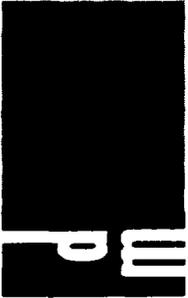


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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
EXAMINER HEARING

May 24, 1967

IN THE MATTER OF:)

Application of Stoltz & Company)
for special pool rules, Lea)
County, New Mexico.)

Case No. 3583

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

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MR. UTZ: Case 3583.

MR. HATCH: Application of Stoltz & Company for special pool rules, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, appearing for the Applicant.

(Witness sworn.)

MR. UTZ: Any other appearances? You may proceed.

JOHN YURONKA

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 John Yuronka.

Q Mr. Yuronka, what business are you engaged in?

A Consulting Petroleum Engineer.

Q Where are you located?

A Midland, Texas.

Q Are you representing Stoltz and Company in the case before this Commission?

A Yes.

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

A Yes.

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

MR. UTZ: I think we're going to have to accept them.

Q (By Mr. Kellahin) Mr. Yuronka, are you familiar with the application of Stoltz and Company in this case?

A I am.

Q Briefly what does Stoltz and Company propose in this application?

A Stoltz and Company would like to have the North Bagley-Lower Pennsylvanian set up on 80-acre proration units and 80-acre spacing similar to the orders set up in the North Bagley-Upper and Middle Pennsylvanian.

Q Would that be Order R-2346 and 2346-A and R-2779 and 2779-A?

A Yes, sir.

MR. KELLAHIN: At this time I would like to ask the Examiner to take administrative notice of the orders governing the spacing and proration units for the Upper and Middle Pennsylvanian Pools in this area.

MR. UTZ: 2346 and 2779 respectively, Upper and Middle?

MR. KELLAHIN: That is correct. The orders were made permanent by 2346-A and 2779-A.

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MR. UTZ: Will so do.

(Whereupon, Applicant's Exhibit No. 1 was marked for identification.)

Q (By Mr. Kellahin) Mr. Yuronka, referring to what has been marked as Exhibit No. 1, would you identify that exhibit, please?

A Exhibit No. 1 is a plat of the North Bagley-Penn area. Each well has been colored to designate what pool the well is presently producing from. The bottom right-hand corner of the plat you will notice that the brown is the Wolfcamp, the green is the Upper Penn, the red is the Middle Penn and the yellow is the Lower Penn. This plat, presently there are only two dual completions in the pool. However, one zone is shut in on each well.

In Unit H of Section 9, Fastkin Collier No. 1 is a dual completion in the Upper and Lower Penn. The Lower Penn is presently shut-in. The other dual completion is in Unit F of Section 10, Texas Pacific Collier No. 1. Presently the Middle Penn is shut-in. This plat covers actually about five or six pools.

The wells shown in Section 11, well, in Unit C of Section 11 is in the Northeast Bagley-Wolfcamp Pool. The north offset to it was just completed a few days ago, I read in the local paper in Midland, the well in Unit L of Section 11

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is undesignated down in Section 23 in Unit D and Unit E. That is the North Bagley-Wolfcamp. Pennzoil has a well in Section 14, Unit I, that is also in the North Bagley-Wolfcamp.

Then down in the bottom row of sections, reading from left to right, the Stoltz Sunray State N, Unit K is presently carried in the May 1967 proration schedule in the Lea undesignated and it's in the Group 7, ten to eleven thousand, and underneath it it has in parenthesis NBLP. I have assumed that is the North Bagley-Lower Penn.

The well in Unit G, which is also a Stoltz well and producing from the Lower Penn, I might add, is the Sunray State well, is that is carried in the West Bagley-Penn. The well in Unit G of Section 28, which is a Lower Penn producer, is a Stoltz well. This is carried in the Bagley-Pennsylvanian Pool and in Section 27, Stoltz Sinclair State "B" 1 in Unit G is an undesignated well.

Q The wells in Sections 27, 28, 29 that are shown as Lower Pennsylvanian wells are not in the North Bagley?

A No, sir, they are producing from what has been designated as the North Bagley-Lower Penn producing interval.

Q It's the same interval as is designated in the North Bagley-Lower Pennsylvanian Pool?

A Yes, sir.

Q Are the other Lower Pennsylvanian wells those

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colored in yellow, those shown on Exhibit 1, all within the boundaries of the North Bagley-Lower Pennsylvanian Pool?

A Not all of the wells, no, sir. Presently, I don't know if the Examiner would care to have me read the acreage now covered by the North Bagley-Lower Penn as to the acreage actually in the pool itself, but all of the wells colored in yellow that are producing from the Lower Penn are not actually in the acreage presently designated as part of the North Bagley-Lower Penn Pool.

MR. UTZ: Are they within one mile?

A Oh, yes, sir, they are. I would say real quickly, without checking any more than I have, I would say they are.

Q (By Mr. Kellahin) Would it be your recommendation, Mr. Yuronka, that all wells as shown on your Exhibit No. 1 be subject to the spacing and proration regulations proposed by Stoltz and Company in this application?

A Yes, sir.

(Whereupon, Applicant's Exhibit No. 2 was marked for identification.)

Q There is a cross section shown on the Exhibit 2, is there not?

A Yes, sir. There is a cross section marked A-A¹ which is Exhibit 2.

Q And as I understand, there are no wells presently

producing as dual completions, that is from both zones?

A No, sir, not to my knowledge in checking the proration schedule and the latest New Mexico Oil and Gas Engineering Committee Report that was issued.

Q Have you had any occasion to look into the producing characteristics of the Lower Pennsylvanian Pool?

A Yes, sir. It's a somewhat of an odd situation. There are very thin streaks, the streaks are very productive to begin with, apparently they do not last very long. However, the production from the Lower Penn does compare with the production from the Upper and the Middle Penn.

Q Now, turning to what has been marked as Exhibit No. 2, would you identify that exhibit, please?

A Exhibit No. 2 is the cross section marked A-A¹ in Exhibit 1, which starts with the well in Unit G of Section 29, the Stoltz Sunray State "AS" No. 1, goes up to the well in Unit G of Section 22, which is Stoltz Sinclair State 262 No. 1, then goes up to the well in Unit P of Section 15, Cabot Carbon Dallas No. 1; then it goes up to, also in Section 15, in Unit F, the Felmont is Hissom State No. 1, and then the last well shown on the cross section is the T. P. Collier No. 1, located in Unit F of Section 10.

The zones producing in the area have been colored with the same color as shown on the plat which is Exhibit No. 1.

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The Wolfcamp, again, is in brown, the Upper Penn is in green, the Middle Penn is red and the Lower Penn is in yellow.

Q Now, on the basis of this cross section, in your opinion is the Lower Pennsylvanian formation continuous throughout the area involved here?

A Yes, sir. From the plat No. 1, as you can see, this cross section just about covers the length of the pool. The well in Unit G of Section 29 is presently producing from the Lower Penn interval. It was taken over by Stoltz and Company and completed as a Lower Penn well in an interval roughly corresponding to the perforations shown in the Lower Penn. They perforated in the Lower Penn from 10,076 feet to 10,204. As you can see, there were also some drill stem tests run in the Lower Penn indicating productivity.

If I may, first I would just like to go through, just roughly through these DST's, if you go to the Stoltz Sinclair State No. 1, State 262 in Section 22, you will notice again that we had a DST that recovered free oil. Cabot Carbon Dallas No. 1 had a show in it in DST, then Felmont Hisson State was originally completed as a lower Penn well, and finally the T. P. Coal and Oil Well Collier No. 1, which was the discovery well in the area, was originally completed from the Lower Penn, so as you can see, we have a stretch of approximately four miles there whereby they have had shows

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in every one of these wells.

Q In addition to that you show on your Exhibit No. 1 other Lower Pennsylvanian wells in the area?

A Yes. Interspersed between these wells there are other Lower Penn completions.

Q As a general proposition, what is the structure in this area?

A There is a high, oh, approximately in Section 27 where the Stoltz Sinclair State "B" 1 is located. That is the highest well on the Lower Penn and it goes down to the West, Northwest and the North structurally.

Q That's a regional high, I assume? That's just a local high within this particular area?

A Yes, local high. The row of sections below this is the Bagley-Pennsylvanian Pool, it is, which is higher.

Q You mean south to the area shown on Exhibit 1?

A Yes.

Q That's the Bagley No. 1?

A No, sir, that is the Bagley-Pennsylvanian Pool, it's another pool entirely.

Q You say it is higher still?

A Yes.

Q Do you have pressure information on the various formations in the Pennsylvanian in this area?

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A To my knowledge there have never been any bottom hole pressures taken in the Lower Penn, but I have some pressures marked on this cross section here in pencil. For instance, the DST from 99--let's take the well on the extreme left of the cross section, the DST from 9978 to 81 had a shut-in pressure of 3800 pounds, 25 minutes. The DST from ten thousand nine to twelve had a 20-minute shut-in pressure of 3500 pounds.

Going to the next well, DST from 9879 to 9947, 30-minute shut-in pressure was 3090. The one below that, the DST from 10,158 to 10,180, 30-minute shut-in was ten fifteen.

In the Cabot Carbon Dallas No. 1, DST from 9920 to 10,012, 30-minute shut-in pressure was 1320 pounds. Then in Felmont Hissom State No. 1, DST from 10,045 to 90, 40-minute shut-in pressure was 3447. DST from 10,088 to 121, 45-minute shut-in pressure was 3239.

Then in the discovery well the T. P. Collier No. 1, the DST from 10,010 to 116, 40-minute shut-in pressure was 3749 and the DST from 10,130 to 10,190, 15-minute shut-in pressure was 3555 pounds.

So as you can see, the range of shut-in pressures on these wells, other than the test that apparently didn't have any porosity or permeability, was somewhere around 3500 pounds.

Q Would you consider that a fairly uniform pressure

across the area covered by the cross section?

A Yes, sir.

Q How does it compare to the pressures in the upper zones?

A Oh, the upper zones are somewhat erratic.

Q But in general, would they compare in relation to the depth factor involved?

A Yes, they would.

Q They would be comparable?

A Yes, sir.

Q Can you reach any conclusions, Mr. Yuronka, as to the possibility of one well efficiently and economically draining an 80-acre proration unit?

A Yes, I believe one well would efficiently drain 80 acres.

Q You have no interference tests, though, have you?

A No, sir.

Q Have you had any experience with the question of drainage in Pennsylvanian Pools generally in Lea County?

A Yes, sir, I was involved in the Bagley-Pennsylvanian Pool rule hearing which is just south of the area shown here, and there is erraticness in the pay but it nevertheless can be traced, certain zones can be traced all the way through.

Q Would you say that the formation that is subject

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to this hearing is comparable to the other Pennsylvanian Pools that are spaced on 80-acre or greater?

A I would say it is comparable to the Upper and Middle Penn which are directly above this Lower Penn producing zone.

Q Have you made any study of the economics of the drilling in the Bagley-Lower Pennsylvanian Pool?

A Yes, sir. The approximate cost of a well into the tanks, this includes a Kobe pumping unit, is approximately \$150,000 per well. The reserves are extremely difficult to determine from logs, you have no core analysis that is available to my knowledge; however, this T. P. Collier No. 1 which I mentioned was the discovery well, this was completed in July of '57 and produced from the Lower Penn before it was plugged back and made a dual.

This well produced 59,878 barrels of oil before the plugback. Using a thousand barrels per acre foot or per, pardon me, you come up with about an 80,000 barrels for the Lower Penn. This would perhaps be a conservative figure, some people will use anywhere from a thousand to 1500 barrels per acre. But for just this particular case, I will get into the 1500 here in just a second, on a thousand barrels per acre you come up with 80,000 barrels of oil. Well, taking into account merely a one-eighth royalty you come up with 7,000 barrels of oil per month.

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Lifting costs on wells, of course, of this nature as deep as they are with the Kobe are fairly high. Whenever you have a pulling job on one of these it amounts to about four or five thousand dollars. So using \$1.75 a barrel on 7,000 barrels of oil per month, that's \$12,250.

Well, this would give you a payout of 12.3 months except for the fact if you use a thousand barrels per acre foot you have already exceeded the ultimate that perhaps could be obtained from the Pennsylvanian.

In regard to a ratio of income to investment, using this thousand barrels per acre, you have less than one to one of income to investment. You don't get your money back, actually. If you use 1500 barrels per acre you come up with about, again using an 87-1/2 percent lease and \$1.75 a barrel, you come up with 1.23 to 1 ratio of income to investment and this pool has shown during the history of it that a lot of these zones produce for a very limited time, actually, some of them have produced for less than a month and some have produced maybe a year or two. So actually the Lower Penn can primarily be considered as a zone to get your money back for drilling and the zones up above it would give you a profit on the drilling of your well.

Q Could you just drill a well to the Lower Pennsylvanian without considering any other production?

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A I would not do it personally, no, sir.

Q Could you reasonably anticipate any more than just a bare payout on your well costs?

A Not by my calculations, no.

Q On that basis, would you recommend that anybody drill a well on 40-acre spacing in this area?

A No, sir.

Q And the upper zones are presently spaced on 80-acre spacing, is that correct?

A Yes, they are.

Q What depth factor do you recommend to the Commission in this pool?

A The Lower Penn is presently in the bracket from ten to eleven thousand and the depth factor for 80 acres is 5.67.

Q Do you have any recommendation as to well locations?

A We would like to have it coincide with the rules as they exist presently in the Upper and the Middle Penn, giving 150-foot tolerance for the location of the well in either 40-acre tract and being able to run your 80-acre proration unit either north, south or east, west.

Q Do you have anything else to add?

A No, sir, I don't.

Q Have you examined Exhibits 1 and 2?

A Yes, sir.

Q Are you familiar with the information that is shown thereon?

A Yes.

Q And do you believe that information to be correct?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1 and 2.

MR. UTZ: Without objection Exhibits 1 and 2 will be entered into the record in this case.

(Whereupon, Applicant's Exhibits 1 and 2 were offered and admitted in evidence.)

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

CROSS EXAMINATION

BY MR. UTZ:

Q You are requesting a temporary order here?

MR. KELLAHIN: If the Examiner please, Stoltz and Company is asking for a permanent order on the basis of the orders that have been entered as to the Upper and Middle Penn zones. In both instances a temporary order was entered upon a period of one year. We have no objection to such an order as a practical matter, at the end of a year there will probably be no need for an order on the basis of the information Mr. Yuronka has presented. We are asking for a

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permanent order but we have no objection to a temporary order.

MR. UTZ: You think it will be completed in a year?

MR. KELLAHIN: Possibly.

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

(Witness excused.)

MR. UTZ: Any statements?

MR. HATCH: Letter from Gulf Oil Corporation dated May 18, 1967.

"Gulf Oil Corporation, as an Operator in the North Bagley Lower Pennsylvanian Oil Pool, believes this pool should be developed on 80-acre spacing for economic reasons and urges the adoption of special rules. It is recommended that such rules, if adopted, provide for the proration units to run either north, south, east or west and the well to be located in either quarter quarter section. M. I. Taylor."

MR. BUELL: Guy Buell for Pan American Petroleum Corporation. Pan American is in agreement with the rules proposed by Applicant, and it would be our recommendation to the Commission that they be adopted as permanent rather than temporary rules.

MR. UTZ: You think they might last a little longer than a year? Any other statements? The case will be taken under advisement. We will take a ten-minute recess.

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