

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

November 19, 1953

IN THE MATTER OF:

The application of Stanolind Oil and Gas Company for the establishment of 320-acre proration units and a uniform spacing pattern in the common source of supply discovered in its state "AB" Well No. 1, Northwest quarter, Southeast quarter, Section 29, Township 17, South, Range 28, ENMPM Eddy County, New Mexico.)

Case No. 601

BEFORE:

Edwin L. Mechem, Governor
E. S. Walker, Land Commissioner
R. R. Spurrier, Secretary, Oil Conservation Commission

TRANSCRIPT OF PROCEEDINGS

(Notice of publication read by Mr. Graham.)

MR. SPURRIER: I have a letter addressed to the Commission dated November 6, written by the attorney in this case. It is as follows: "On September 25, 1953, we filed with your office on behalf of the Haynes & V. T. Drilling Company a petition for order excepting the northwest quarter of section 21, township 29, north range 11 west from Rule 104 paragraph D of the Commission. We received notice that hearing on this petition would be had before the Commission on the 19th day of November, 1953. Since that time, the contract commitments have changed and we respectfully request the withdrawal of this petition and vacating of the setting already made."

Without objection, the Commission will dismiss this case on motion of counsel.

C E R T I F I C A T E

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing transcript of proceedings were taken by me on Thursday, November 19, 1953; that the same is a true and correct record to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this 27th day of November, 1953:


COURT REPORTER

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

TRANSCRIPT OF PROCEEDINGS

Case No. 601

October 28, 1953. - Special Hearing

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 105-106, EL CORTEZ BLDG.
PHONES 7-9648 AND 5-9546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

October 28, 1953

IN THE MATTER OF:

The application of Stanolind Oil and Gas Company for the establishment of 320-acre proration units and a uniform spacing pattern in the common source of supply discovered in its State 'AB' Well No. 1, NW/4 SE/4 Section 29, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.) Case No.) 601

BEFORE:

A. R. Spurrier, Secretary.

TRANSCRIPT OF PROCEEDINGS

(Notice of Publication read by Mr. Graham)

MR. SPURRIER: The meeting will come to order, please.

Who is to appear for Stanolind?

MR. SMITH: J. K. Smith representing Stanolind Oil and Gas Company. I have two witnesses, Mr. Hiltz and Mr. Ingram. At the outset, I would like to direct the Commission's attentions to our application and clarify in some respects the order which we request. I would like to make it clear that the request for the proration units involved here are for gas proration units. It is not spelled but it is inferentially contained in the entire application. Also, that we are confining the establishment of these proration units to the deeper horizons as a matter just to

the horizon in which the State A.B. Well was completed.

T. L. I N G R A M

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. SMITH:

Q You are employed by Stanolind Oil and Gas Company?

A I am.

Q What is your position?

A District geologist in the Roswell District.

Q You have testified before the Commission before, haven't you?

A I have.

MR. SMITH: I would like to ask the Commission to accept his qualifications as an expert.

MR. SPURRIER: They are accepted.

Q Do you have in your possession a map or plat showing the area which we propose to include within the application of these rules?

A I have.

(Stanolind Exhibit No. 1
marked for identification)

Q I would like to direct your attention to the Exhibit there. The red line on the exhibit is that the outline of the area in which you desire or the Stanolind Oil and Gas Company desires that the rules have application?

A That is correct.

Q Roughly, for the purpose of the record here, they start in Section, the middle of Section 19 and go east through the mid

part of Section 19, 20, 21 and 22 and Range 28 East Township 17 South. They follow the section lines of south direction of Section 19, 30, 31 and to the midpoint of Sections 6 which is in Range 29, East, Township 18, South, and proceeds in an easterly direction across the midpoint of the sections in there to the intersecting point of the line proceeding south on the section lines of 22, 27, and 34 and to the midpoint of Section 3, which is in Township 18 South.

Q Mr. Ingram, as a geologist, you had occasion to investigate the possibility of the production in the area as outline there?

A We have.

Q There has been a well completed in there. I wish you would give us the name of the well and date completed.

A Stanolind One State A B which was completed August 24, 1953.

Q This well is located at what point?

A 1900 feet from the south and east lines of Sections 29, Township 17, South Range 28 East.

Q What is your opinion with respect to the reasonable probability of their being productions in the area included within the red lines on Stanolind Exhibit No. 1?

A Geologically and from our seismic information, it is possible for the area outline in red to be productive from this sand.

Q What sand is the well producing from?

A It is Pennsylvanian sand, the exact age of it has not been determined.

Q Have there been any electric logs or micrologs made of the well?

A There have been.

Q Do you have a Schlumberger?

A Yes.

(Stanolind's Exhibit No. 2 marked for identification.)

Q I hand you what has been marked for identification as Stanolind Exhibit 2 and ask that you explain to the Commission the information contained therein.

A It is a Schlumberger electrical log which was run on the Stanolind Number one State A B from a depth of 538 feet to total depth 12,431 feet. The formation tops are so indicated on the log.

Q They are clearly set forth on the log?

A They are.

Q With respect to the producing zone which was encountered in the Stanolind State A B One, what does the electro-log reflect with respect to the formation encountered at what depth?

A It indicates a sand zone, the top of which is at 10,102 and the base at 10,174 feet.

Q That is from the surface?

A That is correct.

Q Do you have another exhibit, micro-log, showing the pay zone?

A We have detailed sections of the electrical log with the micro-log indicated on the right hand portion.

(Stanolind Exhibit No. 3 marked for identification.)

Q Referring again to Stanolind Exhibit 3, the area marked in yellow there is the pay zone?

A That is correct.

Q And what other information is reflected there on which would be of value to the Commission?

A Well, there is the one major sand body approximately 74 feet thick and also there are five other sand stringers above and below which would approximate 12 more feet.

Q At what point in the major thickness was the well completed?

A The perforations were from the upper 25 feet, 10,102 to 10,127.

Q From the information available to you, what is your opinion with respect to the possible pay or potential, of course, I recognize the fact that you as an engineer cannot testify too much with respect to the potential. Can you give us some idea of this particular discovery?

A Well, the wells potential for 20 million cubic feet of pressure approximately 24 barrels of distillate per million cubic feet.

Q Has there been more than one test made?

A That is the only well completed, there is another test drilling in the area now.

Q Who is drilling that well, now?

A San Juan Drilling Company, Number one B San Juan at the same time, 660 feet from the south and west lines of Section 28, Township 17, South Range 28, East.

MR. SMITH: No further questions.

MR. SPURRIER: Anyone have a question of this witness?

MR. COLVIN: A. L. Colvin representing Delhi Corporation, San Juan Drilling Company.

By MR. COLVIN:

Q Mr. Ingram, did that well encounter any shows of oil production at shallow depth?

A It did. Some shows in the Glorieta and also in the Wolfcamp.

Q What was the nature of the shows in the Wolfcamp.

A On the drill steam test from 7,247 to 7,310 which was open four hours, gas came to the surface in 20 minutes recovered 840 feet of heavy oil and gas out mud, 60 feet of free oil.

MR. COLVIN: That is all.

MR. SPURRIER: Mr. Kellahin.

MR. KELLAHIN: Kellahin representing Buffalo Oil Company, I would like to ask some questions.

By MR. KELLAHIN:

Q Mr. Ingram, when Stanolind's well was drilled it was a discovery well, was it not?

A That is correct.

Q Was it drilled primarily as an oil well?

A That is correct.

Q At least it was anticipated to be an oil well. Is its location substantial, the location in the center of the 40-acre unit?

A That is true.

MR. KELLAHIN: That is all.

MR. SPURRIER: Anyone else? If not, the witness may be

excused.

(Witness excused)

R. G. H I L T Z

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. SMITH:

Q Will you state your name, please?

A R. G. Hiltz.

Q By whom are you employed?

A Stanolind Oil and Gas Company.

Q What capacity?

A As an proration engineer in the Fort Worth Office of the Stanolind Oil and Gas Company.

Q You have testified before the Commission on other occasions, have you not?

A Yes, sir, I have.

MR. SMITH: I would like to ask the Commission to accept his qualifications?

MR. SPURRIER: They are accepted.

Q Mr. Hiltz, you have certain data on the completion of that well which I think the Commission would be interested in hearing, I would like for you to relate it to them.

A The information obtained from the completion of the one well which is located 1980 feet from the south line and 1960 feet from the east line of Section 29, Township 17, South Range 28, East, in Eddy County, New Mexico. The well had a surface elevation of 3717 feet. Operations commenced on the well on March 5th, 1953 and the well was officially completed on August 24, 1953. The

well was drilled to an original total depth of 12,430 feet. Where it tested Ellenburger. Subsequently, the well was plugged to a total depth of 10,270 feet, the top of the pay formation was encountered at 10,102 feet. In completing the well, the casin had been set in the well was perforated from 10,102 to 10,127 feet giving a 25 foot perforated interval out of approximately 74 feet of indicated pay. On initial potential test, the well was tested and the calculated open flow from that test was 30 million cubic feet of gas per day with approximately 24 barrels of 5.6 distillate per million cubic feet. The initial bottom hole pressure measured on the well was 4,068 pounds at a datum subsea of 6420 feet. The completion program of the well consisted of thirteen three inch casing set at 503 feet with 500 sacks of cement circulated to the surface. Nine and five eighths inch casin was set at 2,003 feet with 150 sacks, the purpose of that intermediate string being to isolate producing formations which occur above the top of San Andreas formation. Seven inch was set at 10,370 feet with 400 sacks of cement. The calculated fill in the pipe indicated that the cement behind the pipe satisfactorily isolated the Wolfcamp producing zone.

Q Do you have any other data with respect to the completion or is that you have given the potential test?

A I have given a potential test date.

Q What reasons do you have in mind for the promulgation by the Commission at this time of proration rules applying for 320 acre spacing or 320 proration units rather in the area outlined in red on the Stanolind Exhibit No. 1?

A There are many factors which govern the spacing of a well,

but in the ultimate, I think that the proper consignment is one of economics. The initial cost of this first well, the total cost was over \$300,000.00. It was almost \$350,000.00 I believe. The estimated portions of that cost which would be attributed to drilling, just to the producing formation in which the well is now completed, was approximately \$242,000.00. It is estimated that additional wells in the field will cost on the order of \$236,000.00, from the discovery well. We at this time don't have enough information in order to determine what the proper spacing pattern in the field should be. In relation to the cost of the wells, we feel that the spacing should be held to as large a spacing pattern as possible in order to give us an opportunity to get the information that we need from an engineering and geological standpoint to determine what the optimum spacing pattern should be eventually in the field.

Q Do you believe that it would be possible to support and substantiate 640 acres spacing in this field?

A We have no concrete evidence at this time to definitely support any program, but I would say on the basis of experience, we have gained in other areas that it is quite probable that further development of this area will reveal information which will indicate that one well will effectively drain an area considerably in excess of 640 acres. In further considerations of the matter of spacing, I would like to point out other reasons which I think have merit. Actually some type rule is necessary in order to insure orderly and uniform development of this area. The spacing pattern of the type we will recommend will eliminate the drilling of unnecessarily and costly wells until such time as the optimum

spacing pattern is determined, thus diverting funds for development in other portions of the State and in this same area. It will promote more rapid delineation of the field limits. That is a factor which is very desirable in developing a market outlet for the production produced from the well. Another factor which is worthy of consideration is that a wider spacing pattern will permit a larger number of working interest and royalty interest to participate in production from the field at an early time in the early life of the field, giving them a better opportunity to recover their fair share of the reserves in the field. Another factor is this type spacing pattern on a temporary basis will possibly hold at a minimum the number of wells required to meet market demands from the field.

Q You are not familiar with any possible or available market that may exist at this time?

A No, I understand that negotiations which have already directly led to any consummation of contracts.

Q There is no early anticipation of a well connection at this time to immediately start producing?

A To my knowledge, no.

Q Do you have any other comments to make?

A I have no further comments to make on the necessity of the rules. I am prepared now to recommend rules.

Q Will you discuss the rules set forth, the various elements that you are suggesting to the Commission?

A We would recommend to the Commission that they issue a temporary order providing for rules essentially as follows: "The adoption of 320 acre proration units comprising essentially two

continuous and contiguous governmental quarter sections substantially in the form of a rectangle. For the spacing of wells, we would recommend that the wells be located 330 feet from the center of either the southeast quarter or the northwest quarter of a normal section according to United States Government survey with 200 feet additional leeway permitted for tolerance for topographical conditions.

We feel that there should be some specifications as to the type of casing program that should be followed in order to properly isolate and protect all known producing horizons above the pay. For that reason we would recommend that 300 feet of casing be set with sufficient cement to circulate to the surface. We would recommend that an intermediate string be set no higher than the top of the San Andres in order to protect the Seven Rivers, Yates and Grayburg producing formations in that general area. We would also recommend that the production string in the well be set no higher than the top of Pennsylvanian and encountered with sufficient cement circulated behind that pipe to fill the hole above the Wolfcamp which is known to be productive in that area or I should say, is indicated that it possibly can be producing commercially.

As an alternate cementing program on the production string, we think it would be desirable that the rules provide that a two stage tool might be used to isolate the Wolfcamp. We would also recommend that the area covered by this initial order be as outlined on Stanolind's Exhibit No. 1. As to the time for which the order would be effective, we would like to suggest to the Commission that this order remain in effect until five wells have been

completed or until 18 months have elapsed whichever occurs first.

There is one other factor as previously mentioned, there is a second well drilling offsetting the State A B No. 1 that is the San Juan Production Company, San Juan Number 1, I believe. If that well is completed in the same producing formation, the Pennsylvanian, it would be that well would not be on the uniform spacing pattern which we have recommended to the Commission.

It would be our feeling that that well should be granted an exception to the rule, temporary rule, since a permit to drill that well was actually granted prior to the time this application was filed.

Q Do you have any other comments to make?

A No, sir, I don't.

MR. SMITH: No further questions.

MR. SPURRIER: Mr. Hiltz, look in paragraph 2, that is, yes, paragraph 2 on your first page of your application, 303 feet off the center, that actually describes the circle?

A Yes, sir, that is true. I think I know what you mean. We would have no objection to the type rule which you have recently adopted in San Juan calling for 990 feet from the outer boundaries, that would be satisfactory.

MR. SPURRIER: Does anyone have a question of the witness? Mr. Colvin.

By MR. COLVIN:

Q Is it true that Stanolind owns most of the acreage inside the red outline on the plat, Stanolind or its associates?

A Yes, sir, there are a lot of joint interest operations which I am not wholly familiar.

Q For my information, was the area arbitrarily picked or was it based on sub surface work for this rule?

A I believe, Mr. Ingram pointed out, I will confirm what he stated, that that area was estimated to be that which could be reasonably expected to be productive based on seismic information which was obtained by Stanolind.

Q In the event 320 acre spacing is established, how do you propose which way, do you propose to form a unit around your well, the south half of the section or the east half of the section or otherwise?

A We have not specified in our rule, Mr. Colvin, what manner the proration units would be established. We have merely indicated that they should comprise two ordinary quarter sections according to governmental survey.

Q And it could, under that basis, it could be two legal quarter subdivisions, say the southeast and the northwest quarter, they adjoin at the corners?

A No, I believe I said it should be continuous and continuing substantially in the form of rectangle.

Q It could be the southeast quarter of 29 and the northeast of the section below, I believe 32?

A The southeast of 29 and the northeast of 29.

Q No, the northeast of the one down below, 32.

A That is possible.

Q I believe you stated the well was completed at 10,000 foot intervals, that the total cost was \$350,000.00 but that the pro-rated amount to the producing horizon was around 242,000.

A That is an estimate.

Q In forming your spacing unit, taking your parties on the acreage there, would the cost of the first well be prorated on the basis of the \$242,000.00?

A I am not familiar with any contractual obligations we have there. I am not qualified to answer that question.

Q Just off hand, it doesn't seem right, if the well was drilled primarily for oil, hit gas and it formed 320 acres that the partners or the people joining in the spacing unit would have to pay for that exploratory work done by the drilling company?

A Well, I believe that is a matter, Mr. Colvin that can best be settled within the operators and myself.

Q I believe you gave, the party preceeding you, gave the information about the Wolfcamp, you have indicated that it is possibly productive in that area?

A Yes, sir.

Q Take the company that owns a small amount of acreage in the area that doesn't own 320 acres in any one body with the showing encountered on the Stanolind test, it might be an economic gamble for them to drill a well to the Wolfcamp to try for Wolfcamp Oil if they had a pretty good assurance that if they didn't get something in the Wolfcamp, they could carry it on to the Pennsylvanian and probably get production in this gas horizon, do you not think that would be a true assumption?

A It might be a true assumption but I think it is essential if you are going to adequately protect correlative rights that you have a uniform and orderly development program.

Q It would have some weight, if you would want to take the chances in the Wolfcamp, it would kind of help if you wanted to

get a dry hole in that.

MR. SMITH: I think he is asking for the witness to conjecture to a matter that may or may not exist. I would like to object to his question.

MR. COLVIN: I will withdraw the question, but it is a basis for our position in this particular thing which will be brought out later. You stated that the question of economics is involved. A well to that formation, estimated future well, \$236,000.00. I don't know whether you are qualified, Mr. Smith can correct me if I am wrong, I don't know if you are qualified to project a pay out using the current market price for gas?

A No, sir, I am not, I would hesitate to make any estimate at this time because we simply don't have reliable information. It is the objective of this application to make certain that we do not commit ourselves to any development program other than the minimum necessary until we have the information on which we can base a determination of the optimum spacing program.

Q Well, you are basing it though on the economics and partly on economics. We have projected such a pay out that was the reason I asked that question. We find that it would be economical to drill even on 160 acres if they could get a well comparable to what you were all fortunate in getting.

A In my estimate, that can only be confined by obtaining the necessary information.

Q And drilling future wells?

A Yes.

MR. SMITH: With respect to the formations of these 320 acre units, the rule is silent as to whether or not it should

cross section lines, that has been left open purposely for the Commission's consideration. In other words, we have no official confirmation on that one way or the other?

A That is right.

MR. KELLAHIN: Buffalo Oil Company.

Q Mr. Hiltz, did I understand you to say, do you have any core information from the well that you drilled?

A No, no, sir, no cores were obtained on the initial wells.

Q In connection with these units as they are proposed by Stanolind's order, I believe you testified that it would be possible to communitize the southeast quarter of 29 with the northeast section of 32?

A That is a possibility.

Q It would then be possible to communitize the northwest quarter of 32 and the northwest quarter of 31?

A No, sir, it would not.

Q I mean the northeast of 31?

A It would be possible under that rule to communitize the northwest of 32 with the northeast of 31.

Q And the east half of Section 30?

A Well, we are projecting this pretty far into the future but assuming there were no conflicts, you could make 320 pro-ration units out of the east half of the section of 30.

Q I mean under the provisions of the proposed rule, it would be possible to communitize the north half of 29 too, wouldn't it?

A Yes, sir, it would be possible.

Q Where would that leave the southwest quarter section of

29?

A Well, we projected into the future under that assumption, I believe we have some acreage unaccounted for, I believe the east half of Section 30 is unaccounted for, so there would be a total there. . . .

Q I did mention the east half of 30, perhaps, you didn't understand me.

A Are you assuming to make it brief, are you just assuming that you would have the southwest quarter of 29 isolated?

Q Yes, sir.

A That is a very definite possibility.

Q Under the rules as they are now proposed?

A Yes, that is true.

Q It is your testimony on the information you have now available it is uneconomical to drill on 160 acres?

A I have made no statements whatever about the economics of drilling on any spacing.

Q You did state based on that those . . .

A I stated that the spacing of wells in any field is primarily the field of economics. I didn't necessarily relate it to this field.

Q As I understand it, you want this order until you do get the spacing pattern?

A That is the need for this application.

Q Assume that you do not drill, what do you propose to do with an isolated tract of that nature?

A I think that would be a matter, Mr. Kellahin, that would have to be presented to the Commission and after hearing all the evidence they would have to issue an order covering the matter

that they felt was justified in the case.

Q You have no objection to confining it to the sections as I understand.

A Our application is silent on that. As Mr. Smith pointed out, we are essentially neutral.

Q You would have no objection as far as your company is concerned to requiring it to be the north half, south half or east half or west half of the section?

A We will express no objection to that.

Q Referring again to the southwest quarter of Section 29, in the event it was communitized in that fashion, would that not leave on the spacing pattern proposed that 160 acres directly offset by four wells?

A Yes, sir, well, yes, it would, that is correct, if you follow the proper spacing pattern, it would be.

Q On the adjacent 160 acre tracts?

A Yes, that is correct.

Q Isn't there also a distinct possibility that under this proposed spacing pattern leaving it open as it is, is there not a distinct possibility that some operator would have to step out at least a mile in order to protect himself, to fulfill his drilling operations?

A I haven't carried it quite that far. I would be glad to study any plan of drilling you want to propose and perhaps we can develop a hypothetical case.

Q It would be possible, he would have to step out almost a mile?

A I would judge without further study that probably in most

cases he would be confined to half a mile step out.

(Marked Buffalo Exhibit No. 1
for identification.)

Q I hand you what has been marked as Buffalo's Exhibit No. 1 and ask you, with that starred well representing the present Stanolind well to the adjacent tract to the west, on that type of spacing pattern shown on the plat, there would be required a step-out of almost a mile, would there not?

A From the initial well, that is correct. Assuming that is the next well drilled that is a possibility, yes.

Q Assuming that there were drilling obligations in this to offset the productions here then that well would be a necessary well, wouldn't it?

A Would you ask that question again?

Q Assuming that there were drilling obligations to protect against drainage from this well, would that well be necessary?

A Would this well be necessary?

Q Yes, sir.

A I am afraid that is bordering on the matter of a legal question as to what the obligations are under contracts as related to orders issued by the Commission and I would not be qualified to answer that question.

Q Mr. Hiltz, referring to this plat again and the location of the Stanolind Well, and assuming that they communitized with the acreage to the south, as indicated here, your testimony is to the effect that you believe that well will drain at less 320 acres, what acreage would be drained?

A Well, let me be certain I make this clear. I have not

testified that one well in the field will actually drain 320 acres. I, on the basis of experience we had gained, I felt there was a complete possibility that information would show that one well was capable of draining in excess of 640, I want to reiterate the fact that we have no concrete information at this time to determine what acreage one well would drain.

Q I do not wish to mis state your position. Assuming that additional information shows that the well will drain 320 and it is communitized with the tract to the southwest, most of the gas coming from that tract committed go to the well?

A Under the concept of radio drainage theory, it would not.

MR. KELLAHIN: We would like to offer this in evidence. We would put on a witness if you prefer.

MR. SPURRIER: Any objections? If no objections it will be admitted.

MR. SMITH: I would like to ask one question, since he is not offering a witness. It is in regard to your question about the radio drainage, I would like to say that the Courts have generally recognized the compensating radio drainage when you have an unusual --

MR. KELLAHIN: (Interrupting) Yes.

MR. COLVIN: In line with what Mr. Kellahin said, it would be a very definite, not only possibility, but probability that if Delhi should drill a well on any of their acreage under this proposed plan with one exception, our well would be over one mile from that other, than the well that we farmed out to San Juan.

MR. SMITH: Mr. Hiltz, one other thing, I don't think we have explained the legend on the Stanolind Exhibit 1, the green

acreage is state leased acreage, is that correct?

MR. INGRAM: Yes, I believe.

Q The blue is United States of America?

MR. INGRAM: Yes.

Q And the yellow is

MR. INGRAM: Yes.

MR. SMITH: No further questions.

MR. SPURRIER: Mr. Macey.

MR. MACEY: Do you have a name to recommend for this pool?

MR. HILTZ: No, I don't. It is my understanding that maybe submitted on the form C123. I don't know whether it has been submitted.

Q I think if we write an order it would be a good idea to refer to a pool name?

MR. HILTZ: We will be happy to dream up a name and submit it at our earliest opportunity.

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

(Witness excused.)

MR. SPURRIER: Do you have anything further?

MR. SMITH: I would like to offer in evidence Stanolind Exhibit 1, 2 and 3 which have been marked for identification up to now.

MR. SPURRIER: Without objection, they will be admitted. Does anyone have anything further in this case?

MR. COLVIN: A. L. Colvin representing Delhi Oil Corporation San Juan Drilling Company. I would like to say this off the record to the Commission. In line with what Judge Foster said, we

can come here to the Commission and as oil men, we can disagree without being disagreeable but we are disagreeing with Stanolind but we are not going to be disagreeable with them. We do offer objection and I have written out since I have been here, our position which I will read.

We are interested parties to Case 601 in that we own acreage in the immediate vicinity of the Stanolind State A B 1 well located in the Southeast/4 Section 29-156-28E, Eddy County, New Mexico, the discovery and only well completed at this time. Primarily, we feel that there has been insufficient development in this immediate area to draw adequate rules and regulations to prevent waste and protect correlative rights and are therefore recommending to the Commission that the matter be continued until such time as sufficient wells have been drilled and are producing to adequately define the field reservoir, at which time appropriate rules and regulations should be established by the Commission.

In the event the Commission feels spacing units should be established at this time we recommend they be in conformity with the state-wide rule of 160 acre spacing units for gas wells.

We also recommend that said spacing units, regardless of size be designated by legal subdivisions inside section lines; that is, the spacing units will be legal quarter sections or legal half sections within an individual legal section. Secondly, a further reason for our position in addition to the foregoing is as follows: For example, in Sections 28 and 30 adjoining Section 29 to the east and west and the three sections adjoining these sections to the south, according to map furnished us by Stanolind,

Stanolind and its partners own the majority of the acreage and in only one unit on the basis of 320 acres spacing would Stanolind and its partners own less than 50 percent of the unit acreage and they would more or less control the unit to the possible, and I emphasize possible as we do not believe it would be intentional, detriment of the lesser unit interest owners.

Thirdly, on the basis of showings encountered in the Stanolind well, there is a possibility a well capable of commercial production of oil might be completed in the Wolfcamp formation by moving such well short distances from the Stanolind well and if an operator believed he had a fairly certain assurance of getting a gas well in the deeper horizon, it would be more of an incentive to drill a well in search of oil in the more shallow formation, using as a hedge against a dry hole, the better possibility of production by carrying the well to the deeper horizon. However, if there is already a well on the 320 acre unit, he possibly would be unable to produce his gas well if he got production, or his takings would be reduced. We believe this would act as a hindrance to full development of all possible producing horizons in the area.

We therefore make our recommendation as set out before that the case be continued until such time as there have been more wells drilled and placed on production and an adequate study of the field be made to warrant the Commission to issue field rules and regulations.

MR. SMITH: May it please the Commission in view of Mr. Colvin's statement, I would like to make a further statement on behalf of Stanolind. I think that this field here represents a classic example of what we have been talking about in the past

with respect to orderly development in the early stages of a field. To follow the suggestion made by Mr. Colvin would of course compound our troubles, because he be necessary implication has stated that they will go ahead and develop a 160 acre pattern, so that you will be in the position if ultimately it is determined after the field is developed that 320 is your optimum pattern, no doubt Delhi might be in a more favorable position with respect to early withdrawal also with respect to the placement of the wells.

I think that in equity and justice to the further development of the field and the very thing we have talked about and are talking about, we should go ahead and develop the field on the 320 acre spacing basis. I think that the possibility of Wolfcamp production as indicated here shows in our well it would be just as encouraging to drill a well on a 320 acre spacing pattern as it would be to drill the well on a 160 acre spacing pattern. Furthermore I am inclined to believe that since the knowledge of the possible production and gas is there that whoever goes down is going to go ahead and complete a gas well anyhow.

It is going to be necessary to drill an additional Wolfcamp well, so I think the hedge that Mr. Colvin is talking about can best, be stated that they are going to hedge by drilling to gas producing formations down there and selling their gas at the earliest moment. He is talking about the economic detriment of the minority holders which might be devised by the communitization of some of the 320 acres. I don't know quite what he has in mind. Certainly, it has been my experience that the operating agreements are entered into on an equal yard stick basis and that every person

has the opportunity to protect himself by contract by negotiation and certainly, I don't think Stanolind at any time has ever taken any advantage of any of the minority holders and the acreage in any of the units that we have ever operated. It just occurs to me that if we don't go into this matter as I say, the objection that has been raised by Delhi very pointedly brings out the necessity for the promulgation of 320 acres in this field.

Now, our past experience as Mr. Hiltz has indicated has shown that this area, this type of gas production is probably, can drain in excess of 640 acres. Certainly, when we come to the Commission and ask for development on 320 acres, we are doing a reasonably fair thing.

Actually, the question of economics enters into it to a very substantial point. I don't want the Commission to become confused from the standpoint of economics, well, from a standpoint of a well that will not pay out as distinguished from the economics involved in the oil and gas business.

The statute doesn't necessarily write into the statute books the same type of provisions you have in oil and gas leases. In other words, you are to consider the overall economics so that the operators can arrive at the optimum amount of profit to be derived from the drilling of the wells. Furthermore we have the proposition if after we go in and develop the field and step out and if sufficient reserves are available that have been definitely demonstrated so that we can attract possibly another pipeline or in some manner get additional capacity, we may solve some of the proration problems in Southeastern New Mexico. I think on the overall long range viewpoint, the quicker this reservoir can be

explored and found out how extensive it is, the greater benefits and interest to the State of New Mexico and to the operators of New Mexico will be furthered.

MR. SPURRIER: Anyone else?

MR. KELLAHIN: If the Commission please, we would like to call Mr. Gray as a witness if Stanolind has completed their case.

MR. SMITH: I thought the case was over.

M R. R A L P H L. G R A Y

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. KELLAHIN:

Q Would you state your name, please?

A Ralph L. Gray.

Q By whom are you employed?

A Buffalo Oil Company.

Q What capacity?

A As assistant superintendent.

Q Have you ever testified before this commission before?

A I have.

MR. KELLAHIN: Does the Commission accept his qualifications?

MR. SPURRIER: They will be accepted.

Q Mr. Gray, you made a study of the proposed spacing pattern which has been proposed by Stanolind in the nameless pool, the pool without a name?

A Yes, we have given some broad considerations to the spacing question. Of course, as has been pointed out previously, there were not any cores taken so until such time as such data is

available it will not be possible to accurately establish definitely the proper size units.

Q In view of that situation, Mr. Gray, what size unit do you recommend?

A We think that at least under these temporary rules and until such additional information is developed, that we should conform to 320 acre units and we would like to carry Stanolind's idea of uniformity a little further. They have suggested a uniform spacing in which the wells would be located either in the northwest or the southeast quarter of the sections and we also think that the 320 acre units should be uniform to the extent that they should be all within a common section. Either they could be, the section could be divided either in a north, south or east, west direction and then the proration units would be common to a section.

Q Would that insure a uniformity that would not be possible if it is allowed to cross section lines?

A That is right. If the proration units are confined to a common section, it eliminates the possibility of someone getting hurt. I think our Exhibit No. 1 that has previously been presented in the case indicates very definitely that in crossing section lines, it is possible to arrive at a situation where one quarter section is not protected. In such a case, the operator of that particular quarter section would not be provided with the opportunity of developing a normal well on a normal 320 acre spacing unit.

Q Would it also be possible for such an isolated tract to be without an orthodox drilling location?

A If such a condition arose and the operator had to protect his rights by drilling it might mean the drilling of a well that was not in conformance with the standard uniform spacing pattern.

Q Would it be possible for a well so located to be surrounded by wells to which a higher allowable has been allotted?

A That is possible.

Q Do you have anything else to add to that?

A No.

MR. KELLAHIN: That is all.

MR. SPURRIER: Anyone have a question of the witness. If not the witness may be excused.

(Witness excused.)

MR. SPURRIER: Do you have another closing statement?

MR. SMITH: I will just have the stenographer read it back to you.

MR. KELLAHIN: We would like to make clear Buffalo's position in this matter in that we wholeheartedly support Stanolind's application for a temporary order for 320 acre spacing. We base that on the fact that there is a lack of information on this reservoir which will be supplied by the drilling of additional wells and the great depth at which this formation is found, the cost of drilling these wells may well show that one well will drain their 120 acres, a fact which we do not know.

The adoption of a temporary order cannot possibly harm anyone in that, if it is found that additional wells are needed, they can go back in and be drilled. We urge the immediate adoption of the well for the reason that we already have one off pattern well being drilled. Unless the Commission takes some action there

is a distinct possibility that other wells will be started which will require exceptions once the rule is adopted. We do not believe that in forming the drilling units, it should be permitted to cross section lines.

We urge the Commission to adopt a rule which would require communitization within the boundaries of a section either the north half, south half or east half or west half and in that manner insure uniformity throughout the development of the pool. We have a situation here where we have one well producing. We have an opportunity to set up a regular unit and if the Commission does not take that action, then irregular patterns are almost inevitable. For that reason we urge the Commission to confine units to section lines.

MR. COLVIN: May I make a closing statement for Delhi and San Juan in that we agree with the statement of Stanolind and Buffalo Oil Company for the very reasons that they brought out, that there is only one well capable of production.

We do not believe there is sufficient evidence to warrant the establishment of the rules at this time and in the case of the small operator or with the acreage and the position that Delhi and San Juan have, it makes it necessary for us to move way out away from the well to protect our rights under the leases, and particularly in connection with San Juan with relation to the west half of Section 20. It would be necessary for them to commence their well there in the northwest quarter of the section, some mile and a quarter from the well, the Stanolind Well there in 29. We believe and recommend that until such time there is a well being drilled, God forbid, but it could be dry, we have drilled

them before that close to production and Stanolind and Buffalo might be wrong that one well might drain the 160 it is located on and that is all. If they are wrong, we have been penalized. If they are right, I don't believe that they have been penalized because we have projected figures which indicate that wells on 160 acres are economical from a pay out basis and from sources of revenue both to the lessor and to the leasee and the royalty owner.

MR. SPURRIER: Anyone else?

MR. HULL: C. A. Hull, Shell Oil Company. Shell concurs with Stanolind's recommendations.

MR. SPURRIER: Anyone else?

MR. RICHARDSON: W. S. Richardson, Malco Refineries. We concur with Stanolind's recommendation.

MR. SPURRIER: Anyone else? If not, the case will be taken under advisement, and the docket is completed for today.

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I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings in Case No. 601, taken before the Oil Conservation Commission on October 28, 1953, contains a true and correct record of said proceedings to the best of my knowledge, skill, and ability.


REPORTER