

Casa No.

1320

Application, Transcript,
Small Exhibits, Etc.

CASE 1320: San Juan Gas Corp. application
for approval of San Juan 24-2 Unit Agreement, /
10,747 acres, Rio Arriba County, N.M.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
October 4, 1957

TRANSCRIPT OF HEARING
CASE NO. 1320

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

NEW MEXICO
 HENRY BALL
 COLLEGE NEW MEXICO

BBB-500

READING DATE: 10-10-1917

NAME	REPRESENTATIVE	LOCATION
N. E. Hall	San Juan Ind. Int. and	San Juan, N.M.
L. O. White		San Juan, N.M.
Foster W. W. W.	San Juan Ind. Co.	San Juan, N.M.
Wendell D. Duggett	Magnolia Pet. Co.	San Juan, N.M.
J. H. G. G. G.		
Edward R. H. H.	17. 89. H. H.	San Juan, N.M.
Jack Conley	C. C. C.	San Juan, N.M.
Wm. L. Long	Wm. L. Long	San Juan, N.M.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
October 4, 1957

IN THE MATTER:

Application of San Juan Gas
Corporation for approval of
the San Juan 24-2 Unit
Agreement in Rio Arriba
County, New Mexico.

CASE NO. 1320

BEFORE:

ELVIS A. UTZ, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: The hearing will come to order please. Next
case on the docket will be Case No. 1320.

MR. COOLEY: Case No. 1320. Application of San Juan
Gas Corporation for approval of the San Juan 24-2 Unit Agreement
in San Juan County, New Mexico.

MR. MORRELL: If the commission please, I am Foster
Morrell representing the San Juan Gas Corporation and I will
present direct testimony in this case.

MR. COOLEY: Will you be the only witness, Mr. Morrell?

MR. MORRELL: Yes.

(Witness sworn.)

MR. DOGGETT: Mr. Examiner, for the record will you enter

our appearance as being present, Wendell J. Doggett for Magnolia Petroleum Company.

MR. UTZ: What was the last name, please?

MR. DOGETT: Doggett. D-o-g-g-e-t-t.

FOSTER MORRELL

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. COOLEY:

Q Will you state your full name and position, please?

A My name is Foster Morrell, Petroleum Consultant, Roswell, New Mexico, employed and appearing on behalf of San Juan Gas Corporation in connection with unitization for the San Juan 24-2 Unit Agreement.

Q Mr. Morrell, have you previously testified before the New Mexico Oil Conservation Commission as an expert witness?

A I have.

MR. COOLEY: Mr. Examiner, are the witnesses qualifications acceptable?

MR. UTZ: Yes, they are.

MR. COOLEY: Will you proceed, Mr. Morrell?

A I am appearing in Case No. 1320 on behalf of San Juan Gas Corporation, an Oklahoma corporation, as applicant for the approval of the Unit Agreement for the Development and Operation of the San Juan 24-2 Unit Area, Rio Arriba County, New Mexico.

I would like for the commission to have a group of exhibits which I will number, there are two sets of them if you like.

MR. COOLEY: You want to make one of these the official set?

A Yes.

MR. COOLEY: Which one do you want to start out with first?

MR. UTZ: You want to number these now?

A I have them and I'll give them to you as we go along, if you would like to I'll give the numbers of all of them right here.

(Marked Exhibit One through Seven)

MR. HOLLAND: Would you enter our appearance for the record? Edward R. Holland representing A. G. Hill.

MR. UTZ: It will be so entered.

MR. COOLEY: How do you spell that?

MR. HOLLAND: H-o-l-l-a-n-d. Just like the country.

MR. UTZ: Who are you with, Mr. Holland?

MR. HOLLAND: A. G. Hill.

MR. COOLEY: Any other appearances in this case? Would you proceed Mr. Morrell?

A The unit agreement as to form, and the unit area involved, were approved by the Acting Director of the United States Geological Survey by letter dated December 4, 1956, copy of which is offered herewith as Exhibit 1. By letters dated January 11 and January

18, 1957, the Acting Director of the Geological Survey modified said approval of the form of unit agreement with regard to the language of Section 2(e). Copies of these letters are offered herewith as Exhibits 2 and 3 respectively.

Further amendment to the form of unit agreement was approved by the Acting Director by letter dated September 30, 1957, in response to letter dated September 9, 1957, from San Juan Gas Corporation regarding minor changes in Sections 10 and 20. Copies of these letters are offered as Exhibits, San Juan's letter of September 9th being Exhibit 4, and the Acting Director's letter of September 30th being Exhibit 5.

A copy of the unit agreement incorporating the original and amended provisions referred to in the letters heretofore mentioned is offered herewith as Exhibit 6. This is the form of agreement which is now being circulated for execution by interested parties. Attached to the agreement is a map of the Unit Area, Exhibit A, and a schedule of lands and leases and ownership thereof, Exhibit B.

By way of explanation, the letters of September 9th and September 30th being Exhibits 4 and 5, pertain to the change in the effective date of the unit agreement. The original approval, the form as originally approved on December 4, 1956, provided for the drilling of five wells to be commenced after November 1, 1956, and completed by November 1, 1957. At a meeting and conference in Washington, D. C. on September 6, 1957, the Geological Survey

recognized that unforeseen delays beyond the control of San Juan had prevented the completion of execution of the Unit Agreement for submission for final approval within the time it would be necessary to have had those wells completed. Reading The time interval for the Test Program was therefore unrealistic and a change became necessary. The Acting Director's approval on September 30, 1957, now approves the drilling program of five wells the same as originally set forth except that they may be drilled within one year from the effective date of the unit agreement.

MR. UTZ: Just a moment, Mr. Morrell. Do you have a plat of the 25-2 Unit?

MR. COOLEY: 24-2.

A Yes, just a moment.

MR. COOLEY: Do you have an extra copy?

MR. DOGGETT: Is there an extra copy of that available?

MR. COOLEY: You may proceed.

A The Unit Area embraces 10,742.42 acres, more or less, in Rio Arriba County, described as set forth in the Notice of Hearing under Case No. 1320. Do you wish me to repeat that for the record, the description?

MR. COOLEY: I don't believe that's necessary, Mr. Morrell.

A I have identified it as you have advertised it.

MR. UTZ: Your exhibit will show this.

A That description is also contained in the approval letter

of December 4, being Exhibit 1, December 4, 1956.

MR. UTZ: That will be satisfactory.

A Within the Unit Area there are 8,420.04 acres of Federal lands, or 78.34% of the Unit Area; and 2,327.38 acres of patented lands or 21.66% of the Unit Area. Those figures and percentages are also shown on Exhibit A attached to the form of Unit Agreement.

The form of Unit Agreement follows essentially the standard form suggested by the Department of Interior and set forth under Title 30, Code of Federal Regulations, Section 226.12, modified to include provisions for approval and actions by the Oil Conservation Commission of New Mexico, and for the establishment of 320-acre drilling blocks comprising the E/2 and W/2 of each Governmental section for all formations lying above the Mesaverde Formation. In the case of irregular or incomplete sections within the Unit Area, namely Sections 3 and 33, acceptable drilling blocks are set forth in Section 11 of the Unit Agreement as follows:

Lots 1, 2, 3, that's Section 11, these acceptable blocks set forth under Section 11 are in Section 3, lots 1, 2, 2, 3, S $\frac{1}{2}$ of the NE, and SE/NW. The second acceptable drilling block in Section 3 would include the SE $\frac{1}{4}$ and the E $\frac{1}{2}$ of the SW $\frac{1}{4}$. In Section 33 the acceptable drilling block would be the S $\frac{1}{2}$ of Section 33.

This Unit Agreement sometimes called the "Township" or "Block" type unit is in all respects essentially the same form as nineteen other agreements heretofore approved by the Oil Conservation

Commission, namely the San Juan 27-4, 27-5, 28-4, 28-5, 28-6, 28-7, 29-4, 29-5, 29-6, 29-7, 30-4, 30-5, 30-6, 31-6, 32-4, 32-5, 32-7, 32-8 and 32-9 Units. All of the above named and numbered unit agreements are currently in effect and are productive of oil or gas in paying quantities except for the San Juan 32-4 Unit which has been terminated.

For purposes of participation under the San Juan 24-2 Unit Agreement each drilling block on which a well is completed and determined to be capable of producing unitized substances in paying quantities for any formation above the base of the Mesaverde, is admitted to the participating area established for the respective productive formation or formations. The total acreage of such admitted drilling blocks comprises a single participating area for each separate productive formation.

For formations below the base of the Mesaverde, participation in production will be based on the establishment of a participating area determined on the basis of geologic inference upon the completion of a well in such a lower formation capable of producing unitized substances in paying quantities. Separate participating area will be established for formation or reservoir for formations below the base of the Mesaverde.

If the commission please, I did not have this marked as an exhibit but since I have listed in my testimony the number of unit agreement that's in the area, I do have a map for your inspection so

that you could see the location, geographically, of the San Juan 24-2 referred to in Case 1320. With respect to the other units that I have testified to, those units are set forth on this map in yellow, as approved; 24-2 Unit is outlined in purple.

MR. UTZ: You don't wish to introduce this as an exhibit?

A Well, I have already given the commission one. I don't know if they want some more or not.

MR. UTZ: That's all right.

A I might locate the San Juan 24-2 Unit with respect to nearby units as lying directly east of the approved Lindrith Unit and directly south of the proposed San Juan 25-2 Unit. In fact the 24-2 Unit includes all of Township 24 North, Range 2 West, not heretofore embraced within the approved Lindrith Unit.

It is provided under Section 10 of San Juan 24-2 Unit Agreement that a minimum of five wells shall be commenced within one year from the effective date of the unit agreement to test the Pictured Cliffs formation, at least two of which shall be exploratory wells and, further, that one of such five wells shall adequately test the Mesaverde formation. As of the date of this hearing, fifteen wells have been drilled within the unit area to test the Pictured Cliffs formation. Two of these fifteen wells were drilled below the Pictured Cliffs. One well in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 1 was drilled to the Mesaverde formation and was recently plugged back and completed as a producing well in the Pictured Cliffs. The other

well in the NW/SE of Section 1 was drilled to the Dakota formation and plugged and abandoned.

A tabulation of the wells drilled is entered as Exhibit 7. From this tabulation it will be noted that five wells have been completed and tested to have an absolute open flow capacity ranging from 844 MCF per day to 2990 MCF per day. These five wells are located in the SE $\frac{1}{4}$ of Section 1, SE $\frac{1}{4}$, Section 14, NW $\frac{1}{4}$ of Section 23, SW $\frac{1}{4}$ of Section 24 and the NW $\frac{1}{4}$ of Section 27. These wells are considered to be capable of production in paying quantities, as provided in the unit agreement, and would entitle the respective half governmental section to be included in the initial Pictured Cliffs participating area effective as of the effective date of the Unit Agreement.

To date the owners of working interests under outstanding oil and gas leases holding approximately 85% of the acreage within the unit area have signed or indicated their intention to execute the unit agreement. Each and every owner of rights or interest within the unit area will be afforded the opportunity to subscribe to and to commit such rights or interest to the unit agreement.

In order to permit orderly exploration and development of the potential gas reservoir and potential oil zones of the area, it is necessary that the San Juan 24-2 Unit be approved by the Oil Conservation Commission at the earliest possible date.

It is further stated that the San Juan 24-2 Unit Agreement

will tend to promote conservation of oil and gas and the better utilization of reservoir energy and to prevent waste, and that such agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources. Also, the unit agreement is in other respects for the best interests of the State of New Mexico.

San Juan Gas Corporation as Unit Operator agrees to file with the Oil Conservation Commission an executed original or executed counterpart of the San Juan 24-2 Unit Agreement not later than thirty days after the effective date of said agreement.

On the basis of the showing made, it is respectfully requested the Oil Conservation Commission, by appropriate order, approve the Unit Agreement for the Development and Operation of the San Juan 24-2 Unit Agreement at its earliest convenience.

At this point I would like to move for the entering of Exhibits 1 through 7 in Case 1320 in the record of this hearing.

MR. UTZ: Any objection to the entrance of Exhibits 1 through 7? If not, they will be accepted. Does that conclude your testimony?

A That concludes my testimony.

MR. UTZ: Are there any questions of Mr. Morrell?

MR. COOLEY: Yes, Mr. Examiner, I have two questions.

BY MR. COOLEY:

Q Mr. Morrell, what are the unitized substances covered by

this unit agreement?

A Oil and gas and other hydrocarbons underlying the unit area. In other words, all formations and all substances are unitized.

Q Would you elucidate further on this participating areas for each formation? I believe I understood you to state that there would be a separate participating area for each formation lying below the base of the Mesaverde. Now, is that true of each formation lying above the Mesaverde?

A That is correct. The only essential difference is the participating area above the Mesaverde area will be established by drilling blocks of 320 Acres.

Q That's what we are coming to.

A Whereas below the Mesaverde is by geologic inference, and that's impossible to determine in advance.

Q What do you mean by established on the basis of 320 Acre Units?

A That is a definition that is set forth in the Unit Agreement for the purpose of determining the acreage to be included in the participating area. Under Section 11 of the Unit Agreement it says "drilling block."

Q I have it.

A "For participation hereunder as to all formations lying above the base of the Mesaverde formation, shall consist of one-half

sections by governmental survey." The point there is that once a discovery is made you know by agreement you have agreed what acreage would be included in the participating area.

Q This portion of the agreement which you have just read contained in Section 11 on page 9 of Exhibit 6, and likewise the portion which you previously referred to as "Acceptable Drilling Blocks" set out in Section 3 and Section 33, have reference to participation rather than spacing?

A That is right.

Q And will this unit agreement be spaced in accordance with the rules and regulations in effect in the particular area?

A The well spacing is subject to all the rules and regulations of the Oil Conservation Commission by specific reference to those regulations.

Q And if the commission --

A I might say that those, Enabling Act and Regulations are specified in Section 1 of the Form of Unit Agreement.

Q If the commission should approve this Unit Agreement you would not consider it an approval of different spacing for the area included in this unit agreement than that prescribed by the rules and regulations of the commission?

A It would be subject to the rules and regulations of the commission. It does permit in the case of the Pictured Cliffs formation this, a well on 160 acres, which would be according with

the fieldwide rules of the Oil Conservation Commission, would bring into participation an additional 160 acres for the purpose of allocation and participation in production under the unit agreement, but it does not prevent the drilling of a second well, if necessary.

Q Let's assume the hypothetical case, a well is drilled to the Pictured Cliffs formation in the southwest quarter of a section found to be productive of unitized substances in paying quantities and entitled to participation in the Pictured Cliffs area. What other quarter section would then be included in the participating area as a result of completion on that well?

A You place the well in the southwest quarter. The northwest quarter would then come into participation in the drilling block specified to be either the east half or west half of each governmental section. That principally is now in active effect under the 28-7 Unit in which there are some dozen Pictured Cliff wells, and further in the 27-4 and 27-5 Units, which have included wells in the northern end of the Tapicito Pool.

Q Is the Unit Area outlined in Exhibit "A" attached to the Unit Agreement in any pool established by the New Mexico Oil Conservation Commission?

A I can not testify specifically as to whether you have extended the Gavilland Pool as originally defined to include 24-2 or not. The Lindrith may or may not have been extended eastward into 24-2.

Q In any event it is not within the defined limits of any prorated gas pool?

A It is not within the limits of any prorated gas pool, I can testify to that.

Q Should a prorated gas pool be established within the, including all or a portion or more than the area outlined as a unit area herein, where a Pictured Cliffs gas pool, in the absence of a change of spacing for Pictured Cliffs formation, it would receive a 160 acre allowable, is that correct?

A That is correct. It would receive the normal allowable for the 160 acre well in the absence of any change in the present rules and regulations.

Q You stated a short while ago what the percentage of commitment of the working interest had been to date, but I didn't catch it. Would you repeat that please?

A My statement was to the effect that 85% have signed or indicated their intention to sign at the --

Q 85% of working interest?

A Approximately, yes.

Q And what per cent of that 85% is owned by San Juan or what per cent of the entire unit is owned by San Juan, the applicant?

A I don't have that figure specifically before me, but I would say the San Juan, under operating agreements, holds approximately sixty-five to seventy per cent.

Q Then at best only half of the working interest other than San Juan, the applicant, have agreed to this Unit Agreement?

A Over half of them have. The reason for that is that the interest in the San Juan are by operating agreements only down to formations to the base of the Mesaverde. The original holders of the lease retain their rights below the Mesaverde, and to get full commitment to the unit we have to have the rights below the Mesaverde committed as well as above. So San Juan interest is only with respect to formations at the base of the Mesaverde in most cases.

Q This 85% commitment is with respect to all unitized substances?

A That is correct.

Q What commitment do you have with respect from the base of the Mesaverde to the surface?

A Actual commitment to date I would say would be in the neighborhood of forty to fifty per cent, to date. It is now being circulated, it was signed by Humble last week.

Q I believe you misunderstood my question, Mr. Morrell. From the base of the Mesaverde to the surface?

A Base of the Mesaverde to the surface?

Q Yes.

A I would say over 50% has been actually submitted to date because my 85% is commitment to date plus what is indicated will

be signed. In other words, we are not coming before you with a completely executed agreement at this time.

Q In the event that the owners in the unitized area or in the unit area which have not shown their indication of an intention to join the unit, do not subsequently do so, would you have sufficient control of the unit to operate it adequately?

A We will have to have sufficient acreage to retain effective control in order to receive approval from the Director of the Geological Survey.

Q What percentage would that be, Mr. Morrell?

A Approximately eighty to eighty-five percent. Normally that is not on percentage alone but the location of the acreage with respect to the Unit Area.

Q Have the Fee Royalty Owners consented to this Unit Agreement?

A We have not approached them as yet. We have discussed it with some. There is one or two we have already received favorable indications.

Q But none of the Fee Owners have signed to date?

A Actually signed, no.

Q Have any of the owners, that term is technically defined "Working Interest Owners", what it actually means is on the Fee Acreage, consented to the agreement?

A Yes, specifically the San Juan Gas Corporation on the

Palmer lease in Section 1, which they hold working interest. San Juan holds.

Q Any other working interest owners other than San Juan on patented acreage consented to this agreement?

A No, we have under discussion with Magnolia, but they have not indicated finally whether they will join.

MR. COOLEY: That's all the questions I have at the present time, Mr. Examiner.

MR. UTZ: Any one else have any questions of Mr. Morrell?

BY MR. NUTTER:

Q Mr. Morrell, you said that 85% of the working interest had signed or indicated that they would sign. Then 50% have actually signed?

A Yes. We have, it's under, being circulated currently at this time for signature.

Q How long will it be before you have 85% of the working interest have actually signed?

A That is one of those indefinite questions to answer. We hope within the month, and that is the reason for the request of the Hearing now. Knowing the normal course of procedure of the commission it might take two or three weeks for approval. We will have those signatures by the time you have your order, so we'll be able to send it in immediately for approval of the Director. The reason for special unit agreements is that the obligation wells will

commence as of the first day of the month the agreement is approved.

If we have commenced a well in say November, the agreement becomes effective the first of November, we will then receive credit for that well as an obligation well.

Q Will the Director of the United States Geological Survey approve the Unit on the basis of indications that working interest owners might commit their acreage?

A No, they are only approved by actual percentage of execution letters. The commitments would have to be made in writing.

Q I see. Now, you said that you have, on this unit area there had been fifteen wells already drilled?

A That is right.

Q How many of those wells have actually been completed as producing wells?

A Let me get my table so I don't give you a wrong statement. Five.

Q And how many of them have been plugged as drill holes?

A I know of only four specifically that have been plugged.

Q Out of the fifteen wells?

A Out of the remaining ten, the others are in the status of temporary abandonment, several of which may be reworked and be successful completions. The difficulty in some of them is the matter of shutting off the water from the Pictured Cliffs formation.

Q I see. Now, does this Unit Agreement provide for the elimination of any acreage in the Unit Area --

A It does.

Q -- from the unit, if there is no production or drilling activity on some certain date?

A Within a certain date and that is the reference to Section 2(E), as set forth in Exhibits Two and Three filed with this record, and that elimination may be briefly described that all legal subdivision of 40 acres or governmental lots are not entitled to be in a participating area within five years after the first day of the month following the effective date of the establishment of the initial participating area, first initial participating area established under this unit agreement, shall be automatically eliminated unless at the end of the five year period drilling operations are then in progress and are continued, allowing not more than the 90 day's time between the completion of one well and the commencement of the succeeding well, for a period of an additional five years.

Q Mr. Morrell, some of these wells already completed as producing wells, would they be judged being capable of producing unitized substances in paying quantities and admitted to a Participating Area?

A Only after being reworked and tested and proven as paying quantities, as identified in the --

Q You mentioned some potentials on the wells range from eight hundred forty to twenty-nine hundred and some?

A That is right.

Q Are those wells capable of producing in paying quantities?

A That is the intention of the Unit Operator at this time.

Q So a Participating Area could probably be established in a relatively short time after the --

A It will be established effective as of the effective date of the Unit Agreement because the Unit also provides that we shall submit for the approval of the commission prior to the approval of agreement an application for the initial Participating Area which will be effective as of the effective date of the Unit Agreement.

Q In other words, this acreage elimination clause of five years would actually, in effect, be five years from the date the unit is approved?

A That is correct.

MR. NUTTER: That's all I have.

A I might go one step further for your information. In connection with the establishment of participation on drilling blocks, we recognize that in this type of formation a drill hole of five or seven inches in diameter cutting the formation may be considered to prove or disprove only that immediate area, and provision is made that even though a drill hole is, or a well not capable of producing in paying quantities is completed on a 320 acre

drilling block, a second well drilled on that same drilling block that is capable of producing in paying quantities will include the entire 320 in the participation.

MR. UTZ: Does that complete your answer?

A I think so.

MR. UTZ: Are there any other questions of Mr. Morrell?

BY MR. DOGGETT:

Q I would like to ask Mr. Morrell if a separate Operators Agreement has been prepared?

MR. UTZ: Mr. Doggett of Magnolia.

A A Unit Operating Agreement has been prepared, yes, but it is not submitted for consideration of the commission in this case.

Q Do you have a copy available to submit to us?

A Not at this time, no.

MR. DOGGETT: Thank you.

BY MR. UTZ:

Q Mr. Morrell, I believe you stated that there were five wells completed on this unit as of today, is that correct?

A Five wells capable of producing in paying quantities?

Q Yes, sir.

A Yes, sir.

Q Did you have the open flows on those wells, is that listed on your Exhibit 7?

A That is listed under remarks on Exhibit Number 7 based on

tests, ^{Pite}pete-tube -- not ^{pote}pote-tube but three quarter inch.

^{choke}
Q Chock test?

A Chock test, made by either San Juan Gas Corporation and
or Pacific Northwest Pipe Line Corporation.

Q None of these wells have been connected?

A None of these wells have been connected to date.

Q You have any idea how long it will be before they will be
able to have pipe line facilities in this unit?

A Within 24-2 I wish I could answer that question for you
now. Within the adjoining unit they are immediately under con-
struction of a pipe line for connections. It is anticipated it
will be not more than a month or two before we get connections in
24-2. Connections are now available within a mile or mile and a
half of the westernmost boundry of the 24-2 unit.

Q Have you made any purchasing contracts yet?

A San Juan Gas Corporation has, to it's lease hold interests,
has made contract with Pacific Northwest Pipe Line Corporation in
September, 1956.

Q And it is the El Paso Line that is within a mile and a
half of this area now, is that right?

A That is right.

Q It may be some time before Pacific can connect to these
wells or there will have to be a trade of some --

A There is under consideration an agreement between Pacific

Northwest that El Paso might extend it's line for and on behalf of Pacific Northwest.

Q Do you have any geological information that pertains to the Mesaverde and Pictured Cliffs formations, that is contours, et cetera, available for this unit?

A Meaning as to the determination of the boundary of the unit area?

Q Yes, sir.

A The boundary of the unit area was established on the basis of block type and had no relationship with respect to geology.

Q Do you have any recommendations or any intentions as to the spacing in this unit, that is the quarter section, so as to which the wells will be located?

A The present practice in the development is to drill the Pictured Cliffs wells in the southeast quarter and northwest quarter of each section.

Q In your opinion would there be some danger in including in your 320 acre block type dedication to participating area, some dry acreage in the off 160 acres?

A If it was oil I would, with gas and the type of formation and the drainage that will take place, I don't see there would be too great a danger, particularly on the basis of my previous statement that a dry hole may necessarily only disprove the the immediate vicinity of that particular bore hole.

MR. UTZ: Any further questions of Mr. Morrell? If not,
the witness may be excused. Are there any statements or any other
matters pertaining to Case No. 1320? If not we will go to Case 1321.

(Witness excused)

STATE OF NEW MEXICO)
 : SS
COUNTY OF BERNALILLO)

I, MARIANNA MEIER, Notary Public in and for the County of
Bernalillo, State of New Mexico, do hereby certify that the
foregoing and attached Transcript of Hearing before the New Mexico
Oil Conservation Commission was reported by me in Stenotype and
reduced to typewritten transcript by me and/or under my personal
supervision; that same is a true and correct record to the best of
my knowledge, skill and ability.

WITNESS my Hand and Seal, this, the 16th day of October,
1957, in the City of Albuquerque, County of Bernalillo, State of
New Mexico.

Marianna Meier
NOTARY PUBLIC

My Commission Expires:

April 8, 1960.

I do hereby certify that the foregoing is
a correct record of the proceedings in
the hearing held at Case No. 1320,
heard by me on Oct. 4, 1957.
Arthur G. Webb, Examiner
New Mexico Oil Conservation Commission

MAIN OFFICE OCC

1957 SEP 6 PM 12:51

FOSTER MORRELL
PETROLEUM CONSULTANT
NICKSON HOTEL BUILDING
ROSWELL, NEW MEXICO

September 3, 1957

*9-3-57
Docketed for Oct. 11th
mailed by Mr. Morrell
BSP*

Mr. A. L. Porter, Jr.
Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Re: San Juan 24-2 and 25-2 Units
Rio Arriba County, New Mexico

Dear Mr. Porter:

Transmitted herewith are three copies each of the proposed unit agreements for the San Juan 24-2 and 25-2 Unit Areas, Rio Arriba County, New Mexico, with Exhibits "A" and "B" attached. San Juan Gas Corporation is the unit operator.

The Acting Director, U. S. Geological Survey, by letter dated October 5, 1956, copy attached, designated 19,496.76 acres of land in T. 25 N., R. 2 W., N.M.P.M., as a logical unit, to be known as the San Juan 25-2 Unit Area, and approved the form of unit agreement. By letter dated December 4, 1956, copy attached, the Acting Director designated 10,747.42 acres of land in T. 24 N., R. 2 W., N.M.P.M. as a logical unit, to be known as the San Juan 24-2 Unit Area, and approved the form of unit agreement.

San Juan Gas Corporation hereby respectfully requests the approval of the unit agreements by the Oil Conservation Commission of New Mexico, and for such purpose petitions said Commission to enter these cases on the docket for hearing at your earliest convenience.

Very truly yours,

SAN JUAN GAS CORPORATION

FM/as
Enclosures

cc: Mr. E. Alex Phillips
San Juan Gas Corporation
300 Shell Building
Tulsa, Oklahoma

By Foster Morrell
Foster Morrell
Its Representative



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

IN REPLY REFER TO:

J. 12
Air Mail

Mr. Foster Morrell
Post Office Box 933
Roswell, New Mexico

My dear Mr. Morrell:

This will supplement Survey letter of January 11 referring to your letter of January 7 as to section 2(e) of the San Juan 24-2 and San Juan 25-2 unit forms, New Mexico, heretofore approved.

Our letter inadvertently failed to provide for the two different bases of participating areas for formations above and below the base of the Mesaverde. We have rewritten the first sentence of 2(e) as originally approved by letters of October 5, 1956, and December 4, 1956, and have added a new sentence in order to make appropriate provisions for the automatic elimination intended under said subsection when participating areas predicated on the two different bases may be in existence. We believe this revision will prevent complications and will reconcile workable procedures incident to the two different bases. For convenient reference, the revised language is enclosed on a separate sheet. All of section 2(e) as originally approved, except the first sentence thereof, will remain unchanged.

Survey letters of October 5, 1956, for San Juan 25-2, December 4, 1956, for San Juan 24-2, and January 11, 1957, for both units are hereby modified accordingly.

Sincerely yours,

Acting Director

Enclosure

Exhibit 3

Case No. 1320

(c) 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), or Drilling Blocks as defined in this agreement, (whichever may be applicable) no parts of which are entitled to be in a participating area within five years after the first day of the month following the effective date of the first initial participating area established under this unit agreement, shall be eliminated automatically from this agreement, effective as of the first day thereunder, 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 5-year period diligent drilling 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 such drilling operations are continued diligently, with not more than 90 days' time elapsing between the completion of one such well and the commencement of 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 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 or Drilling Blocks 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 said first initial participating area shall be eliminated as above specified. In event of overlap of any two participating areas on different bases, i.e., the Drilling Block basis for formations above the base of the Mesaverde or the subdivision (or aliquot part thereof) basis for formations below the Mesaverde, as prescribed in this agreement, the subdivision basis of elimination shall apply only to lands not overlapped by a Drilling Block entitled to participation.



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

IN REPLY REFER TO

RECEIVED JAN 11 1957

Air Mail

JAN 11 1957

Mr. Foster Morrell, Agent
San Juan Gas Corporation
Post Office Box 933
Roswell, New Mexico

My dear Mr. Morrell:

Reference is made to your letter of January 7 requesting modification of the language of section 2(e) as approved by Survey letters of October 5, 1956, for San Juan 25-2 and December 4, 1956, for San Juan 24-2. You requested authorization to use the same language heretofore approved for the San Juan 26-8 unit.

We agree that the 2(e) language approved for San Juan 24-2 and 25-2 units is probably not suitable as to the acreage subdivisions for lands to be eliminated from block-type units. However, we think the lease basis you suggested is equally inappropriate. Accordingly, we think the following quoted change will be more realistic and, therefore, much more appropriate because it will put elimination on a block basis in conformance with the participating area selections. Therefore, the portion "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), * * *," at the beginning of section 2(e) as approved should be changed to read as follows: "Notwithstanding any other provisions of this agreement, all drilling blocks, * * *." Then for consistency, the words "legal subdivisions of lands" near the beginning of the proviso in the first paragraph of 2(e) should be replaced with the words "drilling blocks".

The two letters specified above are hereby modified accordingly.

Sincerely yours,

William A. Baker

Acting Director

Exhibit 3

Case No 1320



OFFICE OCC

6 PM 12:51

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

BY MAIL ONLY

Foster Morrell, Agent
San Juan Gas Corporation
P. O. Box 933
Roswell, New Mexico

DEC 1 1956

RECEIVED DEC 10 1956

Dear Mr. Morrell:

Reference is made to your application of October 22, 1956, filed with the Oil and Gas Supervisor, Roswell, New Mexico, requesting the designation of 10,747.42 acres in Rio Arriba County, New Mexico, as an area logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act, as amended. Three copies of a proposed form of agreement were submitted for preliminary approval.

Pursuant to the regulations of December 22, 1950, 30 CFR 226.3, the following land is designated as a logical unit area to be known as the San Juan 24-2 unit area:

T. 24 N., R. 2 W., N.M.P.M., RIO ARRIBA COUNTY, NEW MEXICO

	<u>Acres</u>
Sec. 1, lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (all)	650.32
Sec. 2, lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (all)	649.60
Sec. 3, lots 1,2,3, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ N $\frac{1}{2}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$	487.50
Sec. 10, E $\frac{1}{2}$	320.00
Secs. 11, through 14, inclusive (all)	2560.00
Sec. 15, E $\frac{1}{2}$	320.00
Sec. 22, E $\frac{1}{2}$	320.00
Secs. 23, through 27, inclusive (all)	3200.00
Sec. 33, S $\frac{1}{2}$	320.00
Secs. 34, 35, 36 (all)	<u>1920.00</u>
Total	10,747.42

The proposed test program, a minimum of five wells to be completed not later than November 1, 1957, one of which shall adequately test the Mesaverde formation, two of which shall be exploratory wells, and all of which shall be drilled to the Pictured Cliffs formation, is deemed acceptable. The proposed form, which substantially follows the standard form as modified in other New Mexico unit agreements heretofore approved, will be acceptable if altered as indicated by colored pencil notations. One copy so marked is returned herewith, one copy is being furnished the Oil and Gas Supervisor, and one copy is retained.

In the absence of any objections not now apparent, a duly executed agreement identical with the above-mentioned form will be approved if submitted within a reasonable period of time. However, notice is hereby given that the right is reserved to deny approval of any executed agreement submitted which, in my opinion, does not have the full commitment of sufficient lands to afford effective control of unit operations. When the executed agreement is transmitted to the Supervisor for approval, include the latest status of all Federal acreage showing the current record owner of all leases.

Very truly yours,

Arthur S. Baker

Acting Director

Enclosure



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

OCT 15 - 1956

2 + 3 1/2
2 + 3 1/2

Foster Morrell, Agent
San Juan Gas Corporation
P. O. Box 933
Roswell, New Mexico

Dear Mr. Morrell:

Reference is made to your application of May 9, 1956, filed with the Oil and Gas Supervisor, Roswell, New Mexico, requesting the designation of 30,244.13 acres in Rio Arriba County, New Mexico, as an area logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act, as amended. By letter of August 9, 1956, you amended the application by reducing the original acreage from 30,244.13 acres to 19,496.76 acres and submitted three copies of a proposed form of agreement for preliminary approval.

Pursuant to the regulations of December 22, 1950, 30 CFR 226.3, the following land is designated as a logical unit area to be known as the San Juan 25-2 unit area:

T. 25 N., E. 2 W., S. 4 R., RIO ARRIBA COUNTY, NEW MEXICO

	<u>ACRES</u>
Sec. 1, lots 1,2,3,4, S/2 1/2, S/2 (all)	640.23
Sec. 2, lots 1,2,3,4, S/2 1/2, S/2 (all)	641.52
Sec. 3, lots 1,2,3,4, S/2 1/2, S/2 (all)	642.12
Sec. 4, lots 1,2,3,4, S/2 1/2, S/2 (all)	641.16
Sec. 5, lots 1,2,3,4, S/2 1/2, S/2 (all)	640.24
Sec. 6, lots 1,2,3,4, (all frac. sec.)	185.16
Sec. 7, lots 1,2,3,4, (all frac. sec.)	185.34
Secs. 8 through 17, (all)	6,400.00
Sec. 18, lots 1,2,3,4, (all frac. sec.)	186.36
Sec. 19, lots 1,2,3,4, (all frac. sec.)	186.76
Secs. 20 through 29, (all)	6,400.00
Sec. 30, lots 1,2,3,4, (all frac. sec.)	187.32
Secs. 33 through 36, (all)	<u>2,560.00</u>
Total	19,496.76

The proposed test program, a minimum of ten wells to be drilled during calendar year 1957 to test the Pictured Cliffs formation, at least four of which shall be exploratory wells and one of which shall adequately

40 #1

test the Mesaverde formation, is deemed acceptable. The proposed form, which substantially follows the standard form as modified in other New Mexico unit agreements heretofore approved, will be acceptable if modified as indicated by red pencil notations. One copy so marked is returned herewith, one copy is being furnished the Oil and Gas Supervisor, and one copy is being retained.

In the absence of any objections not now apparent, a duly executed agreement identical with the above mentioned form will be approved if submitted within a reasonable period of time. However, notice is hereby given that the right is reserved to deny approval of any executed agreement submitted which, in my opinion, does not have the full commitment of sufficient lands to afford effective control of unit operations. When the executed agreement is transmitted to the Supervisor for approval, include the latest status of all Federal acreage showing the current record owner of all leases.

Very truly yours,

John C. Reed
Acting Director

STATE LAND OFFICE

State of New Mexico



April 16, 1957

MURRAY E. MORGAN
COMMISSIONER OF PUBLIC LANDS
In reply refer to:
Unit Division

FILED APR 17 1957

Mr. Foster Morrell
Petroleum Consultant
Nickson Hotel Building
Roswell, New Mexico

Re: San Juan 25-2 Unit,
Rio Arriba County, New Mexico

Dear Mr. Morrell:

This is to inform you that our attorney on April 16, 1957, approved your San Juan 25-2 Unit Agreement as to form and context.

I wish to call to your attention Tract No. 41 which should be corrected to show E-1214, Assignment No. 14 and the record owner is San Juan Gas Corporation; Tract No. 42 corrected to show E-1214, Assignment No. 13 and the record owner is San Juan Gas Corporation.

San Juan Gas Corporation spudded a well on the SE/4 SE/4 of Section 36. The New Mexico Oil Conservation Commission form C-101 was approved February 28, 1957, however there has been no further report on this well.

Very truly yours,

MURRAY E. MORGAN
Commissioner of Public Lands

MEM:MMR/m
cc: OCC-Santa Fe

Ted Bilberry
By: Ted Bilberry, Supervisor
Oil and Gas Department

4

SAN JUAN GAS CORPORATION
800 SHREVE BUILDING
TULSA, OKLAHOMA

R. ALAN PHILLIPS, PRESIDENT
ROBERT C. LARSON, VICE-PRES
DONALD H. ATKINS, SECRETARY

September 9, 1957

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

Thru: Regional Oil & Gas Supervisor
Roswell, New Mexico

Re: San Juan 25-2 Unit Area
Rio Arriba County, New Mexico

Dear Sir:

Reference is made to your letters of October 3, 1956, January 11 and 18, 1957 relating to and approving the unit area, the form of Unit Agreement and initial well obligations for the subject unit area. San Juan Gas Corporation is designated as unit operator.

Unforeseen delays beyond the control of the San Juan have prevented completion of execution of the Unit Agreement for submission for final approval, as explained during a Conference in Washington, on September 6, 1957, with Mr. H. J. Duncan and Mr. E. M. Pilkinton representing the Geological Survey, and Mr. J. H. Trescot of Clinton Molybdenum Company, tentative partners of San Juan, Mr. Foster Merrill, Consultant for San Juan, and the undersigned.

Because of the delays, the time interval for the Test Program specified is now unrealistic and a change becomes necessary. In accord with the discussion at the above mentioned meeting, and in the absence of any objections, we will substitute in the subject Unit Agreement the following changes in language:

- (1) Section 10: The wells specified in the Test Program "shall be commenced within one year from the effective date of the Unit Agreement."
- (2) Section 20: The beginning of the first sentence to read: "Upon approval by the Commissioner and the Director, or their duly authorized representatives, this Agreement shall become effective as of the first day of the month in which it is approved by the Director..."

Director of Geological Survey - contd.
Washington, D.C.

September 9, 1957

Thru: Regional Oil & Gas Supervisor, Roswell, New Mexico

Your acknowledgment of this letter will be sincerely appreciated.

Very truly yours,

SAN JUAN GAS CORPORATION

By E. Alex Phillips
President

EAP:we



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

STANDARD FORM NO. 64

RECEIVED OCT 1 1957

Air Mail

SEP 30 1957

San Juan Gas Corporation
360 Shell Building
Tulsa, Oklahoma

Gentlemen:

Reference is made to your letter of September 9 requesting official confirmation of minor changes in sections 10 and 20 of the San Juan 25-2 unit agreement, New Mexico. The changes you have specified in your letter as items 1 and 2 are as tentatively agreed in conference with representatives of the Conservation Division on September 6. Accordingly, no objection will be offered to said changes. Consequently, Survey letter of October 5, 1956, is hereby modified to that extent.

Very truly yours,

H. V. Hayden
Acting Director

H. V.

01321

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BASIC WELL DATA
SAN JUAN 25-2 UNIT
RIO ARRIBA COUNTY, NE

Sec.	1/4	1/4	Operator	Well No.	Gr. Elev.	Spudded	Ceased
3	SE	SE	San Juan Gas Corp.	3-D	7424	8-13-56	
9	NW	NW	Greenbrier	1	7324	12-16-51	1- 9-52
9	SE	SE	Greenbrier	1	7305	8- 6-51	10-31-51
10	NW	NW	San Juan Gas Corp.	10-C	7433		
* 11	NW	NW	San Juan Gas Corp.	11-C	7363	8- 3-56	
* 11	SW	SE	San Juan Gas Corp.	11-D	7337	5-19-52	6-25-52
12	SW	SE	San Juan Gas Corp.	12-D	7452	9- 3-56	
* 13	NW	SE	San Juan Gas Corp.	13-D	7447	9-12-56	9-19-56
* 14	SW	NW	San Juan Gas Corp.	14-C	7350	10-20-48	7-15-49
* 14	SE	SE	San Juan Gas Corp.	14-D	7333	7-10-52	
* 15	C	NE	San Juan Gas Corp.	15-D	7308	11- 7-50	12-17-50
15	SE	NW	Cyprus Oil Co.	1		6-21-52	
16	SE	SE	San Juan Gas Corp.	16-D	7246	5- 4-56	5- 9-56

NOTE:

* Gas well capable of producing in paying quantities and included in initial

TABLE 1

A
AREA
W MEXICO

T.C.	Top P.C.	Prod. Interval	Lowest Formation Tested	Status	Remarks
3710	3564	3572-3584	PC	TA	PB 3592'
3805			PC	TA	
5806	3556	3562-3621	MV	TA	DST 600 MCF/D
				Drlg.	
3656	3480	3490-3504	PC	GSI	AOF 737 MCF/D. Test 2-15-57
3535	3480	3481-3535	PC	GSI	AOF 725 MCF/D. Test 7-31-52 Formerly Cyprus #1 Davis.
3620	3521		PC	Drlg.	Fish stuck in hole
3675	3512	3527-3560	PC	GSI	AOF 1400 MCF/D. Test 4-6-57
3492	3416		Lewis	GSI	AOF 450 MCF/D. Test Sept. 1956 Formerly Gardner Petr. Co. #1 Dunham
3528	3400	3425-3528	PC	GSI	AOF 345 MCF/D. Test 9-10-52 Formerly C. L. McMahon #1 Koon
3575	3476	3478-3555	PC	GSI	AOF 560 MCF/D. Test 4-8-57 Formerly A. G. Hill #1 Gardner
3672	3600		PC	TA	
3558	3476	3476-3548	PC	TA	To test Farmington ss.

al Pictured Cliffs participating area, effective _____, 1957

BASIC WELL DATA
SAN JUAN 25-2 UNIT
RIO ARriba COUNTY, NEW

Sec.	1/4	1/4	Operator	Well No.	Gr. Elev.	Spudded	Ceased
* 22	SE	NW	San Juan Gas Corp.	22-C	7215	11-25-56	12- 1-56
* 23	NE	SE	San Juan Gas Corp.	23-D	7369	11-30-56	1- 9-57
* 24	NW	NW	San Juan Gas Corp.	24-C	7419	7- 4-56	7-11-56
* 24	SE	SE	San Juan Gas Corp.	24-D	7424	7-25-56	7-31-56
* 25	NW	NW	San Juan Gas Corp.	25-C	7457	8-23-56	8-30-56
* 26	NW	SE	San Juan Gas Corp.	26-D	7421	4-26-56	5- 3-56
28	NE	SW	R. & G. Drlg. Co.	102	7206	4-20-56	5-13-56
28	NE	SW	R & G. Drlg. Co.	112	7201	5-24-56	6- 6-56
33	SE	SE	San Juan Gas Corp.	33-D	7219	3-30-56	4- 5-56
34	SW	NW	San Juan Gas Corp.	34-C	7248	4- 9-56	4-13-56
* 36	SW	NW	San Juan Gas Corp.	36-C	7343	11-30-50	1-10-51
36	SE	SE	San Juan Gas Corp.	36-D	7399	3- 5-57	

NOTE:

* Gas well capable of producing in paying quantities and included in init.

TABLE 1

Page 2

AREA
MEXICO

T.D.	Top P.C.	Prod. Interval	Lowest Formation Tested	Status	Remarks
3457	3371	3415-3452	PC	GSI	AOF 954 MCF/D. Test 12-7-56
3460	3358	3364-3460	PC	GSI	AOF 3700 MCF/D. Test 4-6-57
3590	3472	3512-3522	PC	GSI	AOF 5300 MCF/D. Test 4-6-57
3652	3505	3506-3522	PC	GSI	AOF 4150 MCF/D. Test 4-4-57
3611	3500	3500-3505	PC	GSI	AOF 1540 MCF/D. Test 4-5-57
3616	3490	3536-3542	PC	GSI	AOF 1330 MCF/D. Test 4-5-57
3522	3404		PC	TA	PB 3475'
3435			PC	TA	
3447	3343	3377-3392	PC	TA	Est. 50 MCF/D & 10 BWPH PB 3400'
3455	3378	3378-3432	PC	TA	
3495	3418	3454-3482	PC	GSI	AOF 300 MCF/D. Test 4-7-57 Formerly A.G. H ₂ O #1X
3612	3474			Drilg.	

al Pictured Cliffs participating area, effective _____, 1957

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

October 22, 1957

C
O
P
Y

Mr. Foster Morrell
P.O. Box 933
Roswell, New Mexico

Dear Mr. Morrell:

We enclose two copies of Order R-1071 and R-1072 issued
October 21, 1957, by the Oil Conservation Commission in Cases 1320
and 1321, respectively, which were heard on October 4th at Santa Fe.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

bp
Encls.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 1320

Order No. 1071

THE APPLICATION OF SAN JUAN GAS CORPORATION

FOR THE APPROVAL OF THE SAN JUAN 24-2
UNIT

AGREEMENT EMBRACING 10,747
ACRES, MORE OR LESS, LOCATED IN TOWNSHIP
24 NORTH, RANGE 2 WEST,
NMPM, RIO ARRIBA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 4,
19 57 at Santa Fe, New M., New Mexico, before Elvis A. Utz, Examiner,
duly appointed by the New Mexico Oil Conservation Commission, hereinafter
referred to as the "Commission," in accordance with Rule 1214 of the Com-
mission Rules and Regulations.

NOW, on this day of Oct. 19 57, the Commission, a quorum being
present, having considered the application, the evidence adduced, and the
recommendations of the Examiner, Elvis A. Utz,
and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

- (1) That this order shall be known as the
SAN JUAN 24-2 UNIT AGREEMENT ORDER.

- (2) (a) That the project herein referred to shall be known as the San Juan
24-2 Unit Agreement and shall hereinafter be referred to as the "Project."
(b) That the Plan by which the project shall be operated shall be embraced
in the form of a unit agreement for the development and operation of the San Juan
24-2 Unit Area, referred to in the Petitioner's petition and filed with said
petition, and such plan shall be known as the San Juan 24-2 Unit Agreement Plan.

Use letter (a) only if
Paragraph 2(b) is used.

- (3) ~~(b)~~ That the San Juan 24-2 Unit Agreement Plan shall be, and hereby is, approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing in any manner any right, duties or obligations which are now, or may hereafter, be vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said San Juan 24-2 Unit Agreement, or relative to the production of oil and gas therefrom.

(b) That the unit operator periodically shall file with the Commission a Unit Statement of Progress, summarizing operations for the exploration and development of any lands committed to said Unit Agreement. This statement of progress shall be filed within 30 days after the expiration of each six-months period during the term of the unit agreement, and shall contain such pertinent data as may be necessary for the Commission to determine the progress being made in the Unit Area.

//

TOWNSHIP 24 North, RANGE 2 West,

all in Rio Arriba County, New Mexico,
containing 10.747 acres more or less.

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

(6) That any party owning rights in the unitized substances who does not commit such rights to said unit agreement before the effective date thereof may thereafter become a party thereto by subscribing to such agreement or counterpart thereof, or by ratifying the same. The unit operator shall file with the Commission within 30 days an original of any such counterpart or ratification.

(7) That this Order shall become effective upon the approval of said unit agreement by the Director of the United States Geological Survey

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

, Chairman

, Member

, Member & Secretary

S E A L

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 10-11-57

CASE 1320 Hearing Date 10-11-57

My recommendations for an order in the above numbered cases are as follows:

*The application be granted and the usual
unit order written.*

Thos. H. V. G.

Examiner

Staff Member

Case 1317

Waltham, Mass. (Eng. 6 below)

1. Does it smell? 100% No

2. With 1000 dollars in stock value of 6.

Kind regards to you & Mrs.

29, 000.

75.6

August 18, 1904.

May 21 1886 36

William 2 1/2

Overdye 1129

Red Lake

Case 1320

1980

Hand Page 7

Ed. R. Holland.

85% Have animals
San Juan co. 65 to 70%

1. 7. Dedicated

27. 4 37-7

37-7

23 0 0

27-5

32-8

284

3259

21-5

Block Dept ext 0

28-6

Smith - 107 & 108 m.s. completed,

28-3

15. mella 2 below Pc

29-11

844 to 2920 A.O.F. ?

29-5

Connections - Polyschum

24-6

10.2 months - 11 1/2 miles

29-7

Sacrific

Condition	10 Trials	20 Trials	30 Trials
1	~85%	~75%	~65%
2	~75%	~65%	~55%
3	~65%	~55%	~45%
4	~55%	~45%	~35%
5	~45%	~35%	~25%

30-5

36-6

31-6

32-9 Terminated

32-5

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 1320
Order No. R-1071

THE APPLICATION OF SAN JUAN GAS
CORPORATION FOR THE APPROVAL OF
THE SAN JUAN 24-2 UNIT AGREEMENT
EMBRACING 10,747 ACRES, MORE OR
LESS, LOCATED IN TOWNSHIP 24 NORTH,
RANGE 2 WEST, NMPM, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m., on
October 4, 1957, at Santa Fe, New Mexico, before Elvis A. Utz,
Examiner, duly appointed by the New Mexico Oil Conservation
Commission, hereinafter referred to as the "Commission," in
accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 21st day of October, 1957, the Commission, a
quorum being present, having considered the application, the evidence
adduced, and the recommendations of the Examiner, Elvis A. Utz, and
being fully advised in the premises,

FINDS:

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

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

IT IS THEREFORE ORDERED:

(1) That this order shall be known as the

SAN JUAN 24-2 UNIT AGREEMENT ORDER

(2) (a) That the project herein referred to shall be
known as the San Juan 24-2 Unit Agreement and shall hereinafter be
referred to as the "Project."

(b) That the plan by which the project shall be
operated shall be embraced in the form of a unit agreement for the
development and operation of the San Juan 24-2 Unit Area, referred
to in the Petitioner's petition and filed with said petition, and
such plan shall be known as the San Juan 24-2 Unit Agreement Plan.

(3) That the San Juan 24-2 Unit Agreement Plan shall be, and hereby is, approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing in any manner any right, duties or obligations which are now, or may hereafter, be vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said San Juan 24-2 Unit Agreement, or relative to the production of oil and gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

TOWNSHIP 24 NORTH, RANGE 2 WEST

Sections 1 & 2: All,
Section 3: Lots 1, 2, 3, and S/2 NE/4, SE/4 NW/4,
E/2 SW/4, SE/4,
Section 10: E/2,
Sections 11 through 14, incl; All,
Section 15: E/2,
Section 22: E/2,
Sections 23 through 27, incl.: All,
Section 33: S/2,
Sections 34, 35 & 36: All,

all in Rio Arriba County, New Mexico,
containing 10,747 acres more or less.

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

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the San Juan 24-2 Unit Agreement within 30 days after the effective date thereof.

(6) That any party owning rights in the unitized substances who does not commit such rights to said unit agreement before the effective date thereof may thereafter become a party thereto by subscribing to such agreement or counterpart thereof, or by ratifying the same. The unit operator shall file with the Commission within 30 days an original of any such counterpart or ratification.

(7) That this order shall become effective upon the approval of said unit agreement by the Director of the United States Geological Survey and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall immediately notify the Commission in writing of such termination.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


EDWIN L. MECHEM, Chairman


MURRAY E. MORGAN, Member


A. L. PORTER, Jr., Member & Secretary

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE SAN JUAN 24-2 UNIT AREA
COUNTY OF RIO ARriba
STATE OF NEW MEXICO

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BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
San Juan EXHIBIT No. 6
CASE 1320

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE SAN JUAN 24-2 UNIT AREA
COUNTY OF RIO ARriba
STATE OF NEW MEXICO

NO. _____

THIS AGREEMENT, entered into as of the _____ day of _____, 1957, 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 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 Oil Conservation Commission of the State of New Mexico is authorized by an act of the Legislature (Chapter 72, Laws 1935, as amended by Chapter 193, Laws of 1937, Chapter 166, Laws of 1941, and Chapter 168, Laws of 1949) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the San Juan 24-2 Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

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

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

1. ENABLING ACT AND REGULATIONS.

The 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 New Mexico are hereby accepted and made a part of this agreement.

2. UNIT AREA.

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

<u>New Mexico Principal Meridian</u>		
<u>Township 24 North, Range 2 West</u>		
		<u>Acres</u>
Section 1, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (all)		650.32
Section 2, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ (all)		649.60
Section 3, Lots 1,2,3, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$		487.50
Section 10, E $\frac{1}{2}$		320.00
Sections 11 through 14, inclusive (all)		2,560.00
Section 15, E $\frac{1}{2}$		320.00
Section 22, E $\frac{1}{2}$		320.00
Sections 23 through 27, inclusive (all)		3,200.00
Section 33, S $\frac{1}{2}$		320.00
Sections 34, 35, 36, (all)		<u>1,920.00</u>
Total		10,747.42

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator the acreage, percentage, and kind of ownership of oil and gas interests in all land in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor," and not less than six copies of the revised exhibits shall be filed with the Supervisor and one copy thereof shall be

filed with the New Mexico Oil Conservation Commission, hereinafter referred to as the "Commission."

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

(a) Unit Operator, on its own motion or on demand of the Director of the Geological Survey, hereinafter referred to as "Director," after preliminary concurrence of the Director, 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 Commission and the Supervisor, and copies thereof mailed to the last known address of each working interest owner, lessee, and lessor whose interests are affected, advising that thirty 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 Commission and the Supervisor 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 Commission and the Director, 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), or Drilling Block as defined in this agreement, (which ever may be applicable) no parts of which are entitled to be in a participating area within five years after the first day of the month following the effective date of the first initial participating area established under this unit 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 5-year period diligent drilling 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 such drilling operations are continued diligently, with not more than 90 days' time elapsing between the completion of one such well and the commencement of 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 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 or Drilling Blocks 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 said first initial participating area shall be eliminated as above specified. In event of overlap of any two participating areas on different bases, i.e., the Drilling Block basis for formations above the base of the Mesaverde or the subdivision (or aliquot part thereof) basis for formations below the Mesaverde, as prescribed in this agreement, the subdivision basis of elimination shall apply only to lands not overlapped by a Drilling Block entitled to participation. Determination of creditable "Unavoidable Delay" time shall be made by Unit Operator and subject to approval of the Director. 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 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 interests and 60% of the current unitized basic royalty interests (exclusive of the basic royalty interests of the United States), on a total-nonparticipating-acreage basis, respectively, with approval of the Director, provided such extension application is submitted to the Director not later than 60 days prior to the expiration of said 10-year period.

Any expansion of the unit area pursuant to this section which embraces lands theretofore eliminated pursuant to this subsection 2(e) shall not

be considered automatic commitment or recommitment of such lands.

3. UNITIZED LAND AND UNITIZED SUBSTANCES.

All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement." All oil and gas in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances."

4. UNIT OPERATOR.

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

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR.

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

Unit Operator shall have the right to resign in like manner and subject to like limitations as above provided at any time a participating area established hereunder is in existence, provided, that such resignation shall not release Unit Operator from any liability for any default by it hereunder occurring prior to the effective date of its resignation.

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote

of the owners of working interests determined in like manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director.

At any time for any reason whatsoever there is no Unit Operator, until a successor Unit Operator is selected and approved as hereinafter provided, the working interest owners shall be jointly responsible for performance of the duties of Unit Operator, and shall not later than thirty 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 interest in unitized substances, but upon the resignation or removal of Unit Operator becoming effective such Unit Operator shall deliver possession of all equipment, materials, and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor Unit Operator or to the owners thereof if no such new Unit Operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

6. SUCCESSOR UNIT OPERATOR.

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

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT.

Costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests, all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements, entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement." Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any inconsistency or conflict between the unit agreement and the unit operating agreement, this unit agreement shall prevail. Three true copies of any unit operating agreement executed pursuant to this section should be filed with the Supervisor prior to approval of this unit 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 which are necessary or convenient for prospecting for, producing, storing, allocating, and distributing the unitized substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator, and together with this agreement, shall constitute and define the rights, privileges, and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. INITIAL DRILLING.

Inasmuch as wells capable of producing unitized substances from the Pictured Cliffs formation have already been completed within the unit area, no initial test well to such formation is specified under the terms of this agreement.

10. PLAN OF DEVELOPMENT AND OPERATION.

Upon submittal of this unit agreement for final approval, the Unit Operator shall submit for the approval of the Commission and the Supervisor an acceptable plan of development and operation for the unitized land which, when approved by the Commission and the Supervisor, shall constitute the drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. A minimum of five wells shall be commenced within one year from the effective date of this unit agreement to test the Pictured Cliffs formation, at least two of which shall be exploratory wells. One of such five wells shall adequately test the Mesaverde formation.

From time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Commission and the Supervisor, a plan for an additional specified period for the development and operation of the unitized land. Any plan submitted pursuant to this section shall provide for the continued development of the unitized area and for the diligent drilling necessary for determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and shall be as complete and adequate as the Commission and the Supervisor may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall (a) specify the number and locations of any wells to be drilled and the proposed order and time for such drilling; and (b) to the extent practicable specify the operating practices regarded as necessary and advisable for proper conservation of natural resources. Separate plans may be submitted for separate productive zones, subject to the approval of the Commission and the Supervisor. 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. No 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 Commission and the Supervisor, shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION.

(a) Formations above base of the Mesaverde:

See 11

Drilling Blocks, for participation hereunder as to all formations lying above the base of the Mesaverde formation, shall consist of one-half sections, by government survey, the sections being divided by a line running north and south in such manner that each Drilling Block shall be either the East Half (E/2) or the West Half (W/2) of each given section, provided, however, that as to Sections 3 and 33, T. 24 N., R. 2 W., the following described lands shall be regarded as acceptable Drilling Blocks for all purposes hereunder.

Acceptable Drilling Blocks

Lots 1, 2, 3, $S\frac{1}{2}NE\frac{1}{4}$, $SE\frac{1}{4}NW\frac{1}{4}$ Section 3;
 $SE\frac{1}{4}$, $E\frac{1}{2}SW\frac{1}{4}$ Section 3;
 $S\frac{1}{2}$ Section 33.

Within thirty days after the effective date of this agreement as to wells theretofore completed, and within the month of completion, if practicable, for wells thereafter completed, or as soon thereafter as required by the Supervisor, the Unit Operator shall determine which wells so completed are capable of producing unitized substances in paying quantities (to-wit: quantities sufficient to repay the costs of drilling and producing operations, with a reasonable profit), and shall, by written notices mailed simultaneously, advise the Commission, the Supervisor, and the working interest owners of its determination in that regard, giving the data upon which its determination is based, including the effective date of the admission of each Drilling Block to the appropriate participating area, the description of all of the land in each Drilling Block so qualified for admission by a well located thereon, and the formation or formations in which such wells are completed. Protests against such determination may be filed with the Commission and the Supervisor within fifteen days after date of receipt by the Supervisor of such written notice, but unless the Commission or the Director shall, within thirty days after date of such receipt by the Supervisor, disapprove such determination, the determination of the Unit Operator shall thereafter be binding upon the parties hereto. The initial participating area for any formation above the base of the Mesaverde shall include all of the land in each Drilling Block on which a well so determined to be capable of producing unitized substances in paying quantities is located, such initial participating area to become effective as of the date of the completion of the first well to that formation, or the effective date of this unit agreement, whichever is later. Unit Operator shall prepare a schedule setting forth the percentage of unitized substances to be allocated, as hereunder provided, to each unitized tract in any participating area so

established or revised. Upon the approval of the initial participating area by the Commission and the Director, and automatically for subsequent revisions thereof in the absence of timely disapproval as above provided, said schedule shall govern the allocation of production from and after the date the participating area or its enlargement becomes effective.

A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof producing as a single pool or zone, effective as of the date of completion for production, and all of the provisions of this subsection (a) shall be considered as applicable separately for each such participating area. All wells completed for production of unitized substances in a particular formation shall be regarded as producing from that particular zone or pool.

Additional Drilling Blocks shall be admitted to the appropriate participating area on the first day of the month following the month in which a well thereon is completed for production, if capable of production of unitized substances in paying quantities, and the schedule of allocation shall be revised accordingly. All production prior to the effective date of such admission shall be credited solely to the account of the leases in that particular block without unit participation.

If the initial well on any Drilling Block is not capable of production in paying quantities and at a later date a well is drilled on such Drilling Block which is capable of production of unitized substances in paying quantities, then the entire Drilling Block shall be admitted to the participating area.

No Drilling Block, once included in a participating area, shall be excluded therefrom on account of depletion of unitized substances.

An undrilled Drilling Block is defined as an intervening Drilling Block when it lies between two Blocks included in the same participating area, and said participating Blocks adjoin the undrilled Block directly to the north and south or east and west. Unit Operator shall commence the drilling of a well on such intervening Drilling Block within ten months from the effective date of participation of the Block causing it to become an intervening Drilling Block, unless said time be extended by the Director, and shall continue such drilling with due diligence to a depth necessary to test the formation from which production is secured in said participating area.

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

Whenever it is determined that a well drilled under this agreement to formations above the base of the Mesaverde is not capable of production in paying quantities and inclusion of the Drilling Block on which it is situated in a participating area is unwarranted, production from such well shall, for the purposes of settlement among royalty interest owners, be allocated only to the Drilling Block on which the well is located so long as such land is not within a participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a well shall be made as provided in the unit operating agreement.

(b) Formations below the Mesaverde:

Upon completion of a well capable of producing unitized substances in paying quantities from formations lying below the base of the Mesaverde, or as soon thereafter as required by the Supervisor, the Unit Operator shall submit for approval by the Commission and the Director, a schedule based on subdivisions of the public-land survey or aliquot parts thereof, of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all land in said schedule on approval of the Commission and the Director to constitute a participating area, effective as of the date of completion of such well or the effective date of this unit agreement, whichever is later. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective.

A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined upon approval of the Commission and the Director. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or

otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities or to exclude land then regarded as reasonably proved to be nonproductive in paying quantities and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first day of the month in which is obtained the knowledge or information on which such revision is predicated, provided, however, a more appropriate effective date may be used if justified by the Unit Operator and approved by the Director. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this subsection (b) that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities; but, regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of revision of the participating area.

In the absence of agreement at any time between the Unit Operator and the Commission and the Director as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected hereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States, which shall be determined by the Supervisor and the amount thereof deposited as directed by the Supervisor to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sum due as Federal royalty on the basis of such approved participating area.

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

12. ALLOCATION OF PRODUCTION.

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

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS AND DRILLING OF WELLS NOT MUTUALLY AGREED UPON.

Any party or parties hereto owning or controlling the working interests or a majority of the working interests in any unitized land having thereon a regular well location may, with the approval of the Supervisor as to Federal land, or the Commission as to privately-owned land, and subject to the provisions of the unit operating agreement, at such party's sole risk, cost and expense, drill a well to test any formation for which a participating area has not been established or to test any formation for which a participating area has been established if such location is not within said participating area, or drill any

well not mutually agreed to by all interested parties, unless within ninety days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such well in like manner as other wells are drilled by the Unit Operator under this agreement.

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

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

14. ROYALTY SETTLEMENT.

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

If gas obtained from lands not subject to this agreement is introduced into any participating area of the lands being operated hereunder, for use in

repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Commission and the Supervisor, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with due allowance for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the plan of operations or as may otherwise be consented to by the Commission and the Supervisor, as conforming to good petroleum engineering practice, and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

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

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

15. RENTAL SETTLEMENT.

Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws, and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their leases. Rental or minimum royalty for lands of the United States subject to this agreement shall be paid at the rate specified in the respective leases from the United States unless such rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

With respect to any lease on non-Federal land, if and when committed to this agreement, containing provisions which would terminate such lease unless drilling operations were within the time therein specified commenced upon

the land covered thereby or rentals paid for the privilege of deferring such drilling operations, the rentals required thereby shall, notwithstanding any other provision of this agreement, be deemed to accrue and become payable during the term thereof as extended by this agreement and until the required drilling operations are commenced upon the land covered thereby or some portion of such land is included within a participating area.

16. CONSERVATION.

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

17. DRAINAGE.

The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement, including wells on adjacent unit areas.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED.

The terms, conditions, and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development, or operation for oil or gas of lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary shall 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 leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement, and, without limiting the generality of the foregoing, all leases, subleases, and contracts are particularly modified in accordance with the following:

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

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

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

(d) Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil or gas of lands other than those of the United States, committed to this agreement, if any, 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 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 lease remains subject hereto, provided, that production is had in paying quantities under this agreement prior to the expiration date of the term of such lease.

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

(g) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Sec. 17(b) of the Act of February 25, 1920, 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."

19. COVENANTS RUN WITH LAND.

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

20. EFFECTIVE DATE AND TERM.

This agreement shall become effective as of the first day of the month in which it is approved by the Director or his duly authorized representative and shall remain in effect until July 1, 1960, and so long thereafter as unitized substances can be produced in paying quantities, i.e., in this particular instance in quantities sufficient to pay for the costs of producing same from wells on unitized land within any participating area established hereunder and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can be produced as aforesaid, or it is terminated as heretofore provided in this agreement.

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

21. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION.

All unit production and the disposal thereof shall be in conformity with allocations, allotments 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 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.

22. CONFLICT OF SUPERVISION.

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

23. APPEARANCES.

Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department of the Interior and the Commission and to appeal from orders

issued under the regulations of said Department and/or Commission or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

24. NOTICES.

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

25. NO WAIVER OF CERTAIN RIGHTS.

Nothing in this agreement contained shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State wherein said unitized lands are located, or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

26. UNAVOIDABLE DELAY.

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

27. FAIR EMPLOYMENT.

In connection with the performance of work under this agreement, the Unit 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, lay-off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Unit 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 nondiscrimination clause.

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

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

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

29. NON-JOINDER AND SUBSEQUENT JOINDER.

If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the working interest in that tract may withdraw said tract from this agreement by written notice to the Director and the Unit Operator prior to the approval of this agreement by the Director. Any such tract not so withdrawn shall be considered as unitized, and any necessary adjustments of royalty occasioned by failure of the royalty and record owner to join will be for the account of the corresponding working interest owner. Any oil or gas interests in lands within

the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. 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. After operations are commenced hereunder, the right of a 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. 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 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 days by the Director.

30. COUNTERPARTS.

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

IN WITNESS WHEREOF, this unit agreement is executed by the undersigned parties hereto as of the dates set opposite their respective signatures:

UNIT OPERATOR AND WORKING INTEREST OWNER

SAN JUAN GAS CORPORATION

Date: _____

By _____
President

ATTEST:

Secretary
300 Shell Building
Tulsa, Oklahoma

OTHER WORKING INTEREST OWNERS

GARDNER PETROLEUM COMPANY

Date: _____

By _____
President

ATTEST:

Secretary
1025 Mayo Building
Tulsa, Oklahoma

SKELLY OIL COMPANY

Date: _____

By _____
Vice President

ATTEST:

Assistant Secretary
Skelly Building
P. O. Box 1650
Tulsa, Oklahoma

GILCREASE OIL COMPANY

Date: _____

By _____
President

ATTEST:

Secretary
P. O. Box 2708
San Antonio, Texas

HUMBLE OIL & REFINING COMPANY

Date: _____

By _____

ATTEST:

Assistant Secretary
Humble Building
P. O. Box 2180
Houston, Texas

GULF OIL CORPORATION

Date: _____

By _____

Attorney in Fact

ATTEST:

Assistant Secretary
Guaranty Bank Building
P. O. Box 2097
Denver, Colorado

MAGNOLIA PETROLEUM COMPANY

Date: _____

By _____

Vice President

ATTEST:

Assistant Secretary
P. O. Box 900
Dallas, Texas

CYPRUS OIL COMPANY

Date: _____

By _____

Vice President

ATTEST:

Assistant Secretary
523 West Sixth Street
Los Angeles 14, California

L. W. WICKES AGENT CORPORATION

Date: _____

By _____

Vice President

ATTEST:

Assistant Secretary
1206 Pacific Mutual Building
Los Angeles 14, California

CLARK & COWDEN PRODUCTION COMPANY,
A PARTNERSHIP

Date: _____

5543 Yale Boulevard
Dallas 6, Texas

By _____
General Partner and
Attorney in Fact

CLARK & WILSON, A PARTNERSHIP

Date: _____

5543 Yale Boulevard
Dallas 6, Texas

By _____
General Partner

R. L. CLARK GRANDCHILDREN TRUSTS

Date: _____

5543 Yale Boulevard
Dallas 6, Texas

By _____
Trustee

Date: _____

ATTEST:

Assistant Secretary

By _____
Vice President

Date: _____

ATTEST:

Assistant Secretary

By _____
Vice President

Date: _____

ATTEST:

Assistant Secretary

By _____
Vice President

Date: _____

Address: 700 Mercantile Bank Bldg.

Dallas, Texas

A. G. Hill

Margaret H. Hill

Date: _____

Address: _____

Date: _____

Address: _____

Date: _____

Address: _____

Date: _____

Address: _____

Date: _____

Address: _____

Date: _____

Address: _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195____, by _____, _____ President of _____, a _____ Corporation, in behalf of said corporation.

My Commission Expires:

Notary Public in and for _____
County, State of _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195____, by _____, _____ President of _____, a _____ Corporation, in behalf of said corporation.

My Commission Expires:

Notary Public in and for _____
County, State of _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195____, by _____, _____ President of _____, a _____ Corporation, in behalf of said corporation.

My Commission Expires:

Notary Public in and for _____
County, State of _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195____, by _____, _____ President of _____, a _____ Corporation, in behalf of said corporation.

My Commission Expires:

Notary Public in and for _____
County, State of _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195__, by _____.

My Commission Expires: _____

Notary Public in and for _____
County, State of _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195__, by _____.

My Commission Expires: _____

Notary Public in and for _____
County, State of _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195__, by _____.

My Commission Expires: _____

Notary Public in and for _____
County, State of _____

STATE OF)
COUNTY OF) ss.

The foregoing instrument was acknowledged before me this _____ day of _____, 195__, by _____.

My Commission Expires: _____

Notary Public in and for _____
County, State of _____

EXHIBIT "B" - SAN JUAN 24-2 UNIT - RIO ARriba COUNTY, NEW

Tract No.	Description	No. of Acres	Serial No. Lease Date and Term	Land Owner Percentage of Royalty	Record Owner of Lease or Application
FEDERAL LANDS					
1	Sec. 1: Lot 2, SW/4 NE/4 Sec. 2: SE/4 Sec. 3: Lot 1, SW/4 NE/4 Sec. 10: E/2 SE/4 Sec. 11: SW/4 Sec. 12: E/2 W/2	724.98	S.F. 079331 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All	A. G. Hill
2	Sec. 14: SE/4 Sec. 15: S/2 SE/4 Sec. 22: N/2 SE/4 Sec. 23: W/2 SW/4 Sec. 26: SE/4 Sec. 35: N/2 SW/4	640.00	S.F. 079338 4-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All	Lindsey Hooper
3	Sec. 25: S/2 NW/4 Sec. 33: SE/4 Sec. 34: SW/4	400.00	S.F. 079429 8-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All	A. G. Hill
4	Sec. 36: NE/4 SW/4, NW/4 SE/4	80.00	S.F. 079457 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All	Gulf Oil Corporation
5	Sec. 15: NW/4 NE/4	40.00	S.F. 080022 8-1-49 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All	*R. L. Davisson, Jr.

August 9, 1957

*Assignee under assignment filed for approval.

MEXICO

Page 1

Overriding Royalty Owner and Percentage		Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest	
Eugene C. Connor, et al (See Footnote #4, page 9)	2.625%	<u>To Base of Mesaverde</u> San Juan Gas Corporation <u>Below Base of Mesaverde</u> A. G. Hill	All All
None		<u>To Base of Mesaverde</u> San Juan Gas Corporation <u>Below Base of Mesaverde</u> Lindsey Hooper	All All
Charlie W. Parcell	5.000%	<u>To Base of Mesaverde</u> San Juan Gas Corporation <u>Below Base of Mesaverde</u> A. G. Hill	All All
None		Gulf Oil Corporation	All
Mrs. Annie Mary White, et al (See Footnote #5, page 9)	5.000%	<u>To Base of Mesaverde</u> San Juan Gas Corporation <u>Below Base of Mesaverde</u> R. L. Davisson, Jr.	All All

EXHIBIT "B" - SAN JUAN 24-2 UNIT -

Tract No.	Description	No. of Acres	Serial No. Lease Date and Term	Land Owner Percentage of Royalty
<u>FEDERAL LANDS (Continued)</u>				
6	Sec. 13: E/2 Sec. 25: S/2, NE/4 Sec. 34: SE/4 SE/4 Sec. 35: S/2 SW/4, SE/4	1080.00	S.F. 080500 1-1-52 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
7	Sec. 24: S/2	320.00	S.F. 080715-A 11-1-51 5 yrs. Ext'd to 10-31-59	U.S.A. 12 $\frac{1}{2}$ % All
8	Sec. 24: N/2	320.00	S.F. 080715-B 11-1-51 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
9	Sec. 2: Lot 1, S/2 NE/4 Sec. 11: W/2 NE/4, SE/4 NW/4 Sec. 13: W/2 NW/4, SE/4 NW/4 Sec. 14: E/2 NW/4, SW/4 NW/4	482.46	S.F. 081294 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
10	Sec. 23: N/2 NW/4, SW/4 NW/4 Sec. 26: NW/4 NW/4, S/2 NW/4	240.00	S.F. 081333 4-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All

August 9, 1957

RIO ARriba COUNTY, NEW MEXICO

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Record Owner of Lease or Application	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
Skelly Oil Company	None	Skelly Oil Company All
A. G. Hill (1/2) Magnolia Petroleum Company (1/2)	Oscar Abraham 5.000%	A. G. Hill 1/2 Magnolia Petroleum Company 1/2
J. Glenn Turner (1/2) Oscar Abraham (2/6) Riasan Company (1/6)	None	J. Glenn Turner 1/2 Oscar Abraham 2/6 Riasan Company 1/6
Gardner Petroleum Company, et al (See Footnote #1, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Gardner Petroleum Company, et al All (See Footnote #1, page 9)
Gardner Petroleum Company, et al (See Footnote #1, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation <u>Below Base of Mesaverde</u> Gardner Petroleum Company, et al All (See Footnote #1, page 9)

EXHIBIT "B" - SAN JUAN 24-2 UNIT

Tract No.	Description	No. of Acres	Serial No. Lease Date and Term	Land Owner Percentage of Royalty
<u>FEDERAL LANDS (Continued)</u>				
11	Sec. 36: N/2 NW/4, SW/4 NW/4	120.00	S.F. 081353 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
12	Sec. 1: Lots 3, 4, S/2 NW/4 Sec. 10: NE/4 Sec. 12: NE/4	485.06	N.M. 01356 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
13	Sec. 1: N/2 SW/4 Sec. 3: Lots 2, 3 Sec. 11: W/2 NW/4, W/2 SE/4 Sec. 12: SE/4 Sec. 14: W/2 NE/4 Sec. 15: NE/4 NE/4	605.12	N.M. 01518 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
14	Sec. 14: E/2 NE/4	80.00	N.M. 01524 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All

August 9, 1957

Record Owner of Lease or Application	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
Gardner Petroleum Company, et al (See Footnote #1, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Gardner Petroleum Company, et al All (See Footnote #1, page 9)
L. W. Wickes Agent Corporation, et al (See Footnote #3, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation 1/2 L. W. Wickes Agent Cor- poration 1/2 <u>Below Base of Mesaverde</u> L. W. Wickes Agent Cor- poration, et al All (See Footnote #3, page 9)
R. L. Davisson, Jr.	Mrs. Annie Mary White, et al 5.000% (See Footnote #5, Page 9)	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> R. L. Davisson, Jr. All
Humble Oil & Refining Company	H. E. Milliken 3.000%	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Humble Oil & Refining Company All

EXHIBIT "B" - SAN JUAN 24-2 UNIT

Tract No.	Description	No. of Acres	Serial No. Lease Date and Term	Land Owner Percentage of Royalty
<u>FEDERAL LANDS (Continued)</u>				
15	Sec. 34: N/2 SE/4, SW/4 SE/4	120.00	N.M. 02597 8-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
16	Sec. 34: NE/4 NE/4	40.00	N.M. 02579-A 8-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
17	Sec. 33: SW/4	160.00	N.M. 02598 8-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
18	Sec. 27: W/2 NW/4, NW/4 SW/4	120.00	N.M. 02599 8-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
19	Sec. 22: S/2 SE/4	80.00	N.M. 03483 4-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All

August 9, 1957

Record Owner of Lease or Application	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
Gardner Petroleum Company, et al (See Footnote #1, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Gardner Petroleum Company, et al All (See Footnote #1, page 9)
Gilcrease Oil Company, et al (See Footnote #2, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Gilcrease Oil Company, et al All (See Footnote #2, page 9)
Felmont Oil Corporation	None	Felmont Oil Corporation All
Skelly Oil Company	None	Skelly Oil Company All
Humble Oil & Refining Company	H. E. Milliken 3.000%	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Humble Oil & Refining Company All

EXHIBIT "B" - SAN JUAN 24-2 UNIT -

Tract No.	Description	No. of Acres	Serial No. Lease Date and Term	Land Owner Percentage of Royalty
<u>FEDERAL LANDS (Continued)</u>				
20	Sec. 2: Lot 2 Sec. 11: NE/4 NW/4 Sec. 13: NE/4 NW/4 Sec. 14: NW/4 NW/4	162.42	N.M. 03739 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
21	Sec. 23: SE/4 NW/4 Sec. 26: NE/4 NW/4	80.00	N.M. 03745 4-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
22	Sec. 36: SE/4 NW/4	40.00	N.M. 03752 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
23	Sec. 23: NE/4 Sec. 35: NE/4	320.00	N.M. 03768 4-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All

August 9, 1957

Record Owner of Lease or Application	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percent of Interest
Gilcrease Oil Company, et al (See Footnote #2, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Gilcrease Oil Company, et al All (See Footnote #2, page 9)
Gilcrease Oil Company, et al (See Footnote #2, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Gilcrease Oil Company, et al All (See Footnote #2, page 9)
Gilcrease Oil Company, et al (See Footnote #2, page 9)	None	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Gilcrease Oil Company, et al All (See Footnote #2, page 9)
Humble Oil & Refining Company	H. E. Milliken 3.000%	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Humble Oil & Refining Company All

EXHIBIT "B" - SAN JUAN

Tract No.	Description	No. of Acres	Serial No. Lease Date and Term	Land Owner Percentage of Royalty
<u>FEDERAL LANDS (Continued)</u>				
24	Sec. 13: SW/4 Sec. 22: NE/4 Sec. 23: E/2 SW/4, W/2 SE/4 Sec. 26: SW/4, S/2 NE/4, NW/4 NE/4 Sec. 27: E/2 E/2 Sec. 35: NW/4	1080.00	N.M. 03992 4-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
25	Sec. 36: E/2 NE/4, E/2 SE/4, SW/4 SE/4, SE/4 SW/4, W/2 SW/4	320.00	N.M. 03994 5-1-48 5 yrs. Ext'd add'l 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
26	Sec. 36: W/2 NE/4	80.00	N.M. 015020-A 8-1-54 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All
27	Sec. 23: E/2 SE/4 Sec. 25: N/2 NW/4 Sec. 26: NE/4 NE/4	200.00	N.M. 019399 1-1-56 5 yrs.	U.S.A. 12 $\frac{1}{2}$ % All

TOTAL FEDERAL LANDS -

August 9, 1957

Record Owner of Lease or Application	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
A. G. Hill	Eugene C. Connor, 2.625% et al. (See Footnote #4, page 9)	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> A. G. Hill All
A. G. Hill	Eugene C. Connor, 2.625% et al. (See Footnote #4, page 9)	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> A. G. Hill All
Humble Oil & Refining Company	George Cuccia 1.000% John P. Cuccia 1.000% Vincent Cuccia 1.000% 3.000%	<u>To Base of Mesaverde</u> San Juan Gas Corporation All <u>Below Base of Mesaverde</u> Humble Oil & Refining Company All
Pubco Development, Inc.	None	Pubco Development, Inc. All

8,420.04 Acres

EXHIBIT "B" - SAN JUAN 24-2 UNIT

Tract No.	Description	No. of Acres	Lease Date and Term	Land Owner Percentage of Royalty
<u>PATENTED LANDS</u>				
28	Sec. 1: Lot 1, SE/4 NE/4 SE/4, S/2 SW/4	322.66	2-28-56 5 yrs. HBP	Roger J. Palmer 8.333% H. J. Guthmann 2.083% Thomas McKenna 1.042% Joseph Sommer 1.042%
29	Sec. 2: Lots 3, 4, S/2 NW/4, SW/4 Sec. 3: SE/4 NE/4, SE/4 SE/4 NW/4, E/2 SW/4	644.72	3-13-56 2 yrs.	Milton Davis, et al 12 1/2%
30	Sec. 10: W/2 SE/4	80.00	2-1-47 10 yrs. Unleased	A. G. Johnson 6 1/4% Fannie Hill 6 1/4%
31	Sec. 11: E/2 E/2 Sec. 12: W/2 W/2 Sec. 15: S/2 NE/4, N/2 SE/4	480.00		J.B. Harty 12 1/2%

August 9, 1957

- RIO ARriba COUNTY, NEW MEXICO

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<u>Record Owner of Lease or Application</u>	<u>Overriding Royalty Owner and Percentage</u>	<u>Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest</u>
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San Juan Gas
Corporation

San Juan Gas Corporation All

San Juan Gas
Corporation

San Juan Gas Corporation All

Magnolia Petroleum
Company

None

Magnolia Petroleum Company All

Unleased

Skelly Oil Company

None

Skelly Oil Company All

EXHIBIT "B" - SAN JUAN 24-2 UNIT

Tract No.	Description	No. of Acres	Lease Date and Term	Land Owner Percentage of Royalty
<u>PATENTED LANDS (Continued)</u>				
32	Sec. 27: SW/4 SW/4 Sec. 34: NW/4, W/2 NE/4, SE/4 NE/4	320.00		Paul Brown 12 $\frac{1}{2}$ %
33	Sec. 14: SW/4 Sec. 27: E/2 W/2, W/2 E/2	480.00	1-1-47 10 yrs.	J.F. Brown 12 $\frac{1}{2}$ %

TOTAL PATENTED LANDS -

R E C A P I

<u>LAND</u>	<u>ACRE</u>
Federal	8,42
Patented	<u>2,32</u>
Totals	10,74

August 9, 1957

Record Owner of Lease or Application	Overriding Royalty Owner and Percentage	Working Interest Owner Under Option Agreement, Operating Agreement or Assignment and Percentage of Interest
A. G. Hill	None	A. G. Hill All
Magnolia Petroleum Company	Horace F. McKay, Jr. \$10.00 per acre out of 16.25% of all produc- tion from SW/4 Sec. 14.	Magnolia Petroleum Company All

2,327.38 Acres

T U L A T I O N

<u>AGE</u>	<u>PERCENTAGE</u>
0.04	78.34%
7.38	21.66%
7.42	100.00%

EXHIBIT "B" - SAN JUAN 24-2 UNIT - RIO

FOOTNOTES

#1 Gardner Petroleum Company, et al, includes:

Gardner Petroleum Company	(1/3)
Lindsey Hooper	(1/3)
Clark & Cowden Production Co., a Partnership	(5/24)
Clark & Wilson, a Partnership	(1/24)
R. L. Clark Grandchildren Trusts, Rawlins Clark, Trustee	(2/24)

#2 Gilcrease Oil Company, et al, includes:

Gilcrease Oil Company	(1/2)
Ruth Gilliland Kistler, Independent Executrix of the Estate of J. W. Gilliland, Deceased	(1/4)
Ralph Gilliland	(1/4)

#3 L. W. Wickes Agent Corporation, et al, includes:

L. W. Wickes Agent Corporation	(1/2)
Cyprus Oil Corporation, a division of Cyprus Mines Corporation	(1/4)
Skelly Oil Company	(1/4)

#5 Mrs. Annie Mary White, et

Mrs. Annie Mary White
Lindsey Hooper
John C. Martin, Jr.
Joe B. Houston
Gerald B. Klein
John R. Cartmill
Mr. H. E. Milliken and G
Milliken, Joint Tenant
Dr. William Kenneth Newi

August 9, 1957

#4 Eugene C. Connor, et al, includes:

Eugene C. Connor	.116846%
L. L. Henry	.173910%
Mrs. Florence Randall	.130430%
Mrs. Stella Connor	.206530%
John R. Cartmill	.174997%
John C. Martin, Jr.	.007609%
Joe B. Houston	.011413%
Gerald B. Klein	.011413%
Mrs. Davida Gilmore	.076090%
R. L. Davisson, Jr.	.374080%
Annie Mary White	.278985%
Gardner Petroleum Company	.304367%
Willie S. Gardner	.228261%
Lindsey Hooper	.174997%
J. H. Gardner	.126814%
Mr. H. E. Milliken & Goldie	
Milliken, Joint Tenants	.038043%
Dr. William Kenneth Newill	.038043%
Charles W. Lovejoy & Constance	
Lovejoy, Joint Tenants	.152171%
	<u>2.624999%</u>

al, includes:

1.00%
0.60%
0.20%
0.30%
0.30%
0.60%

Goldie

s

ll

1.00%
1.00%
5.00%