

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 9, 1967

EXAMINER HEARING

IN THE MATTER OF:
Application of V. F. Vasicek and J. M.
Fullinwider, dba V-F Petroleum for
compulsory pooling, Lea County, New
Mexico.

Case No. 3633

BEFORE:

Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order.
The next case is Case 3633.

MR. HATCH: Case 3633, application of V. F. Vasicek and J. M. Fullinwider, doing business as V. F. Petroleum for compulsory pooling, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, appearing for the Applicant. We have three witnesses I would like to have sworn, please.

MR. NUTTER: We might ask at this time if there are other appearances in this case.

MR. MORRIS: Mr. Examiner, I am Dick Morris of Montgomery Federici and Andrews, Santa Fe, New Mexico, appearing for Ashmun and Hilliard.

MR. NUTTER: Thank you, Mr. Morris. We might point out at this time that although the advertisement of this case is correct, and the description was given as being the northwest-southwest of Section 6, Township 13 South, Range 38 East, there is an error on the docket. We were concerned that Ashmun and Hilliard may not have been aware of the case being on the docket because of the error on the docket, but - -

MR. MORRIS: No objections offered as to the error on the docket.

MR. NUTTER: We will stick with the case, then.
You are aware of the case being called?

MR. MORRIS: Yes, sir.

(Witnesses sworn)

MR. KELLAHIN: I would like to call as our first witness, Mr. Jerry Fullinwider.

JERRY M. FULLINWIDER, called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Jerome M. Fullinwider.

Q Now, what business are you engaged in, Mr. Fullinwider?

A I am a partner in V-F Petroleum, which is an independent firm located in Midland, Texas, engaging in exploration, drilling and production of crude oil and natural gas.

Q How long has V and F Petroleum been engaged in the oil business?

A About three and a half years.

Q What has been your background and experience in the oil business, Mr. Fullinwider?

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

A I graduated from Southern Methodist University in 1951, Business and Law. Was employed by Sohio Petroleum Company. I was with them in various capacities for six years in numerous states, including Canada, including the position of Land Administrative Assistant to the Manager of Exploration, foreign and domestic.

At that time, I went with an independent concern, headquartered at Dallas, Texas, A.W. Cherry and Cherry Brothers, as their Manager of Land and Exploration. I was with them for eight years, at which time, I moved to Midland and formed the present partnership, V-F Petroleum. This totals seventeen years of experience in Land and Exploration, and related activities.

Q In connection with your work in Land and Exploration, did you acquire leases and put together drilling deals in New Mexico?

A Yes, sir.

Q And you have had experience in this field?

A Yes, sir.

Q And you are a partner in the V-F Petroleum, the Applicant in this case?

A Yes, sir.

Q And you have an interest in the area involved in

this application, is this correct?

A Yes, sir, I do.

(Whereupon Applicant's Exhibit Number 1 was marked for identification.)

Q Briefly, would you outline just what occurred in connection with this application, Mr. Fullinwider?

A Yes, sir. I would like to offer a location plat as Exhibit 1, for reference material, so interested parties can have before them the location and land in question. You will note that V-F Petroleum has oil and gas leases under the southwest quarter of Section 6. shown thereon. Our longest term lease expiring in May of 1972, and shown thereon is a proposed location for a 12,300 foot Devonian test well located on a forty acre proration unit, described as the northwest quarter of the southwest quarter of said Section 6. I would like to offer this as Exhibit 1.

Q The forty acres outlined with a dashed line, that is the area you are seeking to force pool in this application?

A Yes, sir, it is.

Q Now, that is the surface area. What particular formations are you seeking to force pool in this application?

A We wish to force pool all formations while it is primarily a Devonian test, at the same time, there are numerous other possible pay horizons up the hole, and so we wish all of them force pooled.

Q In other words, you are seeking to force pool all mineral interests in connection with this particular acreage, is this correct?

A Yes, sir.

(Whereupon Applicant's Exhibits 2 through 8 were marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 2, would you identify that exhibit, please?

A Exhibit Number 2 is a mineral take off of the mineral ownership under the land in question, both the forty acre tract on which we are requesting force pooling, and the entire southwest quarter of Section 6.

You will note that numerous mineral owners are listed with their addresses and the interest that they own, on this exhibit. All of the interests shown on the exhibit are under lease to V-F Petroleum, with the exception of the last interest listed, Mrs. Opal Effie Fulton and her husband. They own a three-sixteenths interest and it is under lease to Ashmun and Hilliard.

At the time we started leasing this land, we were aware that Ashmun and Hilliard had, at one time, had the entire Section 6 under lease and drilled some wells thereon and subsequently dropped all of their leases, excepting eighty

acres surrounding their one productive well. This includes the southwest quarter of Section 6; they had it all leased at one time and they dropped it over a year and a half ago. So, we proceeded to lease these interests and when we were about one third of the way through, we ran across Ashmun and Hilliard's leasing activity, particularly on the interest of Opal Effie Fulton. That surprised us, since they had once had it under lease and had dropped it, but we assumed maybe they just wanted an interest in the play and, so, we stepped up our leasing to see if we could get it all. We thought we had opposition at the time. As it turns out, that is the only interest that they did pick up. They did not even approach any of the other interests and we ended up owning all of the rest of the interest. We paid good bonus money, up to thirty dollars an acre and excess royalty for some of the interest, and some of them, they are owned by mineral pros. Some of these names I am sure you gentlemen will recognize as being professional mineral buyers, and they wouldn't sell us leases, but they would give us short-term leases free with excess royalty on the hopes of getting a well drilled since they were familiar with the situation in the area.

Q Now, you say you got some short-term leases, what

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

is the exploration date on those?

A The shortest term lease we have, expires, if we do not commence drilling thereon before, on December 7th, 1967.

Q So you have to start a well prior to that, or you will lose the shortest term lease, is this correct?

A That is correct.

MR. NUTTER: What was that date again?

THE WITNESS: December 7, 1967.

MR. PORTER: What month?

THE WITNESS: December 7, 1967.

Q (By Mr. Kellahin) Now, having encountered this Opal Effie Fulton lease, which, you say, is held by Ashmun and Hilliard, what effort did you then make to make some kind of an arrangement with Ashmun and Hilliard?

A Well, sir, as I mentioned at first, we didn't know what their entrance into the play meant. We were surprised by it because they had once had it leased and had dropped it, and we just assumed they would probably go along with us, so we didn't know what to expect. But, after we completed the leasing, we contacted Mr. Hilliard in California, he has moved there a month or so ago, and discussed this situation with him and he was extremely

conversant with it, immediately responsive to our telephone call, and we asked him if he would join us in the drilling of the well, or if he would otherwise sell his lease to us, or farm out his lease to us, or what were his intentions.

Mr. Hilliard and I are acquaintances and we speak frankly to one another, and incidently, I would like to say that Mr. Vasicek, my partner, and Mr. Pennel, also our partner on this deal, all three of us were on the telephone at the same time with Mr. Hilliard, which he knew, so this is not a one-sided explanation of the telephone call.

Mr. Hilliard indicated, that as a rule, Ashmun-Hilliard liked to be constructive, but in this particular instance, they were going to be destructive, that they would not join in the drilling of the well, they would not farm out to us, they would not sell us the lease or in any way participate. They did not want the well drilled and would do what they could to keep it from being drilled, because they felt like the oil would possibly be recovered from the one well they had in there and there was always some possibility that a new location would not be successful, and they didn't want to risk their money to drill it.

MR. PORTER: In other words, you could put them down as doubtful?

THE WITNESS: Yes, sir.

Q (By Mr. Kellahin) Now, did you follow up this conversation with a letter directed to Mr. Ashmun?

A I wrote to Mr. Hilliard and Mr. Ashmun lives in Western Canada and Mr. Hilliard has been in charge of their southwestern operations since Mr. Ashmun moved, but since Mr. Hilliard moved to California to promote a professional soccer team, we thought the best thing to do was to get in touch with him personally on the matter. We did --

Q Before we get to that, does Ashmun and Hilliard have an office in Midland?

A Yes, sir, they do.

Q And your offices are also in Midland?

A Yes, sir.

Q Did you contact their office in Midland?

A No, sir, we didn't, for the fact, that their office in Midland is more or less a caretaking situation. They have turned over their operations to a professional operating firm, that is doing it on a contract basis, and we knew they would have no say so as to the participation of the drilling of a well, so we went straight to Mr. Hilliard, who does have a say so.

Q Now, referring to what has been marked as Exhibit

Number 3, would you identify that exhibit?

A Exhibit Number 3 is a letter dated July 18, '67, which we wrote to Mr. Hilliard in San Francisco confirming our telephone conversation of July 7, and telling him what we planned to do, that we had these leases under lease, we wanted to drill this well. We told him the proposed location of the well and the cost of the well, both the cost of drilling and also the cost of completion.

We offered him three propositions in the letter. One, that he join the drilling of the well, paying his prorata share of the cost thereof and we would enter into a standard operating agreement, which would name us as operator and would provide a hundred dollars a month, per well for combined fixed rate for overhead expense.

And then, we also mentioned to Mr. Hilliard on the telephone, that if they wanted to operate, we didn't care. We weren't particularly choosy about that because we had three-sixteenths and they had -- we had thirteen-sixteenths and they had three-sixteenths. It was logical that we would be operator, but if that was the only thing standing in the way, we would be very happy for them to operate the well.

The second proposal was that they farm out the lease to us, let us drill it at our own cost, risk and expense

dearnley-meier

and they retain a three-sixteenth of eight-eighths overriding royalty interest.

And our third proposal was that, if they would sell their lease to us, we would give them their money back, plus a thirty-second override and guarantee to drill the well at our free cost, risk and expense.

We furthermore said, that if he had any ideas as to his participation, differing from those we offered, we would just be delighted to discuss them with him. We sent this registered mail, and you will note on the skirt of the letter, we have the returned receipt from the Post Office Department, so we know it was received by them, and we have never had a reply from them.

Q Now, in connection with that letter, was the well location correctly stated?

A Well, it was a location that we had chosen at the outset, however, after discussing this matter with our attorneys, as it appeared we were going to have to follow some legal procedures to, and join them to either get with us or do something else, we discovered that the location we had chosen was not in keeping with the regulations of the Oil and Gas Commission of New Mexico, so we changed the location slightly and wrote him another letter of July 21.

Q That is Exhibit Number 4, is that correct?

A Yes, sir, in which we pointed out this change to him and also requested once again that he give this his earnest consideration and let us hear from him, and we have not received a reply from that letter.

Q You have never received anything but an indication from Mr. Hilliard that they will not participate in a well and do not want you to drill a well, is this a correct statement?

A That is correct.

Q And that is based primarily on your telephone conversation?

A Primarily on our telephone conversation, however we have subsequently had discussions with Mr. Hilliard's staff in Midland, as we have seen them on the streets and in meetings and whatnot, and they have indicated they were quite aware of what we were up to and more or less just said that was it, in other words, "We know what you are doing and lots of luck", that sort of thing, so obviously they don't intend to do anything about it.

Q Now, does V-F Petroleum desire to drill on this unit, forty acre tract?

A Yes, sir, we would like to very much.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

Q And are you able to drill without force pooling the three-sixteenths interest?

A No, sir, there is no way that we could drill without the force pooling. There is some question, if we could justify the drilling of the well even with force pooling, because as I understand the statutes of the state, there are set certain percentages for recoveries, and given the risk involved on this location and given the expense of the well, it is a very expensive well, and given the economics of the area, it may be difficult to drill at all because of having to carry Mr. Hilliard's interest.

Q Now, there will be additional testimony of course on the expense of the well and the risks involved in drilling it, will there not, by other witnesses?

A Right.

Q Now, Exhibit Number 1 is a location plat and showing the area under lease on the location, your proposed location, was that prepared by you under your supervision?

A Yes, sir.

Q And Exhibit Number 2, was that prepared by you or under your supervision?

A Yes, sir.

Q And Exhibits 3 and 4 are copies of letters from

your files, kept in the ordinary course of business, is this correct?

A Yes, sir.

MR. KELLAHIN: At this time, I would like to offer in evidence, Exhibits 1 through 4 inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 4 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 4 were admitted in evidence.)

MR. KELLAHIN: That's all I have on Direct Examination.

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

THE WITNESS; Sir, may I make a--

MR. NUTTER: Yes, sir, go ahead.

THE WITNESS: -- slight addition so the questions may refer to it also if they wish? Many of our royalty owners, as shown by this mineral take-off, are professional mineral buyers and they are quite anxious to see this well drilled and we have received both written and telephone communication from them, wanting to know why aren't we drilling yet and when are we going to drill? We do have some long-term leases as I have mentioned, but it is not our business

to try to sit and wait while oil is being drained, and we need to drill. We feel an obligation to our lessors, and that is why we are proceeding with this hearing.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Fullinwider, I note in the numbered Paragraph 1 of your letter of July 18th, that you mentioned that the agreement would name V-F Petroleum as operator and the accounting schedule would provide for a combined fixed rate for overhead expense of one hundred dollars per month, per well to the depth of twelve-five?

A Yes, sir.

Q Now, what do you propose as the operating cost? You realize that the statutes provide that the Commission shall set an operating cost for operating the well?

A Yes.

Q Do you have any testimony or will one of your other partners have testimony relating to operating cost?

MR. KELLAHIN: We have another witness on that, however, I am sure Mr. --

A I don't believe that the witness has to do with operating cost per se. Now, you are not speaking of drilling and completion costs?

Q No, but the statutes --

A Yes, sir.

Q -- provide that there will be set an operating cost.

A Well, our understanding of operating costs, that they would -- operating costs of any producing property, would be made up of, first of all, any third party services that are contracted on that particular producing lease, such as a Slumber Jay, or a well workover unit, or acidizing job, or reperforating, or whatever. Third party charges, naturally, are charged to the entire lease.

Secondly, there would be a charge for the supervision and overhead of the well that the operator recoups part of his overhead for operating this well. And we assume that a hundred dollars per month would not be at all an excessive request for this S and O charge as it is called in the industry, which, on the accounting exhibit, is called a combined fixed rate for overhead expense.

Q Now, will this include actual operating costs of the well, however, or is this only overhead expense? Maybe I don't follow what you mean by "Overhead Expense."

A Well, sir, I imagine, from your question, that this is what we would consider, that you are calling the operating

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

costs of the well.

MR. PORTER: Cost of the pumper's salary and so forth?

THE WITNESS: Well, we consider a pumper's salary like a third party charge that everybody bears. It is nothing that comes into the operator one way or another. It goes to the pumper. So, we don't anticipate making any other operating charges.

Q (By Mr. Nutter) Well, as operators of the well, you would be advancing these costs for the pumper's salary --

A Yes.

Q -- for example?

A Yes, sir.

Q And you would recoup Ashmun and Hilliard's share of those pumping costs out of production?

A Yes, sir.

Q And that would be included in this one hundred dollars?

A No, sir. I see what you are getting at. If you want to take the pumping cost, the cost of a pumper of a well and set that out as part of the operating costs, separate from these other charges, well, then, yes, that of course must be included. As I mentioned, we would consider it in

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

the same category as the third party charge. You have numerous expenses on producing property, pumper being just one of them, and, but that definitely would be one, and I should say, a pumper for a well here -- we don't have other wells in the areas, we certainly could get one I imagine for a hundred dollars a month, wouldn't you imagine Vic, maybe for even --

Q You would have a contract pumper to take care --

A Contract pumper, that is correct.

Q -- of the pump?

A Which, as I say, we consider a third party charge, just like if you hired Slumber Jay to come out and do something to the well.

Q What would you estimate would be your normal operating costs, including overhead and actual field costs? Now, I don't intend to include workovers or anything like that, they wouldn't be normal operating costs, but normal operating costs would be approximately what?

A I would say, for a well to this depth, three hundred dollars a month should amply take care of it, including the pumper, including the supervision and overhead, everything that had -- the buying of gauge books, all of the little incidentals that are monthly recurrals, recurring

items and not an extraneous item such as a workover rig or something like that. For the one well.

MR. VASICEK: For a flowing well.

THE WITNESS: Oh, excuse me, a flowing well. If we had a pumping well, of course, we would have an additional charge of electricity and also charges for grease and things like this, which would increase, perhaps, above the three hundred dollars. We hope we would not get a pumping well here, but it is always a possibility. So the three hundred dollars would certainly include normal recurring monthly expenses on a flowing well.

Q I see.

A If it was a pumping well, it would be hard to say, I would say four hundred, four hundred and fifty should amply include it.

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

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Fullinwider, along the same line of inquiry as Mr. Nutter, of your total operating expenses how much

of that **figure** that you mentioned the three hundred dollars, would be attributable to the costs of supervision?

A Well, as I mentioned in the letter to Mr. Hilliard, we think a hundred dollars per month is ample reimbursement for supervision and overhead of a well of this depth. We know some companies get a hundred fifty, even two hundred, but our schedule calls for a hundred dollars per month, so that is the figure.

MR. MORRIS: Thank you.

MR. NUTTER: If there are no other questions, the witness may be excused.

(Witness excused.)

MR. KELLAHIN: I would like to call Mr. Vasicek. VICTOR F. VASICEK, called as a witness, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

MR. KELLAHIN:

Q Would you state your name, please?

A Victor F. Vasicek.

Q Are you a partner in V-F Petroleum, Mr. Vasicek?

A Yes, I am.

Q Are you a petroleum engineer?

A I am a registered petroleum engineer in the State

of Texas.

Q Have you ever testified before the Oil Conservation Commission of New Mexico and made your qualifications a matter of record?

A Yes, sir.

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

MR. NUTTER: Yes, they are.

(Whereupon, Applicant's Exhibits 5 through 68 were marked for identification)

Q (By Mr. Kellahin) Mr. Vasicek, in connection with the application of V-F Petroleum in the case before the Commission at this time, have you made any investigation of the area involved as to productivity and the possibility of completing a producing well?

A Yes, sir, I have. To begin with, Exhibit 5 will show you -- if you will please refer to Exhibit 5. This gives a monthly production from the Ashmun and Hilliard Number 1 Maxwell, from the date of the inception, which was in September, 1965 through May of 1967.

Q Now, is that well located near the proposed location of V-F Petroleum?

A Yes, sir, it is located approximately 1400 feet

northeast of the proposed location, V-F Petroleum's proposed location.

Q Is that the only producing well in the Bronco West Field?

A That is the only production, yes, sir, it is, in the Devonian horizon. There was a plugged-out Pennsylvanian well, or Wolfcamp well to the southeast.

Q But that is the only Devonian production?

A That is the only Devonian producer.

Q Would you continue your discussion of Exhibit Number 5, please, sir?

A This well, up to this date, to update the April -- the June and July and August figure, this well has produced a cumulative amount of about 135,000 barrels of oil, but it is shown as 121 on this exhibit, 121,000.

During this time, this -- the performance of this well has been very good, although it does not show making its allowable. They intentionally, from what I can -- from talk from the field or pumper and the people in the area, they intentionally held it down to approximately 6,000 barrels per month. I don't know why they did, but they possibly thought they might have been near water or something like that, they didn't want to cone, cone water into the -- that

would in some way injure the well. The 6,000 barrel figure obviously was chose as, probably the most efficient rate of production for stabilized flow. I am just -- this is just my guess from what I can tell of it.

I did make an inspection of the field and went over it with the farmer, we went out there and just looked the place over. And obviously it does not make any water, they never have reported any water, and from the inspection of the field, I could tell it did not make any water. They sell gas off of this lease and the exhibit also shows the amount of gas that this well has produced, somewhere -- the monthly gas production should be "MCF". We did not specify whether it was cubic feet or what, but it is "MCF" and it has made approximately 400,453 "MCF" cumulative gas production.

This is a gas-oil ratio of approximately 4 -- average GOR of about 400 to 1, and from the evidence we have here, it appears that there has been no increase or decrease in GOR, and as I said before, it still does not make any water, so the well has performed very well.

Q Is that well being pumped or is it natural flow?

A It is a flowing well, and although there were no pressures, no bottom hole pressures available. I looked all over on, in all the records of the Commission's and I

never did see any bottom hole pressures. And they did drillstem test this well upon completion, however, the tool failed and they did not get a bottom hole shut-in pressure. So we do not know what the pressure has done, but the performance has been well -- has been good, and the surface tubing pressure was somewhere in the neighborhood of 475 pounds flowing, and at the time, it was flowing approximately, oh, I would say at the rate of 218 barrels a day, with a 475 pound working pressure.

I am not real sure of the choke. The report that I saw was -- excuse me just a minute. Jerry do we have that -- I think they showed the choke. I believe it was sixteen -- excuse me.

MR. KELLAHIN: Off the record here.

(Whereupon, an off-the-record discussion was held.)

A It probably doesn't matter just what the choke was. They had a positive choke, but I think it was a quarter inch choke and the tubing pressure was 475 flowing, with a packer in the hole, so there was no casing pressure.

Q Now, as a petroleum engineer, have you made any personal investigation of the area involved in this application?

A Yes, sir. The King field to the south and the Bronco-Silurian-Devonian to the north, from the standpoint of location, this well is located as you can tell on your -- actually it has not been brought in yet, I don't think, as an exhibit, but it will be seen that this location is located -- this field is located somewhat in between these two fields. It is right on trim, on the Devonian trim.

Q Now, that will be shown by a later exhibit and another witness --

A Yes, sir.

Q -- is this correct? Well, in your opinion as a petroleum engineer, and your knowledge of the area, in your opinion is the Bronco field a one-well field?

A In our opinion, we think it should cover at least another location or two, and possibly even more, due to the nature of the -- or due to existence of other fields, the history in the area and the performance, particularly the performance of this well strongly indicates that the field should extend certainly more, over a larger area than the eighty acres under which this well, the Ashmun-Hilliard well is producing.

Q Now, this is in reference to the Devonian formation --

A Yes, sir.

Q -- is that correct?

A That is correct.

Q Are there other formations in the area that may be productive in your opinion?

A Yes, sir. We think the Wolfcamp certainly has a very good potential here, and as a matter of fact, there is -- excuse me -- several zones in the Pennsylvanian-Wolfcamp Section that could be productive, and also the Mississippian are all potential producing horizons.

Q Now, in the event you receive the force pooling order and drill the well, would you recommend that these other zones be tested?

A Yes, sir, these are in our plans as I will get to in the next exhibit. We have an AFE plan to thoroughly test these other zones.

Q Now, you have made a cost estimate, I take it?

A Yes, sir.

Q Referring to what has been marked as Exhibit Number 6, would you identify that exhibit, please? Before we get into that, there is a second sheet attached to Exhibit Number 5.

A Yes, that is the decline curve as plotted. As you can see, it is pretty level and shows no decline. And this

dearnley-meier

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

further substantiates the fact that they would possibly have produced the well at higher rates if they so desired, but over the twenty -- actually a twenty month period as we have shown here, it hasn't exhibited any decline or increased in GOR or any water production. So this is one of the main -- one of the good reasons we feel like that this field certainly is larger than what is shown as being the, in other words, the eighty acre tract that is being produced there now by Ashmun and Hilliard.

Q Now, referring to what has been marked as Exhibit Number 6, would you identify that exhibit?

A This is comprised of two sheets. The first sheet, page 1, is Drilling and Testing Cost Estimate. We have -- we do this on all wells prior to drilling them. Prior to the drilling of any wells, we come up with an estimated cost, without any -- not trying to, not include any trouble, just the bare costs, bare minimum or just to cover everything that we can possibly think of in the drilling of a well. And according to this estimate, the cost of a dry hole will be something in the neighborhood of \$148,000, tested to the casing point, tested through the Devonian.

This includes four drillstem tests. We anticipate possibly two in the Wolfcamp-Pennsylvanian zone, and one in the

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

Mississippian and one in the Devonian, and the logs are necessary for drilling this type of well, casing and whatnot.

The second sheet shows the costs that it will take to complete the well should we decide to complete it as an oil well. The completion cost would be somewhere in the neighborhood of \$63,000.00, and to complete a well cost in the tanks would be something like \$208,000.00 to complete a well.

Q Have you had experience in drilling Devonian wells, Mr. Vasicek?

A Yes, sir, I have been in charge of drilling several Devonian wells in Texas and New Mexico. Just only one in New Mexico. As a consultant, just prior to forming our partnership, I was in charge of a 14,700 foot Devonian well, drilled approximately twelve miles to the southwest of this location, and we did not complete it as a Devonian well, it made a well in the Wolfcamp, that is the Austin-Wolfcamp, one well field.

Q This estimate is based on your experience in drilling those wells, is that correct?

A Yes, sir, yes, sir. Well, that and talking to different people. Actually there was a lot of research done on this. It is just not my own -- what I mean, it is a

research on my own part, but there is a lot of experience that has gone into these cost estimates. I feel they are quite in line. I might -- excuse me.

Q Go right ahead.

A This does not include any possible problems that might be, or we might encounter such as loss of circulation and blowout, however, blowouts-- you don't have any blowouts in this area, at least I don't know of any. However, I think they did lose circulation on the Ashmun-Hilliard-Whitmyer. They had a pretty bad loss of circulation going, but I don't recall exactly what it is, but I do know they lost circulation there for several days.

Q Now, you heard the previous testimony in regard to operating costs. Have you any idea of what the operating costs will amount to on this well?

A Yes, sir, we try to operate our wells as cheaply as possible. I usually do all the contracting personally, and a pumper can usually be hired for anywhere -- when you get an isolator well like this, it just costs a little bit more, around seventy-five to a hundred dollars a month, and sometimes you can make a deal for sixty or sixty-five. They furnish everything, vehicle and all. That is total cost.

And if you have a flowing well, without any problems,

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

in other words, a trouble free well where you don't have to use chemical, you don't have -- you are set up to handle oil, and you don't make any water, you don't have to treat your emulsions and whatnot, it is entirely possible to have a lifting cost, oh, I would say probably for -- we could probably produce that well maybe for as low as \$250.00 a month, including the \$100.00 for the S and O charges. In other words, a \$150.00 and an additional 200 and probably get by pretty well. As a matter of fact, even maybe less. But, I would say an average cost, in other words, right down the line, you better start looking -- you had better be looking at \$300.00 over a period of years.

Now, if the well makes water, you have got problems. Any time you are going to handle water, your well is going to quit flowing, you are going to have pumping installations, you are going to have electric bills, you are going to have whatever you want to use for prime mover, depending -- engines are troublesome too, you know. Wear and tear on circle rods, pulling jobs, or if you have got circle rods, kobe installations, you still got problems. And the cost can really go high, they can skyrocket, depending on how much water you are going to lift, and who knows when you have a water drive reservoir such as I think, I have an idea that this is what

this is. If you ever make water, it could be as high as 850, \$900.00 a month lifting cost.

Q Now, you mentioned this problem of loss circulation in the Ashmun-Hilliard well. Are there any other risks involved in drilling a well in this area?

A I don't know of any real risk, except that any time you go throughout the Abo shale, it is always possible you can get in trouble, particularly, say, on drillstem tests, if your mud, something happens to your mud, or it isn't just right, you might be leaving yourself open for a pretty good fishing job, something like that at any time, or even when you are logging, sometimes it is difficult to get your logs to bottom.

One of the main things I always fear for, is having a borderline situation to where you think you have a well and you don't and you run pipe and you have one of these, what we call expensive dry holes, to where you tried to make a completion and you didn't know whether you should have plugged it to begin with or not.

Q Well, would you consider that a risk involved in the drilling of a well?

A Yes, sir, that is in any, almost any well.

Q You are familiar with the New Mexico Statute, are

you not, which provides that in a force pooling case, the Commission can permit the recovery of the reasonable costs of drilling the well, including a reasonable charge for supervision?

A Yes, sir.

Q And may include a charge for the risk involved in the drilling of such well, which charge for risks, shall not exceed fifty percent of the non-consenting working interest owner or owner's prorata share of the costs of drilling and completing the well?

A Yes, sir.

Q You are familiar with that? Have you any estimate as to what the risks involved in this particular area and this specific well would be?

A Well, this is pretty hard to answer because a well of this magnitude, of this cost, and any time you drill a Devonian well, the experience of the Devonian, you can drop off in a hurry and there is just a lot of inherent risks that you cannot put your finger on. I would say that fifty percent would be a minimum for expenditure in a project of this type.

Q Were Exhibits 5 and 6 prepared by you or under your supervision?

A Yes, sir.

MR. KELLAHIN: I would like to offer in evidence Exhibits 5 and 6.

MR. NUTTER: Applicant's Exhibits 5 and 6 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 5 and 6 were admitted in evidence.)

MR. KELLAHIN: I have nothing further of this witness.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Vasicek, what do you base your fifty percent risk on? I mean, our statute provides that we can allow up to fifty percent, so it would appear that fifty percent would be the risk factor under the most extreme conditions, and I might inform you that we have established risk factors as low as ten percent and in some cases, on up to that fifty percent. Now, we have usually saved the fifty percent for extremely doubtful situations.

MR. KELLAHIN: If the Examiner please, I brought this out and I am not objecting to the question, but we will have some additional testimony in regard to this risk factor, and I merely brought this out from his point of view as a

petroleum engineer in the drilling of the well.

MR. NUTTER: I note that Exhibit 7, here, is going to have a picture of the structure and so forth, so we will get into the actual risk of the location --

MR. KELLAHIN: This is correct.

MR. NUTTER: -- with another witness, then?

MR. KELLAHIN: That is correct.

MR. NUTTER: Okay, that is fine.

MR. KELLAHIN: But, I only meant to bring it out from his point of view as an engineer and --

A To answer your question possibly as partially, I mean in part. From a standpoint of drilling a well, these costs here are what I call bare minimum, no trouble, and any time you drill a well, you know, you could get in trouble, I don't care if it's a posthole, you might get hung up and have a, although, just have a pretty good cost for treating the tools, or whatever, such as, it is not clearly out of the ordinary to leave a logging tube in the hole, that just happened to me. And any time you run anything in a hole, chances are you won't get it out and you might even junk the hole. The casing collapse or whatnot, going through the salt section, and any time you have to set intermediates, there is always problems. The bottom joint might flip off, there is just

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

a lot of things, which I don't think it is -- we as operators, we accept these things you understand, but on the other hand, this cost estimate here does not include any problems that I mentioned, this is right straight down the line of what I think the cost will be.

Q You don't have any contingency fund here --

A No, sir.

Q -- to fall back on?

A Sure don't.

MR. NUTTER: Okay, are there any other questions of Mr. Vasicek? Mr. Morris?

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Vasicek, is there any more risk involved in the drilling of this well than any other Devonian well?

A Any other Devonian well, where? Where do you mean?

Q You say --

A Just any other Devonian well?

Q You say you are familiar with the drilling of Devonian wells in this area. Is there any particular reason why you would expect to incur special risk in drilling this well?

A I wouldn't call it exactly a special risk, however,

when you have a well that is drilled just to the east of you where they lost circulation for several days, and I talked to the man that furnished the water on the well, he is an irrigation farmer on the land, and he said they used about four times as much water on that well than they had anticipated and they had contracted for. This is where I get a lot of my -- some of my information.

Any time you lose circulation, you are not only facing a high mud bill, but you are facing problems that evaluate in your well from the standpoint of logging and testing, and there is also a possibility of blowout, because, due to investing of a higher static head. So, I would say there is a possibility here, over and above, say, an ordinary Devonian well, that the cost could be -- the risk could be a little higher here. Drilling contractors certainly investigate all records and don't think they don't know that there is loss circulation problem there when they start bidding on the footage basis, because they -- well, it just adds to the cost of the well in general.

Q Did they have any loss circulation problem in the drilling of the Ashmun-Hilliard well to the northeast of you?

A Not to my knowledge, to the northeast that is the --

MR. NUTTER: That would be the producing well.

Q It produces --

A Oh, no, I don't think they did. I don't think they did.

MR. MORRIS: That's all.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Vasicek, you have got \$10,000.00 worth of mud here and \$2,000.00 worth of oil on your AFE.

A Yes, sir.

Q Is that a normal mud bill for a Devonian well?

A I think it is. It is pretty normal, yes, sir.

Q It doesn't include any loss of circulation materials?

A No, sir, it does not. You see, the \$10,000.00, ordinarily, let me put it this way. You could probably get by with a cheaper mud bill, but our procedure in evaluating this property, calls for mudding up much earlier than what some people would do just by blaring down the Devonian and trying to complete there. We have to evaluate -- we want to evaluate all these zones up above. In order to do this, this takes a high mud bill, a higher cost in general.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

Q Now, you say you have got four drillstem tests run here, you said you tested the Pennsylvanian, Wolfcamp, Mississippian and Devonian?

A Yes, sir. This is just something to shoot at. It could be more. As you know, the Bursom zone there, you know it has got several possibilities and we might even have as much as six or seven tests in there. But, this is just for our -- just kind of an average. Four -- four tests should be adequate.

Q And \$1,650.00 is a normal charge for a drillstem test?

A Absolutely, very normal.

Q If you have several drillstem tests run at the same time, is it still \$1,650.00 a piece?

A Yes, sir, in other words, every time you run a test, you have got rig time involved and tools, see, and rigs usually run at this depth for day rates, you know, you go on day rates, about \$1,200.00 or eleven or twelve, somewhere in that neighborhood, and \$400.00 for -- and you just as well figure twenty-four hours any time you run drillstem tests anywhere below, oh, I would say below 10 or 11,000 feet.

Q Well, even at a total here of \$207,813.00 you are still less drilling costs than were furnished -- or completion

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

costs, than were furnished to Ashmun and Hilliard in the letter of July 18th, I think. The estimate there was \$150,000.00 to look at the bottom of the hole and \$65,000.00 to complete which would be \$215,000.00. So, your estimate, still is something less than what was furnished to Ashmun and Hilliard originally, is that correct?

A I don't recall exactly. I think when we wrote the letter to Ashmun and Hilliard, we were just estimating it, just kind of trying to round it off, am I right on that Jerry? It was just a rounding off deal, is what it was.

Q Then on the final estimate, you hadn't gone over the figures that were furnished to him, certainly it come out less than the estimate that was furnished him?

A Yes.

MR. NUTTER: Any further questions of the witness?
He may be excused.

(Witness excused.)

MR. KELLAHIN: I would like to call Mr. Pennel.

H. D. PENNEL, called as a witness on behalf of the Applicant, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A My name is H. D. Pennel.

Q What business are you engaged in Mr. Pennel?

A I am a consulting geologist and a partner in this deal.

Q Where are you located?

A In Midland, Texas.

Q Have you ever testified before the Oil Commission of New Mexico?

A Yes, sir.

Q Have you made your qualifications as a geologist a matter of record?

A Yes, sir.

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

MR. NUTTER: Yes, they are.

Q (By Mr. Kellahin) Mr. Pennel have you made a study of the area involved in the application that is presently before the Commission?

A Yes, sir.

Q What did you do in connection with that study?

A I constructed several contour maps. One, the first one I should like to present is Exhibit Number 7, a

regional map showing the trends of the Devonian fields, and the position of the Bronco West and the Gladiola South fields in that trend.

You will note, roughly a north-south trend and we think it is part of that field's system. The regional map also includes API reserve figures on the various fields with many years of history behind them.

Q Now, in general, that shows the alignment of the Bronco field in relation to the other Devonian pools in the area, doesn't it?

A Yes, sir.

Q In your opinion, is the Bronco field, based on that information, a one well field?

A No, sir. I think, from my geological interpretation, it should be larger. Now, I don't think it is going to be a large field, but I think it could very well be comparable to the King field to the south, four miles south and one mile west, indicated on the map. I think it would be very comparable to that. Although, we might be just a little bit optimistic, it might be a three or a four well field.

(Whereupon, Applicant's Exhibit Number 8 was marked for identification.)

Q Now, referring to what has been marked as Exhibit

Number 8, would you identify that exhibit, please?

A Exhibit Number 8 is an information map which we put together to provide answers to a great many questions, all on one map, showing the position of our southwest quarter of Section 6, and the drillstem tests and the geological horizons on each well. Incidentally, I don't consider the Ohio well to the south in Section 13 and the Gulf well to the west in Section 12 as part of our prospect or our anomalous area. I think they are something else, they are just wildcats in the immediate area, but the information is there for whatever purpose it might serve.

Q What is the source of this information?

A Electrical logs and scout tickets.

Q And you compiled it --

A Yes, sir.

Q -- for the purpose of this hearing?

A Yes, sir.

Q And the information does show all of the geologic tops in the area, does it not?

A Yes, sir.

Q As well as all tests that were made to your -- which you had any information?

A Yes, sir.

(Whereupon, Applicant's Exhibit Number 9 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 9, would you identify that exhibit, please?

A Exhibit Number 9 is a structural contour map on the top of -- well, I call it the top of a Permo-Penn Marker, there is a number of markers in this immediate area and the log, which is an inset on the map, indicates the marker I used. It is a fairly, shall I say, standard marker among geologists in the area, to contour up in that part of the section, and it is pretty close to the top of the Pennsylvanian, but it is, I think, still in the Permian, anyway, it is a substantial marker and I have constructed this map and called it the top of the Permo-Penn Marker, contour interval, fifty feet.

It indicates, as you can see, that there is a fairly large anomalous area that could extend over a good part of the southwest quarter of Section 6.

Q Now, there has been Wolfcamp production in this area, has there not?

A Yes, the third well that was drilled on this prospect was drilled by Sunray on the Fulton in the southeast, southwest of Section 6. It made water and a good show of

oil as indicated on the information map, in the Devonian, but, of course, did not produce and it was plugged back to what we call the Wolfcamp, at 9700 feet, where it produced over a period of some seven years, 125,000 barrels of oil.

Q The well, at the present, is plugged and abandoned, is this correct?

A It is presently plugged and abandoned.

(Whereupon, Applicant's Exhibit Number 10 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 10, would you identify that exhibit, please?

A This is a structural contour map, Exhibit Number 10, on the top of the Devonian; contour interval a hundred feet.

I should like to point out, that there are three wells in the prospective area that actually penetrated the Devonian, being the Cosden Well in the northwest corner of Section 6, the Ashmun-Hilliard producer, and the Sunray-Fulton in the southeast-southwest of 6. Other points in the area, geological horizons in the area, have been projected. In other words, they are what you might call an educated guess, an estimate of where the top of the Devonian would have been encountered had the wells been drilled that deep. So, those

points are used for interpretations in this contour map and the three actual Devonian points.

Q Well, your projected depths are based actually on your interpretation log on some higher formation --

A Yes, that's right.

Q -- correlating it to the Devonian, is this correct?

A Yes.

Q Now, what control do you have in connection with your 8400 foot line marked "Oil-Water Contact"?

A The Sunray-Fulton, on the formation map shows a drillstem test of the top of the Devonian from 12282 to 320, tool open four hours, recovered 4,000 feet of water blanket, 280 feet of slightly oil and gas-cut mud, 2,000 feet of slightly oil and gas-cut salt water, 1810 feet of salty sulphur water, flowing pressures 1930 to 3185, final shut-in pressure, forty-five minutes, 4955. Now, that is the only information that we have that would indicate where the oil-water contact might be.

We feel sure that it is no lower than the top of the porosity in the Sunray-Fulton, which is 12,290 feet.

Q Well, actually on the west, it could be closer to your **proposed** location than you indicate here, is this correct? X
You have no control on the west?

A No.

Q And this is just your interpretation based on what information you do have?

A Yes, sir.

Q Now, on the basis of the exhibits that you have offered, Mr. Pennel, this would indicate that a well drilled to the Devonian at the location proposed here, would be productive of oil, as was the Ashmun-Hilliard well to the north, is this correct?

A Yes, sir.

Q Do you have any other information that would indicate that perhaps this is not as good a location as is indicated by these exhibits?

A Yes, sir.

(Whereupon, Applicant's Exhibit Number 11 was marked for identification.)

Q Referring to what has been marked as Exhibit Number 11, would you identify that exhibit, please?

A Exhibit Number 11 is an interpretation of seismic data in the area and included with the seismic data are the known points and the projected points on the top of the Devonian. You will find the known points, the wells that actually penetrated the Devonian are underlined in red and

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1082 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

the projected points are underlined in green, and the seismic points, shot points are indicated by a smaller circle.

Now, we received this seismic information in exchange for some other information in another area, and we know it is authentic, we saw the original maps, and it is an interpretation of seismic information in the area. And it is not too optimistic as you can see.

Now, I can't see any other way to contour, on the basis of this information, the area immediately around the Ashmun and Hilliard Maxwell, to be any larger than it is, or to extend down into our leasehold.

Q Actually, then, if your interpretation, as shown on Exhibit Number 10, showing the water-oil contact, 8400 feet is correct, then the chances are, a well drilled as proposed by V-F Petroleum at the location proposed here, would encounter water, would it not?

A It would.

Q This is a risk that is involved in the drilling of this well?

A Very definitely.

Q Mr. Pennel, you are familiar with New Mexico's statute in regard to force pooling, are you not?

A I am.

Q You are aware that the Commission can grant no more than a fifty percent risk factor under the statute, you understand this?

A Sure.

Q I believe you were present when the previous witness was testifying and Mr. Nutter said "This has generally been considered to be the maximum risk factor."

A Yes, sir.

Q Based on your interpretation of the geological information you have and the seismic information that has been made available to you, what do you consider a reasonable risk factor for the drilling of the V and F Petroleum well?

A Well, I shudder to put a numerical figure on a risk factor, but unquestionably, this is a wildcat well, even though it is 1400 feet from a producer. I should like to refer back here, if I may, to Exhibit Number 8, the information map, and point out the dates at which the earlier wells were drilled in this area, just by way of leading up to what I am going to say here. The Sunray well in the northwest-northeast of Section 7, the Sunray was drilled -- was the first well in the area, drilled by Sunray and what was known as an anomalous area. And they missed it, they didn't go to the Devonian, but they were running very low and

abandoned the well. That was the Number 1.

The Number 2 Well was the Sunray Fulton in the southeast, southwest of Section 6 and it made a well out of the Wolfcamp, but did not produce from the Devonian, and the Devonian was the primary objective.

Now, their Number 3 Well, based on their information, was spotted in the southeast corner of Section 1 to the west, and it had a good show in the Wolfcamp, but was low enough that they did not choose to take it to the Devonian. There were three wells they had drilled and had not found the Devonian.

The Number 4 Well, chronologically here, was the Cosden well in the northwest corner of 6, and they did not find the Devonian with oil in it, they found, they had to go to water show in the Devonian. And Ashmun-Hilliard finally found it with their fifth well and presumably, all the available scientific information that the industry had to offer, it took five wells to find the top of this Devonian field and I would call that pretty risky.

Q Would you consider a fifty percent risk factor a reasonable risk factor on this well?

A Yes, I would, and I would say we stand more than a fifty-fifty chance of getting a dry hole.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

Q Actually, there was a sixth well that was a dry hole, was there not, Ashmun and Hilliard's well located in Section 6?

A Yes. After they finished, immediately after they finished the producer in the southeast, northwest of 6, they drilled a well in the northwest, southeast of 6, known as the Number 1 Whitmyer. I presume that that was to be a high well. They took it down to the top of the Mississippian, at which point it ran -- it was about a hundred and fifty, sixty feet low, something like that, to the discovery and would obviously be low in the Devonian since the Mississippian section does not vary greatly in the area.

Q Were Exhibits 7, 8, 9, 10 and 11 prepared by you or under your supervision?

A Prepared by me.

MR. KELLAHIN: I would like to offer Exhibits 7 through 11 inclusive.

MR. NUTTER: Applicant's Exhibits 7 through 11 will be admitted in evidence.

MR. MORRIS: Mr. Examiner, could I ask that the Examiner withhold the ruling on the admissibility of Exhibit

11 until after Cross Examination?

MR. NUTTER: All right, sir. Exhibits 7 through 10 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 7 through 10 were admitted in evidence.)

MR. KELLAHIN: That's all on Direct Examination.

MR. NUTTER: Mr. Morris.

CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Pennel, will you put most reliance on your structural interpretation as shown on Exhibit 10, or on the interpretation of the seismic data as shown on Exhibit 11?

A It is obvious that we are placing more reliance on Exhibit 10 or we wouldn't be interested in drilling the well.

Q Now, on Exhibit Number 10, your proposed location would actually be at the optimum point on the structure, would it not?

A We think so, yes.

Q Now, with respect to Exhibit Number 11, what was the source of your information for the preparation of this exhibit?

A I am not at liberty to disclose the actual source

of the information. Seismic information isn't the sort of thing that passes freely, particularly the good seis and, but I guess you will have to take my word for the fact that it is authentic. It was done by a small major company and the points are authentic from their map.

Q Do you have that map with you, sir?

A No, sir.

Q Do you have any of the information with you, basic information with you, from which you prepared this exhibit?

A No, sir.

MR. MORRIS: At this time, Mr. Examiner, I would move that Exhibit Number 11 not be accepted into evidence. I have no ability to cross examine Mr. Pennel with respect to the preparation of this exhibit since he does not have the underlying material available and is unwilling to furnish the basis or the source of his material.

MR. KELLAHIN: If the Examiner please, I think the objection may go to the weight to be given to the exhibit rather than to its admissibility, the witness having testified that he has examined the seismic data and this is an accurate reflection of what he examined. Certainly the Commission is well aware that seismic information is seldom offered over here in this Commission, very seldom is it available.

MR. FULLINWIDER: Could I speak on this point, sir?

MR. NUTTER: Yes, sir, go ahead.

MR. FULLINWIDER: We utilized the seismic data shown on this map, Exhibit 11, at this hearing because frankly it is the most optimistic seismic information we have seen. As you will note from the exhibit, it shows that our proposed location is likely to be about fifty feet low to the Ashmun-Hilliard well, perhaps more so.

Now, admittedly, this is negative enough when you consider the water table that has been established on the structure. It appears that the Ashmun-Hilliard well could not have an excess of sixty feet of oil column. This being the case, if we are fifty feet low we are exceedingly risky in our location, however, when we spoke to Mr. Hilliard on the telephone, he told us that they had shot this area extensively after the completion of their initial discovery well, that they indeed had a shot point on every forty acres, and he invited our inspection of this information. He called his geologist, Mr. Tracy Clark in Midland and made arrangements for us to see this information. Mr. Clark made it available to us, and all three of us saw it, Mr. Vasicek, Mr. Pennel and myself. And on the basis of Mr. Hilliard's own seismic information, our location would have been some seventy-five

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

or eighty feet low to his well.

Now, I think it would be possible, if the Examiners would like to have a continuance of this hearing to perhaps produce in evidence Ashmun and Hilliard's own seismic information, which might be difficult for their attorney to dispute.

MR. NUTTER: Well, the trouble of it is, Mr. Fullinwider, you all have seen that and you all have seen ^{hasn't} this and you know the source of this, but Mr. Morris ~~doesn't~~ I think that this case fairly well speaks for itself. I don't think you would drill the well on the basis of this seismic map, I think you are going -- Mr. Pennel stated that he was drilling the well on the basis of his own geological interpretation. Now, your's is strictly on log tops and geological information --

THE WITNESS: Yes, sir.

MR. NUTTER: -- as depicted from the logs?

THE WITNESS: Yes, sir, and optimism.

MR. NUTTER: Well, the purpose of this is to drill the well and the purpose of this one is to get a high risk factor?

MR. KELLAHIN: Correct.

MR. NUTTER: I think we will admit the exhibit, Mr.

Morris and do exactly as Mr. Kellahin suggested. We will take it for what we consider it to be worth.

MR. MORRIS: I have no further questions.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Pennel, you know the history of this seismic map, was this seismic map available at the time any of these wells, these six wells, which are show here, were drilled?

A Yes, sir, the seismic work was done prior to the drilling of the two Asmun and Hilliard wells and after Number 4 Well, or the Cosen well was drilled, and prior to the drilling of the Ashmun and Hilliard wells, so the Ashmun and Hilliard wells were well placed, certainly the discovery was well placed on this seis, even though it was made before the well was drilled.

Q It would appear that the second Ashmun and Hilliard well would be about the same position, structurally as your proposed location from this seismic map, is that correct?

A Yes, sir.

Q And that well never did go to the Devonian. The Mississippian was running approximately a hundred and eighteen feet below the Number 5, so they didn't take it to the Devonian?

A That's right, sir.

MR. NUTTER: Are there any further questions of the witness? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything to say, Mr. Morris?

MR. MORRIS: Mr. Examiner, our position in this is that Ashmun and Hilliard realizes that it can offer no objection to the compulsory pooling in this case, it does not offer any objection to it, however, our concern is that the Commission establish a reasonable charge for supervision and a reasonable charge for the risk involved in the drilling of the well.

I believe as far as the charge for supervision is concerned, Mr. Fullinwider has testified that \$100.00 would be reasonable for supervision and we have no quarrel with that.

As far as the charge for risk involved in drilling of the well is concerned, just, I think it is evident that here we are talking about the drilling of a well only some 1400 feet away from the, a good well, and that the structure map on which the well is being drilled, certainly indicates that this well is likely to be, if anything, better than the

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

Ashmun and **Hilliard well**. We trust that the Examiner and the Commission will bear these thoughts in mind in fixing the risk factor in which we would offer no opinion on.

MR. NUTTER: Mr. Kellahin.

MR. KELLAHIN: If the Examiner please, since there is no objection to the force pooling, why we haven't any problem here. Admittedly, the acreage will have to be pooled or the well can't be drilled, and the economics certainly enters into the picture when you start talking about the risk factor, because the Applicant, here, is being asked to carry a three-sixteenths working interest, which is a pretty heavy interest for a well of this cost.

Now, you say we are drilling within 1400 feet of the producing well, I point out that Ashmun and **Hilliard like-**wise drilled approximately 1400 feet from that same producing well and got a dry hole, so that point is up to the risk. I think further, the testimony offered by Mr. Pennel, brings it home to us, that we are talking about something like a six to one shot. There has been six dry holes and one producer drilled in an effort to develop the West Bronco field. Admittedly, all of these wells didn't go clear to the Devonian, but based on the structure encountered and its position, there was no use in carrying them on down, and

they were admittedly dry in the Devonian. So, the risk factor we are talking about, in addition to the normal risks incurred, encountered in drilling a well to the Devonian formation and the possibility of loss of circulation as discussed by Mr. Vasicek, we also have the long shot of making a producer out of this and they are gambling a considerable amount of money, and we feel that the Applicant is entitled to the maximum risk factor.

MR. NUTTER: Thank you. Does anyone have anything further they wish to offer in this case? If not, we will take Case 3633 under advisement.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)

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

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 29th day of August, 1965.

Jerry Potts
Court Reporter and Notary Public

My Commission Expires:
7-10-70

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3633 heard by me on Aug 9, 1967.

[Signature], Examiner
New Mexico Oil Conservation Commission