

Case 189
hearing Nov. 1, 1949.

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

PROCEEDINGS

The following matter came on for consideration before a hearing of the Oil Conservation Commission of the State of New Mexico, pursuant to legal notice, at Santa Fe, New Mexico, on November 1, 1949, at 10:00 A. M.

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives public notice pursuant to law of a public hearing to be held November 1, 1949, beginning at 10:00 o'clock A.M. of that day in the City of Santa Fe, New Mexico, in the Senate Chambers.

STATE OF NEW MEXICO TO:

All named parties in the following cases,
and notice to the public:

Case 189

In the matter of the application of the Oil Conservation Commission upon its own motion to revise the rules and regulations of the Commission to conform with the provisions of Chapter 168 of the New Mexico Laws of 1949, and to consider Committee recommendation and take testimony in the premises. This is a readvertisement.

Case 197

In the matter of the application of Jones and Watkins applicants, for an order approving an unorthodox location for a well 1205 feet west of the east line and 740 feet south of the north line (NE/4 NE/4) of Section 10, Township 19 South, Range 29 East, N.M.P.M., Turkey Track Pool, Eddy County, New Mexico.

Case 198

In the matter of the application of Amerada Petroleum Corporation for an order establishing proration units and uniform spacing of wells for the common source of supply discovered in Amerada-State BTB #1 well, in NW/4 NW/4 of Section 26, Township 12 South, Range 33 East, N.M.P.M., Bagley Area,

Lea County, New Mexico.

Case 199

In the matter of the application of Roland Rich Woolley for an order approving an unorthodox location 1345 feet east of the west line and 1295 feet south of the north line of Section 3, Township 17 South, Range 30 East, N.M.P.M., Square Lake Pool, Eddy County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on October 13, 1949.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

/s/ R. R. Spurrier
R. R. SPURRIER, Secretary

BEFORE:

Honorable Thomas J. Mabry,
Governor and Chairman
Honorable Guy Shepard,
Member

REGISTER:

Elvis R. Utz
Santa Fe, New Mexico
For the New Mexico Oil Conservation Commission

Frank C. Barnes
Santa Fe, New Mexico
For the New Mexico Oil Conservation Commission

Justin Newman
Artesia, New Mexico
For the New Mexico Oil Conservation Commission

Vilas P. Sheldon
Artesia, New Mexico
For the New Mexico Oil Conservation Commission

G. T. Pearson
Fort Worth, Texas
For Continental Oil Company

E. L. Shafer
Hobbs, New Mexico
For Continental Oil Company

Clarence B. Folsom, Jr.
Socorro, New Mexico
For Petroleum Engineering Dept., N. M. S. M.

E. E. Kinney
Artesia, New Mexico
For the New Mexico Bureau of Mines

Raymond Lamb
Artesia, New Mexico
For Wilson Oil Company

Milton H. Barber
Socorro, New Mexico
For Petroleum Engineering Dept., N. M. S. M.

M. T. Smith
Midland, Texas
For Shell Oil Company

Wm. E. Bates
Midland, Texas
For The Texas Company

Geo. E. Kendrick
Jal, New Mexico
El Paso Natural Gas Company

J. W. Baulch
Jal, New Mexico
El Paso Natural Gas Company

C. D. Borland
Hobbs, New Mexico
For Gulf Oil Corporation

E. J. Gallagher
Hobbs, New Mexico
For Gulf Oil Corporation

J. P. Sanderson
Tulsa, Oklahoma
For Gulf Oil Corporation

Lloyd L. Gray
Tulsa, Oklahoma
For Gulf Oil Corporation

Russell G. Lowe
Tulsa, Oklahoma
For Gulf Oil Corporation

R. S. Blymn
Hobbs, New Mexico
For the New Mexico Oil Conservation Commission

J. N. Dunlavey
Hobbs, New Mexico
For Skelly Oil Company

M. G. Krousop
Loco Hills, New Mexico
For Grayburg Oil Company

W. H. Mills
Maljamar, New Mexico
For Kewanee Oil Company

G. L. Shoemaker
Midland, Texas
Stanolind Oil Purchasing Company

F. G. White
Brownfield, Texas
For Magnolia Pipe Line Co.

Jack G. Coates
Midland, Texas
For Cities Service Oil Company

Vernon Turner
Magnolia, Arkansas
For McAlester Fuel Company

Max K. Watson
Amarillo, Texas
Natural Gas Consultant

B. M. Keohane
Roswell, New Mexico
For himself

Joseph S. Hartman
Aztec, New Mexico
For himself

W. M. Ports
Artesia, New Mexico
For Southeast Engineering Co.

M. H. Soyster
Hobbs, New Mexico
For the U. S. Geological Survey

Foster Morrell
Roswell, New Mexico
For the U. S. Geological Survey

John A. Frost
Artesia, New Mexico
For the U. S. Geological Survey

Glenn Staley
Hobbs, New Mexico
For Lea County Operators

Paul N. Colliston
Kermit, Texas
For Amon G. Carter Foundation

J. R. Cole
Santa Fe, New Mexico
For Southern Union Gas Company

Roy O. Yarbrough
Hobbs, New Mexico
For the New Mexico Oil Conservation Commission

M. L. Patterson
Odessa, Texas
For Phillips Petroleum Company

O. P. Nicola
Bartlesville, Oklahoma
For Phillips Petroleum Company

Raymond A. Lynch
Midland, Texas
For Phillips Petroleum Company

Paxton Howard
Midland, Texas
For Shell Oil Company

Frank R. Lovering
Hobbs, New Mexico
For Shell Oil Company

R. S. Dewy
Midland, Texas
For Humble Oil Company

J. W. House
Midland, Texas
For Humble Oil Company

Jack M. Campbell
Roswell, New Mexico
For himself

A. R. McQuiddy
Roswell, New Mexico
For New Mexico Oil & Gas Association

J. A. Seth
Santa Fe, New Mexico
For Stanolind Oil & Gas Company

Clarence E. Cardwell, Jr.
Midland, Texas
For The Atlantic Refining Company

G. H. Gray
Midland, Texas
For Sinclair Oil & Gas Co.

D. V. Kitley
Midland, Texas
For The Ohio Oil Company

B. R. Luscomb, Jr.
Ft. Worth, Texas
For Stanolind Oil & Gas Company

J. K. Smith
Fort Worth, Texas
For Stanolind Oil & Gas Company

C. F. Bedford
Fort Worth, Texas
For Stanolind Oil & Gas Co.

Ralph L. Hendrickson
Hobbs, New Mexico
For Stanolind Oil & Gas Company

O. A. McCracken, Jr.
Houston, Texas
For American Republics Corporation

W. B. Macey
Artesia, New Mexico
For American Republics Corporation

C. C. Cragin
El Paso, Texas
For El Paso Natural Gas Company

Ben R. Howell
El Paso, Texas
For El Paso Natural Gas Company

Quilman B. Davis
Dallas, Texas
For Southern Union Gas Company

A. R. Ballou
Dallas, Texas
For Sun Oil Company

E. P. Keeler
Dallas, Texas
For Magnolia Petroleum Company

F. S. Wright, Jr.
Midland, Texas
For Magnolia Petroleum Company

Wm. E. McKellar, Jr.
Dallas, Texas
For Magnolia Petroleum Company

R. L. Denton
Midland, Texas
For Magnolia Petroleum Company

Carl Barnhart
Midland, Texas
For Amerada Petroleum Corporation

W. G. Rickett
Tulsa, Oklahoma
For Amerada Petroleum Corporation

C. V. Millikan
Tulsa, Oklahoma
For Amerada Petroleum Corporation

Harvey Hardison
Midland, Texas
For Standard Oil Company of Texas

John M. Kelly
Roswell, New Mexico
For Independent

P. D. Gromimon, Jr.
Fort Worth Texas
For The Texas Company

MR. SHEPARD: Let the record show that the Protest of the Carbonic Chemicals Corporation has been made a part of the record of this hearing.

GOVERNOR MABRY: The meeting will come to order. Mr. Graham, let us know what we have here.

MR. GRAHAM: Will the Commission determine what order it wishes the cases to be heard?

GOVERNOR MABRY: Case 197 is suggested.

(Mr. Graham reads the Notice of Publication in Case 197.)

MR. McCORMICK: Come forward, Mr. Jones.

MR. JONES: I am representing myself and Jones and Watkins.

MR. GRAHAM: You will be your own witness.

MR. JONES: I have a witness with me.

GOVERNOR MABRY: We thought, gentlemen, it might expedite the matter to get these cases out of the way before we go into the rules, which you are all more or less interested in.

^{TS}
W. W. PORCH, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. JONES:

MR. McCORMICK: Your name is J. L. Jones?

MR. JONES: That's right.

MR. McCORMICK: You are one of the partners of Jones and Watkins?

MR. JONES: Yes, sir.

MR. McCORMICK: Go ahead and state your position.

MR. JONES: We drilled a well which was supposed to have been in the northwest of the northeast quarter of Section 10, and by a mistake of an engineer, a Mr. Bullock, who was working for the engineering company at that time, he moved it and got the location 740 feet from the south line and 1205 feet west of the east line, and that was a mistake--it was made--and unknowingly to me until after the well had been drilled and completed. There is no brass stob in that particular area. There is a location corner there to be used. Not being familiar with that Mr. Bullock made this mistake--and I think it was an honest mistake--and naturally we would like to get the approval of the State of New Mexico to produce this well.

GOVERNOR MABRY: How far off are you from the--

MR. JONES: We are too close to our west line. The property adjoining this, however, all belongs to the firm of Jones and Watkins, of whom I am a partner. Mr. Porch, who is representing the engineering company, can give all that information as to the exact location of the well.

GOVERNOR MABRY: Very well.

MR. GRAHAM: May I ask a question?

MR. JONES: Yes, sir.

MR. GRAHAM: You own the lease upon which you intended to drill?

MR. JONES: That's right.

MR. GRAHAM: Also the lease upon which the actual location was made?

MR. JONES: That's right. They are all under the same lease number, and those are owned by me and Mr. Watkins.

MR. GRAHAM: What is the adjoining lease situation?

MR. JONES: The adjoining lease situation to the north, and we are not crowding the line, is owned by R. E. McKee. And the lease to the south and east--no the lease to the south and to the west of us--is owned by Jones and Watkins. The lease to the east is owned by Harry Leonard of Roswell. We are crowding the west line, in fact it is offsetting our own lease.

MR. GRAHAM: It offsets your own lease?

MR. JONES: That's right. Mr. Por^{ts}ch, will you give the--

MR. GRAHAM: Go ahead and give your testimony.

A. What Mr. Jones has given insofar as the location is concerned is correct to the best of my knowledge. Mr. Bullock, the engineer who was working for our firm, The Southeast Engineering Company, of whom I am partial owner, this man was sent to the field among the first locations made. He has since left the company, but as Mr. Jones says, I believe it was an honest mistake.

GOVERNOR MABRY: Just a moment, I don't know who might be interested in this, but can you hear? It is pretty difficult in this old hall, isn't it? I suggest if anybody is interested in this case that they pull up a chair and get close where they can hear these witnesses. Nobody interested, of course it is all right. Go ahead.

MR. PORCH (continuing): This man was sent to the field to make this location, and I questioned him as to the location when he came back and made the certified plat. Mr. Jones says there is no general land office stakes in that area, and I believe he made the location as best he could. Later, however, there seemed

MR. McCORMICK: Mark that as Exhibit 1, please.

MR. SHELDON: I would like to introduce Exhibit 1 which is a map showing the 160 acres in question and all surrounding acreage and the wells. And I would like to introduce as Exhibit 2 a copy of the letter from the Oil and Gas Supervisor of the Geological Survey.

GOVERNOR MABRY: Will you give us the substance. It will be in the record.

MR. SHELDON: It says they have no objection.

GOVERNOR MABRY: Is it recommended, or do they have no objection?

MR. SHELDON: No objection is offered. The drilling of this well may afford opportunity for additional recovery.

GOVERNOR MABRY: All right.

MR. SHELDON: It is on Federal land. That is all I have to offer. If there are any questions?

GOVERNOR MABRY: Any questions of this witness, gentlemen? Anyone?

MR. GRAHAM: One question. On what particular 40 will this location be?

MR. SHELDON: It will be in the northeast quarter. That is stated, Mr. McCormick, on the map.

MR. McCORMICK : Yes, I don't see the section numbers on here.

MR. GRAHAM: Will you come up and point this out to us, please.

MR. SHELDON: It is in Section 3. I am sorry.

(Off the record discussion)

MR. SHELDON: It is the northeast of the northwest of Section 3.

MR. McCORMICK: I think that is all.

GOVERNOR Mabry: If there are no other questions and no objections, this will also be taken under advisement.

MR. SHELDON: Thank you, sir.

(Off the record discussion.)

GOVERNOR MABRY: The rules are coming up and will be gone through one at a time, and I have asked the other member of the Commission, Mr. Spurrier is absent because of a death in the family, and I am going to ask if I can be excused. We will go through the rules, and objections will be noted as to any rule or a portion of a rule, and then we will get in a huddle in the Commission and go into the thing more fully. If there should be any great number of objections, I would like to know about it and hear you, but I have other commitments, and with your permission, and unless somebody thinks it is very important, I will go ahead and take care of other matters and let Mr. Shepard, with the aid of counsel, take the Hearing, and to make a record as to objections and as to specific rules and parts of rules so that we can without much delay determine what we will do about it. I guess it is all right.

(Governor leaves the Hearing.)

MR. SHEPARD: Will you read the next case, Mr. Graham?

(Mr. Graham reads the Notice of Publication in Case No. 189.)

MR. GRAHAM: This is a continuance from the September 7th meeting.

MR. McCORMICK: Mr. Campbell, do you have something to offer in evidence at this time?

MR. CAMPBELL: My name is Jack M. Campbell. I am Chairman of the Legal Advisory Committee to the Commission, and on behalf of that Committee and the Engineering Committee appointed by the Commission to study these rules, I desire to offer into evidence Exhibit 1, which is a report, dated October 14, 1949, as joint report of the Engineering Committee and the Legal Advisory Committee to the Commission. I would like to state in

connection with this Exhibit that it does not contain all of the rules and regulations, which must be promulgated by the Commission, in that the order by which these rules would be promulgated was not set out in it, and the rescission of existing orders and the retention of existing orders is not contained in this particular report. But it is offered as the joint report of those two Committees.

MR. McCORMICK: Exhibit 1 will be received in evidence. And, gentlemen, at this time on behalf of the Land Commission and Mr. Shepard, I would like to make a few preliminary remarks for record. Following the enactment of Chapter 168 of the Laws of 1949, the Commission appointed an Engineering Committee, of which Mr. Dewey of Midland, Texas, was the Chairman. This Committee was requested to draft proposed rules and regulations. After that Committee made its preliminary report, a hearing, which might be called an interim hearing, was held here after due notice on the 7th of September. All interested parties were given an opportunity to make suggestions and objections at that time, and then the Engineering Committee was requested to prepare its final draft. The Engineering Committee later had a meeting with the Legal Committee, also appointed by the Commission of which Mr. Jack M. Campbell was the Chairman. And Exhibit 1 is the final recommendation of the two joint Committees. The purpose of this meeting is to hear the final objections and suggestions to the proposed rules, and it isn't contemplated that there will be another hearing after this. Now, gentlemen, I think it would expedite matters if we would go over these rules one by one, and if there are no objections, it will be noted. Now, we do not care or desire to have suggestion or objections to be made as to matters of punctuation or grammar,

because the final draft will be thoroughly checked for that. And we will save some time if we will just stick to the fundamentals. Also, I think it is well to bear in mind that these are only general rules and regulations, and that special rules and orders and regulations can be adopted at particular pools, which take precedence over the general rules. So if you believe that some particular rule here would work adversely to one situation you have in mind, that is not necessarily grounds for revising the general rules, because if it is of sufficient importance, a special rule can be made for that which will take precedence over the general rule. The purpose of having general rules is to have something which applies Statewide until the special rule or exception is made to apply to a particular situation. So with that preliminary statement, we will now go over the proposed rules one by one. Mr. Shepard, will you take over now, please?

MR. SHEPARD: Let's make all our suggestions and objections as brief as possible. We wan't everyone to be heard, but let's kind of try to refrain altogether from foolish arguments and get through as quickly as we can. Is there any objection to the definitions?

MR. DAVIS: My name is Quilman B. Davis of the Southern Union Gas Company. First, I am kind of lost here today. ^{Willis} Lewis Lee, who has studied the regulations and done considerable work on them, will be here at noon and perhaps will have some other statements to make. But since we intend to just go down the line with these, I have one or two suggestions in the definitions. First, as a matter of clarification, "adjusted allowable," we suggest it be changed to read, ["]adjusted allowable shall mean the allowable production of the regular proration units after

all adjustments are made or applied," eliminating the rest of that sentence. I think it will clarify that statement just a little bit if we eliminate gas oil ratio adjustment are adjusted to protect correlative rights. Shall I just go down the line with these suggestions.

MR. SHEPARD: Yes, go right ahead. Just a minute, Mr. Davis, will you come around here so that the reporter can get it.

MR. DAVIS: The next suggestion that we have was under the allowable production definition. We would suggest that it read as follows: "Allowable production shall mean that number of barrels of oil or standard cubic feet of natural gas authorized to be produced from the respective wells or proration units of an allocated pool." We would add the language, "wells or proration units;" and then eliminate "authorized by the Commission," because I think perhaps those proration schedules would take care of that. The next is back allowable.. We would suggest back allowable shall mean the authorized accumulative under production or shortage for a given well or proration unit.

MR. McCORMICK: What is the difference?

MR. DAVIS: Well, it was our thought you might have a well without necessarily having a proration unit. It would have over or under shortage on production, in other words, a well and proration unit not necessarily being synonymous. As a matter of explanation, we didn't receive a copy of these rules that the Legal Committee went over until we arrived here. And after I got back from Dallas, we went over them pretty thoroughly. Now, this is just a question I am raising on bottom hole or sub-surface pressure. Perhaps you can tell me whether I am right or wrong. Where it says, "pounds per square inch," should it be gauge or absolute or whether it makes any difference.

MR. McCORMICK: I don't understand what you mean.

MR. DAVIS: In other words, you say "shall mean the pressure in pounds per square inch," is that square inch gauge or absolute?

A VOICE: It should be gauge.

MR. McCORMICK: You mean after the word "inch," you should insert "gauge"?

A VOICE: Before "pressure" put "gauge."

MR. McCORMICK: All right.

MR. DAVIS: The definition for Bradenhead gas well, we would eliminate the word "underlying" as being a restrictive word which I don't believe was intended. It says, "successfully cased off from an underlying oil or gas reservoir." It seems to us it would be sufficient to say "from an oil or gas reservoir" without reference to the word "underlying," being a very restrictive word, and I don't believe it is desirable in the definition.

MR. McCORMICK: It would be underlying the well, wouldn't it?

(Off the record discussion.)

MR. DAVIS: Common purchaser for natural gas. We would eliminate each, on the third line, "within each common source of supply." We would make it "within a common source of supply."

A VOICE: It has been written here from the statute.

MR. McCORMICK: Yes, it is, we can't change that.

MR. DAVIS: Then, "from which it purchases," being the last four words of that sentence, we would strike that. I don't think that is in the statute.

MR. McCORMICK: That is in the statute, too. That is an exact copy of the statutory definition.

MR. DAVIS: Well, I will pass over that. I don't know what happened there. I might suggest this is just probably a matter of form that the Committee will take care of, but where we refer

(see Section 14 (d)), Chapter 168, Session Laws 1949). It might be a good idea to say, Section 14 d and other subsections under that. Just add the words et cetera. That is just a suggestion. Since we are referring to a Section of the Act, it might be a good idea to go ahead and show that other subsections do affect them. We were wondering on the next page the definition of cubic foot of gas, or standard cubic foot of gas, why it wouldn't be better to just say for the purpose of these rules a standard cubic foot shall mean a volume of gas contained in a cubic foot of space and computed at a base pressure of 15.025 Psi absolute without going back to the 10 ounces, above the average barometric pressure of 14.4. I don't know myself just what the barometric pressure is.

MR. SHEPARD: Nobody knows what that is except some of the gas engineers anyway.

MR. DAVIS: From our standpoint, it would seem clearer if you eliminated that part and just said 14.4 pounds.

(Discussion.)

MR. SHEPARD: Mr. Davis, Mr. Gray just informed me that the Engineering Committee had a meeting last night and made a few last minute changes. It might save some time if we had them state their changes. Some of the things they have changed might eliminate some of your recommendations.

MR. DAVIS: I think it would be a good idea,

MR. SHEPARD: ~~Mr. Dewey, will you~~ will you come forward?

MR. DEWEY: Mr. Commissioner, the Engineering Committee had the first opportunity last evening to review the printed recommendations of the Legal Committee and the Engineering Committee, and the first opportunity to go over Exhibit 1, and had certain suggestions relative to changes that in their opinion might be

made. I would appreciate the opportunity to present them.

MR. SHEPARD: Go right ahead.

MR. DEWEY: The question has been raised here relative to why a definition for bradenhead gas well needs to be included in the rules and regulations due to the fact that no mention has been made of a bradenhead gas well in the law. If you will refer to Rule 112, it is our thought that under multiple zone completions that it might be well to amplify the first sentence to read as follows: The multiple zone completion of any well--and these are the words to be inserted--including a bradenhead gas well, may be permitted only by order of the Commission upon Hearing. That is one recommendation.

MR. McCORMICK: Do mean that any well that was going to install a bradenhead would have to get a permit from the Commission?

MR. DEWEY: If it was going to be produced and operated as a source continuous gas supply, we think it should. It is a form of multiple zone completion.

MR. McCORMICK: Only if it is a multiple zone completion.

MR. DEWEY: As a matter of fact, we believe it is a type of multiple zone completion, and that properly it should be included in the rules covering multiple zone completions.

(Discussion.)

Under the definition for casinghead gas, we recommend that the Commission consider adding after the word "indigenous" in the first line or after the word "to" at the first of the second line the three words "and produced from," so that it will read "casinghead gas will mean any gas or vapor or both gas and vapor indigenous to and produced from a pool classified as an oil pool by the Commission." This definition of casinghead gas has rather unique meaning in these rules in that it defines a gas well when

it is produced from the gas cap of an oil pool.

MR. McCORMICK: Do you recommend any change on that last sentence?

MR. DEWEY: No, sir, we do not. Referring to Rule 506, gas-oil ratio limitation, it our recommendation that in the last sentence of the first paragraph the word "natural," the third word in the line, "natural," be changed to "casinghead," and the word "oil" be inserted before "proration" in the next to the last word. So that the last sentence would read "in allocated pools or producing wells, whether oil or casinghead gas, shall be placed on the oil proration schedule." While I am discussing Rule 506, I would like to suggest another change, which doesn't have anything to do with casinghead gas particularly. But I should like to add this limiting clause at the first of the second paragraph: "Unless heretofore or hereafter specifically exempted after Hearing by the Commission," and then last of the sentence remains the same. And then further on down in the eighth paragraph, we recommend that it be stricken entirely. That paragraph currently reads: "All gas produced in allocated oil pools specifically exempted from gas-oil ratio limitations shall be marketed unless specific exemption is obtained from the Commission." We think that the change would be preferable to drop that. There seems to be some question of conflict between the two thoughts. We were trying to clarify the meaning. The definition for gas-lift. We suggest that the word "the" be changed to "a" in the second line. In the definition gas-oil ratio. We suggest the insertion be made, insert the word "high" before gas-oil ratio and the insertion "proration unit." It should read, "high gas-oil ratio proration unit shall mean proration unit with at least one producing oil well" and so forth. The multiple completion

definition. We recommend the insertion of the word "common" before source of supply, so that the definition shall read, "multiple completion shall mean the completion of any well so as to promote the production from more than one common source of supply with the production from such common sources of supply completely segregated." Under the definition shortage or underproduction, we suggest changing the wording by striking out the words in the last line, "to equal the amount," and to substitute the words, "amount equal to that authorized." And then it would read, "shortage or underproduction shall mean the amount of oil or the amount of natural gas during the proration period, by which given proration unit failed to produce an amount equal to that authorized on the proration schedule." In the shut-in pressure definition, we suggest that a change in wording be made so that the definition will read as follows: "Shut-in pressure shall mean ^{the} ~~then~~ insert the wording "gauge ~~pressure~~ pressure" and delete the word "noted" following "pressure" and insert "in pounds per square inch." The definition would then read, "Shut-in pressure shall mean the pressure-gauge in pounds per square inch at the well head when the well is completely shut-in." Not to be confused with bottom hole pressure. Likewise, in the definition on the first page of bottom hole or sub-surface pressure, we suggest that the word "gauge" be inserted before "pressure" so that the definition would read, "Bottom hole or sub-surface pressure shall mean the gauge pressure in pounds per square inch under conditions existing at or near the the producing horizon." Under the definition of deep pool, we suggest a change of wording or a change of language such that the definition will read, "Deep pool shall mean a common source of supply situated below 5,000 feet. Under unit of

proration for gas, we suggest a change in the definition to read, "Unit of proration for gas shall consist of such geographical area as may be prescribed by order of the Commission." I think that is all the suggested changes we have in the definitions.

(Discussion)

MR. DEWEY: In Rule 8 we noticed that the word "natural" should be in there. It is just a misspelling of the word.

(Further discussion about the deep pool definition.)

MR. DEWEY: Under Rule 101 in the last paragraph, we suggest a change there so that that line will read, or that last paragraph will read, "Both forms--for one well bond and blanket form bond--are available from the Commission's office in Santa Fe." We thought we ought to put a verb in there. We didn't attempt to change the meaning. Under Rule 104, well spacing, we have a suggested change in the language. It merely a rearrangement of the wording.

MR. McCORMICK: Which paragraph, Mr. Dewey?

MR. DEWEY: It is Rule 104 and paragraph a. I will read the suggested change. Each well drilled for oil shall be located on a tract of approximately 40 surface, contiguous acres substantially in the form of a square, and here is where the change comes in, or on a governmental quarter quarter section in accordance with the legal subdivisions of the United States Public Land Surveys containing not less than 36 acres. It is just a change in the arrangement of the words there so that in accordance with the legal subdivision of the United States Public Land Surveys will apply to the last part of it--and apply only to the governmental quarter quarter section.

(Discussion.)

MR. MORRELL: Anything more or less than 40 acres is a thought. I will check that for you at noon and give you the official dope on it.

(Further Discussion.)

MR. DEWEY: In paragraph b under Rule 104, the same change is contemplated, or a comparative change is contemplated in the wording so that paragraph--a change is contemplated in the wording of that paragraph so that the words, "in accordance with legal subdivision of the United States Public Land Surveys," would be inserted the word, "sections," rather than where it is. I will read the pertinent part of it as it would read after the correction was made: "Each well drilled for gas subsequent to the order adopting this rule shall be located on a tract consisting of approximately 640 surface, contiguous acres substantially in the form of a square, or on a governmental section in accordance with legal subdivision of the United States Public Land Surveys containing not less than 600 acres." There would be no further change in the paragraph.

(Discussion)

MR. DEWEY: We suggested a change in the distance from 1320 to 990 and from 2640 to 1980. Was there anything else in that paragraph, Lloyd? Going to paragraph c we thought there was a good deal of unnecessary language in there. We couldn't see just why it was needed, and we wanted to ask some of the members of the Gas Committee why it was necessary to put in particularly about gas pools accessible to established gas transportation facilities not controlled by orders heretofore or hereafter made. We didn't think that added a great deal to it in our interpretation of it. That might be a reason behind the words we didn't catch. Our thought was that part of it could read, "provided," and then strike out the next part of it, "provided each

well drilled for gas shall be located on a tract consisting of at least 160 surface, contiguous acres," and eliminate the wording after that. Does anybody know the reason to keep the current wording?

A VOICE: Wasn't that designed to take care of the 640-acre spacing in the San Juan Basin?

MR. CAMPBELL: Yes, sir, it was to eliminate Lea County from the 640-acre Statewide spacing, because a pattern had already been established at 160 acres there. Mr. Neal, who suggested that, isn't here. I don't recall any discussion on that particular wording. I don't think there had been any.

MR. DEWEY: We thought this part of it could be dropped without losing anything from it. We may have been mistaken in that. The part that reads as follows, we thought could be stricken, "that in presently producing gas pools accessible to established gas transportation facilities, not controlled by orders heretofore or hereafter made." We thought that part of it might be dropped without harm.

A VOICE: Wouldn't that come in conflict with the first part?

MR. McCORMICK: Yes, it would, there would be no distinction.

MR. DEWEY: If that is the case, that is probably why it was written that way.

(Further Discussion.)

MR. DEWEY: We have no objection to its being in there except that we didn't think it served too good a purpose, but if it has a purpose, we will pass over this.

(Reporter's Note: The above discussion had to do with paragraph b of Rule 104, rather than paragraph c as stated by Mr. Dewey.)

MR. DEWEY: Under paragraph c we suggest the ~~insertion~~ after the

word, "drilled," of the following words, "for oil subsequent to this order." Paragraph c would then read, "Wells drilled for oil subsequent to this order not in conflict with the two preceding paragraphs, and so on through. Now coming to the next page in the second paragraph, we weren't able to determine the precise meaning of the word--of the three subdivisions there, 1, 2 a and b. And it was our thought that the wording there might well be changed to clarify the meaning. We thought we could read that in several different ways and get different interpretations out of it.

MR. McCORMICK: What are your suggested changes?

MR. DEWEY: We had a good many of them suggested, but we never arrived at a good wording. We didn't know whether our interpretation--our interpretation was that there was just one valid reason for an unorthodox location, and that was due to topographical conditions, and that 2 a and b were really part of one. And we weren't sure about this radius of 660 feet, whether it shouldn't be changed to read 330 feet for oil and 990 feet for gas, or whether it should be left at 660 feet.

MR. McCORMICK: The purpose of that was to allow applications for unorthodox locations purely on topographical reasons to be handled by the Secretary without a hearing. But where they wanted to crowd the line in order to get some oil that they couldn't get by drilling in an orthodox location, then they would have to have a hearing, and any interested parties would be given an opportunity to object.

MR. DEWEY: Mr. McCormick, in that case, wouldn't it be preferable it should read as follows under 1, "The necessity for the unorthodox location is based on topographical conditions, and provided the ownership of all oil and gas leases within a radius of

660 feet or some other footage of the proposed location is common with the ownership of the oil and gas leases under the proposed location." That is, that the last part of that is part of the proviso.

MR. McCORMICK: That is what it was intended to be. It is conjunctive there. You would have to comply with 1 and 2a and b.

MR. DEWEY: That was one thing that wasn't clear to us, that the two were conjunctive, and the only reason that it could be automatically granted were the conditions set out, and it hinged on the prime basic fact of the topographical situation. That clarifies that if it can be reworded to do that.

MR. McCORMICK: I think we can change the wording to do that.

(Discussion.)

MR. McCORMICK: I suggest that the Engineering Committee do make a final recommendation on that after you have consulted.

MR. DEWEY: You want us to try and reword this?

MR. McCORMICK: If you do make a recommendation for changing the wording, give it to us in writing.

MR. DEWEY: Under Rule 107, casing and tubing requirements. Towards the end of the first paragraph, currently it reads, "except the one to be produced." That is the end of the sentence in the first paragraph. We suggest that the change be made to read, "except the one or ones to be produced." With the thought in mind in that case, that in case of a multiple zone completion there may be more than one producing source of supply. And the change is made to incorporate that provision of allowing two zones to produce under the multiple zone system.

MR. SHEPARD: We will stand adjourned until 1:30, and then we will start in again.

(Adjournment for the noon hour.)

(Mr. Dewey indicated the following correction: under Rule 116 where it says "leases" in the next to the last line the first word should be changed to "lessees.")

MR. SHEPARD: The meeting will come to order. I would suggest we let Mr. Dewey go ahead and suggest what he has. We will not make any comment on that until he gets through, and then we will go through it section by section and invite all comments and suggestions anyone cares to make.

MR. CAMPBELL: Mr. Commissioner, may I make a suggestion. There are a great many changes that can be suggested with regard to the usage of certain words and that sort of thing, and there are some that are substantive that people want to be heard on in this Hearing. Might I suggest the Commission consider the possibility of holding the record open on changes involving mere usage of words and let those be submitted by letter. But any individual that feels that there is something not clear insofar as phraseology is concerned, and ~~the Commission~~ ~~hear~~ only the matters that relate to the substance of the regulations in this open Hearing.

MR. SHEPARD: I think that is a very good suggestion. Go ahead, Bob.

MR. DEWEY: All right. Under Rule 201, notice we would like to change the word in the fifth line from "leases" to "lessees," and we would like to change the last number in that paragraph from 908 to 1108, that is, see Rule 1108 instead of 908. Under Rule 308, we make this suggestion, that the rule read as follows: "Operators shall report monthly on Form C-115 the amount or percentage of water produced without oil by each well making 2 per cent or more water in accordance with

periodic tests." We don't anticipate that they will have to get out every month and make a new test, but they should be made at more or less regular intervals. In Rule 309, we suggest that the title be changed from "Central Tank Batteries" to "Common Tankage," and that in the third line that "central tank battery" be changed to the words "common tankage." The thought being that a tank battery is not necessarily in the center of a lease, and the common tankage may be anywhere on the lease. It is common tankage for eight units rather than a central tank battery. In Rule 312, treating plant, we think that this draft of the proposed rules inadvertently deleted the last two paragraphs that were in the former rules about treating plants, and that they should be included in the rules and regulations as finally adopted.

MR. CAMPBELL: You mean you plan to use Rule 313 in the previous draft as it is in that draft?

MR. DEWEY: Yes, we think that inadvertently they forgot the last two paragraphs.

MR. CAMPBELL: It is the balance of one paragraph and another one.

MR. DEWEY: That's right. Just carry it through completely as it was in the former draft. In Rule 403, we suggest that the title be changed to read "Natural Gas from Gas Wells to be Measured" rather than "metered." And the text be changed in the first line to read, "All natural gas produced shall be accounted for by metering or by other methods approved by the Commission," and so on. We would like to suggest to the Commission that in the final adoption and publishing of the general rules and regulations that the special rules and regulations that are still in force shall all be published in the Appendix to the General Rules. And in that connection,

these General Rules relating to carbon dioxide in New Mexico would also be placed in the Appendix. We would like also to call your attention to the fact that the Committee has made no effort to modify the current General Rules relating to carbon dioxide in New Mexico. There is one point on the last part of those carbon dioxide rules in the last paragraph that might well be considered for change, and that is "drilling depth." I think that comes in the last paragraph, in the last sentence, "In no case shall the operator drill no more than two-thirds of the distance through the horizon which he intends to produce." I want to call that to the Commission's attention. We don't know how it got into the other rules. Under Rule 503, Authorization for Production and Purchase and Transportation, we suggest a change in the wording or rearrangement of the wording rather than a change. We think it is a clarification. In the eighth line the words "purchase and transportation" be deleted at that point, and that after the word "schedule" instead of a period, the sentence be completed to read, "and the purchase and transportation of oil so produced." I will read the rule as we suggest it, "The Commission will consider all evidence of market demand for oil to be produced from all oil pools during the following month. The amount so determined will be allocated among the various pools in accordance with existing regulations and among the various units, in each pool in accordance with regulations governing each pool. In allocated pools, effective the first day of each proration period, the Commission will issue a proration schedule which will authorize the production--now the change comes at this point--of oil from the various units in strict accordance with schedule and purchase and transportation of oil so produced."

I would like to suggest that in the fifth line from the bottom of that same paragraph that the words "or of the natural gas" be stricken from the text so that that sentence will read now, "A supplementary order will be issued by the Commission to the operator of a newly completed or recompleted well and to the purchaser or transporter of the oil from a newly completed or recompleted well, establishing the effective date of completion, the amount of production permitted during the remainder of the proration period, and the authority to purchase and transport same from said well." On the following page in the first paragraph, we would like to have the Commission consider the striking out of the last sentence entirely, "No purchase in excess of the production set forth on the monthly proration schedule is authorized for any proration period from a proration unit having gas-oil ratio adjustment." We don't see that that is needed. In the third paragraph on that page, we would like to change the word "four" about in the middle of the paragraph to "three," because there are three methods enumerated below, and there are four justifications set out, but only three of them enumerated. We would like to change that to three.

(Discussion.)

MR. DEWEY: In the last part of that same paragraph, we would like to change the wording slightly. Take the last sentence in that paragraph, "Unless application was filed for back allowable within 60 days after the occurrence of the shortage, no back allowable for such shortage shall be granted." That is the way it should read. There is a grammatical mistake in the third line from the bottom of the paragraph. ~~Well~~ should be area. Going to Rule 506--well, we discussed Rule 506 previously.

Going to Rule 1105 and Rule 1106, we recommend that both rules be stricken completely from the text. We don't think that the Commission requires that information. It has been furnished in the past, but we understand they don't contemplate it will be necessary to furnish that information in the future. Coming to Rule 1126, we would like to change that so that it reads, "See Section 1, Rules 701, 702, 703, and 704."

I would like to ask other members of the Committee if I have overlooked anything in going through this thing that we should discuss or present to the Commission at this time.

(No response.)

MR. DEWEY: If not, I think that is all we have.

MR. LLOYD GRAY: There might be some question in the Committee about whether there should a lot, when we were talking about those quarter quarter sections in the spacing deal.

MR. DEWEY: It is a very controversial subject.

MR. GRAY: On my copy I have a "lot" put in there. I thought you might poll the Committee and see if it was the general concensus.

(Mr. Dewey polls the Committee on that question.)

MR. DEWEY: I will have to retract what I said about lots in that connection. I will re-read the rule then the way it should be. Do you remember the number of that, Lloyd?

MR. LLOYD GRAY: 104, wasn't it?

(Further discussion.)

MR. McCORMICK: I would like to suggest we go to all the other rules first and come back to Rule 104. That is the most controversial of all. Then we can gauge our time better.

MR. DEWEY: Are there any other questions the Committee has?

(Discussion as to Part C.)

MR. SHEPARD: Let's start in then on miscellaneous rules. We

will go through them and take any objection you may have. But as to phraseology and wording, I would suggest that everybody submit that in writing. I don't believe it is hardly fair to take up the time now in arguing ~~over~~ phraseology of these rules. Rule 1, anybody have anything to offer on Rule 1?

MR. LYNCH: My name is R. A. Lynch, representing Phillips Petroleum Company. I would suggest we add a sentence to either Rule 1 or Rule 2 to make it clear that in proper cases the Commission may call a Hearing for the purpose of granting an exception or for the purpose of granting a particular exception to any of these rules. That would save adding on to each rule, except where the Commission grants an exception. I would suggest the following wording, "The Commission may grant exceptions to these rules, after notice of hearing, when the granting of such exceptions will not result in waste, but will protect comelative rights or prevent undue hardship."

MR. SHEPARD: Anybody else? OK, Rule 3.

MR. MCKELLAR: My name is William E. McKellar, representing Magnolia Petroleum Company. This states that notice will be given in the manner and form as will be prescribed by the Commission. The statute states the manner in which the notice shall be given. I think the rule should track the statute. The Commission has discretion only as between the two methods laid down in the statute.

MR. LEE: My name is Lee^a. I represent Southern Union. Just another technical point under the statute, I think, but it is good. The statute says, "including revocation, change, renewal, or extension in lieu of the word exception." I am adding the point that the word "revocation" is included in the statute instead of the word "exception." The statute uses the word "extension."

Another point. In the third line, there is a qualifying phrase, under the provisions of Rule 1, which seems unnecessarily restrictive.

(Reporter's Note: Mr. Lee is referring to Rule 2.)

MR. SHEPARD: Any one else? OK, Rule 3. Any one have anything to say? On Rule 3?

MR. DAVIS: I think perhaps the word "revoking" should be added there. The statute reading, required the making or revoking, and so forth. In the second line.

MR. SHEPARD: I wish that everyone that wants to change the phraseology would please submit it in writing. We will probably be here a month if we don't. Anybody else have anything to say on Rule 3. Rule No. 4? Rule 5? Rule 6? 7? 8? 9? Ok, going to C, Drilling, Rule 101? 102? 103? 105? We will come back to 104. 106? 107? 108? 109? 110? 111?

MR. LLOYD GRAY: It seems to me that five degrees and absolutely requiring straightening of the hole is a little bit too restrictive. There are times when it is almost impossible to keep a hole within five degrees, and under special circumstances, I think an operator should have some alternative, such as submitting a directional survey showing that the bottom of his hole is only going to be proper.

MR. SMITH: My name is J. K. Smith, Stanolind Oil & Gas Company. I would like to suggest the first three lines in Rule 111 be stricken. I think that might take care of the situation. The Commission could still control it by directional surveys.

MR. SHEPARD: Anyone else? OK, 112? 113? 114? 115?

MR. LLOYD GRAY: I believe that the requirement that the operating pressure, or working pressure, be at least equivalent to bottom hole pressure is a little bit unnecessary. Many times we have

wells with a high bottom hole pressure and a very low surface pressure. It appears to me we should have fittings that would withstand the pressures that we are going to have to operate with.

MR. LOVERING: I don't believe it is possible for anyone to anticipate with any degree of accuracy what pressures they will have to operate under. Reservoir conditions change within a given pool and make a big difference in operating pressures from well to well. I think in view of the safety required that we should pay heed to those blow outs and fires and what not that cause so much waste on the Gulf Coast, and I think we should follow suit and have added protection, and there is no other way to get it.

MR. LLOYD GRAY: I think I would agree there should be some definite figure put in there, putting in a working pressure which is normally half the test pressure I believe is a little bit on the conservative side. The only thing I would suggest is that the test pressure of the fittings be at least 150 per cent of the bottom hole pressure.

(Discussion.)

MR. LEE: I want to go back to Rule 114. I just noticed the last sentence in the first paragraph requiring some kind of legal fence. I just want to inquire what a legal fence is, if we know.

MR. SHEPARD: It was defined by statute.

MR. LEE: Where has it got to go, though? What I am really concerned about is the provision in one section of the statute to the effect that it waives the liability for personal injuries, property damage that some individual might assert against someone for violating rules of the Commission. It strikes me that this provision in attempting to eliminate some physical hazards

might be imposing actual hazards of liability against those of us engaged in drilling wells. We can't tell from this where the fence is supposed to be. I was talking about the last sentence of the first paragraph of Rule 114, which reads, "All pits and other hazards shall be adequately protected by a legal fence." And at the same time, pointing out that this was a little bit ambiguous, you couldn't know exactly what requirement is imposed upon you, coupled with the fact that the statute undertakes in one section to preserve the rights of people against us drilling wells when we violate a rule of the Commission. I suggest that unless we know more about what this means than I know about it that we could safely afford to delete that sentence. It may be that the fence had to go completely around the rig, or perhaps just around the pit. It says, all pits and other hazards shall be adequately protected by a legal fence. I just think we ought to strike that.

MR. SHEPARD: Rule 116?

MR. MCKELLAR: This provision here as to pipelines, where you have to report on leaks and breaks in the pipeline, is there any minimum there. If you lose 50 barrels of oil in your field gathering lines, would it be necessary to report that? They provide a hundred barrel minimum pertaining to lease lines, but nothing said about a minimum as pertaining to gathering lines. It would help our pipeline if they would clarify that.

If we lose five or ten barrels of oil, you don't want to be bothered by a report coming in on that, do you?

MR. SHEPARD: Anybody else have anything on 114? We go to 116?

MR. MCKELLAR: That comment was pertaining to 116.

MR. SHEPARD: OK, anybody else? 117? OK, d Abandonment and Plugging of Wells, Rule 201?

MR. LLOYD GRAY: I don't know hardly how it should be changed,

but the requirement there that you have to notify all offsets, I think they mean lessees. They say leases and property owners. That could be a terrible obligation to notify all property owners, particularly on a wildcat and when you have got a rig still over the location, and even in old completed areas where the offset leases might have been abandoned after being used for years and divided up as to royalty interest. It might be very difficult to notify all property owners.

MR. SHEPARD: Anybody else on 201? 202? 203? 204?
e Oil Production Operating Practices, Rule 301?

MR. KEELER: My name is E. P. Keeler with Magnolia. Rule 301 among other things, provides for an annual gas-oil ratio test to be taken on the anniversary month of the completion of the discovery well. No provision is made in the rules for the filing of the results of such tests with the Commission, and also no provision is made in regard to a deadline as to when those reports should be filed. We believe that there should be some deadline in there. For example, possibly the fifteenth day--the report should be submitted by the fifteenth day of the month following the month in which the tests were taken, or any other date, just so it is definite. And also in the last sentence, which reads, "The Commission will drop from the proration schedule any proration unit for failure to make such test as hereinabove described until such time as a satisfactory test has been made, or satisfactory explanation given." We think there should also be some phrase in there that it can also be dropped from the schedule for failure to report such tests to the Commission as are provided.

CHAIRMAN SHEPARD: Anybody else? Rule 302? 303? 304? 305?
306? 307? 308? 309? 310? 311? 312? F. Natural Gas

Production Operating Practice 401?

MR. LLOYD GRAY: Commenting on Rule 312, I think there is a typographical error we fail to show the last two paragraphs of it. It is much shorter than it should be.

CHAIRMAN SHEPARD: Rule 401? 402? 403? 404? 405? 406?
We will skip the CO₂ and go down to 501, Regulation of Pools.
502?

MR. MCKELLAR: You can only produce, as I understand it, 125 per cent of the daily allowable in any one day. I want to test this. You can only produce this 125 per cent of the daily allowable in the event you are behind with your daily allowable, is that the intent of the Committee?

MR. DEWEY: It was our intention that that was the maximum rate that you were allowed to produce. We could give you an authorization to over produce beyond the schedule, but to catch up and balance out at the end of the month, you could produce nothing to exceed 125 per cent.

MR. LOVERING: That ruling is going to have to work both ways. You will have to be able to make up production, and you will have to make up anticipated reductions of production due to testing and so forth. I think that has got to work both ways.

MR. MCKELLAR: Under that interpretation, should it be possible to say on the 25th of the month you have produced your oil for the month, then the question would be can you run that pipeline on through the end of the month, or would it be hot oil. Under my interpretation, you couldn't.

MR. SHEPARD: Anybody else? 503? 504? 505? 506? 507?
No. II, Gas proration and Allocation. Rule 601? 602? 603?
604? Rule 701? 702? 703? 704? J. Oil Purchasing and
Transporting. 801? 802? 803? K. Gas Purchasing and

Transporting. Rule 901? 902? L. Refining. Rule 1101?
1102? 1103? 1104? 1105? 1106? 1108?

MR. LLOYD GRAY: On No. 8 I would have the same comment as I had on 201. It might be a burden to have to notify all the property owners.

MR. SHEPARD: 1109? 1110? 1111? 1112? 1113? 1114? 1115?
1116? 1117? 1118? 1119? 1120? 1121? 1122? 1123? 1124?
1125? 1126? 1127? N. 1201? 1202? 1203? 1204? 1205? 1206?

MR. CAMPBELL: Mr. Commissioner, before getting to well spacing, I have a proposed paragraph that I would like to submit for the record, which would not be a part of the rules or regulations, but which would be part of the general order by which the rules and regulations are promulgated. I think this situation might arise where oil or gas is being produced now under authority from the Commission by special rule in many cases, where that special rule may be rescinded under the new order, and in the interim period between the time these new rules go into effect, and the time they can come in and make application and get a new exception, there is a danger such oil will be illegally produced. For instance, if he is using gas for gas-lift, and it isn't going to a gasoline plant, because no plant is available, he will have to get an exception under the rules, and probably will be able to. But there is an interim period, and we feel he should be protected in the sale of the oil, which is already legally being produced, but technically illegally would be produced by these rules going into effect, and before he could get an exception. So, I would like to submit this. I have it written, and you won't have to take it in the record. It reads as follows: "These rules and regulations shall become effective at 7 a.m. on _____ date, an exception from these

rules and regulations is hereby granted for a period of twenty days from said effective date, however, as to all presently existing oil and oil-gas wells that have been in the past and are presently operated or the products thereof utilized in a manner differing from the requirements herein, but in compliance with former rules of the Commission, if during said twenty day period the operator of any such well files with the Commission an application for a permanent exception for such well or wells from the requirements of these rules and regulations, a temporary exception hereby granted shall continue in force until such time as the Commission has heard and has issued its order on such application for a permanent exception."

MR. SMITH: Mr. Commissioner, I would like before we go into this well spacing also, I would like to call attention to Rule 202 on the question of requiring a marker to be set up when a well is plugged. I would like to interpose our objection to the marker. We consider it a hazard. It might conceivably be held we would be required to put a legal fence around a four-foot marker.

MR. SHEPARD: Well, let's revert to Rule 104.

MR. CORNELL: My name is Dudley Cornell. I am Chairman of the San Juan Basin Operators' Committee. The Committee includes small and large operators in the San Juan Basin, and I believe we include all of the producers of natural gas in the Basin. To adopt an engineering factor of safety, let's say that our membership includes 90 per cent of the producers of natural gas. We desire to protest the provisions of Section 104 (b), which provides for a 640 acre State spacing rule. We sent notices to our entire membership, giving about three weeks' notice of a meeting yesterday on this and received a number

of letters back, and I have not contacted one single operator, large or small, in the San Juan Basin, who is in favor of the 640 acre spacing. At our meeting yesterday, we had present on our executive committee Paul Umbach, of Stanolind Oil & Gas, B. B. ~~Frobish~~ ^{Probst} of Skelly Oil, Paul English, Dudley Cornell, Scott Brown of Western Natural Gas, and Joe Hartman, land owner of Aztec, and the vote was unanimous to oppose this spacing requirement. As a substitute we would suggest a 160 acres for the spacing order. It would simply mean that you skip down through the first part of this section and tie in to the last part where each well drilled for gas shall be located on a tract consisting of at least a 160 acres. I believe the revision would be very simple. Doubtless, the purpose of a Statewide order is to cover the majority of your conditions and situations and have a minimum of exception leases. Now, in setting this State order at 640, you are requiring an exception for the majority of your locations in the San Juan Area at least. You have a State order entered for 160-acre spacing in Fulcher Basin and Kutz Canyon, in which there are approximately 95 wells. After considerable testimony a year ago, another order was entered establishing 320-acre spacing for the Blanco Field. It seems to me to establish a State rule of 640 you are putting a burden of proof on the majority of the situations, requiring your small operators, especially, to come in and make application to adjust all locations where it isn't necessary. We had several independent operators, who expressed a desire to supplement my remarks. I haven't prepared any technical evidence here. I believe that simply a glance at the map of Kutz Canyon and Fulcher Basin will show ~~there is~~ a narrow belt of production with a northwest southeast trend, and with a 640-acre

spacing approximately in the center of the section, you probably wouldn't have had gas production or deliverability of over five or six million in the State combined, we feel sure, if you had followed a pattern of that sort. Actually, we don't see that any further rule is necessary. We think that your first well if you have a new gas field developed, a Hearing can be held and a special order entered for that well, based on the field conditions, and the test of the well, and pressures, such testimony as the Commission has. I think the majority of the members I have contacted are opposed to any of the spacing orders of that sub-paragraph b, but have no objection to 160-acre spacing.

CHAIRMAN SHEPARD: Anybody else care to comment on Rule 104?

MR. MADDOX: I am an independent operator in San Juan County, New Mexico. I have two large blocks of acreage up there. One tract in particular is 805 acres. I have owned it for the past 30 years, upon which geological information shows this land to be favorably located. It is so situated I could get 360 locations in the form of a square in one 320, but I wouldn't be permitted under 640-acre spacing to have any locations. I feel that that 640-acre location in the San Juan Basin at the present time when we are in initial stages of development up there, and we haven't the engineering data we will probably accumulate in the years to come, and until we do have that and the definite proof that the wells will be pulling from one another on 160-acre spacing, I think it should remain at 160-acre spacing.

MR. ENGLISH: Can we find out who asked for the 640-acre spacing?

CHAIRMAN SHEPARD: We will try and find out, Paul, and let you know.

MR. LLOYD GRAY: I could answer your question. The matter came up in a Committee meeting, and it was the concensus of opinion that 640 was reasonable under the circumstances. I think when we are making general rules, we ought to consider the statute, and I think the Statute says we avoid the drilling of unnecessary wells. And so, we have come on a 40-acre spacing for oil wells, and I think when we consider the mobility of gas as compared to oil, and the different viscosity of gas as compared to oil that most of the engineers will agree that the recovery is reasonable on a 640-acre spacing if 40 acres is satisfactory for oil. As I see it, this is a general picture. If there is local conditions which would indicate that such wasn't the case, you should come in and get a special order.

MR. ENGLISH: Mr. Chairman, who does he represent?

MR. SHEPARD: The Gulf Oil Corporation.

MR. KEOHANE: On Rule 104 with the change where it says, "or lot," I believe containing not less than 36 acres could be drilled. In the north of Lea County in 16-37 and 16-38, we have a series of lots that run across the north side of the township that run 52 acres. I wonder if the Engineering Committee gave any thought to the fact that they would be allowed to run 52/46 inasmuch as your recovery is based on the oil under your acreage?

MR. SHEPARD: Anyone else?

MR. MORRELL: Mr. Chairman, I am inclined to agree with Mr. Keohane that the limitation of 36 acres could and should be deleted from paragraph a of Rule 104. Otherwise, when you read it, you can't drill a well on a lot less than 36 acres. With respect to 640-acre units for gas under sub-paragraph b, I have heard considerable discussion pro and con.

The only con that I have received was that it would be easier to reduce the size of the gas unit by starting with the 640 than it would be to increase it if you started with 160. There is some question of merit though in that position. Actually, at the present time, we are in essence providing for 160 acres for existing facilities in Lea County. We have in the San Juan Basin a 160-unit field, and another a multiple, just two. A 320 acre field. We had a hearing in a case this morning for a 80-acre spacing on an oil well, which was a multiple of 40. If the gas unit was 160, it could be multiples of 160 on a special order. Actually, the size of spacing units involves economics as well as waste, in other words, the cost of drilling. This waste there is whether or not additional wells are warranted. At a shallow depth a 160 acres is satisfactory, or even in some cases that may be too broad. So I am inclined, personally, so far as the Federal acreage is concerned to go along with the 160-acre gas spacing for Statewide rule with permission to upon request and hearing make it any multiple. Now, I do not concur in the figure of 660 feet to a boundary line of a 160-acre gas unit as set forth in the ~~middle line~~ of paragraph b. The Survey has made a definite aim to arrive at uniform spacing for several years. After a series of letters to large number of operators of Lea County, we got that ironed out. And some operators who were drilling 660 feet locations on a 160-acre spacing are now drilling the 990. We have it in effect. I judge some fifty gas wells were drilled on that spacing in Lea County. It is my suggestion that 990 be written into the regulations, and if conditions warrant 660, let that be the exception. Under Rule 104, sub-paragraph d, in the last paragraph, reference is made to adjusting allocation to acreage on

a proportion to the uniform spacing pattern whether the exception is granted. Why should it be limited only to an exception, and if we take the 36 acres out of paragraph a and make all acreage or allowables on an acreage--direct acreage proportional basis. Now, we should recognize that for years we have been getting along very finely in New Mexico without worrying about it. And it has recently only come up after some production was found below 5,000 feet below the surface. Now, we are getting up into multiples of three, four, five and six times the normal 40-acre unit allowable. The ratio is increasing. The thought I had to offer to the Commission here is, why not presently let well enough alone and let present conditions ride with regard to production above 5,000 feet for the shallow pools. But below 5,000 feet make your allocation on a direct acreage proportion to 40 acres. I heard one comment that that would swamp the proration office in getting out the monthly schedule, but I see no difficulty there. When the operator comes in with a well completion notice, he will state his acreage, and it would be set up on the books on a percentage basis and would be right there. It would not be difficult, and it certainly is to me necessary to protect the correlative rights involved. I have in mind in particular this same matter Mr. Keohane mentioned on the Texas line on the east side of Lea County. It happens to be that the majority those are Federal lots, so we are directly interested in that. The last paragraph of 104, sub-paragraph d, under the subject of Well Spacing, mentions allowable, but when we get over to proration and allocation, we find nothing restated regarding that adjustment. I think something should be added to sub-paragraph g, possibly Rule 503, for the adjustment of allocation in direct proportion to the

acreage of that unit to 40 acres. A suggestion has also been made that in connection with definitions, some of the definitions have been in effect and attempt to make a rule. We have definitions for top unit allowable. If they remain under definitions, I think they should be restated under the sections on proration, which is where we should look to find out what the unit of proration is. One other comment is of a general nature. In the next to the last draft of the proposed rules and regulations, there is a list of special orders heretofore issued, which are continued in effect with the issuance of proposed rules and regulations. One I have noted appears to me to require inclusion is Order 784, which is your latest gas-oil ratio order, from which you have taken and put in the proposed regulations in the appendix the list of top-limit gas-oil ratio pools. That Order 784 also specifically exempted certain pools-- Hardy, Rhodes, Cooper-Jal, Langlie-Mattix--, and said they were primarily gas pools. That should be restated here so that there would be no hiatus here with respect to those fields. We want El Paso to keep on taking gas and want to take care of the situation Mr. Campbell brought into the Hearing. That is all I have right now.

MR. McCORMICK: Mr. Morrell, I understood that the Engineering Committee suggested that they place limiting gas-oil ratios on all pools at this time. I may be mistaken about that, but I understood you wanted to start over from scratch and put gas-oil ratios on all pools and let them file exceptions.

MR. LLOYD GRAY; As I understood it in our meeting last night, we wanted to exempt pools that heretofore or hereafter have been exempted by order of the Commission after hearing.

Now, there are several of those pools; like Cooper-Jal and

Penrose-Skelly.

MR. CAMPBELL: I would like to call your attention to a matter that will undoubtedly arise. I think if you will refer to that Order 784, the justification for exempting those pools from any gas-oil ratio limits was that they were gas reservoirs. We now have gas provisions in the act, and persons operating in those pools perhaps should consider the effect of declaring that those are not oil reservoirs but are gas reservoirs and might now be subject to the regulations under the gas section of the statute.

CHAIRMAN SHEPARD: Anybody else.

MR. HARTMAN: I am just a land owner up in San Juan County, and I have talked to quite a number of people up there, and I have yet to hear one of them say that they thought that 640 acres was the right spacing for a gas well. I know there are instances up there if it took a full section to drill a well, there would be 50 or 60 people to sign a lease. And I know you couldn't get 50 or 60 to agree, and you would just stop the drilling. It seems to me down in Lea and Eddy County you have 160 acre spacing, why should we be discriminated against in San Juan County? I know further than that there are oil pools up there that have been found on a 40-acre piece of ground, and if this rule of a full section had been in force, that 40-acres of oil would never have been found. We are very much opposed to 640 acre limitations of drilling up there.

MR. ENGLISH: May I ask a question? Who wants 640-acre spacing?

CHAIRMAN SHEPARD: That is what we are trying to find out.

MR. ENGLISH: That is what I would like to find out. It looks like the Government wants 640 acres, and they don't have one damn dime invested in the deal. I would like to find out what they do want.

CHAIRMAN SHEPARD: Anybody else?

MR. LYNCH: I represent Phillips Petroleum Company. We recommend that the Commission not adopt any Statewide rule with reference to spacing of gas wells, but that the matter be left to the discretion of the Commission to be prescribed by special field rules after notice and hearing in each field.

CHAIRMAN SHEPARD: Anybody else?

MR. LYNCH: There is one little inconsistency I might point out. We have skipped over it. Rule 1125 with reference to carbon black forms, it includes a report of the monthly volume of natural gas delivered to the Carbon Black Plant. I believe Rule 44 prohibits the use of natural gas from gas wells for the manufacture of carbon black. I think there is an inconsistency there.

MR. COMPTON: I represent The Texas Company. In discussing the general rules I find even the Committee that has worked on this apparently is not entirely sure what rules are being rescinded or canceled. I believe, for example, it is the intention of the Committee that we maintain the Eunice-Monument proration unit. If that is true, it is also necessary we maintain the portion of Order 72, which defines the boundary line between Monument and Eunice. With that thought in mind, it might be well for the operators to check all the old rules and be sure all the old rules which we now have of a special nature are not rescinded by the general rules.

MR. LOVERING: I would like to have another word on this Rule 104. We recommend that the basic unit for gas wells be established. We recommend for that unit 160 acres, which can be amended for any particular pool upon evidence and engineering data. The question arises on not how many acres a man has in his parcel.

or plot of ground, it is a question of how many wells would adequately drain that reservoir. That would depend upon the porosity and permeability in the gross section of your reservoir. Surely, there is a big difference between an 8 billion foot well and a 200 million foot well. In some cases 160 acres will adequately drain it; in others, 320 or 640. It might be 1,000 acres with the right type of permeability like you have in Arabia, where you can drain a field adequately by having one well to every 2 or 3 thousand acres. Those conditions vary a whole lot and could exist here. We are in favor of establishing a basic unit, and I go along with Foster Morrell with the idea of increasing it in multiples for particular field when engineering data indicate it should be done. In the interests of economy, both in the cost of drilling and in producing that gas, and also in regard to ultimate production and the waste of the products thereof.

MR. ENGLISH: Mr. Commissioner, when I went up in the San Juan Basin, we were drilling wells wherever we damn pleased, and everybody got a well, and everybody seemed to be happy. For some unknown reason, they have got an idea now without anybody being able to tell you why that only the Pictured Cliffs was any good. We fought all over about the damn Mesa Verde. We finally find out that 320 acres might be a good idea. The other day when we were having all of our trouble about a pipeline out of here, the Government picks up the figures that the Stanolind had issued to us about 3 million feet to the acre in the Blanco Field, and they took that figure, and we have had a Hell of a time getting a pipeline out of the San Juan Basin because we had 3 million feet instead 30 million feet. Now they come back and said you used the blackest figure we had. Thirty

million is what we want. We got 320 acres in that field. Here comes somebody that comes along and says 640-acre spacing. Why not one well to a township? Then we wouldn't have to drill very many wells. I don't know what the Hell you are hunting for. The other time they were hunting we found out they were trying to work some sub-surface structure. I am not interested in it. Now you want 640-acre spacing. Next month it will be one to a township. Let's just drill one to a township, and I will go some place else and forget about the San Juan Basin. That is the way I feel about it. Everybody that doesn't have money invested just has got a lot of damn talk, but the people that have got a lot of money in the ground are trying to sell their gas.

CHAIRMAN SHEPARD: Anybody else?

MR. LYNCH: Mr. Chairman, although these proposed rules might not be perfect, I think we are all under a debt of gratitude to these two Committees, the Engineering Committee and the Legal Committee. I think our appreciation should be expressed to them.

CHAIRMAN SHEPARD: On behalf of the whole Commission, I want to express our deepest appreciation to these two Committees. They have worked practically all the year, even before the drawing up of this gas law, which started most of this thing, and I think they are really entitled to a vote of thanks, not only from the Commission but from the whole Industry. And I hope that you people will get your written suggestions just as soon as possible so that we can close these rules up. We will call November 15th the deadline. Have them in by then because they will all be completed.

MR. LYNCH: Mr. Chairman, you don't want written reports or

recommendations made here?

CHAIRMAN SHEPARD: No. Anything that might be left out here today.

MR. McCORMICK: I do think that the Engineering Committee should make a memorandum on those changes you have suggested, because they won't be clear from the record, I don't think. And anyone else who has a particular matter on phraseology should submit it, because it isn't easy to get those matters down by interlineation as we have tried to do here today. Your suggestions should be sent to the Commission here in Santa Fe.

MR. MORRELL: Would it be in order to second the Motion on the good work of the Committee?

CHAIRMAN SHEPARD: Well, if there is nothing further, we will stand adjourned.

