.00 5.00 5.00 5.00 40.00 100.00	148,533 1.6379
Total: 1 Patented (Fee) Tract - 80 acres, 1.50% of Unit Area			80 acres participating; 0 acres non-participating 148,533 bbls. cumulative production - Fee Lands 1.6379% of Unit Participation					

RECAPITULATION

	<u>FEDERAL LANDS</u>	<u>STATE LANDS</u>	<u>FEE LANDS</u>	<u>TOTAL</u>
<u>Tracts</u>	40	22	1	63
<u>Acres of Land in Unit Area</u>	3,947.73	1,280.00	80.00	5,307.73
<u>Percent of Unit Area</u>	74.38	24.12	1.50	100%
<u>Participating Acreage</u>	2,949.66	1,120.00	80.00	4,149.66
<u>Non-Participating Acreage</u>	998.07	160.00	0.0	1,158.07
<u>Bbls. Cumulative Production</u>	6,172,757.00	2,747,425.00	148,533.00	9,068,711.00

(1) This interest is a portion of an overriding royalty interest originally assigned to Curtis McBroome and Bert H. Murphy by Newmont Oil Company. Newmont assigned an overriding royalty of 1/32nd of its interest in certain leases, said interest increasing or decreasing as Newmont's interest increases or decreases. The 1/32nd interest is subject to a production oil payment in favor of Harold C. Porter in the original amount of \$20,000.00 out of 10% of said interest. The 1/32nd interest is now owned as follows:

Curtis McBroome	34.2%
Bert H. Murphy	34.2%
Texas Royalty Company	18.0%
Harold C. Porter	10.0%
Mary Rainey Randall	3.6%
Curtis McBroome	38.0%
Bert H. Murphy	38.0%
Texas Royalty Company	20.0%
Mary Rainey Randall	4.0%

After the termination of the production payment, the 1/32nd interest will be owned thusly:

(2) Upon the termination of certain production payments payable from this lease, and other leases, both within and without the Unit Area, this interest will be owned 31/32 by Newmont Oil Company as a working interest and 1/32 by Curtis McBroome et al as an overriding royalty interest. (See (1) supra.)

(3) A partnership composed of Harvey E. Yates, John A. Yates, Martin Yates, III, and S. P. Yates.

(4) A partnership composed of Sam Lett, Thomas Gay, and Harold Miller.

(5) An agreement conveying the operating rights to certain depths, which include the Unitized Formation, for this interest, has previously been executed by this party who does not have any present interest in the Unitized Substances or the proceeds from the sale thereof. The parties who have future or reversionary interests in the Unitized Substances will give written notice to the Unit Operator and the company which is payor of the proceeds when their interests become effective.

(6) The records of the Bureau of Land Management and of the United States Geological Survey reflect that this interest is owned by Fred Brainard, or the Estate of Fred Brainard. However, this interest has now passed to Julia Brainard, widow of Fred Brainard. The estate has been closed and necessary Instruments will be filed with the Bureau of Land Management in due course.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 2472
Order No. R-2166

APPLICATION OF NEWMONT OIL COMPANY
FOR APPROVAL OF THE WEST LOCO HILLS
GRAYBURG NO. 4 SAND UNIT AGREEMENT,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 4, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 17th day of January, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Newmont Oil Company, seeks approval of the West Loco Hills Grayburg No. 4 Sand Unit Agreement covering 5,320 acres, more or less, in Townships 17 and 18 South, Ranges 29 and 30 East, EDDY, Eddy County, New Mexico.

(3) That approval of the proposed West Loco Hills Grayburg No. 4 Sand Unit Agreement will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the West Loco Hills Grayburg No. 4 Sand Unit Agreement is hereby approved.

(2) That the plan under which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the West Loco Hills Grayburg No. 4 Sand Unit Area and such plan shall be known as the West Loco Hills Grayburg No. 4 Sand Unit Agreement Plan.

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CASE No. 2472
Order No. N-2166

(3) That the West Loco Hills Grayburg No. 4 Sand Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico relative to the supervision and control of operations for the exploration and development of any lands committed to the West Loco Hills Grayburg No. 4 Sand Unit, or relative to the production of oil and gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

TOWNSHIP 17 SOUTH, RANGE 29 EAST

Section 36: E/2 SW/4

TOWNSHIP 18 SOUTH, RANGE 29 EAST

Section 1: W/2 and E/2 SE/4

Section 2: All

Section 3: All

Section 4: E/2 SE/4

Section 9: E/2

Section 10: All

Section 11: All

Section 12: All

Section 13: NE/4

Section 15: NW/4, W/2 NE/4 and NE/4 NE/4

TOWNSHIP 18 SOUTH, RANGE 30 EAST

Section 7: W/2, W/2 SE/4 and SE/4 SE/4

Section 18: NW/4, W/2 NE/4, E/2 SE/4
and NE/4 SW/4

comprising 5,320 acres more or less.

(b) That the unit may be enlarged or contracted as provided in said Plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Oil Conservation Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the West Loco Hills Grayburg No. 4 Sand Unit Agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party or expansion of the unit area, the unit operator shall file with the Commission within 30 days of such action counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

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CASE No. 2472
Order No. R-2166

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

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHUM, Chairman

R. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 2473
Order No. R-2178

APPLICATION OF NEWMONT OIL COMPANY
FOR EXPANSION OF ITS LOCO HILLS
WATERFLOOD PROJECT, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 4, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 30th day of January, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Newmont Oil Company, seeks permission to expand its Loco Hills Waterflood Project to include the West Loco Hills Grayburg No. 4 Sand Unit Area, comprising 5,320 acres, more or less, in Townships 17 and 18 South, Ranges 29 and 30 East, NMPM, Eddy County, New Mexico, which unit was approved by Order No. R-2166.

(3) That the applicant seeks permission to operate the expanded waterflood project as a "capacity" type flood unrestricted by the allowable provisions of Rule 701 E.

(4) That in the interest of increasing ultimate recovery in the Loco Hills Pool, the applicant should be authorized to

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Case No. 2473

Order No. R-2178

conduct waterflood operations in the West Loco Hills Grayburg No. 4 Sand Unit Area by the injection of water into the Loco Hills Sand; that the allowables to be assigned to wells in this project should be governed by the provisions of Rule 701 E, except that a buffer zone should be established in which allowables would be unrestricted.

(5) That production from wells outside the buffer zone should be tanked separately from production from wells inside the buffer zone unless the applicant receives approval from the Commission for some other satisfactory means of determining production from each of the two areas.

(6) That for the purpose of determining the project area and computing the project allowable under Rule 701 E, any producing well in said project area lying outside the buffer zone should be entitled to receive credit for offsetting an injection well regardless of whether the injection well is in the buffer zone or in the project area.

IT IS THEREFORE ORDERED:

(1) That the applicant, Newmont Oil Company, is hereby authorized to institute a waterflood in the Loco Hills Pool within the West Loco Hills Grayburg No. 4 Sand Unit Area located in Townships 17 and 18 South, Ranges 29 and 30 East, NMPM, Eddy County, New Mexico, by the injection of water initially into the following-described wells:

Ballard B No. 1 - SE/4 NW/4 Section 1, Township 18 South,
Range 29 East

Dixon Yates Federal No. 2 - SE/4 SE/4 Section 1, Township
18 South, Range 29 East

Newmont Canfield No. 1-A - NW/4 NW/4 Section 7, Township
18 South, Range 30 East

(2) That the ultimate project area for said waterflood shall consist of all the acreage within the said West Loco Hills Grayburg No. 4 Sand Unit Area, except the following-described acreage which shall constitute a buffer zone:

TOWNSHIP 17 SOUTH, RANGE 29 EAST
Section 36: S/2 SW/4

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Case No. 2473

Order No. R-2178

TOWNSHIP 18 SOUTH, RANGE 29 EAST

Section 1: W/2 and S/2 SE/4

Section 12: NE/4 and N/2 NW/4

TOWNSHIP 18 SOUTH, RANGE 30 EAST

Section 7: NW/4

(3) That the wells located within the above-described buffer zone may be operated at unrestricted rates of production.

(4) That all producing wells located within said waterflood project and outside the above-described buffer zone shall be operated and produced in accordance with the allowable provisions of Rule 701 E of the Commission Rules and Regulations.

(5) That for the purpose of determining the project area and computing the project allowable under Rule 701 E, any producing well in said project area lying outside the buffer zone shall be entitled to receive credit for offsetting an injection well regardless of whether the injection well is in the buffer zone or in the project area.

(6) That production from wells outside the buffer zone shall be tanked separately from production from wells inside the buffer zone unless the applicant receives approval from the Commission for some other satisfactory means of determining production from each of the two areas.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

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BEFORE THE OIL CONSERVATION COMMISSION

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

CASE No. 2578
Order No. R-2178-B

APPLICATION OF NEWMONT OIL COMPANY
FOR APPROVAL OF A DEVELOPMENT PLAN
FOR THE LOCO HILLS WATERFLOOD PROJ-
ECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 7, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 14th day of June, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

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

(2) That by Order No. R-2178, entered in Case No. 2473 on January 30, 1962, the Commission authorized Newmont Oil Company to institute a waterflood in the Loco Hills Grayburg No. 4 Sand Unit Area in Eddy County, New Mexico. Said order provided that Rule 701-E of the Commission Rules and Regulations governed the determination of the project area and of the project allowable, and established a buffer zone within which wells could be produced at unrestricted rates.

(3) That the applicant seeks approval of a plan of development for the Loco Hills Waterflood Project, Eddy County, New Mexico, which would permit the conversion of wells to water injection by stages.

(4) That an administrative procedure should be established whereby wells may be converted to injection by stages rather than after experiencing substantial response to water injection as required by Rule 701-E (5).

(5) That approval of the subject application will not alter the manner in which allowable would be assigned to the waterflood

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CASE No. 2578

Order No. R-2178-B

project area under the provisions of Rule 701, and will result in certain operating convenience to the applicant.

IT IS THEREFORE ORDERED:

(1) That an administrative procedure is hereby established whereby the applicant, Newmont Oil Company, may convert wells to injection by stages within its Loco Hills Sand Unit Waterflood Project, Eddy County, New Mexico. Five stages hereinafter designated and described are hereby established within which wells may be converted to water injection:

STAGE I

January 1, 1963
to June 30, 1963

E/2 of Section 2, NE/4 and N/2 SE/4 of Section 11, and S/2 NW/4 and S/2 of Section 12, Township 18 South, Range 29 East, and S/4, W/2 SE/4, and SE/4 SE/4 of Section 7, Township 18 South, Range 30 East.

STAGE II

July 1, 1963
to December 31, 1963

W/2 of Section 2, W/2 of Section 11, and NW/4 of Section 13, Township 18 South, Range 29 East, NE/4, W/2 NE/4, NE/4 SW/4, and N/2 SE/4 of Section 13, Township 18 South, Range 30 East.

STAGE III

January 1, 1964
to June 30, 1964

E/2 of Section 3, E/2 of Section 10, and N/2 NE/4 of Section 15, Township 18 South, Range 29 East.

STAGE IV

July 1, 1964
to December 31, 1964

W/2 of Section 3, W/2 of Section 10, and NW/4 of Section 15, Township 18 South, Range 29 East.

STAGE V

After January 1, 1965

E/2 SE/4 of Section 4 and E/2 of Section 9, Township 18 South, Range 29 East.

(2) That application for administrative approval to convert wells to injection within the above-described stages shall be made in the normal manner under Rule 701-E (5), and shall include data concerning the casing and cementing program in the proposed injection well. A copy of said application shall be furnished to the office of the State Engineer.

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CASE No. 2578
Order No. R-2178-B

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

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CERTIFICATE OF APPROVAL

BY COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO


WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of acreage which is described within the attached Agreement, dated September 17, 1962, which has been executed or is to be executed by parties owning and holding oil and gas leases and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

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

NOW, THEREFORE, by virtue of the authority conferred upon me under Sections 7-11-39, 7-11-40, 7-11-41, 7-11-47, 7-11-48, New Mexico Statutes Annotated 1953 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, and any leases embracing lands of the State of New Mexico within the area shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 5th day of June 19 63.



Commissioner of Public Lands
of the State of New Mexico

Supplementary Data

To

Enlargement of Participating Area

WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT
Eddy County, New Mexico

TABLE 1.

NET PAY DETERMINATIONS FOR
RECENTLY COMPLETED WELLS IN
NON-PARTICIPATING AREA

West Loco Hills Grayburg No. 4 Sand Unit

<u>Well No.</u>	<u>Basis for Determining Net Pay</u>	<u>Net Pay, Ft.</u>
4B-2	Core Analysis	4.5
11B-7	Core Analysis	15.25
11B-8	Core Analysis	18.0
11B-9	Core Analysis	16.0
11B-10	Core Analysis	27.0
13B-8	Core Analysis	17.0
13B-9	Core Analysis	26.0
17B-6	Schlumberger Sonic Log	19.0
19C-1	Analogy of Caliper Log with Offset Core Analysis	6.0
21B-5	Schlumberger Sonic Log	2.5
21B-6	Lane Wells Acoustilog	8.25
30-1	Core Analysis	15.0
30-2	Core Analysis	5.75

NET PAY DETERMINATION

Dixon-Yates Saunders "B" No. 2 (4B-2)
West Loco Hills Unit

Net Pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2674-75'	1.6	14.2	0.5
2675-76'	1.9	14.0	0.5
2676-77'	2.1	14.1	0.5
2677-78'	2.4	14.8	0.5
2678-79'	2.4	14.0	0.5
2679-80'	1.0	13.2	0.5
2680-81'	1.3	12.9	0.5
2681-82'	1.1	13.6	0.5
2682-83'	1.2	12.8	0.5
2683-84'	0.5	11.3	0
2684-85'	0.3	8.9	0
<u>Total Net Pay</u>			<u>4.5</u>

CWS/RRP:ajg
7-10-64

NET PAY DETERMINATION

Yates Petr. Corp. Brainard No. 7 (11B-7)
West Loco Hills Unit

Net pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2621-22'	0.4	7.9	0
2622-23'	9.9	14.2	1
2623-24'	63.0	17.9	1
2624-25'	74.0	17.9	1
2625-26'	64.0	18.0	1
2626-27'	20.0	16.6	1
2627-28'	19.0	15.0	1
2628-29'	35.0	17.4	1
2629-30'	30.0	16.7	1
2630-31'	30.0	16.6	1
2631-32'	15.0	15.3	1
2632-33'	9.9	14.1	1
2633-34'	4.8	13.7	0.75
2634-35'	2.4	12.3	0.5
2635-36'	0.7	10.0	0
2636-37'	0.7	9.0	0
2637-38'	0.9	10.3	0
2638-39'	6.2	14.0	1
2639-40'	3.2	13.2	0.75
2640-41'	3.7	14.4	0.75
2641-42'	1.0	11.6	0.5
2642-43'	0.4	9.1	0
<u>Total Net Pay</u>			<u>15.25'</u>

CWS:ajg
8-3-64

NET PAY DETERMINATION

Yates Petr. Corp. Brainard No. 8 (11B-8)
West Loco Hills Unit

Net Pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2649-50'	48.0	17.0	1
2650-51'	90.0	19.5	1
2651-52'	71.0	19.7	1
2652-53'	49.0	18.8	1
2653-54'	31.0	18.4	1
2654-55'	37.0	19.2	1
2655-56'	35.0	18.4	1
2656-57'	24.0	16.8	1
2657-58'	25.0	18.1	1
2658-59'	23.0	17.0	1
2659-60'	17.0	16.5	1
2660-61'	9.9	16.2	1
2661-62'	13.0	16.7	1
2662-63'	8.3	15.8	1
2663-64'	8.5	16.0	1
2664-65'	1.1	11.4	0.5
2665-66'	6.5	15.2	1.0
2666-67'	5.2	14.9	1.0
2667-68'	1.1	10.6	0.5
2668-69'	0.2	9.1	0
2669-70'	0.7	5.2	0
<u>Total Net Pay</u>			<u>18.0'</u>

CWS:ajg
8-3-64

NET PAY DETERMINATION

Yates Petr. Corp. Brainard No. 9 (11B-9)
West Loco Hills Unit

Net pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2615-2616'	0.1	0.9	0
2625-2626'	2.8	4.2	0
2626-2627'	2.1	2.3	0
2627-2628'	1.7	3.2	0
2628-2629'	5.5	5.5	0
2629-2630'	19.0	12.4	1
2630-2631'	29.0	19.0	1
2631-2632'	54.0	22.6	1
2632-2633'	45.0	17.8	1
2633-2634'	61.0	22.6	1
2634-2635'	48.0	17.2	1
2635-2636'	36.0	13.6	1
2636-2637'	65.0	16.5	1
2637-2638'	27.0	16.2	1
2638-2639'	29.0	16.8	1
2639-2640'	21.0	16.7	1
2640-2641'	13.0	15.2	1
2641-2642'	7.5	14.0	1
2642-2643'	1.4	12.8	0.50
2643-2644'	2.1	13.6	0.50
2644-2645'	3.9	12.9	0.75
2645-2646'	3.9	14.7	0.75
2646-2647'	1.2	11.2	0.50
2647-2648'	0.6	6.1	0
2648-2649'	0.7	3.5	0
<u>Total Net Pay</u>			<u>16.0'</u>

CWS:ajg
8-3-64

NET PAY DETERMINATION

Yates Petr. Corp. Brainard No. 10 (11B-10)
West Loco Hills Unit

Net pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2622-2623'	2.8	2.7	0
2626-2627'	1.6	2.9	0
2627-2628'	1.5	9.6	0
2628-2629'	13.0	13.3	1
2629-2630'	16.0	13.6	1
2630-2631'	25.0	15.1	1
2631-2632'	49.0	14.7	1
2632-2633'	35.0	16.7	1
2633-2634'	47.7	16.4	1
2634-2635'	27.0	15.1	1
2635-2636'	31.0	14.6	1
2636-2637'	59.0	17.0	1
2637-2638'	70.0	17.5	1
2638-2639'	59.0	17.6	1
2639-2640'	70.0	17.3	1
2640-2641'	51.0	15.9	1
2641-2642'	23.0	14.3	1
2642-2643'	49.0	16.1	1
2643-2644'	31.0	15.9	1
2644-2645'	37.0	15.7	1
2645-2646'	23.0	15.2	1
2646-2647'	20.0	15.4	1
2647-2648'	12.0	14.2	1
2648-2649'	14.0	13.6	1
2649-2650'	13.0	13.4	1
2650-2651'	9.02	12.1	1
2651-2652'	12.0	12.2	1
2652-2653'	7.8	14.2	1
2653-2654'	13.0	14.4	1
2654-2655'	6.2	11.0	1
2655-2656'	1.4	7.2	0
2667-2668'	2.2	8.1	0
<u>Total Net Pay</u>			<u>27.0'</u>

CWS:ajg
8-3-64

NET PAY DETERMINATION

Dixon-Yates Saunders No. 8A (13B-8)
West Loco Hills Unit

Net pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2649-50'	0.9	3.1	0
2650-51'	1.9	10.2	0.5
2651-52'	6.4	13.4	1.0
2652-53'	29.0	16.9	1.0
2653-54'	13.0	14.8	1.0
2654-55'	47.0	18.1	1.0
2655-56'	28.0	17.3	1.0
2656-57'	31.0	17.8	1.0
2657-58'	39.0	18.4	1.0
2658-59'	24.0	17.1	1.0
2659-60'	23.0	17.2	1.0
2660-61'	19.0	16.3	1.0
2661-62'	22.0	17.1	1.0
2662-63'	6.0	14.6	1.0
2663-64'	4.3	14.1	0.75
2664-65'	3.7	15.6	0.75
2665-66'	6.1	15.6	1.0
2666-67'	1.7	13.6	0.5
2667-68'	1.0	10.3	0.5
2668-69'	0.47	10.4	0
2669-70'	0.87	12.2	0
2670-71'	1.2	11.8	0.5
2671-72'	1.0	13.2	0.5
<u>Total Net Pay</u>			<u>17.0'</u>

CWS:ajg
8-3-64

NET PAY DETERMINATION

Dixon-Yates Saunders "B" No. 9 (13B-9)
West Loco Hills Unit

Net pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2672-73'	6.3	6.0	0
2673-74'	30.0	15.2	1
2674-75'	115.0	20.6	1
2675-76'	77.0	19.1	1
2676-77'	32.0	16.8	1
2677-78'	31.0	16.2	1
2678-79'	117.0	20.6	1
2679-80'	104.0	20.0	1
2680-81'	109.0	19.7	1
2681-82'	134.0	20.9	1
2682-83'	81.0	19.4	1
2683-84'	78.0	20.6	1
2684-85'	64.0	19.1	1
2685-86'	39.0	17.8	1
2686-87'	36.0	17.4	1
2687-88'	49.0	18.0	1
2688-89'	28.0	17.6	1
2689-90'	21.0	16.2	1
2690-91'	11.0	15.3	1
2691-92'	20.0	16.2	1
2692-93'	16.0	15.5	1
2693-94'	8.5	14.9	1
2694-95'	9.9	15.4	1
2695-96'	5.4	14.2	1
2696-97'	1.9	13.7	0.5
2697-98'	1.4	11.5	0.5
2698-99'	6.0	12.4	1
2699-2700'	1.9	11.5	0.5
2700-01'	1.1	10.1	0.5
2701-02'	1.0	9.9	0
2702-03'	0.4	7.4	0
<u>Total Net Pay</u>			<u>26.0'</u>

NET PAY DETERMINATION

Fair Oil Brainard No. 6 (17B-6)
West Loco Hills Unit

Net Pay from Porosity Log

<u>Interval</u>	<u>Porosity</u>	<u>Net Pay, Ft.</u>
2575-76'	0.0	0
2576-77'	11.8	0.5
2577-78'	16.8	1.0
2578-79'	19.0	1.0
2579-80'	21.2	1.0
2580-81'	22.8	1.0
2581-82'	25.8	1.0
2582-83'	21.2	1.0
2583-84'	23.4	1.0
2584-85'	23.4	1.0
2585-86'	22.0	1.0
2586-87'	22.7	1.0
2587-88'	27.2	1.0
2588-89'	25.3	1.0
2589-90'	27.3	1.0
2590-91'	21.8	1.0
2591-92'	21.2	1.0
2592-93'	22.8	1.0
2593-94'	22.6	1.0
2594-95'	16.8	1.0
2595-96'	10.2	0
2596-97'	13.2	0.5
2597-98'	9.0	0
<u>Total Net Pay</u>		<u>19.0</u>

NET PAY DETERMINATION

Newmont Oil Co. Canfield "B" No. 5 (21B-5)
West Loco Hills Unit

Net Pay from Porosity Log

<u>Interval</u>	<u>Porosity</u>	<u>Net Pay, Ft.</u>
2770-71'	9.9	0
2771-72'	10.2	0
2772-73'	10.2	0
2773-74'	9.9	0
2774-75'	9.5	0
2775-76'	10.7	0
2776-77'	11.6	0.5
2777-78'	11.6	0.5
2778-79'	9.2	0
2779-80'	7.6	0
<u>Total Net Pay</u>		<u>1.0</u>

Due to large gross interval of 29' and to 8' of sand with a porosity of about 10% or better, it was agreed the net pay should be 2.5'.

RRP:ajg
7-10-64

NET PAY DETERMINATION

Newmont Oil Co. Canfield "B" No. 6 (21B-6)
West Loco Hills Unit

Net Pay from Core and Porosity Log

<u>Interval</u>	<u>Log</u>	<u>Core</u>		<u>Net Pay, Ft.</u>		
	<u>Porosity, %</u>	<u>Porosity, %</u>	<u>Perm., md.</u>	<u>Log</u>	<u>Core</u>	<u>Total</u>
2725-26'	11.6			0.5		0.5
2726-27'	12.8			0.5		0.5
2727-28'	13.2			0.5		0.5
2728-29'	11.9			0.5		0.5
2729-30'	13.1			0.5		0.5
2730-31'	11.6			0.5		0.5
2731-32'	13.9			0.5		0.5
2732-33'	12.2			0.5		0.5
2733-34'	12.5	11.1	1.4	0.5	0.5	0.5
2734-35'	13.2	11.9	6.0	0.5	1	0.50
2735-36'	14.5	13.3	2.5	0.75	0.5	0.75
2736-37'	13.2	14.0	2.1	0.5	0.5	0.5
2737-38'	13.8	13.5	2.8	0.5	0.5	0.5
2738-39'	13.7	11.1	1.0	0.5	0.5	0.5
2739-40'	13.4			0.5		0.5
2740-41'	11.6			0.5		0.5
2741-42'	10.8			0		0
<u>Total Net Pay</u>						<u>8.25</u>

NET PAY DETERMINATION

Newmont Oil Company State No. 1 (30-1)
West Loco Hills Unit

Net pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2610-11'	0.6	5.7	0
2611-12'	0.5	6.6	0
2612-13'	2.4	10.4	0.5
2613-14'	2.8	11.6	0.5
2614-15'	1.1	10.4	0.5
2615-16'	8.2	12.1	1
2616-17'	0.9	11.2	0
2617-18'	27.0	16.3	1
2618-19'	30.0	17.0	1
2619-20'	25.0	11.4	1
2620-21'	28.0	15.9	1
2621-22'	37.0	16.5	1
2622-23'	15.0	15.6	1
2623-24'	25.0	15.8	1
2624-25'	11.0	14.5	1
2625-26'	2.8	12.4	0.5
2626-27'	5.1	13.2	1
2627-28'	86.0	12.2	1
2628-29'	2.3	12.3	0.5
2629-30'	38.0	10.6	1
2630-31'	61.0	7.8	0
2631-32'	0.3	7.5	0
2632-33'	1.9	10.2	0.5
2633-34'	0.5	9.4	0
<u>Total Net Pay</u>			<u>15.0'</u>

CWS:ajg
8-3-64

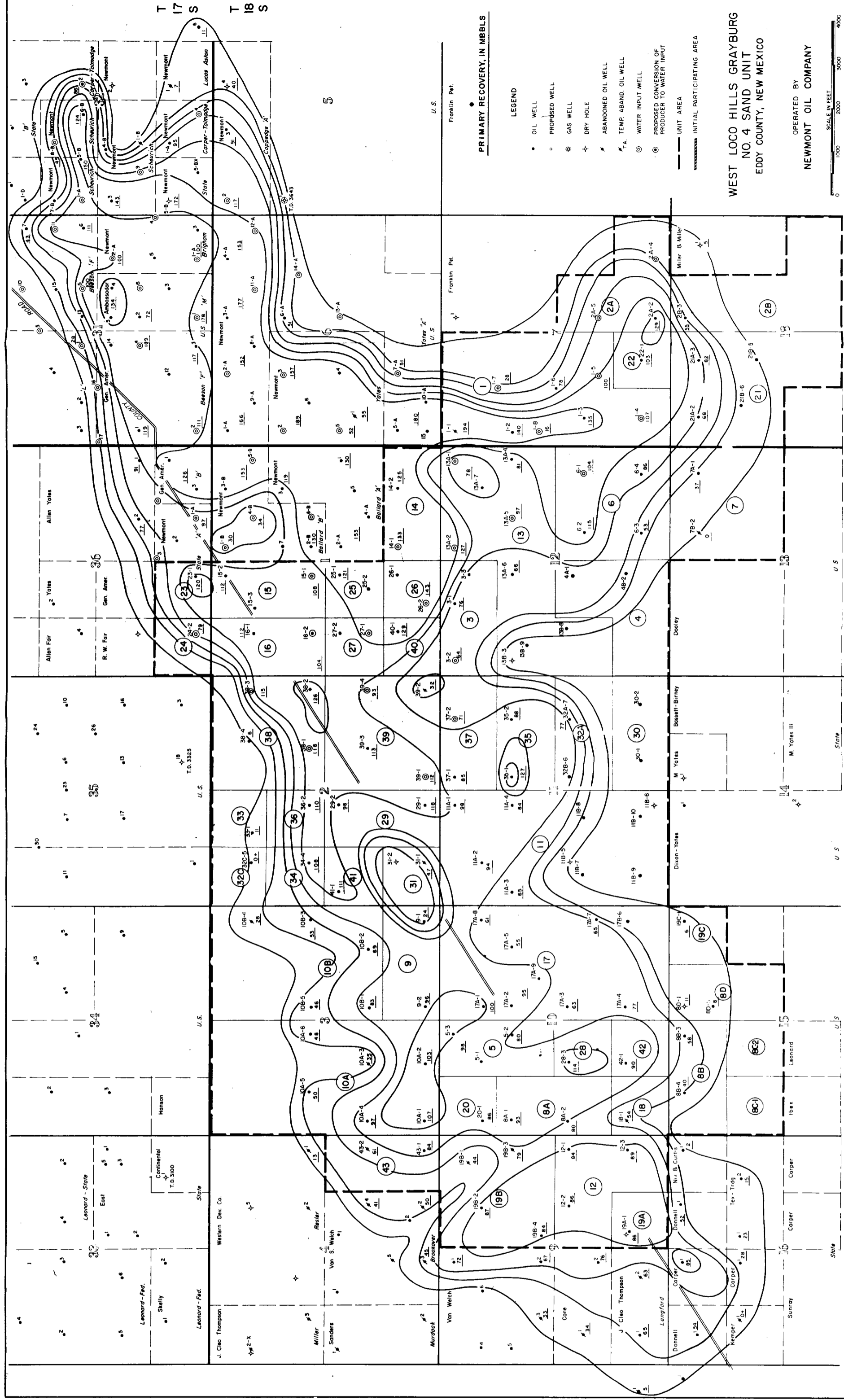
NET PAY DETERMINATION

Newmont Oil Company State No. 2 (30-2)
West Loco Hills Unit

Net pay from Core

<u>Interval</u>	<u>Perm., md.</u>	<u>Porosity, %</u>	<u>Net Pay, Ft.</u>
2609-10'	0.7	1.3	0
2610-11'	0.5	1.7	0
2611-12'	3.1	1.8	0
2612-13'	0.4	1.3	0
2626-27'	0.1	1.4	0
2627-28'	0.1	1.4	0
2628-29'	0.2	1.1	0
2640-41'	0.2	2.0	0
2641-42'	0.2	2.5	0
2642-43'	0.1	2.9	0
2643-44'	0.2	5.4	0
2644-45'	2.5	7.5	0
2645-46'	11.0	12.3	1
2646-47'	8.0	13.4	1
2647-48'	5.5	13.5	1
2648-49'	7.3	13.6	1
2649-50'	3.0	12.4	0.75
2650-51'	1.9	11.4	0.50
2651-52'	1.2	11.0	0.5
2652-53'	0.5	10.0	0
2653-54'	1.5	6.7	0
2654-55'	0.5	5.8	0
2655-56'	0.7	7.6	0
2656-57'	0.3	4.2	0
2657-58'	0.2	3.1	0
<u>Total Net Pay</u>			<u>5.75'</u>

CWS:ajg
8-3-64



PRIMARY RECOVERY, IN MBLS

LEGEND

• OIL WELL
 ○ PROPOSED WELL
 ✱ GAS WELL
 ✧ DRY HOLE
 ✦ ABANDONED OIL WELL
 ✧ TA TEMP. ABAND. OIL WELL
 ⊙ WATER INPUT WELL
 ⊙ PROPOSED CONVERSION OF PRODUCER TO WATER INPUT
 — UNIT AREA
 ===== INITIAL PARTICIPATING AREA

WEST LOCO HILLS GRAYBURG
NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

OPERATED BY
NEWMONT OIL COMPANY

SCALE IN FEET

0 1000 2000 3000 4000

ISO-CUMULATIVE MAP

REVISÉ 12-4-63

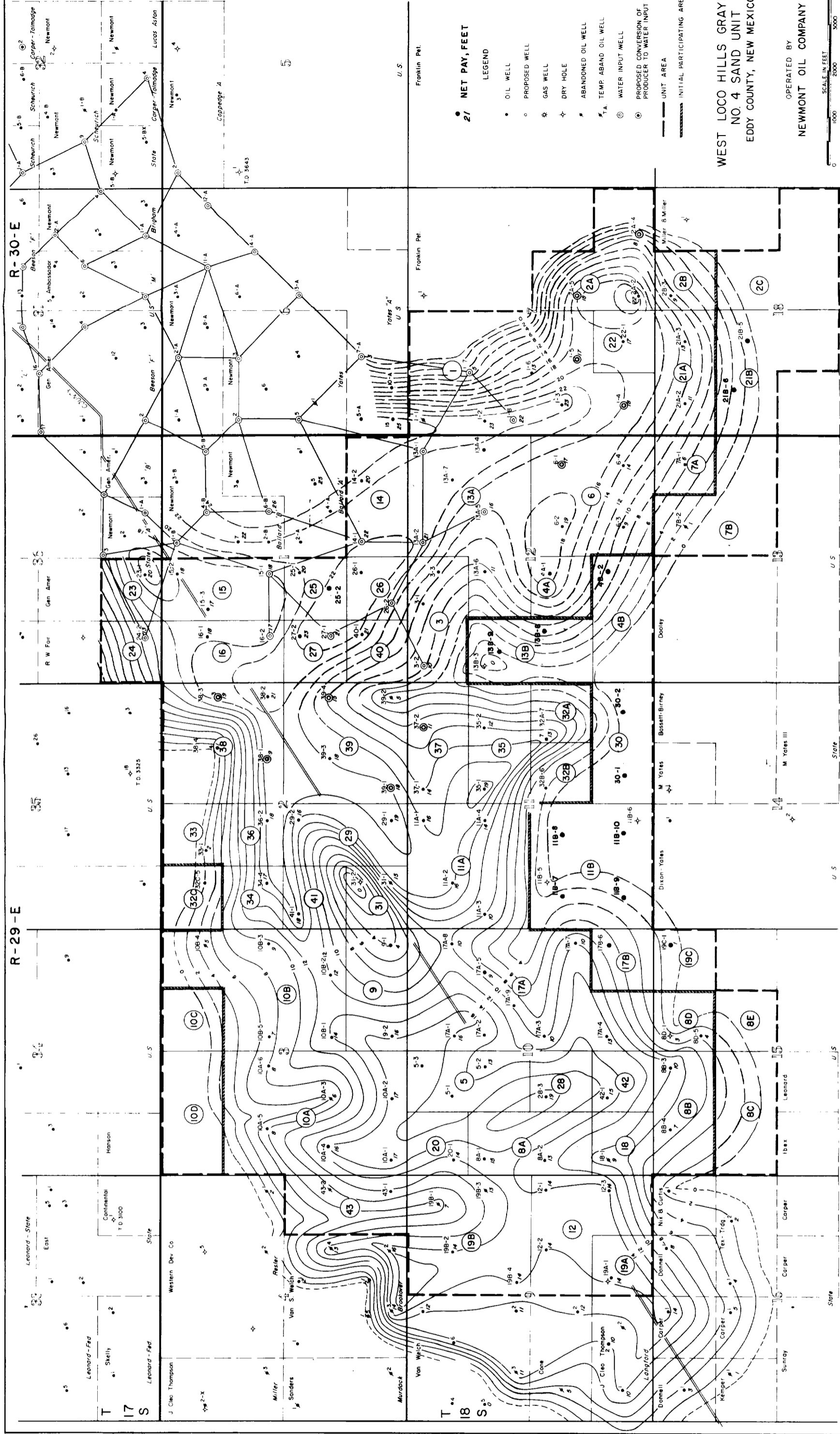
WELLS REVISED 8-3-64

R-29-E

R-30-E

T
17
S

T
18
S



27 NET PAY, FEET

LEGEND

- OIL WELL
- PROPOSED WELL
- * GAS WELL
- ✦ DRY HOLE
- ✦ ABANDONED OIL WELL
- ✦ TEMP. ABAND. OIL WELL
- ⊙ WATER INPUT WELL
- ⊙ PROPOSED CONVERSION OF PRODUCER TO WATER INPUT

UNIT AREA

INITIAL PARTICIPATING AREA

WEST LOCO HILLS GRAYBURG
NO. 4 SAND UNIT
EDDY COUNTY, NEW MEXICO

OPERATED BY
NEWMONT OIL COMPANY

SCALE IN FEET
0 1000 2000 3000 4000

FIRST REVISION TO

J. A. LEWIS

NET OIL SAND ISOPACHOUS MAP

GRAYBURG NO. 4 SAND

CONTOUR INT. 2'

CONTOUR INT. 2'

REVISED 12-4-63

WELLS REVISED 8-3-64

Western Development Co

Rown

linental

"S"

illier

idel

sey Co.

Skelly

Oil Co.

leo

hompson

J Cleo

Thompson

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

33

CL Loyd

"B"

Leonard

State

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

34

Robinson "A"

Sinclair

Leonard

E P Hanson

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

35

Robinson "A"

M Yates

Robinson

Robinson "B"

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

36

Gen Amer

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

37

General American

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

38

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

39

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

40

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

41

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

42

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

43

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

44

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

45

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

46

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

47

Woolley

Fair

"B"

Newmont

J Cleo

Thompson

Miller

Miller

V S Welch

Fair Oil Co

J Cleo

Thompson

J Cleo

Thompson

Donnell

Drig

Carper

L Kemper

Carper

Sunray

Mid-Cont

48

Woolley

Fair

"B"

Newmont

COUNTY EDDY
 FIELD or LOCATION LOCO HILLS
 WELL SAUNDERS 2 B
 COMPANY DIXON-YATES

COMPANY DIXON-YATES

WEST LOCO HILLS UNIT WELL NO. 4B-2

WELL SAUNDERS 2 B

FIELD LOCO HILLS

COUNTY EDDY STATE NEW MEXICO

Location: 990' FSL
 2310' FWL

Other Services:
 NONE

Sec. 12 Twp. 18S Rge. 29E

Permanent Datum: GROUND LEVEL; Elev.: 3504
 Log Measured From KB, 12 Ft. Above Perm. Datum
 Drilling Measured From KB

Elev.: K.B. 3516
D.F. 3514
G.L. 3504

Date 12 9-63
 Run No. ONE
 Type Log GAMMA GAMMA-GAMMA RAY
 Depth—Driller 2708
 Depth—Logger 2708
 Bottom logged interval 2707
 Top logged interval 437
 Type fluid in hole EMPTY W/OIL ON BOTTOM 1200'
 Solinity, PPM Cl. -
 Density -
 Level -
 Max rec. temp., deg F. -
 Operating rig time 2 HOURS
 Recorded by VANN
 Witnessed by NORMAN

BORE-HOLE RECORD

CASING RECORD

Run No.	Bit	From	To	Size	Wgt.	From	To
6-3/4"	437	2634	7 5/8"				437
6 11/16"	2634	2708			SURF.		

EQUIPMENT DATA

Gamma-Gamma

General

Run No.	Tool Model No.	Diameter	Det'r Model No.	Type	Run No.	Hoist Truck No.	Inst. Truck No.	Tool Serial No.	Location

LOGGING DATA

General

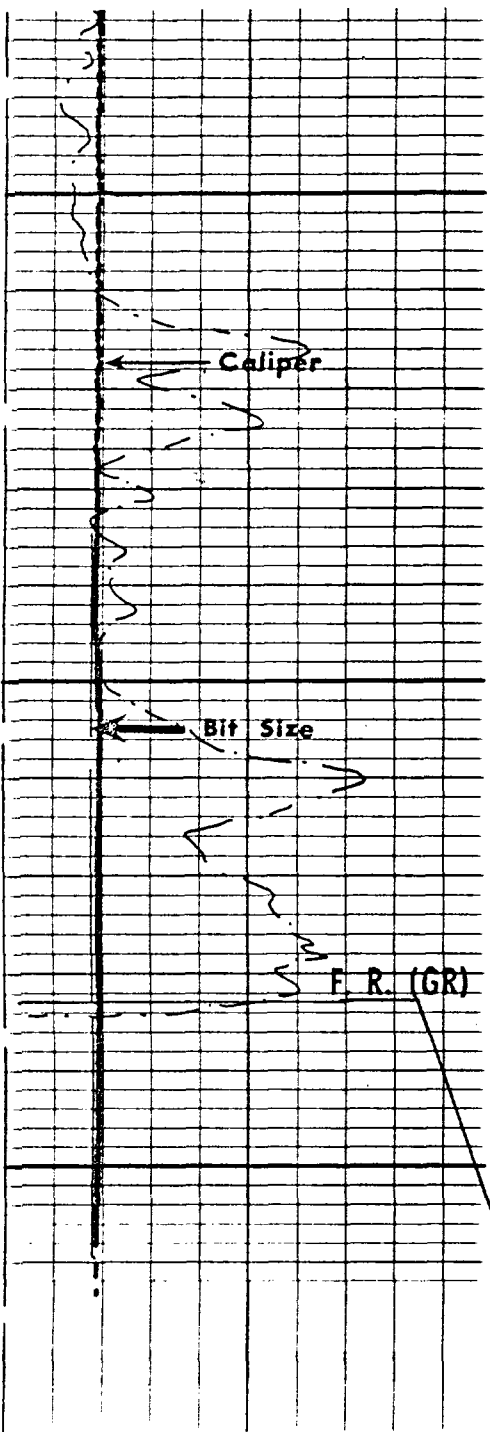
Gamma Ray

Gamma-Gamma

Run No.	Depths		Speed Ft./Min.	T.C. Sec.	Sens. Settings	Zero Div. L or R	API Units per Log Div.	T.C. Sec.	Sens. Settings	Zero: Div. R. of Zero of Track II	Standard per Log
	From	To									
1100	2684	30	2	500	0	12.5	2	300	23 R	30	
437	1100						2	300	23 R	30	

Remarks:

GR. BK 80 82.5; 800 TAP;
 GG. BK. 5; F-400; C-1320; 80/280;



2600

2700

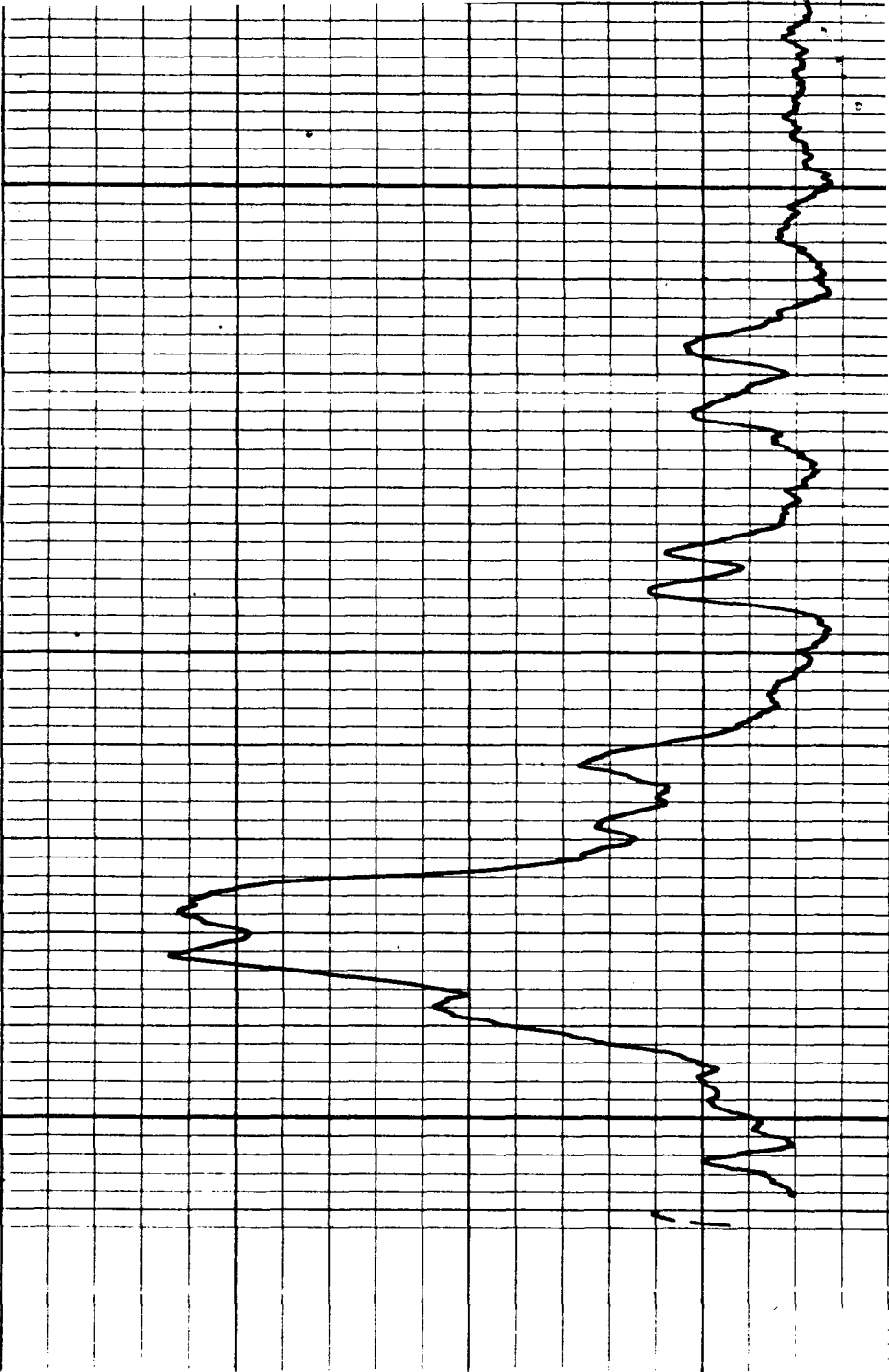
0 125
125 250

GAMMA RAY
API UNITS

5" 15"

CALIPER

DEPT



2.95
2.89
2.84
2.79
2.74
2.70
2.67
2.64
2.61
2.58
2.55
2.52
2.49
2.47
2.45
2.43
2.41
2.39

BULK DENSITY
GRAMS/CC.

690 390 9

GAMMA GAMMA DENSITY LOG



WELL NO. 11B-7
WELL NO. 11B-7

WELL NO.

COMPANY YATES PETROLEUM CORPORATION

WELL BRAINARD NO. 7 WEST LOCO HILLS UNIT

FIELD LOCO HILLS

COUNTY EDDY STATE NEW MEXICO

LOCATION: 1980' FSL & 1980' FWL

SEC 11 TWP 18-S RGE 29-E

Permanent Datum GROUND LEVEL Elev. 3513

Log Measured from K. B. 12 Ft. Above Permanent Datum

Elevations:
KB 3525
DF 3523
GL 3513

Date	2/29/64			
Run No.	ONE			
Depth—Driller	2670			
Depth—logger	2676			
Bottom Logged Interval	2670			
Top Logged Interval	100			
Casing—Driller	8 5/8@ 468	@		@
Casing—logger	466			
Casing Size	7 7/8"			
Type Fluid in Hole	SALT WATER			
Density and Viscosity				
pH and Fluid Loss		cc	cc	cc
Source of Sample	CIRCULATED			
Rm @ Meas. Temp.	.05 @ 68 °F	@	°F	@ °F
Rmf @ Meas. Temp.	@ °F	@	°F	@ °F
Rmc @ Meas. Temp.	@ °F	@	°F	@ °F
Source of Rmf and Rmc				
Rm @ BHT	.037 @ 93 °F	@	°F	@ °F
Time Since Circ.				
Max. Rec. Temp. Deg. F.	93 °F		°F	°F
Equip. No. and Location	X-900/HOBBS			
Recorded By	SHANKS			
Witnessed By	MONROE & NORMAN			

FOLD HERE

THIS HEADING AND LOG CONFORMS TO API RECOMMENDED STANDARD PRACTICE RP-31

REMARKS

Changes in Mud Type or Additional Samples				Scale Changes			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller							
Type Fluid in Hole							
Dens	Visc.						
pH	Fluid Loss	cc	cc				
Source of Sample							
Rm @ Meas. Temp.	@ °F	@ °F		Run No.	Tool Type	Pad Type	Tool Position
Rmf @ Meas. Temp.	@ °F	@ °F		ONE	SERIES 605		FREE
Rmc @ Meas. Temp.	@ °F	@ °F					
Source Rmf Rmc							
Rm @ BHT	@ °F	@ °F					
Rmf @ BHT	@ °F	@ °F					
Rmc @ BHT	@ °F	@ °F					

DETECTOR TYPE D4G1 SCINT. T.C. 2.0 & 0.9 SEN. SETTING 1000 X-1
DETECTOR LENGTH 4" LOG SPEED 30' & 60' ZERO DIV 1 & 2

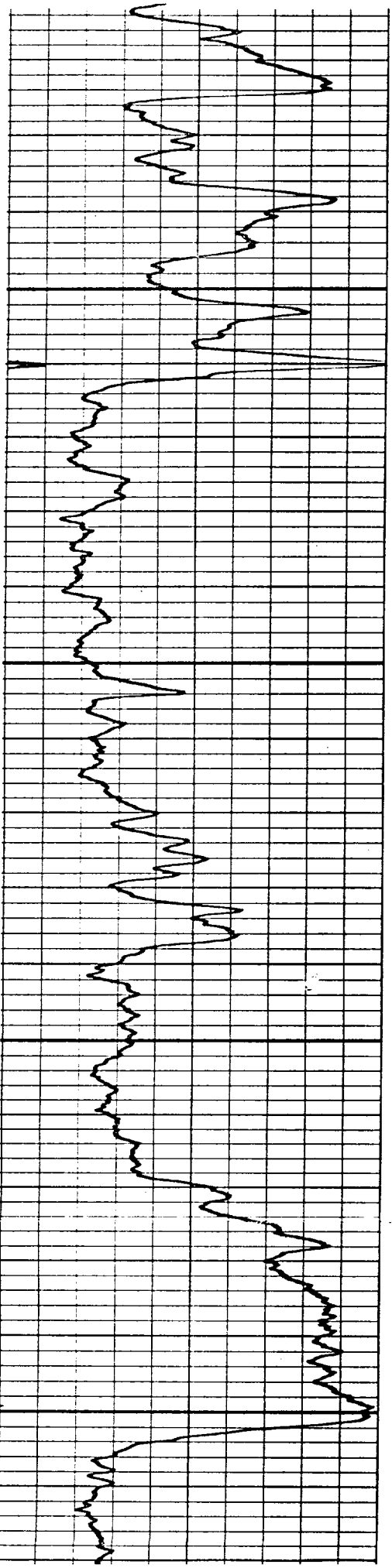
0 API

100 API

100

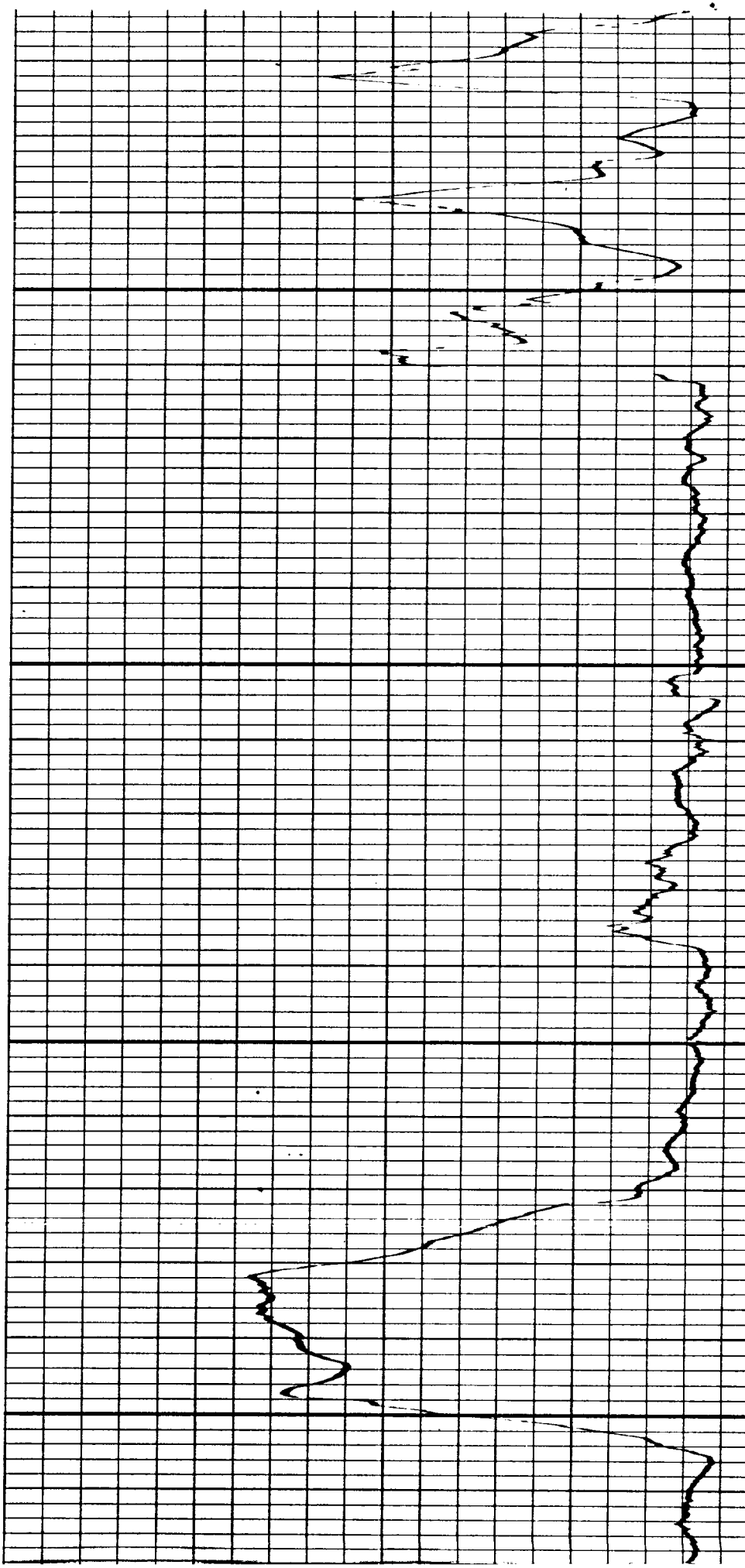
70

4



2500

2600



SCHLUMBERGER

SCHLUMBERGER WELL SERVICE / INC. CORPORATION
Houston, Texas

COUNTY EDDY
FIELD or LOCATION LOCO HILLS
WELL BRAINARD #8
COMPANY YATES PETROLEUM CORP

COMPANY YATES PETROLEUM CORPORATION
WEST LOCO HILLS UNIT WELL NO. 11B-8
WELL BRAINARD #8
FIELD LOCO HILLS
COUNTY EDDY STATE NEW MEXICO
LOCATION 1980' FSL
660' FWL
Sec. 11 Twp. 18S Rge. 29E
Other Services: NONE

Permanent Datum: GROUND LEVEL, Elev. 3509
Log Measured From K. B., 12 Ft. Above Perm. Datum
Drilling Measured From K. B. Elev.: K.B. 3521
D.F. ---
G.L. 3509

Date	3-12-64				
Run No.	ONE				
Depth—Driller	2685				
Depth—Logger	2690				
Btm. Log Interval	2683				
Top Log Interval	100				
Casing—Driller	8-5/8" @ 505	@		@	
Casing—Logger					
Bit Size	7-7/8" & 7-13/16"				
Type Fluid in Hole	SALT BRINE				
Dens.	Visc.				
pH	Fluid Loss	ml		ml	
Source of Sample					
R _m @ Meas. Temp.	@	°F	@	°F	@
R _{mf} @ Meas. Temp.	@	°F	@	°F	@
R _{mc} @ Meas. Temp.	@	°F	@	°F	@
Source: R _{mf} R _{mc}					
R _m @ BHT	@	°F	@	°F	@
Time Since Circ.					
Max. Rec. Temp.		°F		°F	
Equip. Location	3855 ARTISIA				
Recorded By	WINDLAND				
Witnessed By	NORMAN				

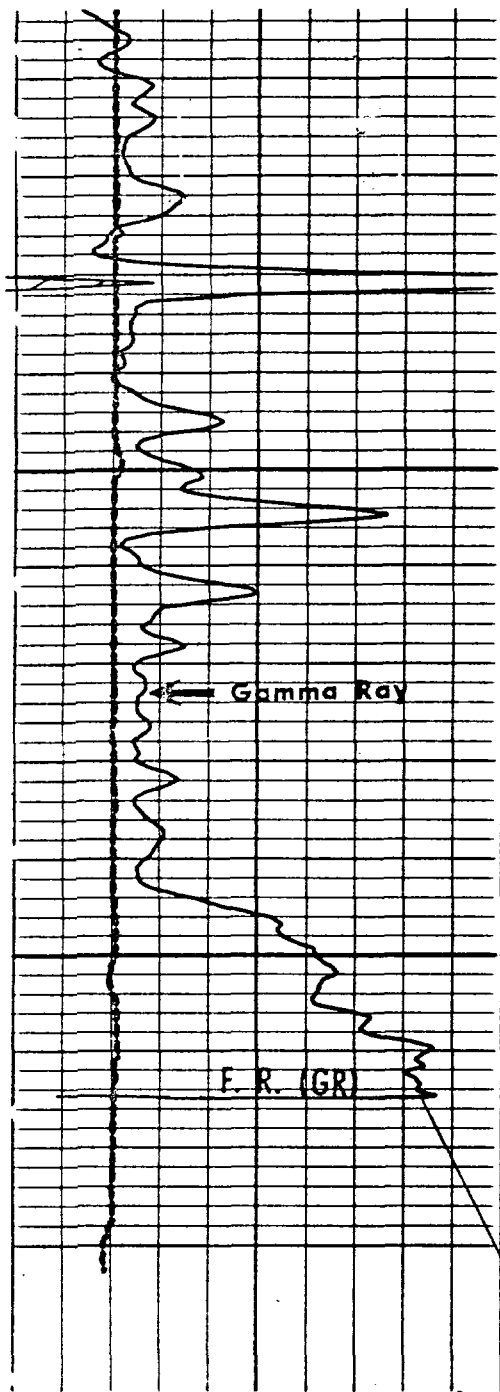
FOLD HERE

REMARKS

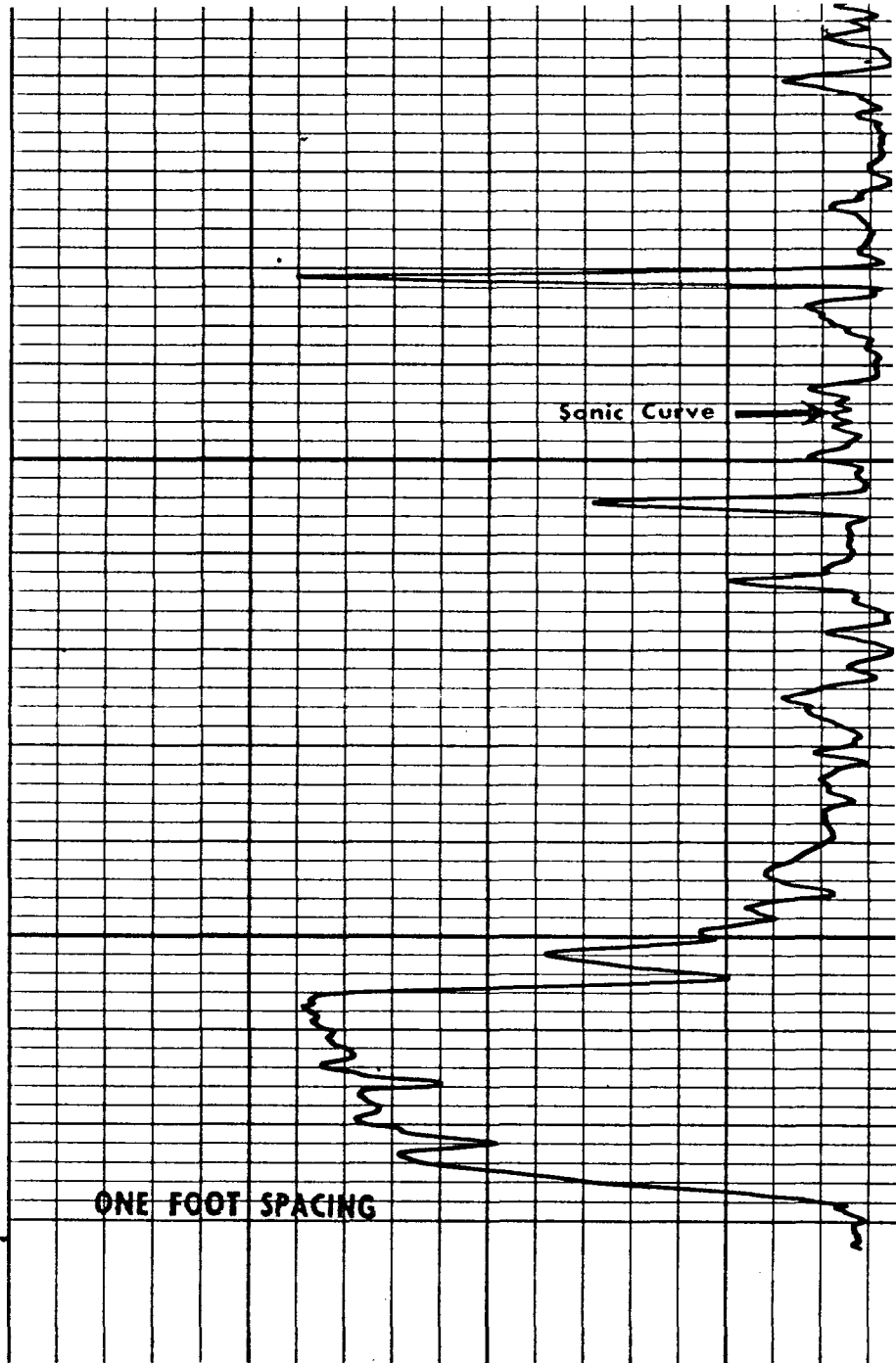
Changes in Mud Type or Additional Samples				Scale Changes			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth—Driller							
Type Fluid in Hole							
Dens.	Visc.						
ph	Fluid Loss	ml					
Source of Sample							
R _m @ Meas. Temp.	@	°F	@	°F	Run No.	Tool Type	Pad Type
R _{mf} @ Meas. Temp.	@	°F	@	°F			Tool Pos.
R _{mc} @ Meas. Temp.	@	°F	@	°F			Other
Source: R _{mf} R _{mc}							
R _m @ BHT	@	°F	@	°F			
R _{mf} @ BHT	@	°F	@	°F			
R _{mc} @ BHT	@	°F	@	°F			

C.D.: S.O.: SPRING GUIDE & CALIPER
Equip. Used: CART. No. B-122
PANEL No. B-11
SONDE No. J-77

CALIBRATION:	BACKGND. CPS.	SOURCE CPS.	GALV. INCR. DIVISIONS	SENS. TAP (FOR CAL.)	SENS. TAP (RECORD)	TIME CONST.	RECORDING SPEED (FT./MIN.)
GAMMA RAY:	80	560	82.5	800	400	2/1	30/67



2600



5 16
RECC CHALLOW

CALIPER
HOLE DIAM. IN INCHES

0 100
100 200

GAMMA RAY
API UNITS

DEPTHS

100 70
 $T \frac{3}{R_1} \frac{1}{R_2}$

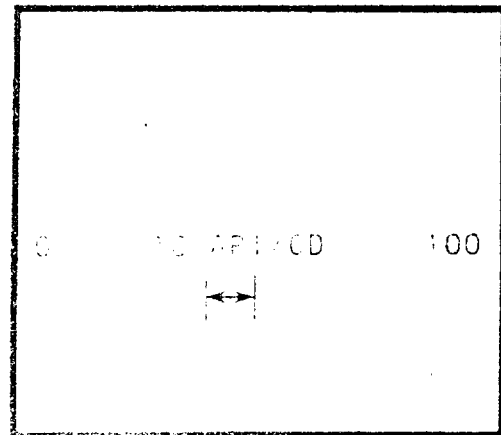
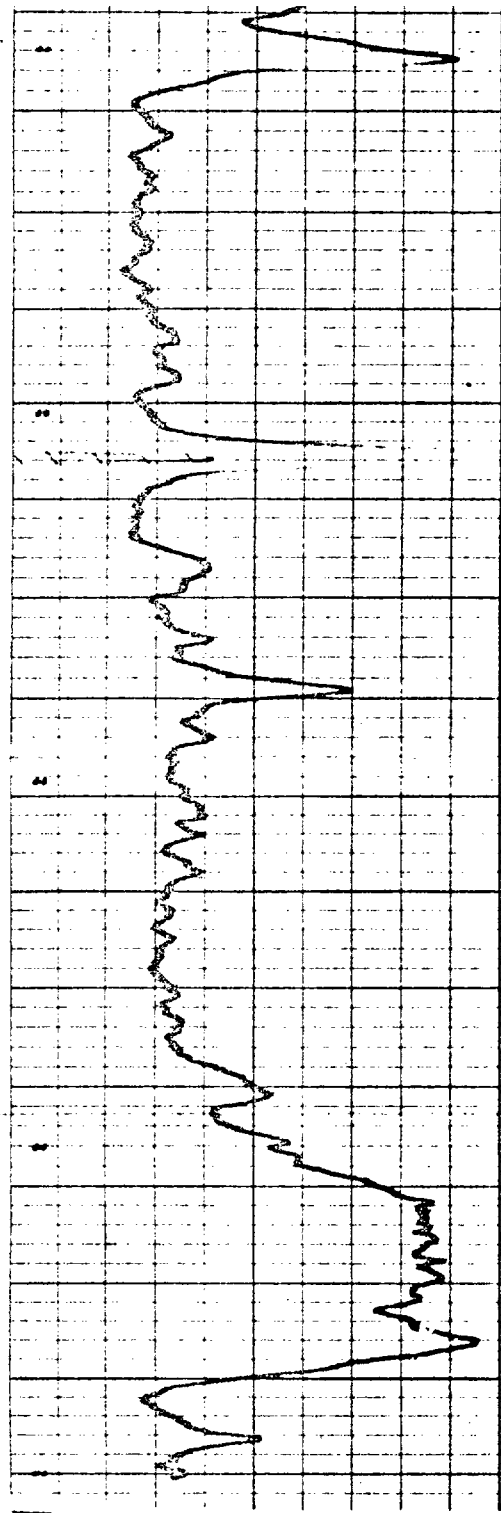
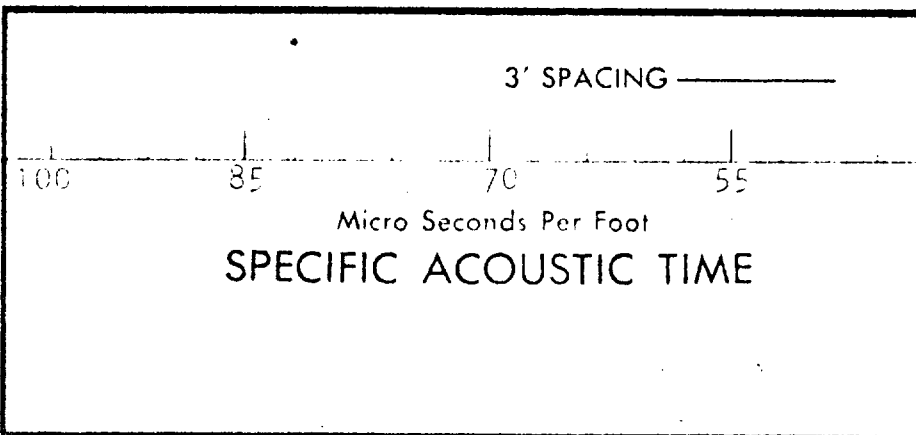
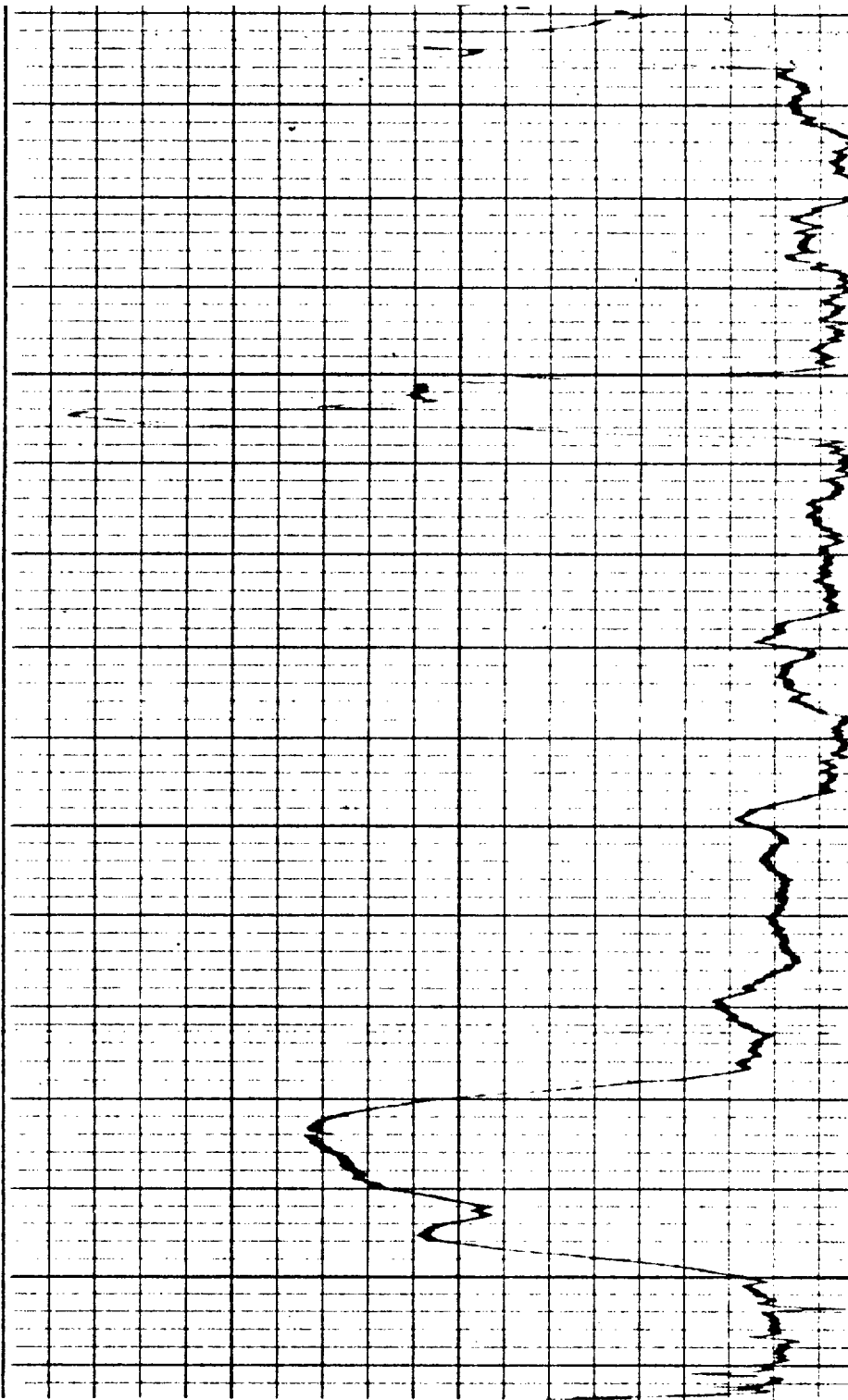
INTERVAL TRANSIT TIME
MICROSECONDS PER FOOT

Journal

THE BLANKING AND THE GUNSHOTS - 1970

LOG SPEED = 40

T. 2 R. 1 R. 2 R.



2600

DEPTH

ACOUSTILOG

LAWNIE WELLS

LAWNIE WELLS

FILE NO.

COMPANY YATES PETROLEUM CORPORATION

WELL BRAINARD NO. 10 WEST LOCO HILLS UNIT

FIELD WEST LOCO HILLS WELL NO. 11B-10

COUNTY EDDY STATE NEW MEXICO

LOCATION: 660' FSL & 1980' FWL Other Services

SEC 11 TWP 18-S RGE 29-E

GROUND LEVEL Elev. 3514

Permanent Datum K. B. 12 Ft. Above Permanent Datum
Log Measured from K. B.
Drilling Measured from K. B.

Elevations:
KB 3520
DF 3525
GL 3514

Date 6/2/64

Run No. ONE

Type Log GAMMA RAY N/NEUTRON

Depth-Driller 2672 2672

Depth-Logger 2675 2675

Bottom Logged Interval 2662 2674

Top Logged Interval SURFACE SURFACE

Type Fluid in Hole DRY DRY

Salinity Ppm Cl.

Density lb./Gal.

Level

Max. Rec. Temp. Deg. F

Opf. Rig Time 2 1/2 HOURS

Recorded By HURST

Witnessed By MR. NORMAN MR. NORMAN

Run Bore Hole Record Casing Record

No. Bit From To Size Wgt. From To

1 12 1/4 SURFACE 537 8 5/8" SURFACE 537

1 7 7/8 537 2672

1 7 7/8 537

FOLD HERE

Gamma Ray

Equipment Data

Neutron

Run No.	ONE	Run No.	ONE
Tool Model No.	402	Log Type	N/NEUTRON
Diam.	3 5/8"	Tool Model No.	402
Detect. Model No.	D4G1	Diam.	3 5/8"
Type	SCINT.	Detect. Model No.	D6N1
Length	4"	Type	SCINT.
Dist. to N. Source	13"	Length	4"
		Source Model No.	S16D5
		Serial No.	3352
		Spacing	18"
		Type	PU BE
		Strength*	5 CURIES

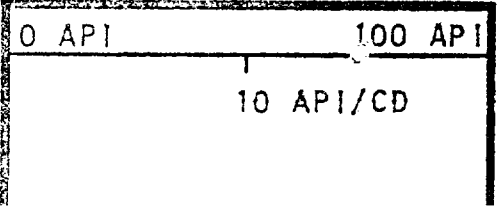
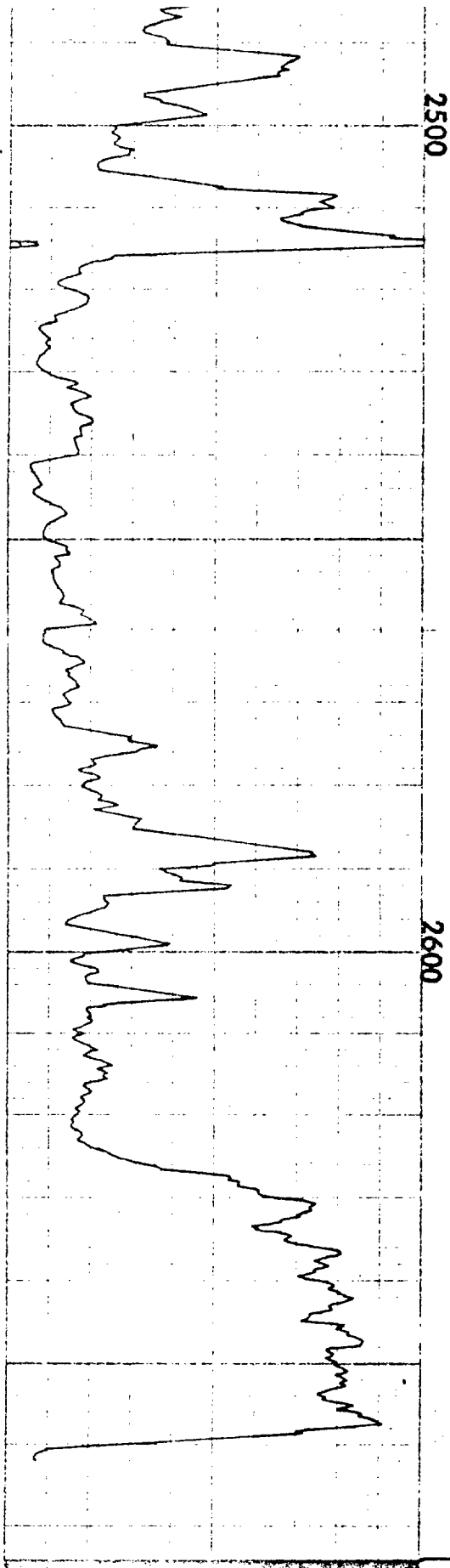
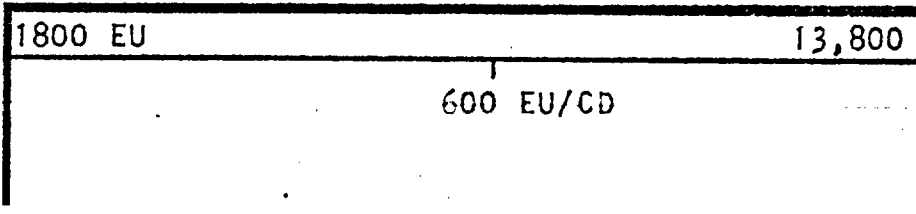
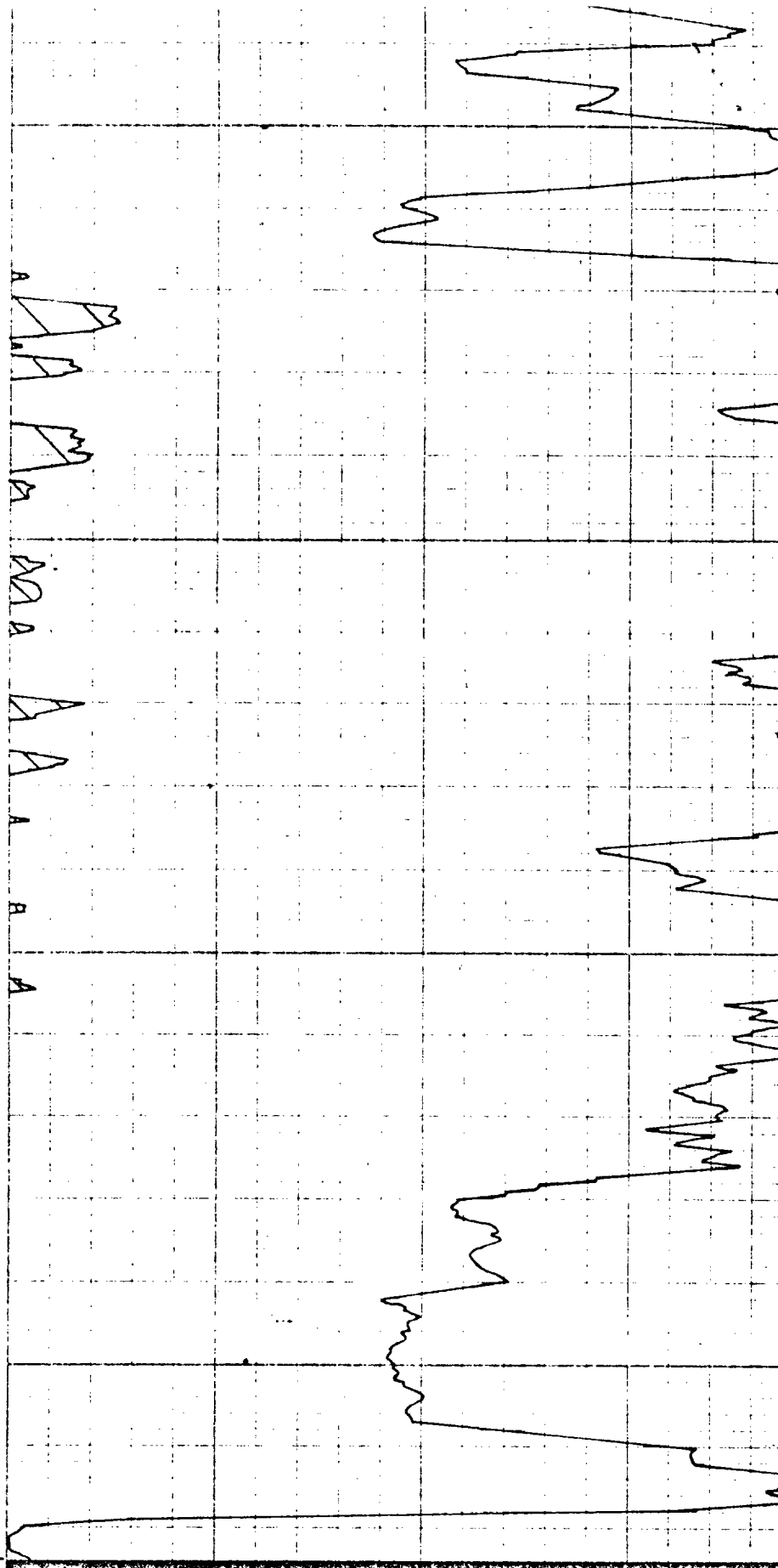
General

Logging Data

General				Gamma Ray				Neutron			
Run No.	Depths	Speed	T.C.	Sens.	Zero	API G.R. Units	T.C.	Sens.	Zero	API N. Units	
	From To	Ft./Min.	Sec.	Settings	Div. L or R	Per Log Div.	Sec.	Settings	Div. L or R	Per Log Div.	
1	2674 1800	30	2.0	510 X-1	0	10 API/CD	2.0	38 X-1	3-L	600 EU/CD	
1	2674 SURF	60	0.9	510 X-1	0	10 API/CD	0.9	38 X-1	3-L	600 EU/CD	

Remarks:

Reference Literature:



COUNTY EDDY
 FIELD or LOCATION LOCO HILLS
 WELL SAUNDERS #8 "A"
 COMPANY DIXON-YATES

COMPANY DIXON-YATES

WEST LOCO HILLS UNIT WELL NO. 13B-8

WELL SAUNDERS #8 "A"FIELD LOCO HILLSCOUNTY EDDY STATE NEW MEXICOLocation: 2310' FSL
990' FWLOther Services:
NONESec. 12 Twp. 18S Rge. 29E

Permanent Datum: GROUND LEVEL; Elev.: 3500
 Log Measured From K.B., 11 Ft. Above Perm. Datum
 Drilling Measured From K.B.

Elev.: K.B. 3512
D.F. 3510
G.L. 3500

Date 11-30-64
 Run No. ONE
 Type Log GRN
 Depth—Driller 2695
 Depth—Logger 2696
 Bottom logged interval 2695
 Top logged interval 50
 Type fluid in hole EMPTY
 Salinity, PPM Cl. ---
 Density ---
 Level ---
 Max rec. temp., deg F. 85
 Operating rig time 3-HOURS
 Recorded by MILLER
 Witnessed by NORMAN

BORE-HOLE RECORD

CASING RECORD

Run No. 1 Bit 3/4" From 436 To 2630 Size 7-7/8" Wgt. --- From --- To ---

Run No. 1 Bit 1/8" From 2630 To 2695 Size --- Wgt. --- From --- To ---

FOLD HERE

THIS HEADING AND LOG CONFORMS TO API RP 33

EQUIPMENT DATA

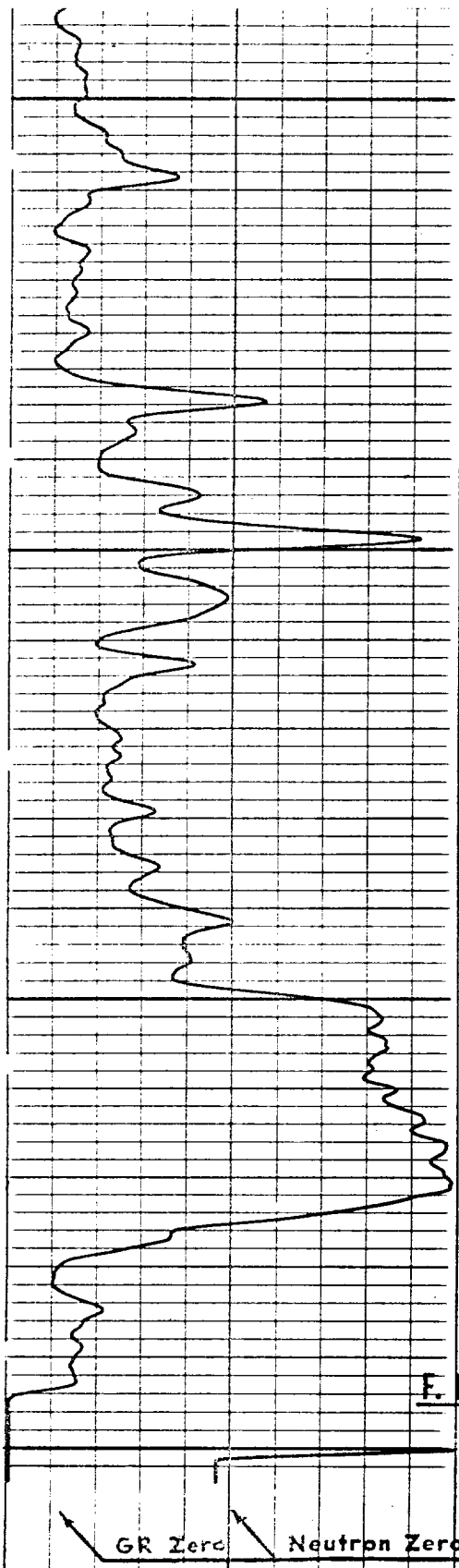
Gamma Ray				Neutron			
Run No.	ONE			Run No.	ONE		
Tool Model No.	GNT-G			Log Type	N-G+N-N THERM.		
Diameter	3-7/8"			Tool Model No.	GNT-G		
Det'r Model No.	SGD-F			Diameter	3-7/8"		
Type	SCINT			Det'r Model No.	NLD-C		
Length	8"			Type	GM		
Dist. to N. Source	94			Length	6"		
General				Source Model No.	NLS C		
				Serial No.			
				Spacing	22.5		
				Type	PU BE		
				Strength	107/N SEC		
Hoist Truck No.							
Inst. Truck No.							
Tool Serial No.							
Location							

LOGGING DATA

General				Gamma Ray				Neutron			
Run No.	From	To	Speed Ft./Min.	T.C. Sec.	Sens. Settings	Zero Div. L or R	API G.R. Units per Log Div.	T.C. Sec.	Sens. Settings	Zero Div. L or R	API N. per Log
1	50	800	60	1	500	0	12.5	1	600	8L	400
1	800	2695	30	2	500	0	12.5	2	600	8L	400

Reference Literature:

GR. CAL. DATA: SENS 800, TC66, 480/75, 82.5



2600

F. R.

GR Zero

Neutron Zero

0

125

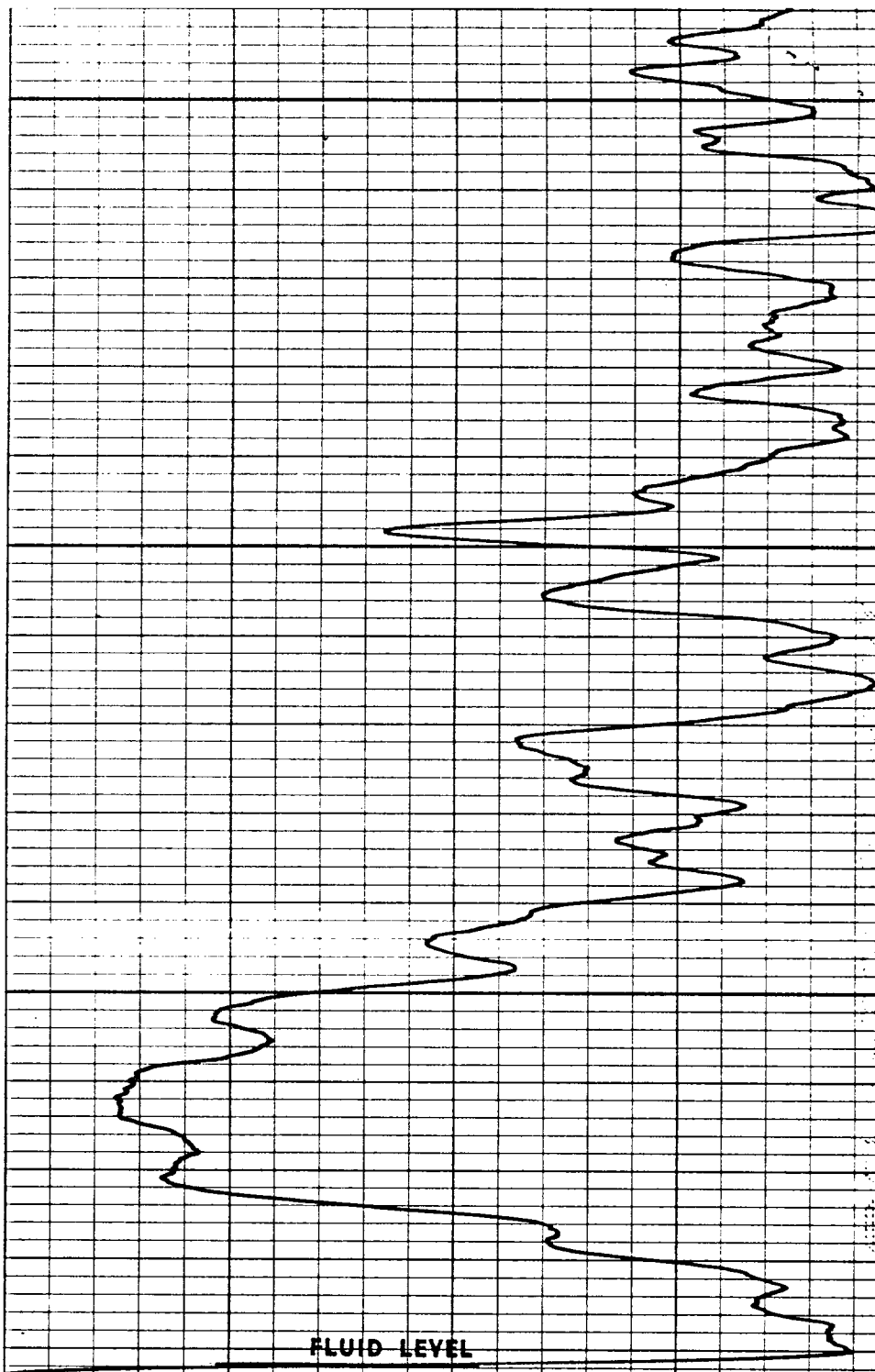
125

250

GAMMA RAY

API UNITS

DEPTHS



FLUID LEVEL

3200

7200

11200

NEUTRON

API UNITS

SCHLUMBERGER

ARTESIA RAY NEUTRON

Copyright 1965 Schlumberger

COUNTY EDDY
 FIELD or LOCATION LOCO HILLS
 WELL SAUNDERS "A" NO. 9
 COMPANY DIXON & YATES OIL COMPANY

COMPANY DIXON & YATES OIL COMPANY
 WEST LOCO HILLS UNIT WELL NO. 13B-9
 WELL SAUNDERS "A" NO. 9
 FIELD LOCO HILLS
 COUNTY EDDY STATE NEW MEXICO
 Location: 1980' FNL
660' FWL
 Sec. 12 Twp. 18-S. Rge. 29-E.
 Other Services: NONE

Permanent Datum: G.L.; Elev.: 3510
 Log Measured From K.B., 12 Ft. Above Perm. Datum
 Drilling Measured From K.B. Elev.: K.B. 3522
D.F. ---
G.L. 3510

Date 5-28-64
 Run No. ONE
 Type Log G.R. & NEUTRON
 Depth—Driller 2730
 Depth—Logger 2731
 Bottom logged interval 2730
 Top logged interval 100
 Type fluid in hole NATURAL-SALT WATER, OIL
 Salinity, PPM Cl. ---
 Density ---
 level 2595
 Max rec. temp., deg F. 91
 Operating rig time 4 HOURS
 Recorded by WENDLAND
 Witnessed by NORMAN

RUN BORE-HOLE RECORD CASING RECORD

No. 1 Bit 7-7/8" CSG. From T.D. To 8-5/8" Size Wgt. From SURF. To 436

FOLD HERE

THIS HEADING AND LOG CONFORMS TO API RP 33

EQUIPMENT DATA

Gamma Ray				Neutron			
Run No.				Run No.	ONE		
Tool Model No.	ONE			Log Type	N-G + N-N	THERM.	
Diameter	GNT-G			Tool Model No.	GNT-G		
Det'r Model No.	3-7/8"			Diameter	3-7/8"		
Type	SGD-F			Det'r Model No.	NLD-D		
Length	SCINT			Type	GM		
Dist. to N. Source	6"			Length	8"		
	91" & 103"			Source Model No.	NLS-C		
General				Serial No.	150		
Hoist Truck No.	2524			Spacing	19.5 & 31	5"	
Inst. Truck No.	2524			Type	PUBE		
Tool Serial No.	GNT-G			Strength	107/N/SEC		
Location	ARTESIA						

LOGGING DATA

General				Gamma Ray				Neutron			
Run No.	From	To	Speed Ft/Min.	T.C. Sec.	Sens. Settings	Zero Div. L or R	API G.R. Units per Log Div.	T.C. Sec.	Sens. Settings	Zero Div. L or R	API N. U per Log
100		1850	30	1	500	0	12.5	1	400	4L	150
1850		2612	30	2	500	0	12.5	2	400	4L	150
2612		3112	30	2	500	0	12.5	2	500	4L	200

Reference Literature:

SCHLUMBERGER

SUNBELT LOGS - FARMWELL ROAD

SCHLUMBERGER WELL SURVEILLING CORPORATION

Houston, Texas

COUNTY EDDY
FIELD or LOCATION LOCO HILLS
WELL BRAINARD #6
COMPANY R. W. FAIR

COMPANY R. W. FAIR
WEST LOCO HILLS UNIT WELL NO. 17B-6
WELL BRAINARD #6
FIELD LOCO HILLS
COUNTY EDDY STATE NEW MEXICO
LOCATION 990' FSL
330' FEL
Sec. 10 Twp. 18S Rge. 29E
Other Services:
CALIPER

Permanent Datum: G.L., Elev. NA
Log Measured From G.L., NA Ft. Above Perm. Datum
Drilling Measured From G.L.

Elev.: K.B. NA
D.F. NA
M.E. G.L. 2528

Date	4-3-64				
Run No.	ONE				
Depth—Driller	2704				
Depth—Logger	2700				
Btm. Log Interval	2694				
Top Log Interval	2300				
Casing—Driller	7" @ 2528		@		@
Casing—Logger	2525				
Bit Size	6-1/4"				
Type Fluid in Hole	WATER				
Dens.	-				
Visc.	-				
pH	-				
Fluid Loss	-	ml		ml	
Source of Sample	-				
R _m @ Meas. Temp.	-	@	@	@	@
R _{mf} @ Meas. Temp.	-	@	@	@	@
R _{mc} @ Meas. Temp.	-	@	@	@	@
Source: R _{mf}	-				
R _{mc}	-				
R _m @ BHT	-	@	@	@	@
Time Since Circ.	-				
Max. Rec. Temp.	-				
Equip. Location	2524 ART				
Recorded By	WENDLAND				
Witnessed By	ROWE				

FOLD HERE

REMARKS BORE HOLE COMPENSATED SONIC LOG

Changes in Mud Type or Additional Samples				Scale Changes			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth—Driller							
Type Fluid in Hole							
Dens.	Visc.						
ph	Fluid Loss		ml				
Source of Sample							
R _m @ Meas. Temp.	@	°F	@	°F	Run No.	Tool Type	Pad Type
R _{mf} @ Meas. Temp.	@	°F	@	°F			
R _{mc} @ Meas. Temp.	@	°F	@	°F			
Source: R _{mf}							
R _{mc}							
R _m @ BHT	@	°F	@	°F			
R _{mf} @ BHT	@	°F	@	°F			
R _{mc} @ BHT	@	°F	@	°F			

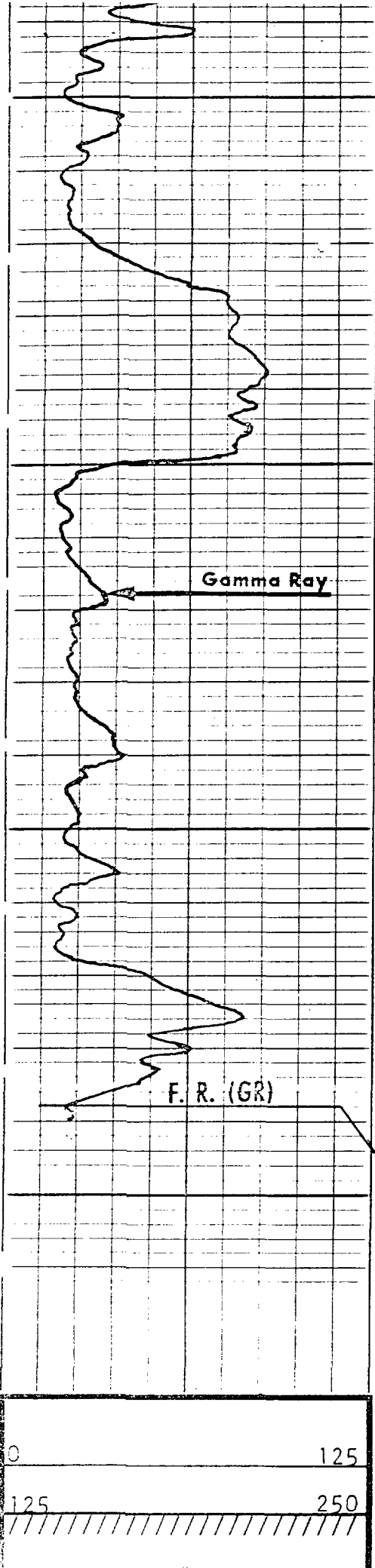
C.D.: USED S.O.: 1/2" TAPE

Equip. Used: CART. No. SLC-X3

PANEL No. SLP-X3

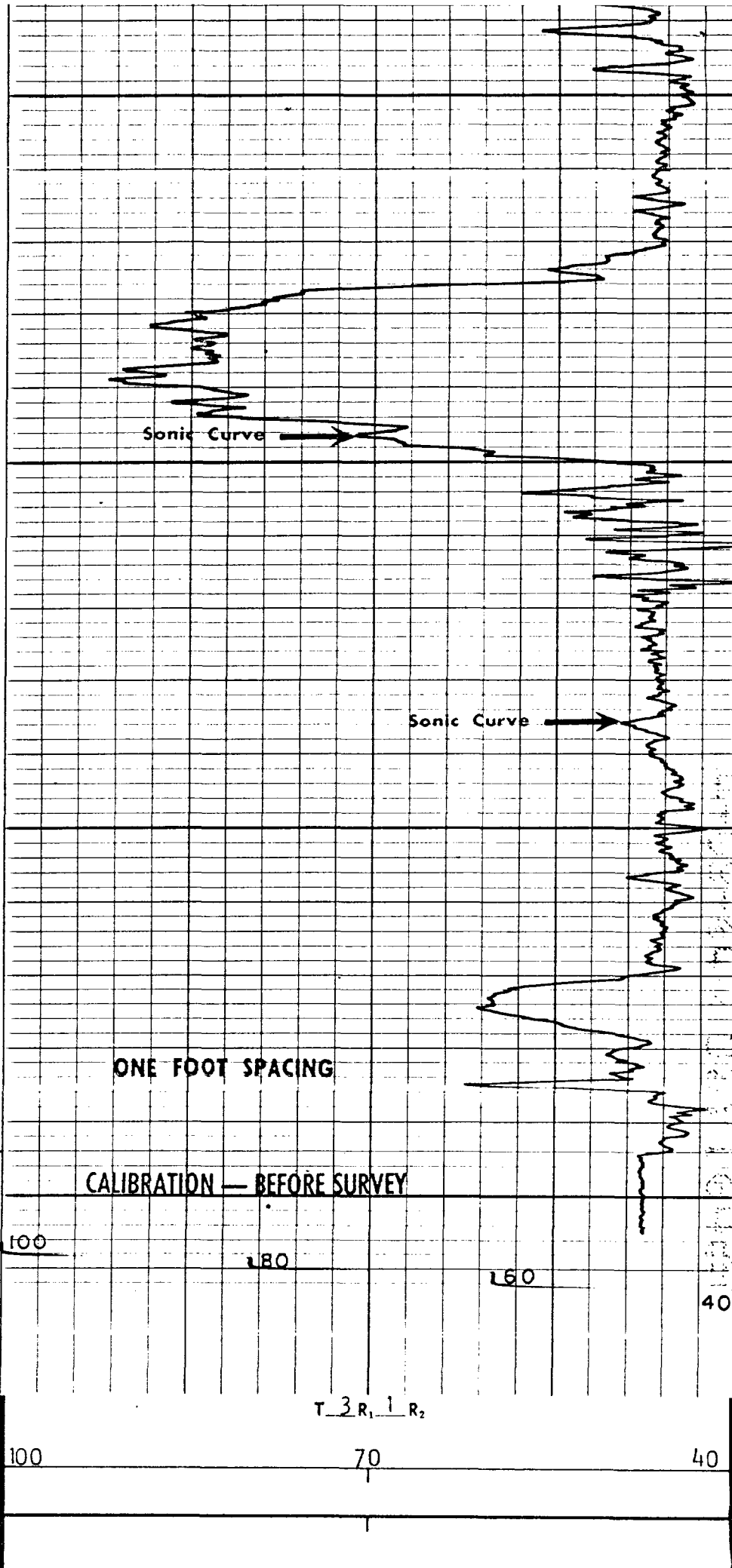
SONDE No. SLS-X6

CALIBRATION:	BACKGND.	SOURCE	GALV. INCR.	SENS. TAP	SENS. TAP	TIME	RECORDING
	CPS.	CPS.	DIVISIONS	(FOR CAL.)	(RECORD)	CONST.	SPEED (FT./MIN.)
GAMMA RAY:	88	504	82.5	800	500	2	30



2600

2700



ONE FOOT SPACING

CALIBRATION — BEFORE SURVEY

$T_3 R_1 1 R_2$

MICRC CALIPER
HOLE DIAMETER IN INCHES

6 16

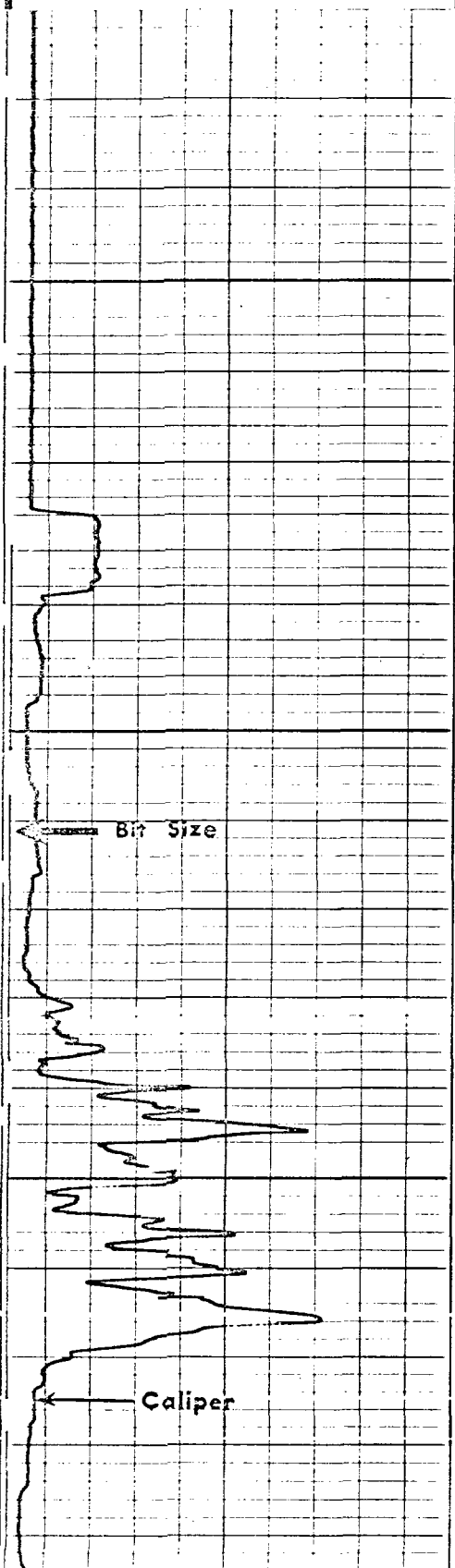
2500

Casing

Bit Size

2600

Caliper





Section Gauge

COUNTY EDDY
FIELD or LOCATION LOCO HILLS
WELL GUY R-1
COMPANY J. CLEO THOMPSON

COMPANY J. CLEO THOMPSON Location of Well
WEST LOCO HILLS UNIT WELL NO. 19C-1 NE/4 NE/4
WELL GUY R-1
FIELD LOCO HILLS
LOCATION SEC. 15, T-18.,
R-29E.
COUNTY EDDY
STATE NEW MEXICO
Elevation: D.F.: ---
K.B.: ---
or G.L.: N. A.
FILING No. ---

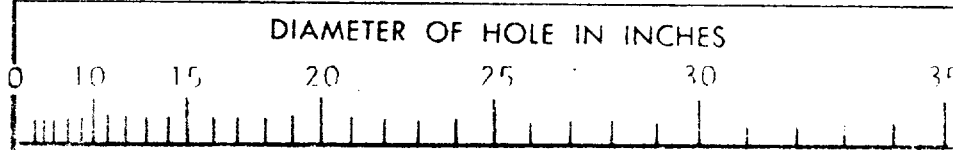
RUN No.	ONE	VOLUME PER 100' OF VARIOUS SIZE CASING
Date <u>4-28-64</u>		
First Reading <u>2607</u>		5" 13.6 cu. ft.
Last Reading <u>2300</u>		5 1/2" 16.5 cu. ft.
Feet Measured <u>307</u>		7" 26.7 cu. ft.
Csg. Schlum. <u>2495</u>		9 3/8" 50.5 cu. ft.
Csg. Driller <u>---</u>		10 3/4" 62.9 cu. ft.
Depth Reached <u>2610</u>		
Bottom Driller <u>2615</u>		
Depth Datum, <u>5-1/2" CASING HEAD</u>		
Mud Nat. <u>NATURAL</u>		
Density <u>---</u>		
Viscosity <u>---</u>		
Resist. <u>@ --- °F</u>		
Res. BHT <u>@ --- °F</u>		
pH <u>@ --- °F</u>		
Wtr. loss <u>CC 30 min. CC 30 min.</u>		
Max. Temp. <u>°F</u>		
Bit Size <u>8"</u>		
Casing Size <u>5-1/2"</u>		

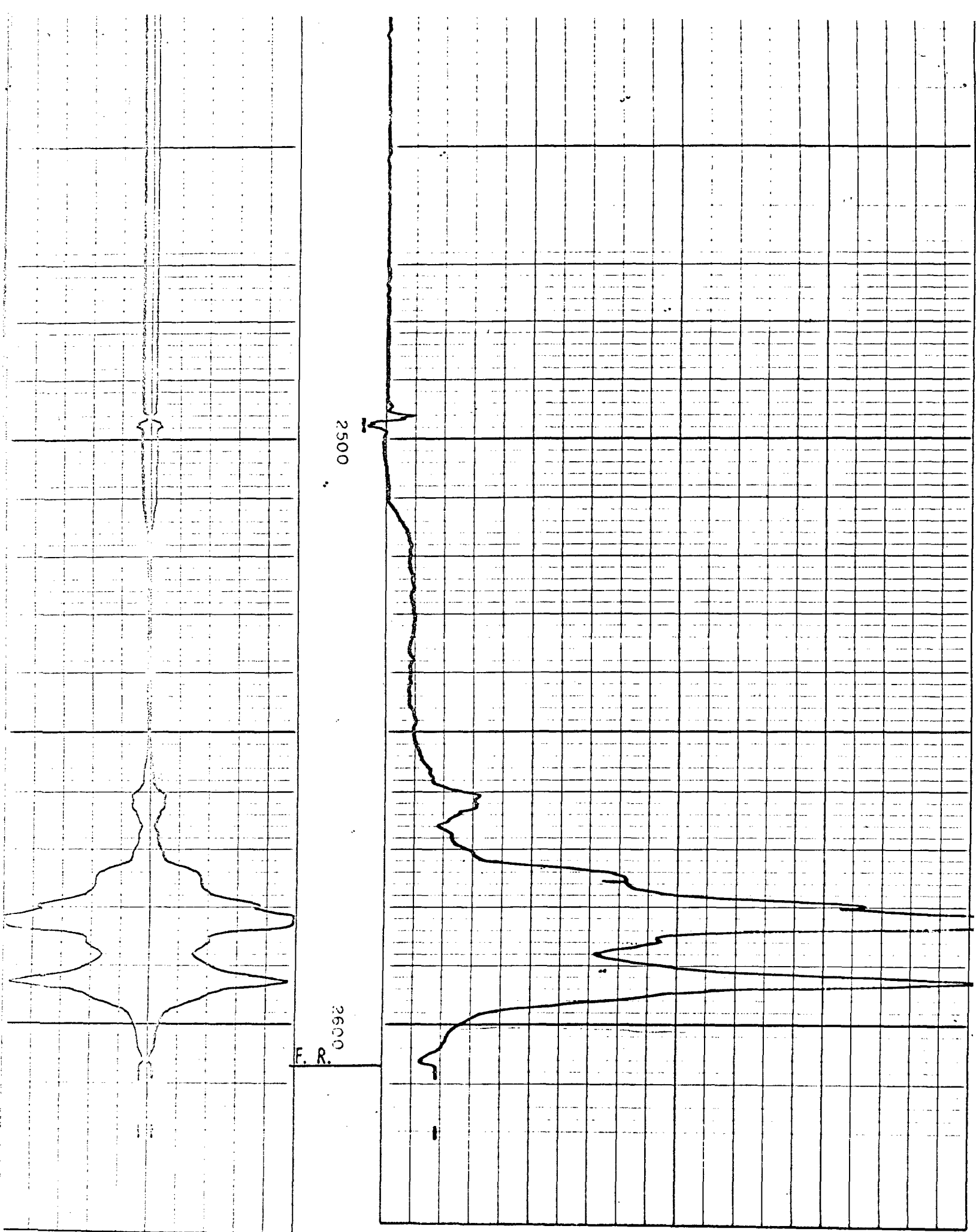
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REMARKS

PROFILE LOG

- The volume of the hole in cubic feet may be obtained as follows.
1. For a depth scale of 1" - 100'
Measure the area under the curve in square inches and multiply by 62.6
 2. For a depth scale of 1" - 50'
Measure the area under the curve in square inches and multiply by 31.3





COUNTY EDDY
FIELD or LOCATION LOCO HILLS
WELL 21 B - 5
COMPANY NEWMONT OIL COMPANY

COMPANY NEWMONT OIL COMPANY
WEST LOCO HILLS UNIT WELL NO. 21B-5
WELL 21 B - 5
FIELD LOCO HILLS
COUNTY EDDY STATE NEW MEXICO
LOCATION 1980' FNL
1980' FWL
Other Services: NONE
Sec. 18 Twp. 18 S. Rge. 30 E.

Permanent Datum: G.L., Elev. 3514
Log Measured From G.L., Ft. Above Perm. Datum
Drilling Measured From G.L.

Elev. K.B. --
D.F. --
G.L. 3514

Date	4-21-64				
Run No.	ONE				
Depth—Driller	3510				
Depth—Logger	3600				
Btm. Log Interval	3591				
Top Log Interval	100				
Casing—Driller	7" @ 2675				
Casing—Logger	6-1/4"				
Bit Size	SALT BRINE				
Type Fluid in Hole					
Dens.	Visc.				
pH	Fluid Loss	N.C ml		ml	ml
Source of Sample	PIT				
R _m @ Meas. Temp.	.06 @ 77 °F	@	°F	@	°F
R _{mf} @ Meas. Temp.	- - - @ °F	@	°F	@	°F
R _{mc} @ Meas. Temp.	- - - @ °F	@	°F	@	°F
Source: R _{mf} R _{mc}	- - - - -				
R _m @ BHT	.04 @ 92 °F	@	°F	@	°F
Time Since Circ.	3 HRS				
Max. Rec. Temp.	92 °F				
Equip. Location	2524 ARTESIA				
Recorded By	WENDLAND				
Witnessed By	BERRY				

FOLD HERE

REMARKS BORE HOLE COMPENSATED SONIC

Changes in Mud Type or Additional Samples				Scale Changes			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth—Driller							
Type Fluid in Hole							
Dens.	Visc.						
ph	Fluid Loss	ml					
Source of Sample							
R _m @ Meas. Temp.	@ °F	@ °F	Run No.	Tool Type	Pad Type	Tool Pos.	Other
R _{mf} @ Meas. Temp.	@ °F	@ °F					
R _{mc} @ Meas. Temp.	@ °F	@ °F					
Source: R _{mf} R _{mc}							
R _m @ BHT	@ °F	@ °F					
R _{mf} @ BHT	@ °F	@ °F					
R _{mc} @ BHT	@ °F	@ °F					

C.D.: YES S.O.: SPRING GUIDE & CALIPEREquip. Used: CART. No. SLC-A 12PANEL No. SLP-A 13SONDE No. SLS-A 12

CALIBRATION:	BACKGND.	SOURCE	GALV. INCR.	SENS. TAP	SENS. TAP	TIME	RECORDING
	CPS.	CPS.	DIVISIONS	(FOR CAL.)	(RECORD)	CONST.	SPEED (FT./MIN.)
GAMMA RAY:	43	432	82.5	800	400	2/1	30/60

GAMMA RAY

API UNITS

DEPTH

INTERVAL TRANSIT TIME

MICROSECONDS PER FOOT

T₃R₁2R₂

0 100

100 200

100

70

CALIPER

HOLE DIAM. IN INCHES

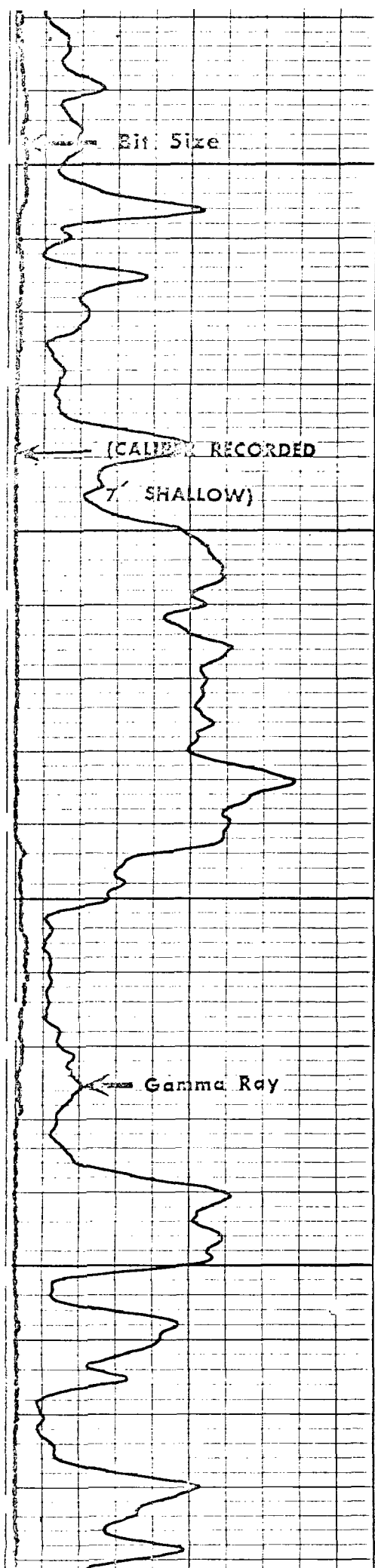
6 16

RECORDED SIGNAL LOW

GR Zero

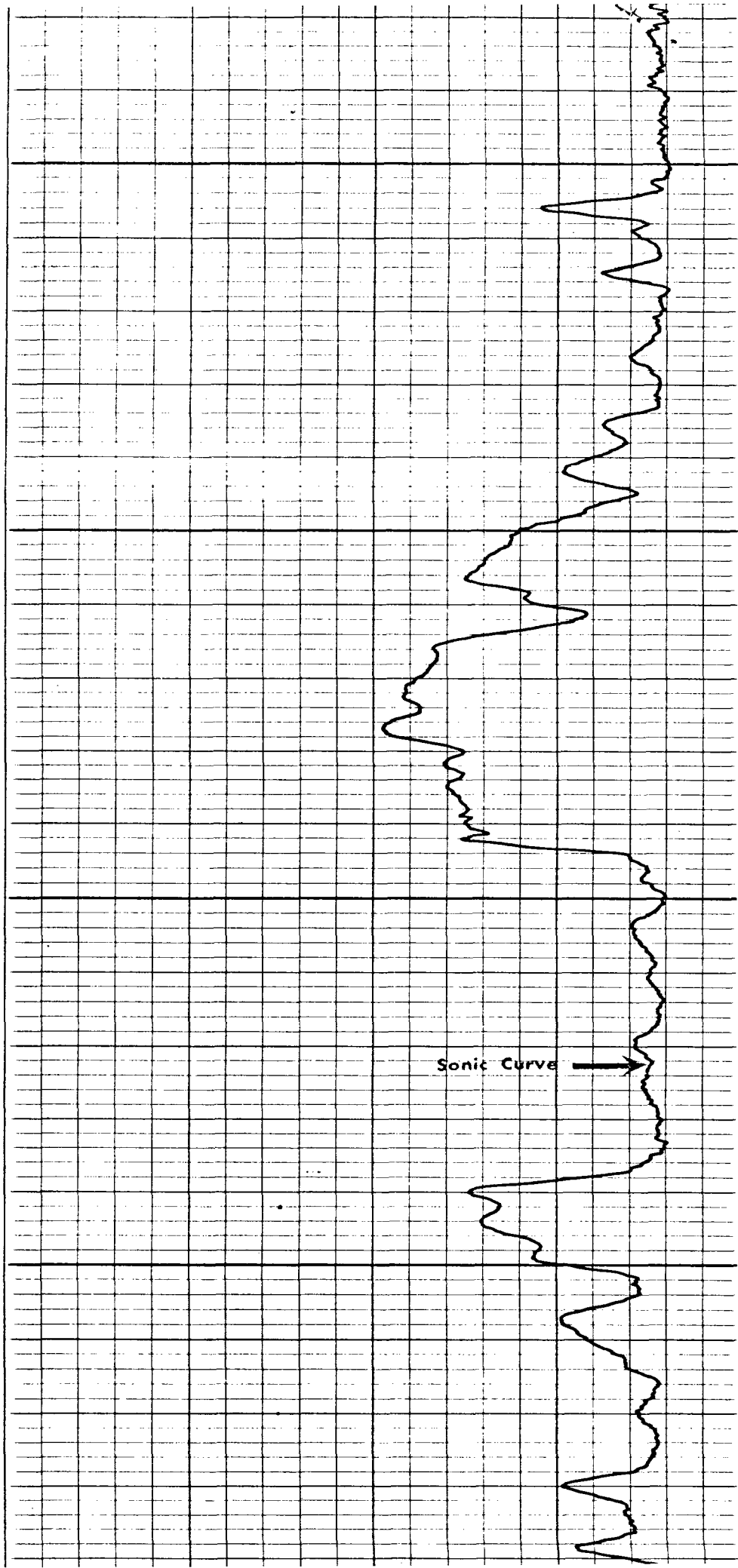
0100

0200

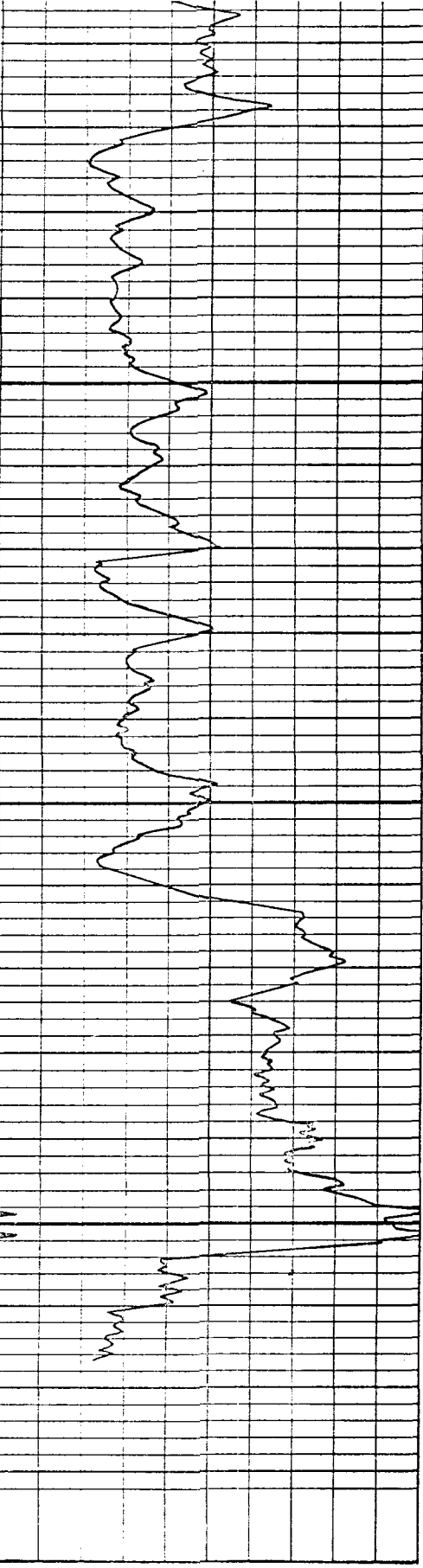


2700

2800

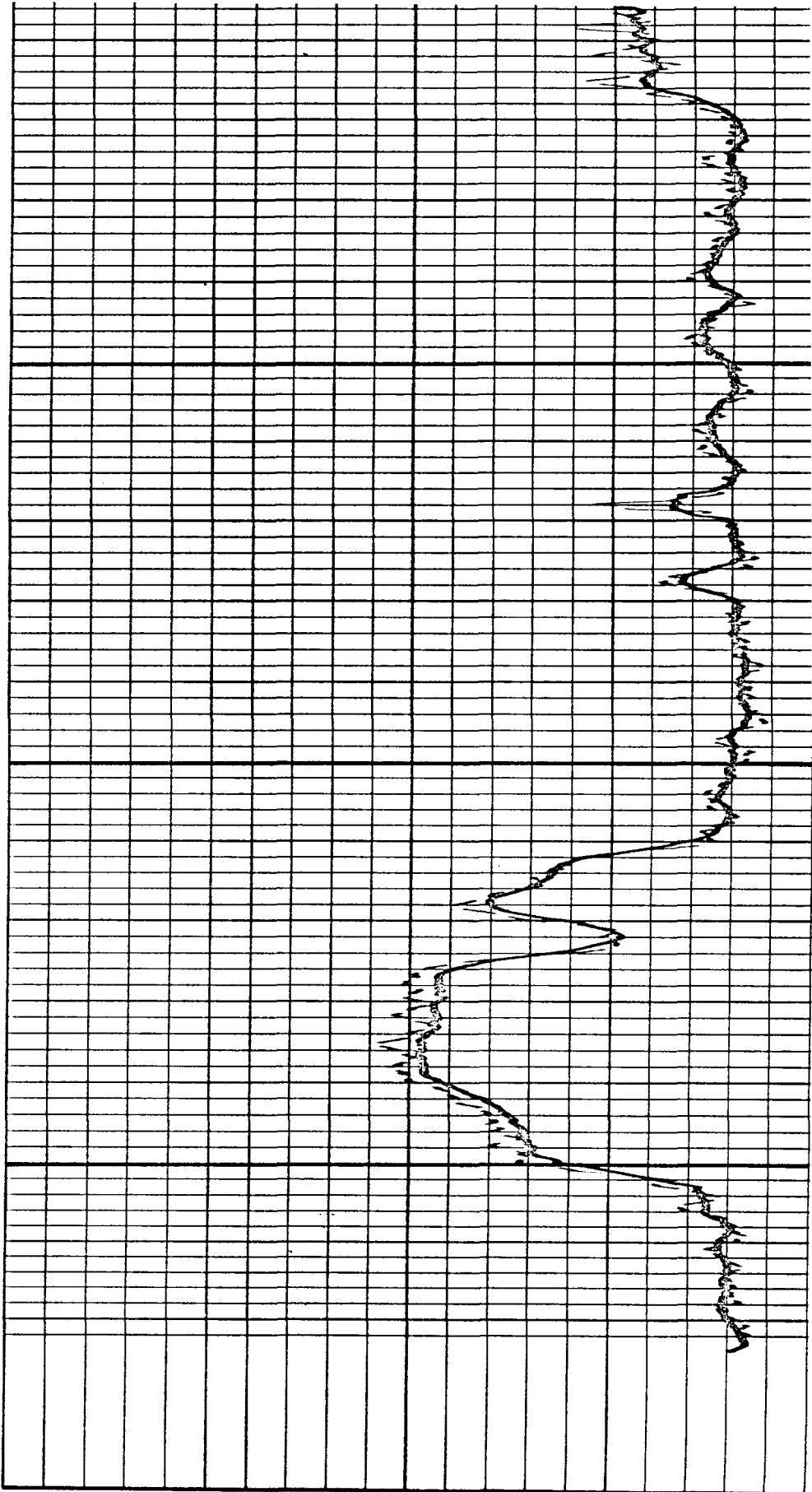


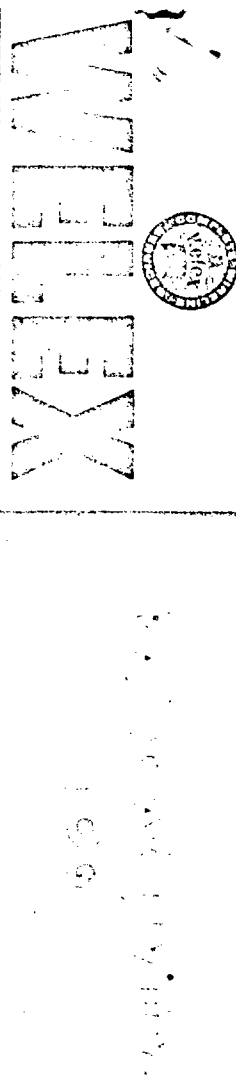
0 API 100 API



2700

100 70 40





COMPANY Newmont Oil
Company
WELL Loco Hills # 30-1
FIELD Loco Hills
County Eddy State N. M.

COMPANY NEWMONT OIL COMPANY
WELL LOCO HILLS # 30-1 WEST LOCO HILLS UNIT
FIELD LOCO HILLS WELL NO. 30-1
COUNTY EDDY STATE NEW MEXICO
Location
Sec. 11 Twp. 18-S Rge. 29-E
Other Services:

Ground Level Elev. 3501
Log Measured from 6-11 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing
Date 6-24-64 6-24-64
Run No. - One - - One -
Type Log Gamma Neutron
Depth--Driller 2655 2655
Depth--Welex 2635 2635
Bottom Logged Interval 2625 2635
Top Logged Interval 50 50
Type Fluid in Hole Water Water
Salinity, PPM Cl.
Density
Level
Max. rec. temp., deg. F.
Operating Rig Time
Recorded By KIM D. C.
Witnessed by M. J. Boyce

WELL RECORD				CASINO RECORD			
Run No.	Bit	From	To	See	Well	From	To
6-11	0	2590	2655	4 L	29.5	0	2590

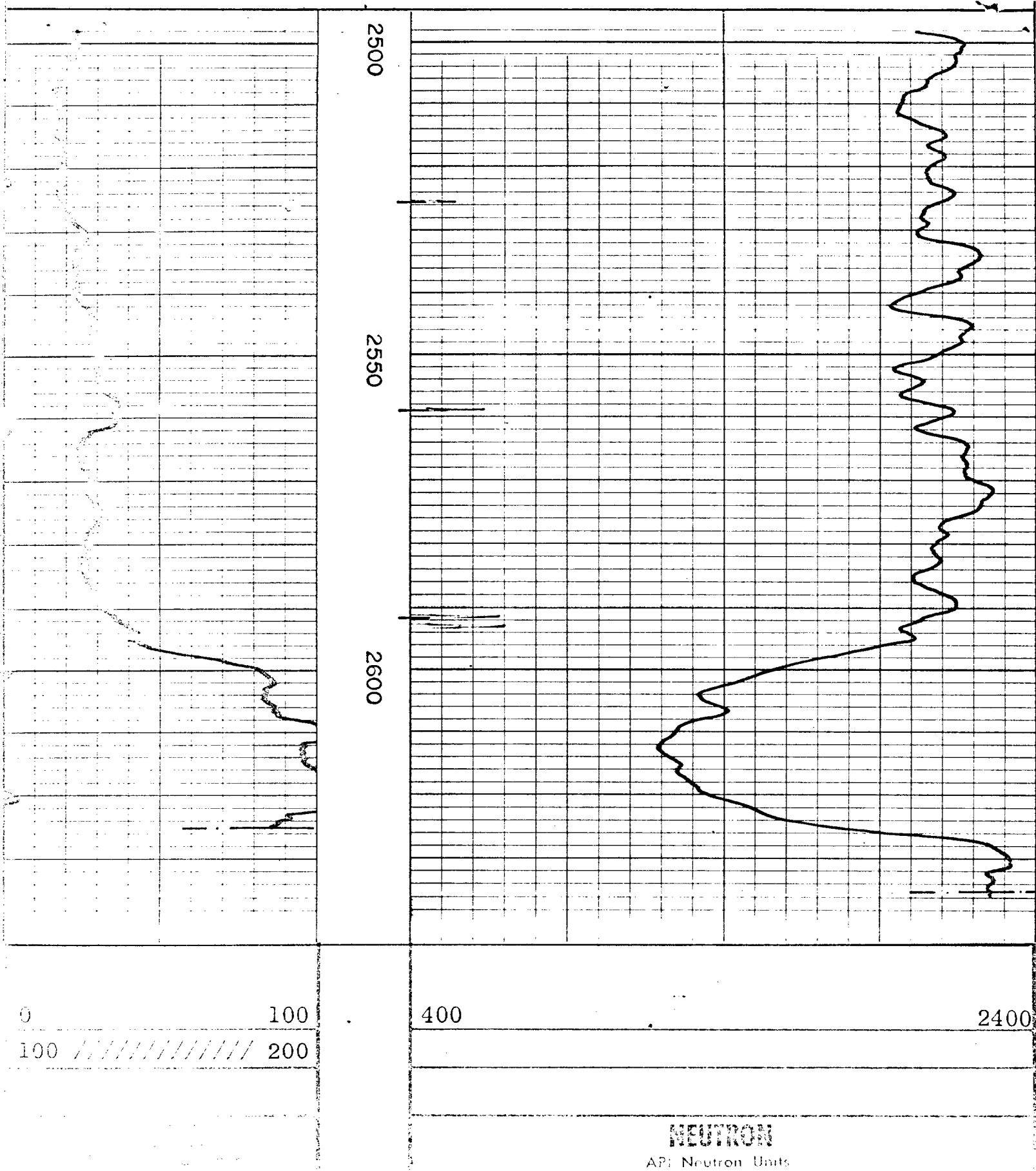
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EQUIPMENT DATA

GAMMA RAY				NEUTRON			
Run No.	- One -			Run No.	- One -		
Tool Model No.	2000			Log Type	Neutron-Gamma		
Diameter	3-5/8"			Tool Model No.	2000		
Detector Model No.	1E11			Diameter	3-5/8"		
Type	GM			Detector Model No.	1C8		
Length	28"			Type	GM		
Distance to N. Source	108.9"			Length	14"		
				Source Model No.	5 CU		
				Serial No.	N-27		
				Spacing	13.9"		
				Type	PuBe		
				Strength	8.5 x 10 ⁶	Neutrons/Sec.	

LOGGING DATA

GENERAL				GAMMA RAY				NEUTRON			
Run No.	Depth	Speed	T.C.	Sens.	Zero	API G.R. Units	T.C.	Sens.	Zero	API N. Units	
	Feet	Ft. Min	Sec.	* Settings	Div. L or R	per Log Div.	Sec.	Settings	Div. L or R	per Log Div.	
50	2	35	*	2	100	0	2	2000	4/L	100	



Newmont Oil Company
Loco Hills # 30-1
Loco Hills Field
Eddy County, New Mexico

T.D. LOGGED	2635'
T.D. DRILLER	2655'
T.D. WELEX	2635'

LANE WELLS

Acoustilog

A Division of FINE-ARTS AND SUPPLY CO. INC.

FILE NO.

COMPANY NEWMONT OIL COMPANYWELL WEST LOCO HILLS UNIT NO. 30-2FIELD LOCO HILLSCOUNTY EDDY STATE NEW MEXICOLOCATION: 660' FSL & 660' FEL

Other Services

SEC 11 TWP 18-S RGE 29-EGROUND LEVEL Elev. 3510

Elevations:

KB 3519DF 3510Log Measured from K. B. 9 Ft. Above Permanent DatumDrilling Measured from K. B. GL 3510Date 6-28-64Run No. ONEDepth—Driller 2675Depth—Logger 2678Bottom Logged Interval 2672Top Logged Interval SURFACECasing—Driller 8 5/8 @ 562Casing—Logger 562Bit Size 6 1/4"Type Fluid in Hole SALT MUDDensity and Viscosity 10.1 34pH and Fluid Loss 8.4 ccSource of Sample CIRCULATEDRm @ Meas. Temp. .05 @ 75 °FRmf @ Meas. Temp. .04 @ 75 °FRmc @ Meas. Temp. .06 @ 75 °FSource of Rmf and Rmc MEAS. MEAS.Rm @ BHT .04 @ 93 °FTime Since Circ. 93 °FMax. Rec. Temp. Deg. F. 93 °FEquip. No. and Location X-900 HOBBSRecorded By SHANKSChecked By MD. LEONETTI

THIS HEADING AND LOG CONFORMS TO API RECOMMENDED STANDARD PRACTICE RP-31

REMARKS	DETECTOR TYPE	D4G1 SCINT	SENS. POSITION	1000-X1
	DETECTOR LENGTH	4"	ZERO DIV. L OR R	0
	TIME CONSTANT	2.0 & 0.9	LOG SPEED	30 & 60

Changes in Mud Type or Additional Samples

Date	Sample No.				
Depth-Driller					
Type Fluid in Hole					
Dens.	Visc.				
pH	Fluid Loss	cc		cc	
Source of Sample					
Rm @ Meas. Temp.	@	°F	@	°F	
Rmf @ Meas. Temp.	@	°F	@	°F	
Rmc @ Meas. Temp.	@	°F	@	°F	
Source Rmf	Rmc				
Rm @ BHT	@	°F	@	°F	
Rmf @ BHT	@	°F	@	°F	
Rmc @ BHT	@	°F	@	°F	

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole

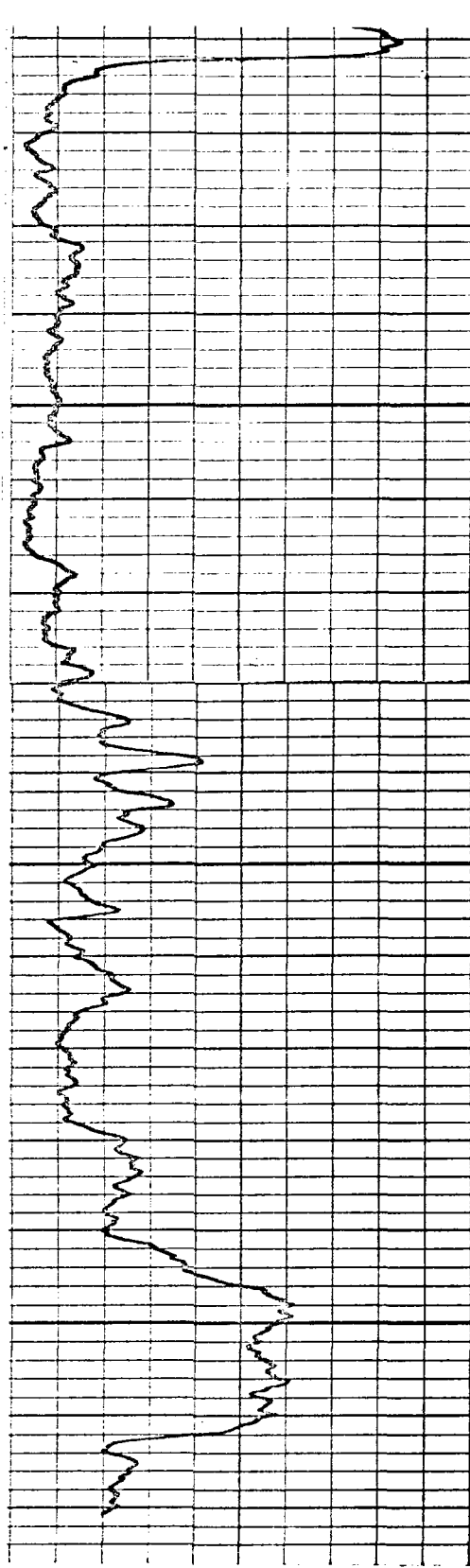
Equipment Data

Run No.	Tool Type	Pad Type	Tool Position	Other
ONE	605 A/L		FREE	

S.P. or G/R

DEPTH

ACoustiLOG



2600

