Case Number

4332

Application

Transcripts.

SmaLL Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Hobbs, New Mexico
April 15, 1970

REGULAR HEARING

IN THE MATTER OF:

The hearing called by the Oil Conservation Commission upon its own motion to consider the inclusion of the northwest quarter of Section 10, Township 9 South, Range 36 East, Lea County, New Mexico, in the Allison-Pennsylvanian Pool or the Vada-Pennsylvanian Pool, whichever is proper.

Case No. 4332

BEFORE: A. L. Porter, Secretary-Treasurer
David F. Cargo, Governor
George Hatch, General Counsel

Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We will call first Case Number 4332.

MR. CARR: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider the inclusion of the Northwest quarter of Section 19, Township 9 South, Range 36 East, Lea County, New Mexico, in the Allison-Pennsylvanian Pool or the Vada-Pennsylvanian Pool, whichever is proper.

MR. NUTTER: We will call for appearances in this case, please.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, New Mexico, appearing on behalf of BTA Oil Producers.

MR. NUTTER: Are there other appearances in Case 4332?

MR. BUTLER: Ode Doyle Butler, Blackrock Oil Company, Midland, Texas.

MR. NUTTER: Any other appearances?

MR. NEAL: C. E. Neal, Neal and Neal, P. O. Box 278, Hobbs, for Oleum Inc., Longview, Texas, P. O. Drawer 2232.

MR. NUTTER: What is that, O-l-e-u-m?

MR. NEAL: Yes, sir.

MR. NUTTER: Thank you.

MR. HAMON: Mr. Butler, are you representing yourself?

MR. BUTLER: I am representing Blackrock Oil Company.

(Witness sworn.)

(Whereupon, Applicant's Exhibits A through C were marked for identification.)

MR. NUTTER: You may proceed.

THE WITNESS: Okay. First of all I would like to submitt three exhibits. The first one is a structural contour map, Exhibit A; the second one is a log cross section, Exhibit B, and the third one is a production comparison, Exhibit C.

Blackrock Oil Company would respectfully request that the subject area, northwest quarter, Section 10, Township 9 South, Range 36 East, be placed in the Allison-Penn Pool and submitting with this we are basing this on a geological contouring which is Exhibit A that indicates an extension of the Allison-Penn Field to the southwestern corner of the Penn Field, which indicates more relative geological position than the Vada Field to the west.

The second Exhibit, B, low cross section, indicates a change in the lithology characteristics coming from the east through the Allison-Penn only three wells on the cross section, the Cosden Four, the Price One and the Blackrock Oil Company Well, which is the subject well under consideration. All indicate producing capabilities from two separate zones in the Bough C section of the Pennsylvanian.

MR. NUTTER: Now, Mr. Butler, the cross section is the red line on Exhibit A; is that correct?

THE WITNESS: Yes, sir. The cross section is the red line on the structural map. Indicating the fourth well on the cross section the BTA Bond Number Four does have somewhat of a different producing characteristic.

I would like at this time to make a small mention of Exhibit C and then ask for Mr. Norbert McIntyre to explain the geology on this somewhat more in detail. Exhibit C is the producing characteristics of the two wells to the west in the Vada Field, the BTA Alan 687 Limited Number One, the BTA Bond 685 Limited Well Number Four.

These figures are for the last five months of 1969 and the first month of '70, which is the ones that were of record in Midland. They indicate a rather high water capacity for both wells.

I might also mention that both of these wells are running completions. The Blackrock Well, Mobil Atlantic Federal Number 1, is a flowing completion; is currently flowing at top allowable with a very low water cut. This is more typical of initial completions in the Allison-Penn than in the Vada-Penn.

If you have any questions, I would be glad to answer them. If not, I would like to call Mr. McIntyre to explain the geology in more detail.

MR. NUTTER: Why don't you do that.

THE WITNESS: Okay.

(Witness sworn.)

NORBERT McINTYRE

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

MR. HATCH: Would you identify yourself for the record, please?

THE WITNESS: My name is Norbert McIntyre, Midland, Texas, independent consulting geologist in this case, representing Blackrock Oil Company.

MR. NUTTER: Mr. McIntyre, have you testified before the Commission or its examiners on previous occasions?

THE WITNESS: Yes, sir, I have.

MR. [illegible]: Is there any qualification on my expert geologist's matter of record with the Commission?

MR. SPURRIER: Yes, sir.

MR. MURRAY: Please proceed.

MR. SPURRIER: I'm not quite sure how these exhibits were described. I suppose Exhibit 1 would be --

MR. MURRAY: 1, 2 and 3.

MR. SPURRIER: A, B and C. Exhibit A being the subsurface contour map which is a depiction of the map on top of the Rough C which indicates a flanking or down dip low relief structure akin to and connected to Allison, which lies immediately to the east.

The red line of the section showing on the log section which accompanies this exhibit gives a relationship structurally and lithologically between the wells which, in the case of Well Number One on the cross section, the BTA Bond Number Four, northwest-southwest Section Four, 9 - 36 Vada Pool; Well Number Two being the Blackrock Oil Company Mobil Atlantic Federal Number One, northwest Section 10, 9 - 36, Well in the Allison Pool; Well Number Three being the Price Merrill Number One, which is in the southeast-northeast Section 10, 9 South, 36 East, also in the Allison Pool and the Number Four Well on the log section being the Cosden

P. G. Mills Number One, that well being located northwest-southeast Section 11, 9 South, 36 East, also in the Allison Pool.

In examining the cross section, I would like to point out wells Two, Three and Four, the lithological similarity as well as the similarity of production in these wells as opposed to BTA Bond Number Four which was completed from one main zone of porosity in the Bouch C as opposed to two separate zones of porosity which produces in the Allison Pool, and also of interest might be a comparison of drill stem test data in the BTA Bond Number Four as compared to the Price Merrill Number One in Section 10.

This would indicate a good possibility or a good probability that these wells are associated with separate structures insofar as Bouch C is connected to separate structure; also the lithological separation. It would appear to me that based on these characteristics, there is vertical separation between the Blackrock Oil Company Mobil Atlantic Federal Number One, which appears to be Allison Pool type as versus the BTA Bond Number Four, which seems to be separated vertically and lithologically.

That's all I have; if you have some questions, sir.

REDIRECT EXAMINATION

BY MR. [illegible]:

Q Mr. McIntyre, is there any difference insofar as the fluid characteristics are concerned?

A From the production history that we have as regards to BTA Pond Number Four and the Blackrock Mobil Atlantic Federal Number One the comparison that I would make is that the BTA Well was completed and produced a considerable amount of water along with the oil, whereas the Blackrock Mobil Atlantic Federal Number One is a flowing Well: monthly production of less than a thousand barrels of water.

Q Now, this Exhibit Number C, which is the tabulation of production from these wells -- of course, with the Blackrock Well it starts with January of 1970 --

A Yes, sir.

Q -- and with the other two wells it starts with August of 1969. Was this their original date of completion?

A Yes, sir. This goes back -- in the case of Blackrock, it was completed in January.

Q So, this is total production from that well?

A Yes, sir. That is correct.

Q And on the other two wells this is their entire life history also; is this correct?

A I'm not sure. I didn't prepare that exhibit. I know it goes back some five months.

Q Who prepared this exhibit, Mr. Butler?

A Mr. Butler prepared this exhibit.

MR. MUTTER: Mr. Butler, is this the total life history for these two wells?

MR. BUTLER: Yes.

MR. MUTTER: So, in other words, from the initial inception of production from the Alan 687 Number One, it made 5,050 barrels of water its first month of production and the 685 Number Four made 23,300 barrels of water in its original month of production?

MR. BUTLER: Yes.

Q (By Mr. Mutter) Whereas Blackrock Well Number One made 186 barrels of water in its first month of production. So, in other words, in your opinion, then, the chief difference in the producing characteristics of the wells would be this volume of water that has been produced?

A Yes, sir. Basically, to point out one thing, the BTA Bond Number Four -- Number One on the cross section -- and the Blackrock Oil Company Mobil Atlantic Federal Number One, which is Number Two on our cross section, are relatively flat structurally; yet their producing characteristics are

entirely different. This would suggest to me separation lithologically and vertically.

Q Now, on the plat here, Exhibit A, which would be this Bond Number Four, it's the well to the northwest: is that correct?

A That is correct, Number One also shown on the plat.

Q So, you have depicted on your subsurface map what appears to be a low or a trough coming up through the eastern half of Section 9?

A That is correct, in continuing on through the southeast corner of Section 4.

Q Which would give some degree of separation between the Number One Well and the Number Two Well on your cross section?

A That is correct, and this is strengthened by the fact that the Alan Federal Well, which is in the northwest-northeast Section 9, is somewhat lower than the two wells on the cross section.

This gives some credence or some justification for showing a synclinal area.

Q Well, actually, the subsea level of the Bough C as indicated here on Exhibit A is minus 5723 for the Bond

Four and the Blackrock Well, so they are identical?

A That is correct, they are identical.

Q But, then, you do have this dip in your blue line on the cross section which reflects the trough?

A That is correct; that reflects a synclinal situation between the two wells. In other words, in my experience with Bench C which has been somewhat, you find wells which are flat structurally no farther apart laterally than these wells, then you would have to assume that they are associated with different structures.

MR. HUTTER: Are there any other questions of Mr. McIntyre? Mr. Kellahin?

MR. KELLAHIN: I have just one question and I will direct it to either Mr. McIntyre or Mr. Butler. Do you have a bottom hole pressure on the Blackrock Well?

MR. BUTLER: No, we don't.

THE WITNESS: No, sir.

MR. HUTTER: That's all? Are there any further questions of Mr. McIntyre? He may be excused.

(Witness excused.)

MR. HUTTER: Do you have anything further, Mr. Butler, that you wish to offer?

MR. BUTLER: No.

MR. [illegible]: You have offered your exhibits, Mr. Butler?

MR. [illegible]: Yes.

MR. [illegible]: Is there objection to the introduction of Blackrock's Exhibits A, B and C? The exhibits will be admitted in evidence.

(Witness sworn.)

(Thereupon, Applicant's Exhibits 1 through 18 were marked for identification.)

JERRY MORITZ

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 Jerry Moritz.

Q By whom are you employed and in what position, Mr. Moritz?

A I am employed by BTA Oil Producers as reservoir engineer.

Q Where are you located?

A In Midland, Texas.

Q Mr. Moritz, have you ever testified before the

Oil Conservation Commission or one of its examiners and made your qualifications a matter of record?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. HUTCHINS: Yes, they are.

Q (By Mr. Kellahin) Mr. Moritz, have you made a study of the Vada-Pennsylvanian Pools and the Allison-Pennsylvanian Pools over the past few years?

A Yes, I have.

Q What was the occasion for the study that you made?

A The occasion was the application of Blackrock to include their well in the Allison Pool.

Q Now, prior to the application that was filed by the Commission on its own motion in the pending case, had you had anything to do with operations in the Vada-Pennsylvanian Pool and the Allison-Pennsylvanian Pool?

A Yes. I have been working in both of them through the years. I presented the testimony that established the middle Allison Pool which is now called this eastern portion of the Vada Pool.

Q Did you present the testimony that resulted in

the consolidation of the middle Allison and the Vada?

A No. That was handled by the Commission.

Q You did participate in the hearing, did you not?

A No.

Q You did not? Now, in connection with your study, have you prepared a series of exhibits in Case Number 4332?

A Yes, sir.

Q Referring to what has been marked as BTA's Exhibit Number 1, would you identify that exhibit?

A Yes. Exhibit Number One is a structure map on top of the Bough C formation covering the Allison-Vada Pool and the South Prairie Pool. It's superimposed on top of a land map and there are three colored areas.

The one to the east in red is the Allison Pool area. The one to the left in green is the Vada South Prairie Pool area and the yellow is what BTA has interpreted to be the area of no Bough C development; in other words, tight Bough C.

Q You would not say that the Bough C was not present in that area though, would you?

A I would say probably the formation may be there, but its character is vastly different than the producing interval.

Q Now, you did not intend the shaded areas to be the exact boundaries of the two pools as defined by the Commission, did you?

A No, sir, they are not. They are just areas that we interpret to have the Bough C porosity connected with these two pools.

Q Now, in connection with the designation of the tight zone as shown by the yellow, has BTA drilled any wells which help to define this area?

A Yes. We have drilled two wells in an attempt to extend the Vada Pool. One is known as BTA's Knox in the southwest quarter of Section 26 of 8 - 36 and the second one is BTA's Santa Fe located in the northwest quarter of Section 15, 9 - 36.

These two wells are situated, as you can see, between the two producing pools, the Allison and the Vada.

Q Now, have you located the Blackrock Well on this exhibit?

A Yes, sir. I have shown it by a red diamond. It is located in the northwest quarter of the northwest quarter of Section 10.

Q Now, referring to what has been marked as BTA's Exhibit Number Two, would you identify that exhibit?

A Yes. This is an exhibit that we think collaborates the separation between the two pools, the Allison and the Vada. This is a plot of time versus bottom hole pressure. The curve starting in 1954 and extending to '66 is the Allison Pool.

The first pressure there in '54 is the discovery well and as you can see the pressure has declined through the years to a point where along about '64, '65 and '66, it was getting pretty low and then starting in 1968, when BPA entered the area that was formerly known as the middle Allison --- I have a plot of some of our pressures, mainly on the wells on the east side next to the tight line and these pressures show that we started with the pressure of about 2250 and as we have developed the area, the pressures have come down and seem to correlate very good between wells on the drop in pressure.

This Bough C communicates very good and you can see pressure drops from wells on development.

Q Now, you say the Bough C communicates very good. Are you referring to communication within the pools as they are presently designated?

A Yes, within the porosity intervals from location to location; say within the Vada Pool it communicates very good.

Q On the basis of your Exhibit Number Two, do you find that it indicates that there is any communication between the Vada portion of the pool and the Allison portion?

A I think it points out to the contrary. I don't think there is any communication between the two pools. My belief is that with this type of communication, you are talking about above 200 milidarcies permeability; I don't think you could maintain a pressure differential like this between two pools.

Q Now, the Allison Pool has been producing since 1954, has it not?

A Yes, sir.

Q Would you consider it substantially depleted at this stage?

A I would say it was.

Q What is the stage of depletion on the Vada Pool?

A I would say that we were still quite a ways from depletion. We still have about 1800 pounds bottom hole pressure and our producing rates are still fairly good.

Q Now, referring to a series of exhibits marked 3, 4 and 5, would you discuss those exhibits, please?

A These exhibits are plots of oil and water production from several of BTA's leases on the east side of

the Vada next to the tight line. I will point out each one. The first one is the Bond Lease, which consists of all of Section 4 in the south half of Section 5 in 9 - 36. As you can see from the plot, this lease produced considerable amounts of oil and water.

As a point of reference, in December of '68, we were producing an average of 250 barrels of oil per well and at that same time we were producing 750 barrels of water per day per well. Another point, in July of '69, when we had six wells completed we were averaging still about 720 barrels of water per day per well and 290 barrels of oil per day per well.

The next exhibit is the BTA Alan, which is located in the northeast quarter of nine. This well shows that -- and also it was drilled at a little bit later time than the Bond -- that its capacity at the peak was about 180 barrels of water per day and about 350 barrels of oil; so, the characteristics of an individual well does vary.

However, we are moving in almost all cases considerable amounts of fluid. The next exhibit is the Cash, which is located in the southwest quarter of nine and again at its peak was producing about 300 barrels of water per day and about 360 barrels of oil.

Q [illegible] recognition, what are the producing characteristics of the Vada Pool as to fluid?

A Initially, when we first moved into the area our producing characteristics were in the neighborhood of 200 barrels of oil and somewhere between 750 and a thousand barrels of water per day.

Q Now, do you find a comparison similar to this in the Allison Pool?

A No, sir. I have prepared the next exhibit --

Q Exhibit number six.

A -- to show a well on the west side of the Allison Pool. It is in the southwest quarter of Section 11. It's Sun Oil Company's P. C. Mills Number One. This well was completed in '55 and is still producing.

Its maximum oil rate, which occurred in '60 and '61, was about 70 barrels of oil per day. At the same time it was producing about 50 barrels of water per day. You can see that the water and oil have both declined. It's interesting to note or to substantiate maybe this separation in '65 and '66, the water production was dropping off on this well.

This was the same period that the maximum differential existed between -- pressure differential existed

between the Vada and Allison and it would appear to be that if there was communication somewhere in this area that you would have had an influx of fluids into this area of Section 11, which is not reflected on this particular well.

Q Now, that is shown by your Exhibit Number Two, is it not?

A The pressure differential, yes.

Q Does that then, in your mind, indicate that there is a separation between the Allison and the Vada?

A Yes, sir.

Q Now, you have prepared a series of exhibits which have numbered 7 through 12. If you would, identify these exhibits and state what they are designed to show.

A Yes. These exhibits are yearly tabulations of oil, gas and water where available of several leases along the west edge of the Allison Pool, mainly they are down-dip wells and next to what we think is the tight line.

The first one is this Price Merrill, which is located in Unit "H" of Section 10 which is the closest well to the Blackrock Well. Its water production is tending to deplete, too. At present, it is only making 56 barrels of water per day and 35 barrels of oil per day. It was, at one time, producing in '64 about 250 barrels of water per day, but we

between the Vada and Allison and it would appear to me that if there was communication somewhere in this area that you would have had an influx of fluids into this area of Section 11, which is not reflected on this particular well.

Q How, that is shown by your Exhibit Number Two, is it not?

A The pressure differential, yes.

Q Does that then, in your mind, indicate that there is a separation between the Allison and the Vada?

A Yes, sir.

Q Now, you have prepared a series of exhibits which have numbered 7 through 13. If you would, identify these exhibits and state what they are designed to show.

A Yes. These exhibits are yearly tabulations of oil, gas and water where available of several leases along the west edge of the Allison Pool, mainly they are down-dip wells and next to what we think is the tight line.

The first one is this Trice Merrill, which is located in Unit "H" of Section 10 which is the closest well to the Blackrock Well. Its water production is tending to deplete, too. At present, it is only making 56 barrels of water per day and 35 barrels of oil per day. It was, at one time, producing in '64 about 250 barrels of water per day, but we

think this is because of the low structural position.

It is off in a steep dipping area, as you can see by the structure map, and we think that it was merely depleting low water.

The next one, just for information, is the south offset to the Price Well which is the G. M. Cone. It doesn't supply too much information. It only produced about two months.

The next one is the Sun R. G. Mills Number One, which is the plot that I had previously and you can see again that there was in the period of '64 to '66, when the maximum pressure differential existed there was not an influx of water. Actually, the water was decreasing in that period of time and presently they are only producing about 14 barrels of water per day.

I won't go through all of these, but you can see that this situation of the water being at a low volume -- I'm thinking of less than 40 or 50 barrels a day -- continues throughout all these exhibits. There is no indication that we have an influx of fluids from the Vada to the Allison and the pressure differential is definitely in that direction if communication between the two zones exists.

Q Now, do you find a decline in the water production

in the Vada Pool?

A Yes, we sure do. We have produced these wells and we have seen a decline in water production.

Q It is characteristic then of Bough C that you would expect it to decline?

A Right. This is mainly because the pools are limited. They do have dry holes. The porosity in the Bough C changes from top to bottom; some cases the whole Bough C interval will be developed for porosity but it does have limits and the water is contained just within the porosity and once you produce that amount of water, it will start to decline.

Q Then, you would base, then, your conclusions that the two pools are separate on the fact primarily of the pressure differentials and the lack of communication as reflected by the production characteristics in the two pools; is that correct?

A Yes. I think also the two previous dry holes that I pointed out being located between the two pools are significant.

Q Now, do you know anything about the pressures in the Blackrock Well which would lead you to conclude that it is in the Vada Pool rather than the Allison?

A That information I have was supplied only by the scouting services. The Blackrock Well was completed flowing and it had a reported 400 pound flowing tubing pressure. This, to me, indicates that the well has to have a fairly good bottom hole pressure much greater than that is in the Allison Pool.

Q Would it be helpful if there were a bottom hole pressure test on this Blackrock Well?

A I think so, yes.

Q Now, you heard the testimony that was offered here by Mr. Butler as to the difference between the two pools. Do you have any comment on that?

A Well, I think the fact that the porosity develops in one particular spot in the Bough C, we have not found this to mean much. We plan on developing in the top, the bottom, in the middle and over the entire interval; however, all of the pressures seem to correlate with our Vada. Previous completions, the performance of the pressure drop all seem to be tied in together.

Our DST's in certain cases will actually show communication on the DST.

Q Now, Mr. McIntyre, in his testimony, referred to the cross section and particularly to the Bond Well Number

Four. Is there anything peculiar about the drill stem test that is shown on the Blackrock Exhibit ?

A I haven't had a chance to examine it. No, this is the correct DST for that well.

Q That is correct? Were Exhibits 1 through 18, inclusive, prepared by you or under your supervision?

A Yes.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1 through 18.

MR. NUTTER: BTA's Exhibits 1 through 18 will be admitted in evidence.

MR. KELLAHIN: That completes the examination of the witness, Mr. Examiner.

MR. NUTTER: Does anyone have any questions they wish to ask Mr. Moritz?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Moritz, there appears to me to be one basic difference in the producing characteristics of the typical Vada Well as compared with this Blackrock Well and if I am correct, I believe that most of the Vada Wells come in producing high volumes of water from the initial production; is this right?

A Generally, yes.

Q And it appears from Blodgett's Exhibit C that the production characteristics would be the opposite there. The well came in in the month of January, 1979, producing zero 45 or 4500 barrels of oil and 180 barrels of water. The following month it made 2500 barrels of oil and about 1400 barrels of water and then in the month of March, production of oil increased to almost 12,000 barrels and the production of water decreased to less than a thousand.

Is this typical of a Vada Well?

A I wouldn't say it was typical. I would say that it was untypical. We have wells that have come in flowing clean, too. I am thinking particularly of this Alan Well shown on whichever exhibit it is.

You can see that when we initially started on it in February of '69, we were about 50 - 50, but we had a period in there on that well that we flowed clean oil and I think this is due to the structural position that you cannot see here.

We are developing on 160 acres and the structure of this area is not completely defined or delineated by this type of development, and I think that you can get into the Bough C and have a slightly high well relative to the

immediate area and have a pocket of oil there.

Q Well, now, according to Mr. McIntyre's testimony this well is identical structurally or at least it has an identical structural high location to your well in the southeast of Section 4: that's your Bond Number Four. Now, is there a difference in the producing characteristics insofar as oil and water is concerned between the Blackrock Well and your Bond Number Four?

A I think there is. I think we are making slightly more water than they are; yes.

Q But, yet, they are structurally the same?

A Yes, but you also realize you are covering three-quarters of a mile across there. What I am saying is that even though they appear on this map to be structurally flat in the immediate area of the Blackrock Well, you may have a little bit higher nose there in this reef and this would be enough to possibly form a little pocket of oil.

This is the best explanation we have come up with when we get these flowing wells.

Q Now, I notice in comparing the structural maps BTA has offered as compared with Mr. McIntyre's map, you both do have this synclinal feature coming up into Section 10 there; then McIntyre has another one that bends back up around

this pool here in the northwest corner of Section 10; he's got another cyclinal trough which bends around that and comes back up into the east half of Section 9 and your structural map lacks that one.

What do you have to say about the comparison of the structural maps there?

A Well, the only thing that I can say is that our people believe that with this high dip going off of the Allison Pool, the west side of the Allison Pool, it's reasonable to expect that it will continue on down into this syncline that we have shown there and that you can expect it with the points on the Vada Pool there to come back up on the other side there.

Q Now, where was the middle Allison Pool which subsequently became part of the Vada? Was this in this green portion of your Exhibit Number One?

A Yes. Essentially, the initial part of the middle Allison was the south half of Section 5 and I believe the south half of Section 33 there.

Q I see.

A As we developed around this area and completely passed the old Bough C Pool clear to the west, we eventually tied completely into the old Vada Pool. We have almost

complete development now clear over to the old Vade.

MR. [illegible]: Are there any other questions of Mr. Verity? If there are no further questions, he may be excused.

(Witness excused.)

MR. MUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: If that completes the testimony in this case I would like to make a very brief statement.

MR. MUTTER: Please do. Mr. Neal, did you plan to present any testimony?

MR. NEAL: We have one witness, very short.

MR. MUTTER: Okay.

(Witness sworn.)

CHARLES NOVY

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

DIRECT EXAMINATION

BY MR. NEAL:

Q Would you please state your name, sir?

A My name is Charles Novy, N-o-v-y.

Q By whom are you employed?

A I am employed by Oleum Incorporated, formerly Trice Production Company.

Q Of Longview, Texas?

A Yes, sir.

Q You are the operator of the Price Hall in Section Number Ten?

A Yes, sir, we are.

Q And what is your formal education, sir?

A I have a degree in petroleum engineering and geological engineering from Texas A and M University.

Q You have never before testified before the New Mexico Oil Conservation Commission?

A No, sir, I have not.

Q You have testified before the similar bodies in the State of Oklahoma and Texas?

A Yes, sir.

Q Have you been practicing your profession since you graduated from Texas A and M?

A Yes, sir, I have.

MR. NEAL: Does the Commission wish to accept the qualifications of a Texas Aggie, Mr. Nutter?

MR. NUTTER: We may want to go into this a little further. What year did you graduate?

THE WITNESS: '58.

MR. NUTTER: And you have been practicing in your

profession since that time?

MR. [illegible]: Yes, sir.

MR. [illegible]: And you have made a study of this particular area --

MR. [illegible]: Yes, sir.

MR. HUTTER: -- that is under question today? Yes, the witness is qualified, Mr. Neal.

Q (By Mr. Neal) In the interest of time, sir, would you generally agree with the conclusion and the exhibits as presented by the BTA Oil Producers?

A Yes, sir, we would.

Q You do own the lease that contains the bottom 80 or the south 80 of the land in question in this hearing?

A Yes, sir, we're the operator of the south half of the northwest of Section 10, 9 South, 36 East.

Q Would you like to make any further statement pertaining to the condition of your well and generally comment on the testimony heretofore offered?

A First, I would like to state that we would support BTA's position that the Blackrock Well belongs in the Vada Pool and we would further like to point out the producing characteristics of the formerly Price Merrill now the Oleum Incorporated Merrill Number One, which is classified as an

Allison Field.

It was completed in the fall of 1958 and currently is on pump, producing approximately 55 barrels of oil a day and 60 barrels of water a day. We have a low fluid level in the well indicating a low bottom hole pressure.

Q And, generally, you do agree with the exhibit, separation of the pool, as presented by BTA Number One, I believe, that there is a production characteristic differential between the two fields?

A In general we agree with that exhibit, yes, sir.

MR. NEAL: I believe in the interest of time, Mr. Nutter, that's all we have; be glad to answer any questions.

MR. NUTTER: Does anyone have any questions of Mr. Novy? He may be excused.

(Witness excused.)

MR. NEAL: In general, just a short statement. We do support the position of BTA Oil Producer, Mr. Nutter.

MR. NUTTER: Thank you, Mr. Neal. Mr. Kellahin?

MR. KELLAHIN: If the Examiner please, just a couple of matters I would like to bring to the attention of the Commission in this case.

The pool rules for the two pools in the Allison-Pennsylvanian Pool, the rules were adopted in Case 1637,

Order R-1395 E. That provides for 80-acre spacing, wells to be located in a unit containing 80 acres consisting either of the south half or north half, east half or west half of the quarter-quarter section.

The pool rules for the Vada Pennsylvanian Pool in Order R-3179 A provide for units consisting of 160 acres. The proportional factors to be assigned to each well for allowable purposes is the same in both pools, 4.77 proportional factor, so the allowable for any given well in the area would be the same.

What we are confronted with here is we have a pool developed on 160 acres which would end up, if this position of Blackrock is approved, offset by the possibility of two wells on 160 acres receiving twice the allowable of a 160-acre well in the Vada Pool.

Now, the pool rules in each case provide that they govern any well drilled within the Allison-Penn or the Vada-Penn as the case may be and not nearer to nor within the limits of another designated Pennsylvanian Pool. This says each well; it doesn't say each unit dedicated. The nomenclature cases haven't established pool boundaries in this particular instance.

The Vada Pool, insofar as the northwest quarter of

Section 9 is concerned, goes to the east boundary of the northwest quarter of Section 9. The Vada-Pennsylvanian Pool extends to the center line and includes the east half of Section 10.

Now, it is only by chance of lease ownership and acreage dedication of the north half of the quarter section resulted here which made the unit dedicated adjacent to both pools. Had the operator owned, for example, the west half only of the quarter section of the northwest quarter, it would have been adjacent to the Vada Pool and this case would probably never have been before the Commission.

I think, however, that what the Commission should be governed by in establishing a pool extension is the pool rules that have been adopted by the Commission and it says a well located not nearer to or within one mile of another pool.

Now, this well physically is located in the immediate offsetting quarter-quarter section to the Vada-Pennsylvanian Pool and its two sections removed from the Allison-Pennsylvanian Pool. If we look at the offsetting wells, the subject well is located 2, 40-acre locations from the nearest Vada-Pennsylvanian Well and something over three locations from the nearest Allison-Pennsylvanian Well; the

nearest Allison-Pennsylvanian Well being in Unit "H" of Section 10 and the subject well being in Unit "D" of Section 10; the nearest Vada Well being in Unit "B" of Section 9. And on that basis, we feel that the Commission should follow the established rules in the interest of protecting the correlative rights of the operators involved here and include the acreage in the Vada-Pennsylvanian Pool.

MR. NUTTER: Thank you. Mr. Butler, did you have any closing statement?

MR. BUTLER: Mr. Nutter, I would like to make one statement only on the location and operation of pools into whichever field that they are adjacent to. I believe it was the Commission's idea to give a rule or some kind of a rule governing the placing of the pool, but I do not believe it was held to maintain over the characteristics or the formations or to be held as to override the characteristics of the separate producing formations.

I think personally it's rather obvious there is quite some difference in the producing characteristics between the Blackrock Well and the BTA Wells to the west. If this well is placed in the Vada Pool, there was only an 80-acre tract available when we drilled it. We did file it as an Allison-Penn Well.

This could possibly preclude any development to the east of this well because again we are in an area of the edge of the Allison Field that generally is broken in 80-acre tracts. That's all.

MR. MUTTER: Does anyone else have anything they wish to offer in Case Number 4333?

MR. KELLY: I have a statement to read on behalf of Mobil Oil Corporation. Mobil Oil Corporation, an operator in both the Allison-Penn and the Vada-Penn Pools recommends that the northwest quarter of Section 10, T-9 South, R-36 East, Lea County, New Mexico, be assigned to the Vada-Penn Pool.

This recommendation is based on the potential of Blackrock's Mobil Atlantic Federal Well Number One, which is located in the northwest quarter of Section 10, being more similar to producing rates of offset Vada-Penn Wells and on Blackrock's Well being closer to Vada production than Allison production.

MR. MUTTER: Thank you.

MR. WATCH: The Commission has received a telegram from Tenneco, reference Case 4333; as an offset operator, Tenneco Oil Company recommends the northwest quarter of Section 10, Township 9 South, Range 36 East, Lea County, New

Mexico, be included in the Vada-Penn Field and subject to 160-acre spacing. Pressure and performance of the subject well indicates it should not be included in the depleted Allison Field.

MR. MUTTY: Thank you. Are there any further statements in this case? We will take the case under advisement.

I N D E X

E X H I B I T S

STATE OF NEW MEXICO)
)
COUNTY OF BERNALILLO)

I, GLENDA BURNS, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Glenda Burns
Notary Public

My Commission Expires:

March 12, 1973

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. ..... heard by me on ....., 19....

....., Examiner
New Mexico Oil Conservation Commission

western union **Telegram**

KA007 NSB009 (830).

NS MDA005 RS PD=MIDLAND TEX 14 825A CST=

OIL CONSERVATION COMM=

1000 WEST BROADWAY HOBBS NMEX= 1970 APR 14 AM 8 25

ATTN A P PORTER JR

REF CASE #4332.

AS AN OFFSET OPERATOR TENNECO OIL COMPANY R
RECOMMENDS THE NORTHWEST QUARTER OF SECTION 10
T-9-S R-36-E LEA COUNTY NEW MEXICO BE INCLUDED IN THE
VADA PENN FIELD AND SUBJECT TO 160 ACRE SPACING.
PRESSURE AND PERFORMANCE OF THE SUBJECT WELL INDICATES
IT SHOULD NOT BE INCLUDED IN TME DEPLETED ALLISON FIELD=

TENNECO OIL CO F J MCDONALD DIST PROD SUPT==

#4332 10 T-9-S R-36-E 160

OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 · SANTA FE
87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

May 5, 1970

Re: Case No. 4332
Order No. R-3959
Applicant:
OCC

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC

Other Mr. Doyle Butler, Mr. C. F. Neal, Mr. C. R. Kreuz

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION TO CONSIDER THE INCLUSION OF THE NW/4 OF SECTION 10, TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM, LEA COUNTY, NEW MEXICO, IN THE ALLISON-PENNSYLVANIAN POOL OR THE VADA-PENNSYLVANIAN POOL, WHICHEVER IS PROPER.

CASE No. 4332
Order No. R-3959

NOMENCLATURE

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 15, 1970, at Hobbs, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 5th day of May, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That Blackrock Oil Company on December 31, 1969, completed its Mobil Atlantic Federal Well No. 1 as an oil well producing from the Bough "C" zone of the Pennsylvanian formation at a location 660 feet from the North line and 660 feet from the West line of Section 10, Township 9 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That said location lies between the horizontal boundaries of the Allison-Pennsylvanian and Vada-Pennsylvanian Pools, Lea County, New Mexico.

(4) That the Commission set Case 4332 on its own motion in order to determine whether the above-described well and the NW/4 of said Section 10 should be placed in the Allison or Vada Pool.

(5) That a typical well completed in the Allison-Pennsylvanian Pool produces considerably more oil than water.

(6) That a typical well completed in the Vada-Pennsylvanian Pool produces considerably more water than oil.

(7) That the above-described well produces notably more oil than water.

(8) That the producing characteristics of the above-described well more nearly conform to the producing characteristics of wells completed in the Allison-Pennsylvanian Pool than of wells completed in the Vada-Pennsylvanian Pool and should, therefore, be spaced, operated, and produced in accordance with the Special Rules and Regulations governing the Allison-Pennsylvanian Pool.

(9) That the evidence indicates that all or a portion of the NW/4 of said Section 10 is productive of oil from the Allison-Pennsylvanian Pool.

(10) That the horizontal limits of the Allison-Pennsylvanian Pool should be extended to include the NW/4 of Section 10, Township 9 South, Range 36 East, NMPM, Lea County, New Mexico.

IT IS THEREFORE ORDERED:

(1) That the horizontal limits of the Allison-Pennsylvanian Pool, Lea County, New Mexico, are hereby extended to include therein the following-described lands:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM
Section 10: NW/4

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

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

esr/

Docket No. 10-70

DOCKET: REGULAR HEARING - WEDNESDAY - APRIL 15, 1970

OIL CONSERVATION COMMISSION - 9 A.M. - THE HOLIDAY INN, 200 SOUTH LINAM, HOBBS, NEW MEXICO

ALLOWABLE: (1) Consideration of the oil allowable for May, 1970;

(2) Consideration of the allowable production of gas for May, 1970, from fifteen prorated pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for May, 1970.

THE FOLLOWING CASES WILL BE HEARD BY THE COMMISSION OR BY A. L. PORTER, Jr., EXAMINER OR DANIEL S. NUTTER, ALTERNATE EXAMINER:

CASE 4332: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider the inclusion of the NW/4 of Section 10, Township 9 South, Range 36 East, Lea County, New Mexico, in the Allison-Pennsylvanian Pool or the Vada-Pennsylvanian Pool, whichever is proper.

CASE 4333: Application of Phillips Petroleum Company for a dual completion and salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Marley "A" Well No. 1, a wildcat well, located in Unit P of Section 3, Township 11 South, Range 31 East, Chaves County, New Mexico, in such a manner as to permit the production of oil from the San Andres formation through perforations from 4148 feet to 4165 feet and the disposal of produced salt water into the San Andres formation through the perforated interval from 4344 feet to 4800 feet.

CASE 4084: (Reopened)

In the matter of Case No. 4084 being reopened pursuant to the provisions of Order No. R-3732, which order established 160-acre spacing units and an 80-acre proportional factor of 4.77 for the Feather-Wolfcamp Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 should or should not be retained.

CASE 4334: Application of Pan American Petroleum Corporation for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to recomplete its State Gas Com "BG" Well No. 1 at an unorthodox location 1450 feet from the North line and 1490 feet from the West line of Section 2, Township 29 North, Range 10 West, Blanco-Mesaverde Pool, San Juan County, New Mexico, the N/2 of said section to be dedicated to the well.

CASE 4335: Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Vacuum (Grayburg-San Andres) Pool by the injection of water into the San Andres formation through its Lea "FE" State Wells Nos. 2 and 4, located in Units C and E, respectively, of Section 11, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4336: Application of Byron McKinight for an exception to Order No. R-3221, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil or gas on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties. Said exception would be for applicant's lease comprising all of Section 19, W/2 Section 20, NW/4 Section 29, and NW/4 Section 30, Township 19 South, Range 34 East, undesignated Yates-Seven Rivers gas pool, Lea County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said leases in unlined surface pits on the leases.

CASE 3859: (Continued from the October 15, 1969, Regular Hearing)
Application of Wilson Oil Company for an exception to Order No. R-3221, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Commission Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's leases in Sections 13, 23, and 24 of Township 21 South, Range 34 East, and Sections 7 and 18 of Township 21 South, Range 35 East, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico. Applicant, seeks authority to continue to dispose of produced water in seven unlined surface pits located in the center of the W/2 of said Section 13, center of the W/2 SE/4 of said Section 13, SW/4 NE/4 of said Section 23, center of SW/4 of said Section 24, center of the NE/4 of said Section 7, NE/4 SW/4 of said Section 7, NW/4 NW/4 of said Section 18.

(Case 3859 continued)

In the alternative, applicant seeks an extension of time in which to comply with the provisions of said order.

CASE 4337: Application of Petroleum Corporation of Texas for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Dexter Monagan Craridge Federal Well No. 1 located in Unit J, Section 22, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit in the vicinity of said well.

CASE 4338: Application of Skelly Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on its Lea "D" Lease by selective injection of water into various zones of the Grayburg-Jackson Pool through three wells located in Units B, H, and J of Section 26, Township 17 South, Range 31 East, Eddy County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of well response.

CASE 4339: Southeastern nomenclature case calling for an order for the creation of certain new pools and the assignment of oil discovery allowables and the contraction and extension of certain other pools in Lea, Chaves and Eddy Counties, New Mexico.

(a) Create a new pool in Chaves County, New Mexico, classified as an oil pool for San Andres production and designated as the Tower-San Andres Pool comprising the following:

TOWNSHIP 11 SOUTH, RANGE 31 EAST, NMPM
SECTION 3: SE/4

(Case 4339 continued)

Further, for the assignment of approximately 20,740 barrels of oil discovery allowable to the discovery well Phillips Petroleum Company's Marley "A" Well No. 1, located in Unit P of said Section 3.

(b) Create a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production and designated as the Tres Papalotes-Pennsylvanian Pool, comprising the following:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM
SECTION 33: NE/4

Further, for the assignment of approximately 52,340 barrels of oil discovery allowable to the discovery well Lone Star Producing Company's New Mexico (80) State Well No. 1 located in Unit B of said Section 33.

(c) Create a new pool in Eddy County, New Mexico, classified as an oil pool for Cherry Canyon production and designated as the Sand Dunes-Cherry Canyon Pool. The discovery well is Texas American Oil Corporation's Todd 26 Federal Well No. 2 located in Unit G of Section 26, Township 23 South, Range 31 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 31 EAST, NMPM
SECTION 26: SW/4 NE/4

(d) Create a new pool in Lea County, New Mexico, classifed as an oil pool for Devonian production and designated as the Warren-Devonian Pool. The discovery well is Continental Oil Company's SEMU Burger B No. 58 located in Unit C of Section 29, Township 20 South, Range 38 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM
SECTION 29: NW/4

(e) Extend the Buffalo Valley-Pennsylvanian Gas Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 27 EAST, NMPM
SECTION 26: S/2

Case 4359 (continued)

(f) Extend the East Caprock-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 32 EAST, NMPM
SECTION 23: NE/4

(g) Extend the Eagle Creek-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM
SECTION 23: NW/4 NW/4

(h) Extend the South Eunice-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
SECTION 11: NE/4

(i) Extend the Maljamar Grayburg-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
SECTION 9: NE/4
SECTION 10: NW/4

(j) Extend the Quail Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM
SECTION 20: All

(k) Extend the Round Tank-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM
SECTION 30: W/2 NW/4 and NW/4 SW/4

(l) Extend the Shugart Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
SECTION 25: W/2 NW/4

(m) Contract the Bough Permo- Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM
SECTION 14: S/2

(n) Extend the Vada-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

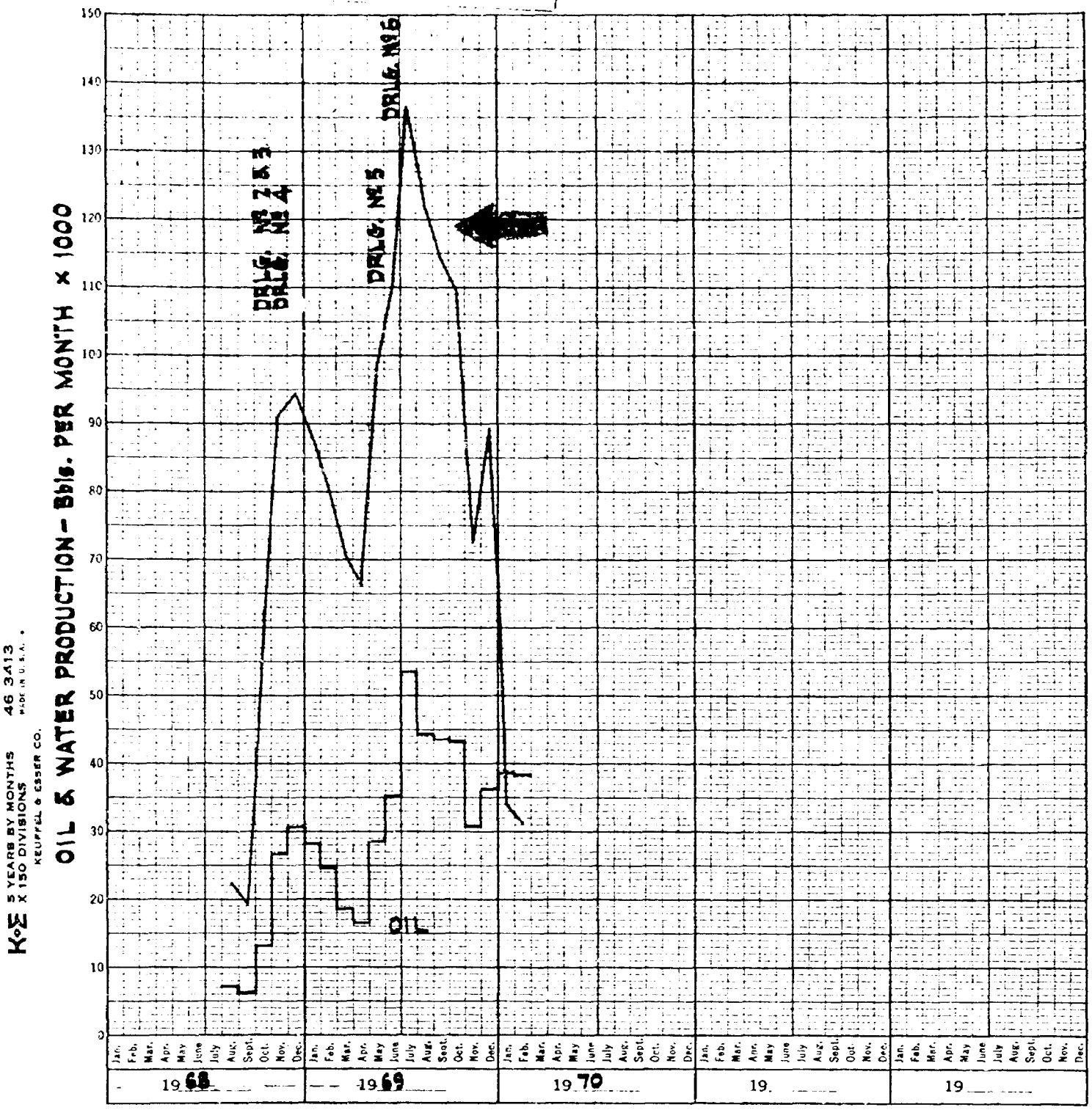
TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM
SECTION 13: S/2

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM
SECTION 18: S/2

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM
SECTION 10: SE/4
SECTION 14: S/2
SECTION 15: NE/4
SECTION 23: NW/4

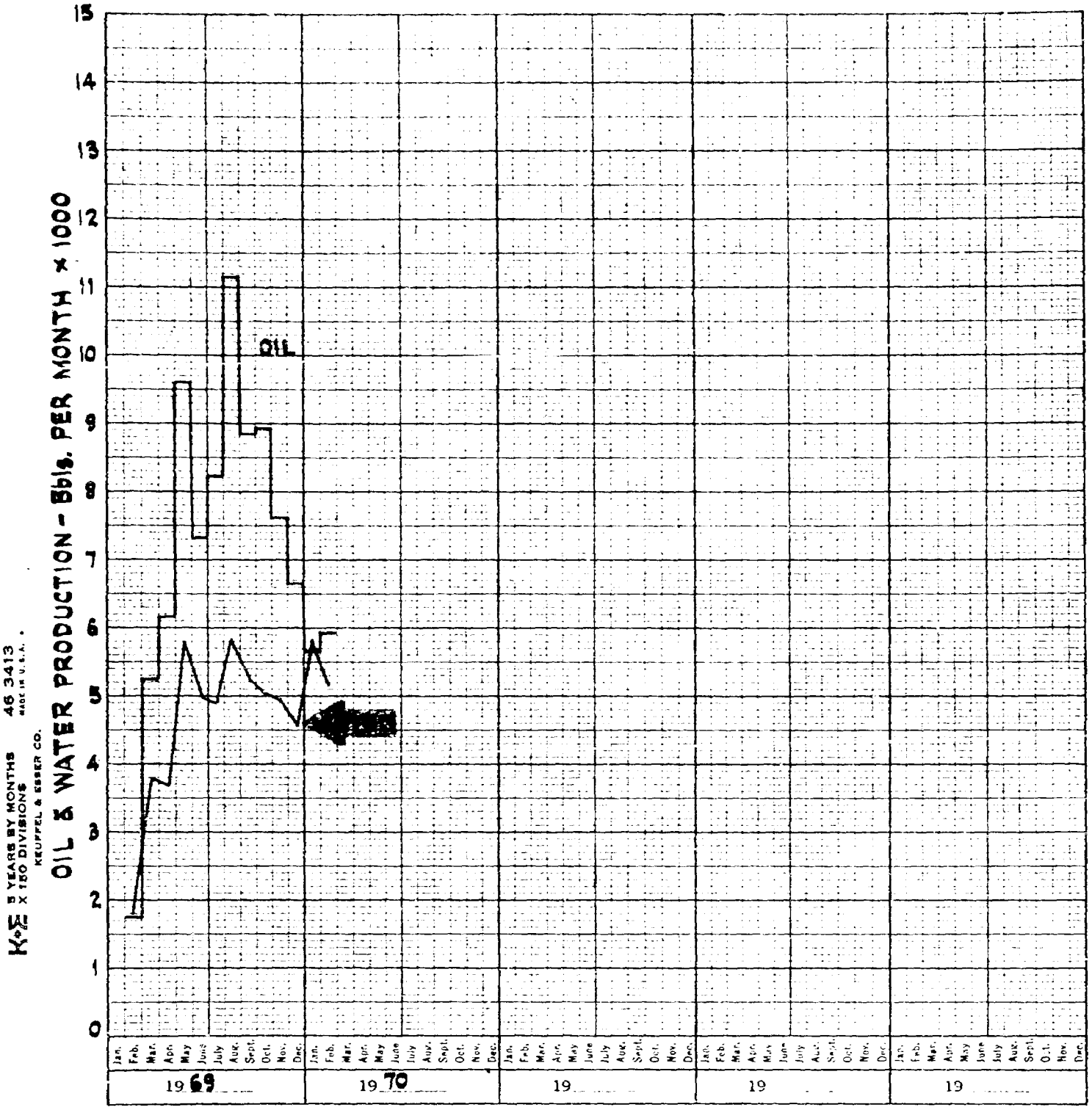
BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 3
CASE NO. 4332

BTA OIL PRODUCERS
685 LTD. BOND LSE.
WELL Nº'S. 1, 2, 3, 4, 5, 6
VADA POOL
LEA COUNTY, NEW MEXICO



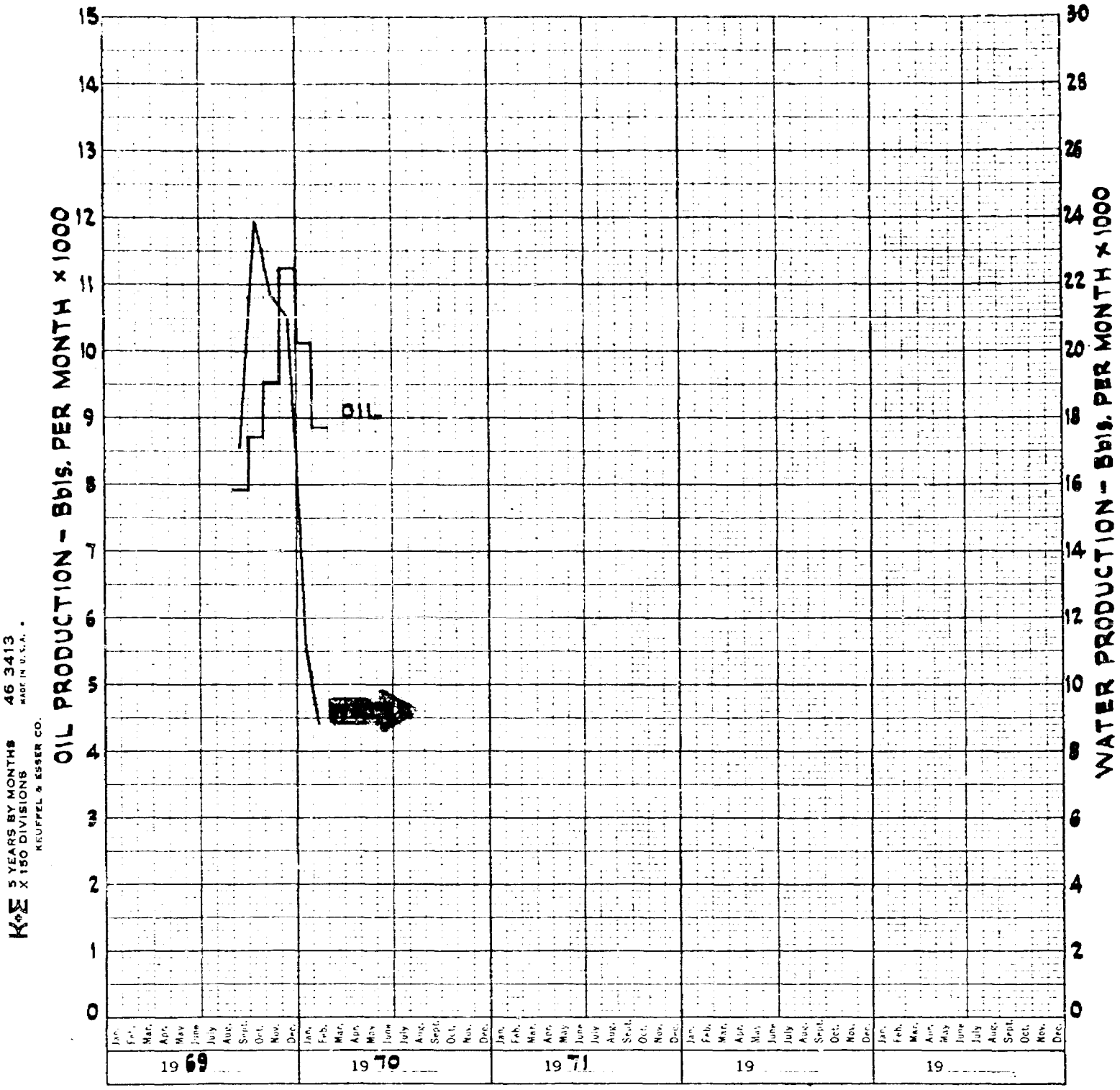
BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
BTA EXHIBIT NO. 4
CASE NO. 4283

BTA OIL PRODUCERS
687 LTD. ALLYN No 1
VADA POOL
LEA COUNTY, NEW MEXICO



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
4-332

BTA OIL PRODUCERS
691 LTD. CASH Nº 1
VADA POOL
LEA COUNTY, NEW MEXICO



K&E 5 YEARS BY MONTHS 46 3413
X 150 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.

Trice - Merrill
H-10-9-36
Allison Pool
Lea County, N.M.

	Production		
	Oil	Gas	Water
1954			
1955			
1956			
1957			
1958	2131	-	-
1959	15122	21244	8332
1960	13656	27172	10331
1961	12201	16621	11794
1962	9049	20309	19655
1963	10686	17212	63972
1964	10635	18394	90028
1965	9443	18160	86890
1966	10246	16910	83190
1967	10796	17446	42620
1968	9192	9537	34400
1969	12372	9974	20658
Total	125529	192979	471870

BTA Oil Producers
Case #4332

G. M. Cone - Kiker
I-10-9-36
Allison Pool
Lea County, N. M.

	Production		
	Oil	Gas	Water
1954			
1955			
1956			
1957			
1958			
1959			
1960			
1961	372	525	1000
1962			
1963			
1964			
1965			
1966			
1967			
1968			
1969			
Total	372	525	1000

BTA Oil Producers
Case #4332

Sun - R. G. Mills #1
L-11-9-36
Allison Pool
Lea County, N. M.

	Production		
	Oil	Gas	Water
1954	-	-	-
1955	37401	-	22900
1956	22027	-	28910
1957	14798	-	17925
1958	9217	-	-
1959	7332	15042	15978
1960	18820	20584	15371
1961	22514	20024	16731
1962	14416	21009	13665
1963	9364	17806	11964
1964	8138	16213	13758
1965	5165	16527	12938
1966	5205	16877	6447
1967	5840	18110	3969
1968	4508	14412	5987
1969	3867	16716	4372
Total	188612	193320	190915

BTA Oil Producers
Case #4332

Gulf-Fed Mills
NW-11-9-36
Allison Pool
Lea County, N. M.

	Production		
	Oil	Gas	Water
1954	84596	-	8190
1955	109742	-	10948
1956	109321	-	4557
1957	105782	-	4234
1958	89715	-	-
1959	90813	120951	9415
1960	75447	97962	13071
1961	40989	47172	7655
1962	8750	13462	7761
1963	13164	18459	9829
1964	11119	16473	9892
1965	10298	9009	10272
1966	10306	6389	9703
1967	11765	9189	11856
1968	13314	10497	13295
1969	12725	16726	12778
Total	797846	366289	143456

BTA Oil Producers
Case #4332

Mobil - Childs-Fed
NE-11-9-36
Allison Pool
Lea County, N.M.

	Production		
	Oil	Gas	Water
1954	17089	-	10114
1955	49832	-	11150
1956	93579	-	19786
1957	102428	-	8137
1958	96210	-	-
1959	98114	116360	6647
1960	57626	50388	6188
1961	35483	29801	8260
1962	4203	415	7345
1963			
1964			
1965			
1966			
1967			
1968			
1969			
Total	554564	196964	77627

BTA Oil Producers
Case #4332

Atlantic - Adams-State #1
M-2-9-36
Allison Pool
Lea County, N. M.

	Production		
	Oil	Gas	Water
1954			
1955	5150	-	15295
1956	10942	-	11939
1957	9981	-	9294
1958	15556	-	-
1959	16187	28452	580
1960	10961	20455	421
1961	6256	10589	498
1962	1504	3913	216
1963			
1964			
1965			
1966			
1967			
1968			
1969			
Total	76537	63409	38243

BTA Oil Producers
Case #4332

Cosden-R. G. Mills
SE-11-9-36
Allison Pool
Lea County, N. M.

	Production		
	Oil	Gas	Water
1954			
1955			
1956			
1957			
1958			
1959	1682	-	1750
1960	1991	-	4200
1961	674	-	1400
1962			
1963			
1964			
1965			
1966			
1967			
1968			
1969			
Total	4347	-	7350

BTA Oil Producers
Case #4332

Gulf-Fed Goode
N-35-8-36
Allison Pool
Roosevelt County, N. M.

	Production		
	Oil	Gas	Water
1954			
1955			
1956			
1957			
1958			
1959			
1960	47061	48280	37275
1961	30547	25820	88199
1962	28054	30048	53451
1963	17424	28491	18367
1964	15124	36860	12899
1965	5354	8618	2639
1966	1359	1404	665
1967			
1968			
1969			
Total	144923	179521	213495

BTA Oil Producers
Case #4332

Mobil - Santa Fe I
H-15-9-36
Allison Pool
Lea County, N.M.

	Production		
	Oil	Gas	Water
1954			
1955			
1956			
1957			
1958			
1959	26230	16468	11282
1960	15460	9505	5598
1961	18952	17317	8898
1962	14481	18187	8723
1963	12297	25798	7223
1964	12424	25537	4930
1965	12749	23072	4289
1966	8924	12724	4489
1967	6010	8006	4529
1968	5537	17354	1979
1969	6071	11503	6784
Total	139135	185471	68724

BTA Oil Producers
Case #4332

Atlantic - State AD #1
N-2-9-36
Allison Pool
Lea County, N. M.

	Production		
	Oil	Gas	Water
1954	22721	-	2962
1955	55111	-	1570
1956	10942	-	371
1957	9981	-	73
1958	48325	-	-
1959	51462	48480	2297
1960	58008	73076	9322
1961	16264	20914	14674
1962	4153	12247	4512
1963	825	1544	833
1964			
1965			
1966			
1967			
1968			
1969			
Total	277792	156261	36614

BTA Oil Producers
Case #4332

Whitehall - Lovejoy
NW-14-9-36
Allison Pool
Lea County, N. M.

	Production		
	Oil	Gas	Water
1954			
1955			
1956			
1957			
1958			
1959			
1960	10680	15992	9810
1961	13191	9224	16962
1962	21130	17519	5286
1963	17893	15321	4036
1964	13812	13194	1772
1965	8215	5833	953
1966	5578	10486	433
1967			
1968			
1969			
Total	90499	87569	39252

BTA Oil Producers
Case #4332

Coastal States - Lea State
NW/4 2-9-36
Allison Pool
Lea County, N.M.

	Production		
	Oil	Gas	Water
1954			
1955			
1956			
1957			
1958			
1959			
1960			
1961	6419	-	11468
1962	32112	17838	16347
1963	32547	30056	8179
1964	23486	13674	8843
1965	8867	144	25492
1966	1961	-	25639
1967			
1968			
1969			
Total	105392	61712	95968

BTA Oil Producers
Case #4332

PRODUCTION COMPARISON

Allison Penn. and Vada Penn. Fields
Lea County, New Mexico

BLACKROCK OIL COMPANY - Allison Penn. Field
Mobil Atlantic Fed. Well No. 1
D-10-9S-36E

	Oil	Water
January, 1970	4,587	186
February	9,532	1,460
March	11,830	840

BTA OIL PRODUCERS - Vada Penn. Field
Allyn 687 Ltd. Well No. 1
B-9-9S-36E

	Oil	Water
August, 1969	11,164	5,850
September	8,940	5,275
October	8,920	5,078
November	7,610	4,940
December	6,646	4,590
January, 1970	5,639	5,832

BTA OIL PRODUCERS - Vada Penn. Field
Bond 685 Ltd. Well No. 4
J-4-9S-36E

	Oil	Water
August, 1969	7,334	23,300
September	7,110	22,500
October	7,187	21,000
November	5,074	14,000
December	5,998	18,900
January, 1970	6,419	5,544

DRAFT

GMH/esr
April 28, 1970

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

RECORDS CENTER

CASE No. 4332

Order No. R-3959

NOMENCLATURE

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION TO CONSIDER THE INCLUSION OF THE NW/4 OF SECTION 10, TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM, LEA COUNTY, NEW MEXICO, IN THE ALLISON-PENNSYLVANIAN POOL OR THE VADA-PENNSYLVANIAN POOL, WHICHEVER IS PROPER.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 15, 1970, at ~~Santa Fe~~, Hobbs, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of May, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That Blackrock Oil Company on December 31, 1969, completed its Mobil Atlantic Federal Well No. 1 as an oil well producing from the Bough "C" zone of the Pennsylvanian formation at a location 660 feet from the North line and 660 feet from the West line of Section 10, Township 9 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That said location lies between the horizontal boundaries of the Allison-Pennsylvanian and Vada-Pennsylvanian Pools, Lea County, New Mexico.

(4) That the Commission set Case 4332 on its own motion in order to determine whether the above-described well and the

NW/4 of said Section 10 should be placed in the Allison or Vada Pool.

(5) That a typical well completed in the Allison-Pennsylvanian Pool ~~generally produce relatively little or no water in conjunction with the production of oil.~~ produces considerably more oil than water.

(6) That a typical well completed in the Vada-Pennsylvanian Pool ~~generally produce relatively large volumes of water in conjunction with the production of oil.~~ produces considerably more water than oil.

(7) That the above-described well produces ~~relatively little water in conjunction with the production of oil.~~ notably more oil than water.

(8) That the producing characteristics of the above-described well more nearly conform to the producing characteristics of wells completed in the Allison-Pennsylvanian Pool than of wells completed in the Vada-Pennsylvanian Pool and should, therefore, be spaced, operated, and produced in accordance with the Special Rules and Regulations governing the Allison-Pennsylvanian Pool. (under)

ship 9 South, Range 36 East, NMPM, Lea County, New Mexico.

IT IS THEREFORE ORDERED:

(1) That the horizontal limits of the Allison-Pennsylvanian Pool, Lea County, New Mexico, are hereby extended to include therein the following-described lands:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM
Section 10: NW/4

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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