

CASE 3889: Application of NTA 03.
PROCEDURE FOR CREATION OF A NEW
PMT and special PMT rules.

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[Signature]

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Case Number

3889

Application

Transcripts.

Small Exhibits

ETC.

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

1120 SIMMS BLDG. • P. O. BOX 1082 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 5, 1969

EXAMINER HEARING

IN THE MATTER OF:

Case No. 3889 being reopened
pursuant to the provisions of
Order No. R-3585, which order
established 160-acre spacing
units and 160-acre proportional
factors of 4.77 for the Middle
Allison-Pennsylvanian Pool, Lea
and Roosevelt Counties, New
Mexico, for a period of one year.

Case No. 3889
(Dismissed)

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING

SANTA FE, NEW MEXICOHearing Date NOVEMBER 5, 1969 TIME: 9 A.M.

NAME	REPRESENTING	LOCATION
John L. Hoover Bill Harder B.K. Buell	Calif. Oil Corp. Humboldt Oil Ref. Co.	Los Angeles, N.M. Hobbs, N.M.
Jerry Sperling W.B. Simmons Jr.	Mobil Oil Corp. Mobil Oil Corp.	Alb. N.M. Midland, Texas
Nina L. Dickson J.W. Shaw R.L. Spence	R.W. Bryan Jake L. Harmon Jake L. Harmon	Santa Fe Midland, Texas Midland, Tex.

MR. UTZ: The Hearing will come to order, please.
We will take up first the continuances and dismissals.
Get the happenings over at once. Case 3889.

MR. HATCH: Case 3889. In the matter of Case No. 3889, being reopened pursuant to the provisions of Order No. R-3585, which order established 160-acre spacing units in 160-acre proportional factors of 4.77 for the Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties, New Mexico, for a period of one year.

If the Examiner please, I caused this case to be readvertised when it should not have been, because the Middle Allison-Pennsylvanian Pool was abolished by Order No. R-3818. I believe it was effective September 1st, 1969. So, I move that the case be dismissed.

MR. UTZ: Case 3889 will be dismissed.

STATE OF NEW MEXICO)
) SS
COUNTY OF BERNALILLO)

I, WAYNE FLORES, 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.

Wayne Flores
COURT REPORTER

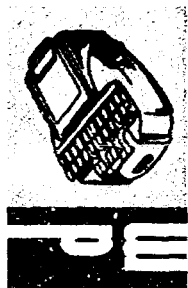
I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3889, heard by me on *May 19, 1969*.

[Signature], Examiner
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 9, 1968

EXAMINER HEARING

IN THE MATTER OF:

Application of BTA Oil
Producers for the creation
of a new pool and special
pool rules, Lea and Roose-
velt Counties, New Mexico.)

Case No. 3889

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

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

MR. UTZ: Case 3889.

MR. HATCH: Case 3889, application of BTA Oil
Producers for the creation of a new pool and special pool
rules, Lea and Roosevelt Counties, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason
Kellahin of Kellahin and Fox, Santa Fe, appearing for the
applicant. I have one witness I'd like to have sworn, please.

(Witness sworn).

MR. UTZ: Let the record show there were no
other appearances because there was nobody else here.

MR. KELLAHIN: If the Examiner please, this
application was designed to create a new pool in which we
propose to include Sections 4, 5 and 8 in Township 9 South,
36 East, and Section 32 in Township 8 South, 36 East in
Roosevelt County and Lea County, the first part being in Lea
County across the county line. As it is advertised, it
merely calls for the creation of a new pool for the well located
in Section 5, Township 9 South, Range 36 East, Lea County. I
would assume that any rules adopted would apply to the entire
area which is covered by our applications since they would be
within one mile of the outer boundaries of the pool, hopefully.

JERRY MORRITZ,

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 Morritz, BTA. I'm a Reservoir Engineer
in Midland, Texas.

MR. UTZ: Would you spell your last name, please?

THE WITNESS: M-o-r-r-i-t-z.

Q Mr. Morritz, have you testified before the Oil
Conservation Commission in New Mexico and made your qualifications
a matter of record?

A Yes, I have.

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

MR. UTZ: Yes, they are.

Q Mr. Morritz, are you familiar with the application
of BTA Oil Producers and the application in Case 3889?

A Yes, I am.

Q Briefly, what's proposed by BTA in this application?

A BTA is proposing that we establish a new Bough "C"
pool of the Pennsylvanian formation in the four sections,

being Sections 4, 5 and 8 of 9 South, 36 East, Lea County, and Section 32 of 8 South, 36 East, Roosevelt County and the adoption of special rules to cover this pool.

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

A This Exhibit is a plat, ownership plat of the area surrounding what we have called the Bond area. It shows the various outlines of the Pennsylvanian pools, Bough "C" pools in this area; to the north being the South Prairie, to the east being the Allison pool, and to the west being the Bough, and the smaller pool to the northwest being the West Allison Pool, all of which are producing out of the Bough "C" formation. It, likewise, shows in colors around each well, the blue being wells that have produced from these pools, however, are abandoned, and the green are wells that are still producing from these pools, the same thing applying to the Bond area. I have included designations for the wells that we have completed.

Q Now, by Bond area, do you mean the area outlined in the solid line which you propose as a new pool?

A Yes.

Q Now, that area does overlap a portion of the Bough pool, does it not?

A It does.

Q Would you propose that that be depleted from the Bough and included in the new pool?

A Yes.

Q The present development of the pool, what is the spacing on that?

A The spacing on the old Bough pool is on statewide and it's forty-acre spacing. There are only two wells left producing in this pool. You can see them in Section 17 and 18 colored green there.

Q One of which you would propose to include in the new pool, correct?

A No.

Q Oh, I see. Those are to the south?

A Right.

Q Now, what's the present development in your proposed Bond pool?

A Presently, we have completed four wells, and Hanks has completed one well in Section 32. Excuse me. We've completed five wells and we have presently developed these on 160-acre spacing.

Q Which is the spacing you propose for the pool at this time, is that correct?

A Right.

Q Now, there appears to be a well completed in Section 6 in the Lea County area, Section 6, adjacent to the proposed pool, is that correct?

A Yes. We just recently have reentered this well. It was drilled as a dry hole and BTA has just recently completed it.

Q Now, that was completed then after the application was filed in this case?

A Yes.

Q And that well is not presently located within the outer boundaries of any pool, is it?

A No. It would be within the Bough area of one mile, but if this application is approved, we would immediately request that it be extended to include this Section 6.

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

A Exhibit Number Two is a structure map contoured on top of the Bough "C" interval of the Pennsylvanian, the contour interval being fifty feet. Also marked, the Bond area, as we have referred to it, is marked in red, the red outline.

The orange line is the trace of a cross section that we will present on a later exhibit. The structure map does

not show any major structure and, again, points out what we believe, that the Bough "C" is controlled more by permeability and porosity pinch-outs than any major structure.

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

A Exhibit Three is a cross section that was outlined on the structure map showing five wells, the first well being the Featherstone, Featherstone Number 1, which is located in the West Allison pool.

We have marked on here the top of the Bough "C" and, in each case, we have marked with yellow the Bough "C" porosity, attempting to show that it is a correlative zone through all of the wells.

Q Now, the Exhibit also shows the reservoir pressures, does it not?

A Yes. There are several of the wells that were drillstem tested, and we have shown the pressures. For instance, the first well, the Featherstone, on drillstem test had a shut-in pressure of 2930 pounds and the next one, the Cabot well, which was drillstem tested, it had a pressure in '67 of 2440 pounds.

Now, again, the third well which was drilled by Western Natural had a shut-in in '61 of 3015 pounds; and then

the second to the last well is BTA's Bond well which was drilled in June of '68, and its shut-in pressure was 2417 pounds.

These pressures are significant, we think, and we will attempt here, a little later, to show what we think is causing these pressures to drop with time and is the basis for our case.

Q But, basically, the pressures do show a consistent drop in relation to date of the well, the date the well was drilled, is that correct?

A Right.

Q Now, referring to what has been marked as Exhibit Number Four of Exhibit A, would you identify that Exhibit?

A Exhibit Number Four is a tabulation of the production history beginning in 1950 of the wells, the wells only in the Bond area, the four sections that we have shown. You will note that the first well is the Mobil-Walker Federal, which has been renamed to be BTA, KGS Number 1, was the initial producer, and it produced almost two years.

The note at the bottom of the first page: There was no production from 12-1-51 through 6-31-65. We have shown a cumulative oil production out to the right edge.

Now, Exhibits Five and Six are just a continuation

of each of these well's production.

The next, Exhibit Five, is in '65 where the Texaco-Northcutt began to produce in, I believe it was, June of 1965.

The last page, Exhibit Six, is in '67 and '68 showing where BTA has begun to reenter and drill several of our wells in this area.

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

A Exhibit Number Seven is a tabulation of the bottom hole pressure and production history of the wells in the Bond area. Again, we have tabulated them up to present date. The last one being BTA's Walker Number 1 which we think is a fairly significant well in our case. This data will be replotted or has been plotted on a curve and will be a little bit more --

Q Before we get to that, now, referring back to Exhibits Four through Six which was the production history in the area, in your opinion as an engineer, would the production from that pool account for the drop in the bottom hole pressure from these wells shown on Exhibit Seven?

A No, I do not believe so, that this amount of production could be accounted for a drop of this pressure in an area of four sections.

Q Although, in part, it would have, of course, some influence, is this correct?

A Yes, this is correct.

Q Now, referring to Exhibit Number Eight, would you identify that exhibit, please?

A Exhibit Number Eight is a plot, a curve of the bottom hole pressure versus time for this bond area. Beginning with 1950, there's a pressure which is shown at approximately 3600 pounds. This pressure is in line with what BTA thinks the Bough "C" virgin pressure is, being around 3600 pounds. The second pressure is what is called Mobil's Walker-Federal Number 1H. This is outside of the Bond, the actual four sections that we're calling the Bond area; however, we believe this well is significant and will make a little better point for what we're going to show on decline of pressure.

Now, we'd want the area of "no production" in here as the time of no production. There is a well drilled, and is shown here as Texaco's Northcutt that was drilled in 1961. It had a pressure of approximately 3000 pounds. We think this is significant in that it is showing that we had a drop in pressure from the original 3600 pounds and no, or very little, production from the area.

Q Now, when you say a period of no production, you mean

by that, a period of no production from this particular area?

A That's right.

A Yes. These other pools that I mentioned in Exhibit

One were producing.

Q Continue with your discussion.

A At the end, the right end of the plot, is shown pressures in '67 and '68 that we're presently taking or have been taking. They are all falling within the 2400, let's say twenty-two to 2600 pound range, which is a considerable drop in the original 3600 pounds. Now, these are new wells that we are completing and, again, on the 160-acre spacing, and we feel that this points out that the well will drain more than 160-acre spacing.

Q It certainly points out that these wells have been drained, does it not, in your opinion?

A Yes.

Q Since the Exhibit was prepared, you drilled your BTA Walker-Federal Number 1 in Unit M of Section 6?

A Yes, we reentered this dry hole.

Q Reentered that. What was the pressure on it?

A The pressure on this well, originally, when it was drilled, is shown up here in about April of 1950. It is shown as Mobil's Walker-Federal Number 1H as 3600 pounds. This well

was subsequently P. and A. 'd on drilling, was declared a dry hole when BTA reentered it here in October of '58. After completion, we measured the pressure to be 2645 pounds. That is close to 1000 pounds pressure drop.

Q And it's also close to the pressures you found in the wells drilled at approximately the same time?

A That's right.

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

A Exhibit Number Nine is a plot of cumulative oil production versus bottom hole pressure and, this, again, just plots the data that we had presented in Exhibit Number Seven, and we think it just furthers the point that there has been drainage over this entire area and that these wells will be draining or could drain 160 acres.

Q And would the Walker-Federal Number 1 also show this?

A Yes, sir. It is not plotted on here, but it would plot at the 2645 pounds at about 179,000 barrels of oil. It would plot right at the bond, about the "B" of where it says Bond Number 2 there.

Q And that was with no production from that well at all?

A None at all.

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

A Exhibit Number Ten is a tabulation of the reservoir data for the wells in the Bond area. Some of it has been obtained from log calculations, some of it has been obtained from, such as the permeability here. There's no cores in this area. We have calculated a permeability of 245 millidarcies from bottom hole pressure data. Some of the data has been arrived at from an analogy with the Vada area which we think is quite similar to this area.

We have gone through a calculation to estimate oil in place, and we have estimated recoverable oil to be a hundred, or 1,020 barrels per acre on a ten foot average. This would recover 81,600 barrels per eighty-acre spacing and 163,200 barrels per 160-acre spacing.

Because of the factors and this depletion that we recognize from these bottom hole pressure plots, we have attempted to estimate depletion and we have calculated or estimated this to be 27.7 percent, so we have reduced our recoverable oil in each case by this factor.

Q Now, referring to Exhibit Number Eleven of Exhibit A, would you discuss that exhibit?

A Exhibit Number Eleven is a tabulation of the economics involved, using this recoverable oil from Exhibit Number Ten. We have used a gross price of \$3.20 there. We have also used an eighty-seven and a half percent working interest. However, BTA, in most of our cases, our working interest is at eighty percent or less. The first tabulation here is assuming no depletion of reserves on eighty acres and 160-acre spacing. In this case, we've shown the recoverable oil and the development cost at \$175,000.00 per well, giving us, on eighty acres, we'd have approximately \$13,000.00 profit. On 160, we'd have about \$201,000.00.

The bottom calculation is assuming that we have depletion. Assuming the same well cost figures, it shows that we would have, on eighty-acre spacing, about \$39,000.00 loss. On 160-acre spacing, we would make about \$97,000.00.

Q Now, referring to what has been marked as Exhibit Number Twelve of Exhibit A, would you discuss that Exhibit?

A Exhibit Number Twelve is a suggested special rules and regulations. Because we recognize the similarity between this pool or the Bond area in the Vada pool, we have suggested here the following six rules which are the ones that were adopted for the Vada area.

Q Now, you are proposing the creation of a new pool

for the production of oil from the Bough "C" zone. Do you have a proposed name for that pool?

A Yes. We would like to propose that it be named the Bond pool.

Q Now, are you asking for permanent rules for this pool, Mr. Morritz?

A Yes, we are, at this time. We feel that with the precedent set by the Vada pool and the similarity between the two pools, that we feel we can ask for permanent rules.

Q Now, just to sum up your testimony, Mr. Morritz, based on the pressure information available to you, in your opinion, will one well effectively and economically drain and develop not less than 160 acres?

A Yes.

Q As I understand, the pressure information you have given reflects pressure drop based on time which you state will not necessarily correlate to the production from these wells. If that be true, then, where did this drainage occur?

A We feel that possibly one or all four of the Bough pools, or the Pennsylvanian pools shown on Exhibit Two did drain this area. We do not know exactly which one it may have been or whether it may have been all of them.

Q Well, if that be true, would this indicate the

drainage in excess of 160 acres?

A Yes.

Q And from the economic point of view, would one well drilled on eighty acres be an economic venture?

A No, sir.

Q As I understand it, in connection with your proposed pools, you ask for an eighty-acre allowable. What's the reason for that?

A Yes. We've asked for an eighty-acre allowable for two reasons: one, because of the nature of the production in this Bough "C", mainly being the high water cut. The higher allowable, 160 acre allowable would require much bigger equipment, probably bigger casing in our wells, and we do not feel it would be justified, the additional expense, plus the fact that the eighty-acre allowable does allow us about a year's payout and we are thoroughly satisfied with that at this time.

Q But the fact that you're asking for eighty acre allowable has no bearing on the ability of one well to drain 160 acres, does it, in your opinion?

A No.

Q Was Exhibit A, consisting of the twelve separate exhibits, prepared by you or under your supervision?

A Yes.

MR. KELLAHIN: At this time, I would like to offer into evidence Exhibit A.

MR. UTZ: Without objection, Exhibit A, consisting of twelve parts, will be entered into the record in this case.

(Whereupon, Applicant's Exhibit Number A, consisting of twelve parts, was admitted in evidence.)

MR. KELLAHIN: That's all I have on direct examination, Mr. Utz.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Morritz, you mentioned only two producing wells remaining in the Bough field, which is the forty-acre spacing field. Now, one was in the northwest northwest of 18, is that correct?

A No. The one that I referred to in 18 is in the northeast of the southeast. It's shown as Pan American's 1A. The other one in Section 17, it would be in the northwest of the southwest.

Q Now, those are the only two wells remaining, producing in the Bough "C" pool?

A Yes, in the Bough pool.

Q I mean, the Bough pool, producing from the Bough "C" formation?

A Right.

Q The well in the northwest northwest of 17, what's it producing from, or has it been plugged?

A That was a test by force and it was dry and plugged by force at the time of drilling.

Q The well I first mentioned in the northwest northwest of 18, as well as the north offset to that, were producing from the Bough "C"

A Yes.

Q But are both plugged?

A Right.

Q Are they plugged or just P.A.?

A I believe they're both plugged.

Q The West Allison Pool is an eighty-acre spaced pool, is that right?

A No. The West Allison is forty-acre spacing. It's on statewide. It was developed as it appears here, on 160, but the actual pool rules read forty-acre spacing.

Q The South Prairie is on eighty, isn't it?

A The South Prairie is on eighty, yes, and the Allison is on eighty.

Q On your Exhibit Number Eight, you show no production for quite a period of time, and then you show your Texaco-Northcutt well as having lost pressure. Am I correct in that statement?

A Its pressure was down at that time of '61, I think you're referring to, and its pressure was down to 3,015. This was at the time the well was drilled, so it would be down from the original 3600 pounds.

Q That's the point. You're assuming it was 3600 pounds?

A Yes.

Q You have no pressures to show that?

A No, not back in 1950 from that well, no.

Q So what you're saying is that production from other wells in the area would cause that pressure to drop to about 3000 pounds?

A If you mean by the area of what I've shown on Exhibit One here, the four Bough "C" pools, yes, that would be correct.

Q The closest production to that well was where?

A The closest production would have probably been the -- I'd have to look to see which pools were producing. It would have been the one shown in M of Section 6 there; well, the South Prairie pool was just getting started about that time, too.

Q So the closest production would have been a mile and a half or more?

A Right. Pretty close to two miles down to the one in 6 there.

Q Now, am I correct in interpreting this correctly that that drop would have been in the course of approximately eleven years, from 1950 to 1961?

A Yes.

Q The cumulative production you have shown on Exhibit Number Nine, if I interpret your data correctly, was only in the Bond area?

A Yes, this production was only from the Bond area.

Q And that is why you arrived at the assumption that this pressure drop could not have been caused by the Bond area alone, but in order to justify this kind of a pressure drop, you would have had to have production from an area further down?

A Yes, that's correct.

Q Now, how about the initial pressures in the area that you're attributing this production to and accounting for the pressure drops, were they about the same as the Bond area?

A The Bough "C" pool which, of course, was established in '49, had a discovery pressure of 3588. The Allison pool,

which was originated in '59, had a discovery pressure of 3363, and the South Prairie, which was in twelve of 1960, was 3159. In '62, when the West Allison was discovered, the pressure was 2930.

Q On what date was the South Prairie discovered, again?

A The South Prairie was in December of 1960.

Q And the Allison?

A It was in August of '59.

Q The Bough "C" was way back there, wasn't it?

A Yes, in April of '49.

Q Your contention, then, is that all these pressures are at or near the 3588 shown by the Bough "C" pool at the time the Bough "C" was discovered?

A Right.

Q Or the Bough pool, rather.

A Right. The Vada area has given indications, further, that the Bough "C" virgin pressure was around 3600 pounds.

Q Well, now, we're talking about an area that's seven or eight miles away?

A Yes, we are.

Q You're not contending that there is communication between the Vada and this area, are you?

A No, not yet, but the only point I wanted to make there was that there is some evidence to indicate that the virgin pressure in this Bough "C" was around 3600 other than just this immediate area here. Some of the other Bough "C", the Lane and some of these other pools, give indications that the original virgin pressure may have been around 3600 pounds.

Q You spoke of similarities in the Bough "C" in this area as being similar to the Vada. Now, how does it compare with pools in the vicinity, such as the South Prairie wells and the Allison and the Bough?

A Let me just get back here to that Exhibit. We have shown here a porosity range of five to ten percent with an average of about eight percent. The Bough, the data that we can find, indicates that the average porosity there was about thirteen percent. The Allison porosity was about nine percent. The South Prairie was seven and a half percent.

Permeability, we've shown to be 245 millidarcies. The Bough pool showed seventy-six millidarcies. The Allison showed 200 and the South Prairie is about 1,035.

The net pay, in almost all the cases, runs, in this four to twelve feet, with probably an average of about ten percent in the other pools; the gravities of the crude, the Bough pool runs forty-four degrees, the Allison was forty-eight to forty-nine, the West Allison was forty-five and the

South Prairie was forty-six. We have been measuring ours at forty-six gravity average. We think these are some of the things that indicate that they are similar.

Q How about the crude types? Are they all sweet crudes, sour crudes, or what?

A I think we're carrying it at intermediate, and I believe that all the others are, too.

Q And this sulfur content of crude is very similar?

A I don't know whether we -- the information we have, we didn't go into it quite that far.

Q Well, I'm talking about communication here between all these pools, they would be about the same type of crude, wouldn't they?

A I think it's the same type on gravity. Whether the analysis will check out on each one of them, I don't know. The grades are the same.

Now, whether the specific ingredients will be the same, we don't know at this time.

Q Well, these are the things that you will undoubtedly determine in time, are they not?

A Yes.

Q Now, you're asking for a permanent order?

A Yes.

Q And are you convinced that the information you

have at this time on these wells will substantiate the permanent order?

A Yes. The type of data that we would have to go after to substantiate this case has already been provided, or we feel has already been provided to us in a way that we could not duplicate. Probably in the form of an interference test, this well in Unit M of Section 6, I don't believe that we could ever afford to duplicate this type of test, interference test. We feel that this is about the best interference test you could run, this drop from the original pressure of 3600 pounds down to our measure of 2645 here this month.

Q That, again, assuming it was 3600 pounds?

A It was 3600. It was measured.

Q Measured in which area, now?

MR. KELLAHIN: In that well.

A In that well. This well in M of Section 6 was drillstem tested.

Q Well, yes, over there; but it wasn't measured in this Bond area?

A No.

Q It was also measured in the other areas which are similar, a few feet away?

A Right.

MR. UTZ: Are there any other questions of the

witness? I believe we cleared up your suggested rules as being the identical rules that are current Vada pool rules.

A Yes, the ones that were adopted as permanent rules for the Vada.

MR. UTZ: The witness may be excused. Any statements in this case?

MR. KELLAHIN: That's all we have, Mr. Utz.

MR. UTZ: The case will be taken under advisement, and the hearing is adjourned.

(Whereupon, at 4:35 o'clock P.M. the hearing was adjourned.)

I N D E XWITNESS

JERRY MORRITZ

Direct Examination by Mr. Kellahin

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Cross Examination by Mr. Utz

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PAGEEXHIBIT

Applicant's 1

MARKED

2

OFFERED AND
ADMITTED

17

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, Charlotte J. Macias, 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.

Charlotte Macias
Court Reporter

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Commission Hearing of Case No. 3889
dated by me on 1968.
[Signature] Secretary
New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

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

November 10, 1969

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMijo
MEMBER

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

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

Re: Case No. 3889
Order No. R-3585-A
Applicant:
BTA Oil Producers

Dear Sir:

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

Very truly yours,

G. L. Carter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Robbs OCC x

Artesia QCC

Aztec OCC

Other _____

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:

CASE No. 3889
Order No. R-3585-A

APPLICATION OF BTA OIL PRODUCERS
FOR THE CREATION OF A NEW POOL AND
SPECIAL POOL RULES, LEA AND ROOSEVELT
COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 5, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of November, 1969, 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 by Order No. R-3585, dated November 21, 1968,
temporary Special Rules and Regulations were promulgated for the
Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties,
New Mexico.

(3) That pursuant to the provisions of Order No. R-3585,
this case was reopened to allow the operators in the subject
pool to appear and show cause why the Middle Allison-Pennsylvanian
Pool should not be developed on less than 160-acre spacing and
why the 160-acre proportional factor of 4.77 should or should
not be retained.

(4) That the subject case should be dismissed inasmuch as
the Middle Allison-Pennsylvanian Pool was consolidated with the

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CASE No. 3889
Order No. R-3585-A

Vada-Pennsylvanian Pool by Order No. R-3818, effective September 1, 1969.

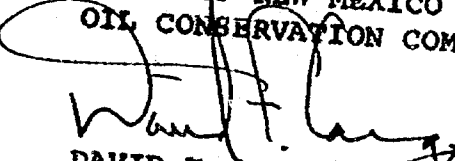
IT IS THEREFORE ORDERED:

(1) That, effective September 1, 1969, the temporary Special Rules and Regulations governing the Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties, New Mexico, promulgated by Order No. R-3585, are hereby abolished, and this case is hereby dismissed.


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

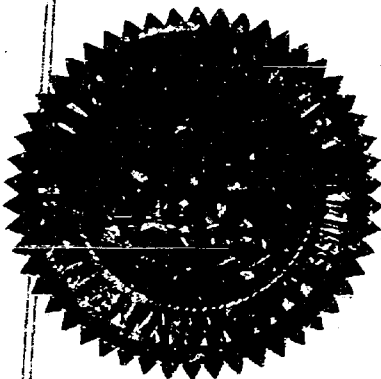
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. ARMILLO, Member


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



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:

CASE No. 3405
Order No. R-3081-A

APPLICATION OF DAVID FASKEN
FOR SPECIAL POOL RULES, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 21, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ day of May, 1969, 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 by Order No. R-3081, dated June 23, 1966, tempo-
rary Special Rules and Regulations were promulgated for the
North Indian Hills-Morrow Gas Pool, Eddy County, New Mexico,
establishing 640-acre spacing units for a period of one year
after first pipeline connection in the pool.

(3) That pursuant to the provisions of Order No. R-3081,
this case was reopened to allow the operators in the subject
pool to appear and show cause why the North Indian Hills-Morrow
Gas Pool should not be developed on 320-acre spacing units.

(4) That the subject case should be dismissed inasmuch as
the North Indian Hills-Morrow Gas Pool was consolidated with the
Indian Basin-Morrow Gas Pool by Order No. R-3758, effective
June 1, 1969.

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CASE No. 3405

Order No. R-3081-A

IT IS THEREFORE ORDERED:

(1) That, effective June 1, 1969, the temporary Special Rules and Regulations governing the North Indian Hills-Morrow Gas Pool, Eddy County, New Mexico, promulgated by Order No. R-3081, are hereby abolished, and this case is hereby dismissed.

(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

S E A L

eer/

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 5, 1969

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4243: Application of Mobil Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Vacuum-Upper Pennsylvanian Pool and the Vacuum-Middle Pennsylvanian Pool in the wellbore of its Bridges State Well No. 121 located in Unit L of Section 13, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4244: Application of Gulf Oil Corporation for an amendment to Order No. R-1084, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-1084 to permit the simultaneous dedication of the 480-acre non-standard gas proration unit established by said order to its H. T. Mattern (NCT-E) Wells No. 10 and 11 located, respectively, 660 feet from the South line and 1980 feet from the West line of Section 1 and 1980 feet from the East line and 660 feet from the North line of Section 12, both in Township 22 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico. Applicant further seeks authority to produce the allowable assigned to said unit from either of the aforesaid wells in any proportion.

CASE 3889: In the matter of Case No. 3889 being reopened pursuant to the provisions of Order No. R-3585, which order established 160-acre spacing units and 160-acre proportional factors of 4.77 for the Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre spacing and why the 160-acre proportional factor of 4.77 should or should not be retained.

CASE 4245: Application of Texas Pacific Oil Company, Inc., for several non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the dedication and rededication of certain acreage and the establishment of the following non-standard gas proration units in Townships 22 and 23 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico:

November 5, 1969, Examiner Hearing

-2-

Docket No. 30-69

A 160-acre unit comprising the W/2 SE/4 and the E/2 SW/4 of Section 8, Township 22 South, Range 36 East, to be dedicated to the State "A" a/c-2 Well No. 56 located in Unit J of said Section 8;

A 200-acre unit comprising the NW/4 and the NW/4 SW/4 of Section 11, Township 22 South, Range 36 East, to be dedicated to the State "A" a/c-2 Well No. 42 located in Unit E of said Section 11;

A 280-acre unit comprising the SE/4, S/2 SW/4, and the NE/4 SW/4 of Section 11, Township 22 South, Range 36 East, to be dedicated to the State "A" a/c-2 Well No. 36 located in Unit M of said Section 11;

A 200-acre unit comprising the N/2 NE/4, the SE/4 NE/4, and the NE/4 NW/4 of Section 15 and the SE/4 SW/4 of Section 10, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 31 located in Unit H of said Section 15;

A 160-acre unit comprising the S/2 NW/4, SW/4 NE/4 and the NW/4 NW/4 of Section 15, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 33 located in Unit F of said Section 15;

A 240-acre unit comprising the SW/4 of Section 3 and the N/2 NW/4 of Section 10, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 35 located in Unit L of said Section 3;

A 160-acre unit comprising the S/2 NW/4 and N/2 SW/4 of Section 10, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 37 located in Unit F of said Section 10.

CASE 4246: Application of Humble Oil & Refining Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from 3860 feet to 4020 feet in its New Mexico "S" State Well No. 26 located in Unit L of Section 2, Township 22 South, Range 37 East, South Eunice-San Andres Pool, Lea County, New Mexico.

November 5, 1969, Examiner Hearing
-3-

Docket No. 30-69

CASE 3928: (Reopened)

In the matter of Case No. 3928 being reopened pursuant to the provisions of Order No. R-3586, which order established 80-acre spacing units for the East Shoe Bar-Devonian, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 4247:

Application of J. J. Travis for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Shugart Queen Unit Area comprising 520 acres, more or less, of federal lands in Sections 20, 21, and 28, Township 18 South, Range 31 East, Shugart (Yates-Seven Rivers-Queen-Grayburg) Pool, Eddy County, New Mexico.

CASE 4248:

Application of J. J. Travis for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in his North Shugart Queen Unit Area by the injection of water into the Queen formation through nine wells at orthodox and unorthodox locations in Sections 20 and 21, Township 18 South, Range 31 East, Shugart (Yates-Seven Rivers-Queen-Grayburg) Pool, Eddy County, New Mexico. Applicant further seeks a procedure whereby additional injection wells at orthodox and unorthodox locations may be approved administratively.

CASE 4249:

Application of Tenneco Oil Company for amendment of Order No. R-3822 and off-lease storage, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks amendment of Order No. R-3822, which order pooled all mineral interests in the Basin-Dakota Gas Pool underlying the N/2 of Section 11, Township 29 North, Range 13 West, San Juan County, New Mexico, to form a 320-acre gas proration unit dedicated to a well to be drilled at an unorthodox location 2250 feet from the North line and 600 feet from the East line of said Section 11. Applicant now seeks amendment of said order to permit the drilling of said well at a point 2390 feet from the North line and 275 feet from the East line of said Section 11. Applicant further seeks authority to transport, prior to measurement, to another lease for storage the liquid hydrocarbons produced by the subject well.

CASE 3455: (Reopened):

In the matter of Case No. 3455 being reopened pursuant to the provisions of Order No. R-2565-B, which order, among other things, established 320-acre spacing units for the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, for a period of three years. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

November 5, 1969, Examiner Hearing
-4-

CASE 4250: Application of McCrary & Franklin for waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg and Lovington sands through their Shipley Well No. 2 located in Unit K of Section 3, Township 17 South, Range 29 East, Square Lake Pool, Eddy County, New Mexico.

CASE 4251: Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation through its Welch Well No. 2 located in Unit G of Section 4 and its Welch Well No. 4 located in Unit C of Section 4, both in Township 19 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.

CASE 4220: (Continued from the October 8, 1969, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit E. P. Campbell, and all other interested parties to appear and show cause why the E. P. Campbell Christmas Well No. 1 located in Unit C of Section 6, Township 23 South, Range 36 East, Salmat Pool, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

State of New Mexico
Oil Conservation Commission



P. O. BOX 2088
SANTA FE

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

Re: Case No. 3889
Order No. R-3585
Applicant:
BTA Oil Producers

DOCKET MAILED
Date 10-24-69

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

Carbon copy of order also sent to:

Hobbs OCC _____ x
 Artesia OCC _____
 Aztec OCC _____
 Other _____

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 20, 1969

C
O
P
Y
BTA Oil Producers
104 South Pecos
Midland, Texas 79701

Re: Case 3889 (Reopened)

Gentlemen:

Due to an oversight, the above-described case has been advertised to be heard November 5, 1969.

As the Middle Allison-Pennsylvanian Pool has been abolished, the subject case will be dismissed.

Very truly yours,

GEORGE M. HATCH
Attorney

GMH/esr

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:

CASE No. 3889
Order No. R-3585
NOMENCLATURE

APPLICATION OF BTA OIL PRODUCERS
FOR THE CREATION OF A NEW POOL AND
SPECIAL POOL RULES, LEA AND ROOSEVELT
COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 9, 1968,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 21st day of November, 1968, 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 the applicant, BTA Oil Producers, seeks the cre-
ation of a new pool for the production of oil from the Bough "C"
zone of the Pennsylvanian formation in Lea and Roosevelt Counties,
New Mexico, and the promulgation of special rules and regulations
governing said pool, including a provision for 160-acre spacing
units and for the assignment of an 80-acre allowable factor of
4.77.

(3) That the BTA Oil Producers Federal Northcutt Well No. 1,
located in Unit B of Section 5, Township 9 South, Range 36 East,
NMPM, Lea County, New Mexico, having its top perforations at 9766

-2-

CASE No. 3889

Order No. R-3585

feet, has discovered a separate common source of supply which should be designated the Middle Allison-Pennsylvanian Pool; that the vertical limits of said pool should be the Bough "C" zone of the Pennsylvanian formation; and that the horizontal limits of said pool should be as follows:

TOWNSHIP 8 SOUTH, RANGE 36 EAST, NMPM
ROOSEVELT COUNTY, NEW MEXICO
Section 32: S/2

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM
LEA COUNTY, NEW MEXICO
Section 4: W/2
Section 5: All

(4) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 160-acre spacing units and the assignment of a 160-acre proportional factor of 4.77 for allowable purposes should be promulgated for the Middle Allison-Pennsylvanian Pool.

(5) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(6) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(7) That this case should be reopened at an examiner hearing in November, 1969, at which time the operators in the subject pool should be prepared to appear and show cause why the Middle Allison-Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the proportional factor of 4.77 assigned to the subject pool should or should not be retained.

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CASE No. 3889

Order No. R-3585

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea and Roosevelt Counties, New Mexico, classified as an oil pool for Pennsylvanian production, is hereby created and designated the Middle Allison-Pennsylvanian Pool, with vertical limits comprising the Bough "C" zone of the Pennsylvanian formation and horizontal limits comprising the following:

TOWNSHIP 8 SOUTH, RANGE 36 EAST, NMPM

ROOSEVELT COUNTY, NEW MEXICO

Section 32: S/2

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM

LEA COUNTY, NEW MEXICO

Section 4: W/2

Section 5: All

(2) That temporary Special Rules and Regulations for the Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
MIDDLE ALLSION-PENNSYLVANIAN POOL

RULE 1. Each well completed or recompleted in the Middle Allison-Pennsylvanian Pool or in the Bough "C" zone of the Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting

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CASE No. 3889

Order No. R-3585

the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (158 through 162 acres) shall be assigned a 160-acre proportional factor of 4.77 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Middle Allison-Pennsylvanian Pool or in the Bough "C" zone of the Pennsylvanian formation within one mile thereof, but not nearer to nor within the limits of another Bough "C" Pennsylvanian Pool, are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before December 1, 1968.

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CASE No. 3889
Order No. R-3585

(2) That each well presently drilling to or completed in the Middle Allison-Pennsylvanian Pool or in the Bough "C" zone of the Pennsylvanian formation within one mile thereof, but not nearer to nor within the limits of another Bough "C" Pennsylvanian Pool, shall receive a 40-acre allowable until a Form C-102 dedicating 160 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing in November, 1969, at which time the operators in the subject pool may appear and show cause why the Middle Allison-Pennsylvanian Pool should not be developed on less than 160-acre spacing units and to show cause why the proportional factor of 4.77 assigned to the subject pool should or should not be retained.


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

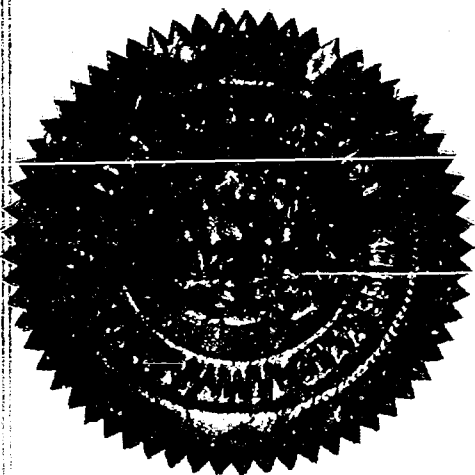
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


GUYTON B. HAYS, Member


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



esr/

Case 3889

Heard. 11-7-68

Rec. 11-14-68

Grant B.T.A. a new 160 Acre spaced
post to be called Middle-Allison
Penn. & consisting of horizontal
limits:

8 S-36 E.

sec. 32 W 1/2

9 S-36 E

sec. 4 W 1/2

sec. 5 A 11

Due ~~to~~ dry holes in sec. 5 this
sec. should be omitted from their
request.

Use Vada Rules.

150' center of 1/4 1/4 sec.

4.77 Allowable.

Thus to [Signature]

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



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

LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 1980
HOBBS
November 6, 1968

Mr. Elvis Utz, Gas Engineer
New Mexico Oil Conservation Commission
Post Office Box 2088
Santa Fe, New Mexico

Re: Case 3889

Dear Elvis:

In studying the exhibits submitted by BTA and the work I have done on the proposed new pool area of Section 32, Township 8 South, Range 36 East and Sections 4, 5 and 7, Township 9 South, Range 36 East, I have realized the following:

1. BTA has, to the present, completed six producing wells in said area; four are new wells, while two are recompleted P & A wells.
2. That the Bough, Crossroads, Allison and South Prairie-Pennsylvanian Pools are of one common reservoir. That the area in between them is undeveloped but will be productive except for local lows which dips the Bough C formation below the water-oil contact.
3. That the average porosity (8%) and permeability (245 md) is high enough to drain 160 acres.
4. Reservoir data indicates that these four Pennsylvanian pools have already drained some of the undeveloped acreage between these pools.
5. That these four pools all lie on a common, NE-SW, trending structure, which consists structurally of a number of local highs and lows.

I recommend:

1. That the requested area be created as a new pool and assigned 160 acre spacing with an 80 acre allowable (without a discovery allowable).
2. Change the spacing in the old "Bough" Pool to 160 acre spacing and 80 acre allowable and extend said area to pool. (The Bough Pool only has two wells presently producing. These will need additional acreage dedicated.)

Enclosed is one copy each of work done on this case in Hobbs.

Very truly yours,

OIL CONSERVATION COMMISSION

John W. Runyan
John W. Runyan
Geologist, District I

JWR:fd

encl.

JASON W. KELLAHIN
ROBERT E. FOX

KELLAHIN AND FOX
ATTORNEYS AT LAW
54 1/2 EAST SAN FRANCISCO STREET
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

TELEPHONE 982-4315
AREA CODE 505

October 22, 1968

OCT 24 1968

Mr. A. L. Porter, Director
New Mexico Oil Conservation Commission
Post Office Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

For your information, I am enclosing a letter received
from Roger C. Hanks, in connection with the Oil
Commission hearing in Case No. 3889, held October 9.

Yours very truly,

Jason

JASON W. KELLAHIN

jwk:peg
Enc. as stated

JSW

RECEIVED

ROGER C. HANKS
PETROLEUM GEOLOGIST
1102 OIL & GAS BLDG.
WICHITA FALLS, TEXAS
TELEPHONE (817) 322-3741

October 14, 1968

30 OCT 24

B T A Oil Producers
104 South Pecos
Midland, Texas

Attention: Mr. Barry Beal

Re: 160-Acre Spacing
Bough East - Bond Area

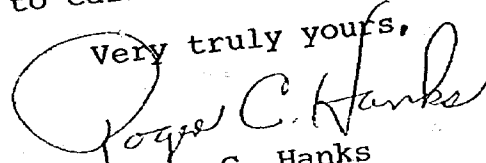
Gentlemen:

This will be my letter confirming our approval of your application before the Commission on Case No. 3889 reference 160-acre spacing in the Bough East - Bond Area, Roosevelt County, New Mexico. We are in complete accord with your request.

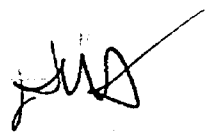
It is our opinion and has been for quite some time that wells of these porosities and permeabilities are quite capable of draining in excess of 160 acres.

If we can be of any further assistance to you concerning this application, do not hesitate to call or write.

Very truly yours,


Roger C. Hanks

RCH:rm



Docket No. 29-68

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 9, 1968
9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 3872:

Application of Union Oil Company of California for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to fully complete its Federal "A" Well No. 1 located in Unit P of Section 12, Township 13 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Morton-Wolfcamp Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres and such other formations as may occur in the open-hole interval from approximately 4620 to 7350 feet.

CASE 3873:

Application of R. G. McPherson for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the open-hole interval from approximately 5250 feet to 5854 feet in his S. P. Johnson Well No. 1 located 990 feet from the West line and 1650 feet from the South line of Section 5, Township 12 South, Range 39 East, South Carter-San Andres Pool, Lea County, New Mexico.

CASE 3874:

Application of Gulf Oil Company - U. S. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Paddock and Blinbry Oil Pools in the well-bore of its C. L. Hardy Well No. 2 located in Unit N of Section 20, Township 21 South, Range 37 East, Lea County, New Mexico, with the provision that no more than one single allowable will be produced from said well.

CASE 3875:

Application of Pan American Petroleum Corporation for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well in exception to the Fowler-Ellenburger Rules at an unorthodox location 910 feet from the North line and 1980 feet from the West line of Section 15, Township 24 South, Range 37 East, Lea County, New Mexico.

October 9, 1968, Examiner Hearing
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Docket 29-68

CASE 3876:

Application of Newmont Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Young (Queen) Unit Area comprising 1320 acres, more or less, of federal and state lands in Township 18 South, Range 32 East, Young (Queen) Pool, Lea County, New Mexico.

CASE 3877:

Application of Newmont Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Young (Queen) Unit Area by the injection of water into the Queen formation through 17 wells located in Sections 9, 16, 17, 19, 20, 21, and 29, Township 18 South, Range 32 East, Young (Queen) Pool, Lea County, New Mexico.

CASE 3878:

Application of General American Oil Company of Texas for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Premier sand through two injection wells located in Unit M of Section 8, and Unit G of Section 17, Township 16 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico.

CASE 3879:

Application of Walter Duncan Oil Properties for an unorthodox oil well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well at an unorthodox oil well location 1000 feet from the North line and 1242 feet from the East line of Section 36, Township 32 North, Range 18 West, San Juan County, New Mexico. Said well would be projected to the Dakota formation.

CASE 3880:

Application of Anne Burnett Windfohr, dba Windfohr Oil Company, for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated interval from approximately 6970 feet to 7028 feet in the Windfohr Oil Company Jackson "B" Well No. 23 located in Unit J of Section 24, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico.

CASE 3881:

Application of J. M. Huber Corporation for the creation of a new oil pool and for special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Devonian oil pool for its Lone Star Federal Well No. 1 located in the NE/4 NE/4 of Section 20, Township 8 South, Range 36 East, Roosevelt County, New Mexico, and for the promulgation of special rules therefor including a provision for 80-acre proration units.

- CASE 3882: Application of Solar Oil Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil in the Teague Blinebry Pool, Lea County, New Mexico.
- CASE 3883: Application of Solar Oil Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil in the Imperial Tubb-Drinkard Pool, Lea County, New Mexico.
- CASE 3884: Application of Marathon Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Miller Ranch Unit Area comprising 5,276 acres, more or less, of State, Federal and Fee lands in Townships 21 and 22 South, Range 25 East, Eddy County, New Mexico.
- CASE 3885: Application of Sinclair Oil & Gas Company for a waterflood expansion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Turner "B" Grayburg-Jackson Waterflood Project, Grayburg-Jackson Pool, by the conversion to water injection of 12 additional injection wells located in Sections 20, 29, and 30, Township 17 South, Range 31 East, Eddy County, New Mexico.
- CASE 3886: Application of Sinclair Oil & Gas Company for the amendment of a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks amendment of its Guadalupe Ridge Unit Agreement, unitizing certain lands in Eddy County, New Mexico, and approved by Order No. R-3471, to conform to certain requirements of the Director of the United States Geological Survey. In the absence of objection, the case will be submitted and an order issued upon the basis of the application and exhibits attached thereto.
- CASE 3887: Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Premier sand of the Grayburg formation through two wells to be located in Units E and K of Section 12, Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico. Applicant further proposes to produce oil from the Upper Grayburg through parallel strings of tubing, if said zones are productive in the subject wells.

October 9, 1968, Examiner Hearing
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Docket No. 29-68

CASE 3888:

Application of Amerada Petroleum Corporation for a dual completion, salt water disposal and tubing exception, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State E "B" Well No. 1 located in Unit E of Section 27, Township 10 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the North Echols-Devonian Pool and the disposal of produced salt water through the tubing-casing annulus into the San Andres formation through perforations in said casing from approximately 5220 feet to 5250 feet. Applicant also seeks an exception to the tubing requirements of Commission Rule 107 in that said tubing would be set more than 250 feet above the upper most Devonian perforation.

CASE 3889:

Application of BTA Oil Producers for the creation of a new pool and special pool rules, Lea and Roosevelt Counties, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Bough C zone of the Pennsylvanian formation for its well located in Section 5, Township 9 South, Range 36 East, Lea County, New Mexico, and for the promulgation of special rules therefor including a provision for 160-acre proration units and for the assignment of an 80-acre allowable factor of 4.77.

CASE 3890:

Application of Pan American Petroleum Corporation for special pool rules and a non-standard gas proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Empire-Pennsylvanian Gas Pool, Eddy County, New Mexico, including a provision for 320-acre spacing units with wells to be located in either the northwest quarter or the southeast quarter of the section. Applicant further seeks approval of a 280-acre non-standard gas proration unit comprising the SE/4, S/2 SW/4, and the NW/4 SW/4 of Section 30, Township 17 South, Range 28 East, Empire-Pennsylvanian Gas Pool, to be dedicated to its State V Com Well No. 1 located 990 feet from the South and East lines of said Section 30.

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PUBCO

October 7, 1968

New Mexico Oil & Gas Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 3889

file

Gentlemen:

We understand that BTA oil producers have applied for field delineation and 160 acre spacing in a new Bough "C" field in the South Prairie area of Lea County.

Pubco, as an acreage holder in this area, has no objection to this application.

Sincerely,

Charles E. Ramsey, Jr.
Charles E. Ramsey, Jr.
Area Production Manager

CER:cak

[Handwritten signature]

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

APPLICATION OF BTA OIL PRODUCERS
FOR 160-ACRE SPACING AND PRORATION
UNITS, LEA AND ROOSEVELT COUNTIES,
NEW MEXICO.

Case 3889

A P P L I C A T I O N

Comes now BTA Oil Producers and applies to the Oil Conservation Commission of New Mexico for the creation of a new pool for the production of oil from the Bough C zone of the Pennsylvanian formation, or in the alternative, for the extension of the boundaries of the West Allison Pennsylvanian Pool, to include the lands hereinafter described, together with the adoption of pool rules for said pool to include a provision for 160-acre spacing and proration units for the production of oil and from the Bough C zone of the Pennsylvanian formation, with the assignment of a proration factor of 4.77 for allowable purposes, and a further provision for flexible well locations.

Applicant proposes that the pool include, either as a new pool, or as an extension of the West Allison Pennsylvanian Pool, Sections 4, 5, and 8, of Township 9 South, Range 36 East, N.M.P.M., Lea County, New Mexico, and Section 32, Township 8 South, Range 36 East, N.M.P.M., Roosevelt County, New Mexico.

Applicant is the owner and operator of a well completed in Section 5, Township 9 South, Range 36 East, N.M.P.M., and

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is currently working on wells in Sections 4 and 6 of the same township. There is also production in Section 32, Township 8 South, Range 36 East, N.M.P.M., Roosevelt County, New Mexico, all of which production is from the same common source of supply.

Present information based upon geology of the area and information obtained as a result of drilling and production indicates that one well will efficiently and economically drain and develop not less than 160 acres in the Bough C zone of the Pennsylvanian formation, and that drilling of wells on a closer pattern than 160 acres will result in the drilling of unnecessary wells, and will result in waste.

WHEREFORE, applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner and that after notice and hearing as required by law the Commission enter its order as prayed for.

Respectfully submitted,

BTA OIL PRODUCERS

By Jason W. Kellahin
Kellahin & Fox
P. O. Box 1769
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

DRAFT

GMH/esr

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. 3889

Order No. R- 3585-A

APPLICATION OF BTA OIL PRODUCERS
FOR THE CREATION OF A NEW POOL AND
SPECIAL POOL RULES, LEA AND ROOSEVELT
COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 5, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this day of November, 1969, 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 by Order No. R-3585, dated November 21, 1968,
temporary Special Rules and Regulations were promulgated for the
Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties,
New Mexico.

(3) That pursuant to the provisions of Order No. R-3585,
this case was reopened to allow the operators in the subject
pool to appear and show cause why the Middle Allison-Pennsylvanian
Pool should not be developed on less than 160-acre spacing and
why the 160-acre proportional factor of 4.77 should or should
not be retained.

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CASE No. 3889

Order No. R-3585-A

(4) That the subject case should be dismissed inasmuch as the Middle Allison-Pennsylvanian Pool was consolidated with the Vada-Pennsylvanian Pool by Order No. R-3818, effective September 1, 1969.

IT IS THEREFORE ORDERED:

(1) That, effective September 1, 1969, the temporary Special Rules and Regulations governing the Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties, New Mexico, promulgated by Order No. R-3585, are hereby abolished, and this case is hereby dismissed.

(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.

DRAFT

GMH/esr

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 & LAW LIBRARY

CASE No. 3889

Order No. R-3585

NOMENCLATURE

APPLICATION OF BTA OIL PRODUCERS
FOR THE CREATION OF A NEW POOL AND
SPECIAL POOL RULES, LEA AND ROOSEVELT
COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 9, 1968,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this November day of October, 1968, 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 the applicant, BTA Oil Producers, seeks the cre-
ation of a new pool for the production of oil from the Bough "C"
zone of the Pennsylvanian formation in Lea and Roosevelt Counties,
New Mexico, and the promulgation of special rules and regulations
governing said pool, including a provision for 160-acre spacing
units and for the assignment of an 80-acre allowable factor of 4.77.

(3) That the BTA Oil Producers Federal Northcutt Well
No. 1, located in Unit B of Section 5, Township 9 South,
Range 36 East, NMPM, Lea County, New Mexico, ^{having its top perforation at 9766 feet,} has discovered a
separate common source of supply which should be designated the
Middle Allison - Pennsylvanian Pool; that the vertical limits of
said pool should be the Bough "C" zone of the Pennsylvanian

formation, ~~as found in the interval from _____ feet to _____~~
~~feet on the log of the aforesaid BTA Oil Producers~~
~~Well No. _____~~ and that the horizontal limits of said pool should
be the as follows:

Township 8 South, Range 36 East, N42W, Ross County, W. Va.
Section 32: W 1/2 S 1/2

Township 9^{South}, Range 36 East, N42W, Lee County, New Mexico.
Section 4: W 1/2
Section 5: All

correlative rights, temporary special rules and regulations
providing for 160-acre spacing units and the assignment of ~~00~~ ^{160-acre} a
proportional factor of 4.77 ^{for allowable purposes} should be promulgated for the
Middle Allison - Pennsylvania Pool.

(5) That the temporary special rules and regulations
should provide for limited well locations in order to assure
orderly development of the pool and protect correlative rights.

(6) That the temporary special rules and regulations
should be established for a one-year period in order to allow
the operators in the subject pool to gather reservoir information
to establish the area that can be efficiently and economically
drained and developed by one well.

(7) That this case should be reopened at an examiner hearing
in November, 1969, at which time the operators in the subject
pool should be prepared to appear and show cause why the
Middle Allison - Pennsylvania Pool should not be developed on
less than 160-acre spacing units and to show cause why the ~~00-acre~~
proportional factor of 4.77 assigned to the subject pool should or
should not be retained.

IT IS THEREFORE ORDERED:

(1) That a new pool in Lea and Roosevelt Counties, New Mexico, classified as an oil pool for Pennsylvanian production, is hereby created and designated the Middle Allison - Pennsylvanian Pool, with vertical limits comprising the Bough "C" zone of the Pennsylvanian formation as found in the interval from _____

~~feet to _____ feet on the log of the BTA Oil Producers Federal~~

~~Northeast~~ Well No. 1, located in Unit B of Section 5, Township 9 South, Range 36 East, NMPM, Lea County, ~~New Mexico~~

and horizontal limits comprising the following:

Township 8 South, Range 36 East, NMPM, Roosevelt County, New Mexico

Section 32: W/2

Township 9 South, Range 36 East, NMPM, Lea County, New Mexico

Section 4: W/2

Section 5: all

SPECIAL RULES AND REGULATIONS

FOR THE

Middle Allison - Pennsylvanian POOL

RULE 1. Each well completed or recompleted in the Middle Allison - Pennsylvanian Pool or in the Bough "C" zone of the Pennsylvanian formation within one mile thereof, and not nearer to or within the limits of another designated Pennsylvanian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit

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CASE No. 3889

consisting of less than 160 acres or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (158 through 162 acres) shall be assigned ^{a. 160} ~~an 80~~-acre proportional factor of 4.77 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Middle Allison - Pennsylvanian Pool or in the Bough "C" zone of the Pennsylvanian formation within one mile thereof ^{but not nearer to nor within the limits of another Bough "C" Pennsylvanian Pool,} are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before December 1, 1968.

(2) That each well presently drilling to or completed in the Middle Allison - Pennsylvanian Pool or in the Bough "C" zone of the Pennsylvanian formation within one mile thereof ^{but not nearer to nor within the limits of another Bough "C" Pennsylvanian Pool,} shall receive a 40-acre allowable until a Form C-102 dedicating 160 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing in November, 1969, at which time the operators in the subject pool may appear and show cause why the Middle Allison - Pennsylvanian 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 assigned to the subject pool should or should not be retained.

(4) 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.