ALBUQUERQUE, NEW MEXICO

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO NOVEMBER 14, 1960

IN THE MATTER OF:

CASE 2123: Application of Continental Oil Company for an unorthodox oil well location. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location for its William Mitchell "A" Well No. 21 in the Maljamar-Paddock Pool, Lea County, New Mexico, at a point 1345 feet from the North line and 2615 feet from the West line of Section 20, Township 17 South, Range 32 East.

BEF ORE:

Daniel S. Nutter, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: We will take next Case 2123.

MR. MORRIS: Application of Continental Oil Company for an unorthodox oil well location.

MR. KELLAHIN: If the Examiner please, Jason Kellahin of Kellahin & Fox, Santa Fe, representing the applicant. We will have one witness.

(Witness sworn)

E. D. COLTHARP,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:



- Q Will you state your name, please?
- A E. D. Coltharp.
- Q By whom are you employed and in what position?
- A Continental Oil Company as district engineer, Artesia district, New Mexico.
 - Q Are you familiar with the application filed in Case 2123?
 - A Yes, sir.
- Q Would you state briefly what's proposed in this application?
- A Case No. 2123 is the application of Continental Oil Company for drilling its William Mitchell "A" No. 21 Well on a non-standard location 1345 feet from the North line and 2615 feet from the West line of Section 20, Township 17 South, Range 32 East, Maljamar-Paddock Pool, Lea County, New Mexico.
- Q Now, there's presently production from the Maljamar-Pad-dock Pool, is there not?
 - A Yes, sir.
- Q Would you outline briefly the production history of the Paddock formation in this area?
- A Well, there are three presently producing wells from the Paddock formation: The William Mitchell "A" No. 20 Well, the William Mitchell "B" No. 19-P, and the William Mitchell "B" No. 22 Well. These three wells are surrounded by several wells which have produced either a little bit or no oil at all from the Paddock formation. One well, the William Mitchell "B" No. 20 Well, has pro-



duced approximately 47,000 barrels. The William Mitchell "B" No. 19-P has produced 165,409 barrels as of November 1st, 1960, and still capable of producing 45 barrels of oil per day flowing. The William Mitchell "B" No. 22-P has produced 113,290 barrels, and it is presently pumping approximately 26 barrels of oil per day. The William Mitchell "A" No. 20 was just recently completed, and on its IPit potentialed for approximately 100 barrels per day flowing.

Q Now, there are a number of other wells drilled to that formation, which were nonproductive, is that correct?

A Yes. They were either tight or on drill stem test, indicated that they weren't commercially productive.

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

Q Now, referring to what has been marked as Exhibit No. 1, would you discuss the information shown on that Exhibit?

A Exhibit No. 1 is the location and ownership plat. As shown on the plat, six wells surrounding the three producers are now plugged and abandoned. There are five wells around here, as I indicated before, the Mitchell "B" No. 20, which is the well in Section 19, and it's in the northeast of the southeast corner. That well produced 47,000 barrels. The William Mitchell "A" 19 which is located in the southwest of the northeast of Section 19, was a dry hole on initial completion.

MR. NUTTER: I think you stated, Mr. Coltharp, that it was the 19 that had produced 47,000 barrels. That's the No. 20,



is it not?

William Mitchell "B" 19 located in Section 17, up in 17. it's in the southwest of the southeast.

MR. NUTTER: That's the one that has produced 47,000?

Maybe I got mixed up. I thought I said 146,400 on that. Okay. Then, the 20 in Section 19 has pro-MR. NUTTER: duced how much?

That has produced 47,000 barrels. The new well, Section 20, the William Mitchell "A" No. 20 located in Section 20, which is in the center of the northwest, is just the new well; just recently completed for 100 barrels a day. The Well No. -- William Mitchell "B" No. 22, located in the northwest of the southwest. that one has produced approximately 113,000. I hope I kept those straight. We have two more down here, William Mitchell "B" No. 23 and William Mitchell "B" No. 28, located in the northwest of the southeast. Those were dry holes, both of them. Now, actually, this William Mitchell "B" 28 was carried on down to the Devonian. so it was just a plugged back, and tried to make a completion out of the Paddock, but we couldn't do it.

The location of the William Mitchell "A" 20 Well was ap-Q. proved by this Commission, was it not?

Yes. sir. Α

Are all of the ownerships common throughout on the William Mitchell "A" lease?

Yes, on the William Mitchell "A". The William Mitchell



"A" is outlined in red. It's the north half of Section 19, and the north half of Section 20.

- Q Is all the royalty ownership common?
- A Yes, sir.
- Q Is that a Federal lease?
- A Yes, sir.

(Whereupon, Applicant's Exhibit 2 marked for identification.)

Q Now, referring to what has been marked as Exhibit No. 2, will you discuss the information shown on that Exhibit?

A Exhibit No. 2 is a structure map, well, 2 and 3 are structure maps and isopach maps. Exhibit 2 is a structure map contoured on the top of the Paddock formation, and indicating a high off to the, actually a high location of, in about the, approximately in the center of Section 19 on the Paddock formation, and another locally, just a small high located in the center of Section 21. However, the high in Section 21 is too low to actually have any effect on the productive horizon.

Q Now, there are two lines shown on these Exhibits, AA and BB. What is the significance of those?

A Generally speaking, from the information that we have at the present time, everything to the west of this Exhibit -- I mean of the line AA is in essence tight, very tight, and they had to treat this William Mitchell "B" No. 20 down here, they had to treat it several times to get 47,000 barrels of oil out of it, and finally,



they just treated it into water, trying to make a commercially productive well out of it. Therefore, it's indicated that everything is tight to the west of that. Generally speaking, it's either tight or watered out, everything to the east of the line BB That's just based on our present information obtained from the wells that are already drilled out there.

Q Do you consider the area southeast of the line BB to be commercially productive?

A No, sir. To the south and east of that, we considered that to be water.

(Whereupon, Applicant's Exhibit 3 marked for identification.)

Q Now, on the Exhibit No. 3, there are also two lines shown there. Would you discuss those? No, there are four lines.

A Yes, sir, there are four lines on it. Those are approximately the same four lines that were on the structure map, and this is just the isopach of the sand thickness and showing that everything, although we do have some sand development to the west and north of the line AA, it is still tight. It is just a tight sand there. Likewise, everything to the south and east of line BB is below what we consider the water table, and it is either tight or goes into the water; when the sand starts development again, it's completely down in the water section. Likewise, to the north -- wait a minute, to the south of line CC, that is into the water again because of structure and also to the north of DD, that goes into water.



So, we're either surrounded by tight or going into the water of the structure.

- Q It's your conclusion that in this area you have a relatively small productive area, is that correct?
 - A Yes, sir.
- Q And the proposed location of your "A" 21 Well is within the area you consider to be productive?
 - A Yes, sir.
- Q Now, what acreage do you have dedicated to your William Mitchell "A" No. 20?
 - A That is the proration unit No. C.
- Q What acreage do you propose to dedicate to your No. 21 Well?
 - A F.
 - Q Would that be standard 40-acre dedication?
 - A Yes, sir.
- Q The only difference being the well location, is that correct?
 - A Yes, sir.
 - Q How close would you be to the line?
 - A Twenty-five feet from both lines.
 - Q At what depth are you drilling this well?
 - A Fifty-five hundred feet.
- Q Do you believe that the well would be bottomed on the acreage dedicated to the well?



A Based upon our information, it should creep, if the bottom creeps off, it should try to creep off up structure, and, therefore, according to our information as to the structure, it would creep kind of in a southwest direction, which would bring probably the bottom hole closer to this 40-acre, closer to the center of the 40-acre. That's just the normal direction. However, if our information is wrong, we could be a little bit off on that, but generally speaking, it would creep in that direction.

- Q The fact that you are right at the unit line, you are not offset by any other ownership, are you?
 - A No. sir.
 - Q How far is the well located from your No. 20 Well?
- A It's approximately one thousand feet. It's in the east-west direction. It's 995 feet, and in the north-south direction, it's 50 feet. Therefore, it's approximately 1000 feet.
- Q Based on the information that you have as to the structure and the productive area of the Maljamar-Paddock Pool, would a well drilled as you propose to drill it recover oil that would otherwise not be recovered?
 - A Yes, sir.
- Q Would a well drilled at a standard location on this unit, in your opinion, recover the oil under the acreage proposed to be dedicated?
 - A Yes, it would recover.



Q No, I say a well located at a standard location?

A That's right, it would not because it would be too close to the present producing Mitchell "A" Mo. 20 Well.

Q It is your desire to move away from that well?

A Yes, sir.

Q Were Exhibits 1, 2 and 3 prepared by you or under your supervision?

A Yes, sir.

MR. KELLAHIN: I would like to offer in evidence Exhibits 1, 2 and 3.

MR. MUTTER: Continental's Exhibits 1 through 3 will be entered.

(Whereupon, Continental's Exhibits 1,2 and 3 were received in evidence.)

MR. KELLAHIN: That's all I have.

MR. NUTTER: Does anyone have any questions of Mr.

Coltharp?

MR. MORRIS: Yes.

MR. PORTER: Go ahead, Dick.

CROSS-EXAMINATION

BY MR. MORRIS:

Q Does Continental have any plans for developing either units B or G in the future? Those would be the immediate east offsetting units?

A See, we have a well, William Mitchell "B" 19-P in Section



17 --

- Q Yes.
- A -- which would be just north of your unit B.
- Q Right.

A We feel that will be drained. That well has already produced 160,000 barrels, and it's so close to a tight zone that we feel it will be draining down in there, and that we right at the present time, our present plans do not call for any development in that area.

- Q Your structure would preclude you from developing unit is that correct?
 - A That's correct.
- Q Do you feel that your unorthodox location here would have anything to do with your decision of whether to develop or not to develop here your unit B?
 - A Unit B.
- Q In other words, if, moving the well closer to the outline of unit B would, therefore, give that well a better chance to drain unit B?
 - A Yes.
- Q Do you feel that that would be one reason why you wouldn't drill a well up there in B if this were approved?
- A I think our present plans would not even call for one in B. Now, I'm just -- this right here, based upon our information at the present time, we would not develop B. That's the best



answer I can give there.

MR. MORRIS: That's all I have.

MR. PORTER: I have one question.

MR. NUTTER: Mr. Porter.

MR. PORTER:

- Q Does Continental own all of the production in the Maljamar-Paddock?
 - A Yes, sir.
- Q Has anybody else except Buffalo or Continental drilled Paddock wells in there?
 - A Yes, sir. Kewanee. Which map are you on?
 - Q I'm on Exhibit 3.
- A All right, Exhibit 3. In looking at that, look at the right D up there. You'll notice the King "B" No. 1 Well.
 - Q Yes.

A That's drilled by Kewanee. That was their acreage before we purchased that from them. They drilled a Paddock well there which was a dry hole. Two more Paddock wells, which are not indicated, approximately a half mile west of the County line drilled by Hudson and Hudson, Puckett, I do not remember exactly the number, they were dry holes.

- Q Nobody else has had any production?
- A No other production. Nobody else has had any production. Several drilled wells, but no other production.

MR. PORTER: That's all I have.



BY MR. NUTTER:

Q What pay are these other wells on the lease producing from?

A All of these on the William Mitchell "A" and the William Mitchell "B" leases are producing from the Maljamar pay, Grayburg-San Andres pay.

Q Is there any secondary recovery project under way in that pay?

A Well, there is off to the extreme right, Kewanee started a water flood back in 1957, I believe, if I'm not mistaken. They started a water flood in that, and also the Maljamar cooperative agreement asked for a pilot to be located down in Sections 21 and 28, for a pilot to be located down in there.

that you are proposing today are ideally located, almost in the direct center of five-spot locations. I wonder if Continental had any plans for somewhere down the road converting those to injection wells for secondary recovery in the Grayburg-San Andres pay after depletion in the Paddock. Have you all given any thought to that?

A I'll have to admit we have given some thought to that.

If these were dry holes, what would you use them for then?

Q Is there any difference structurally or, as far as the thickness of the pay is concerned, from the location which you propose for the No. 21 Well and a standard location in that 40-acre



tract, being 330 out of the North and East lines of that 40?

A We were just trying to stay as far away from this other well. We would be closer to the other well if we came down 330 out of the North and East line of that quarter acre. We will be much closer to the No. 20 Well, and we're trying to stay away from it as much as possible.

Q How far out of the southwest quarter of unit C is that well drilled?

A Well, there's a tank battery, and we had to move over 200 feet to get away from the tank battery, so we drilled out of the -- I mean I'm thinking the same thing, 200 feet out of the west and 25 out of the south, is the location of that well.

Q I see. Have you made any computation as to difference in the distance between the two wells if you drilled on a 25-foot location as you propose and a 330 foot location which would be standard?

A No, sir, I haven't.

Q What assurance can Continental give the Commission that the well will be bottomed on the 40-acre tract to which it's dedicated?

A Oh, we would have to run a survey for that.

Q Continental would be willing to run a survey on the completion of the drilling to establish the exact location of the bottom of the hole?

A I imagine they would, yes.



MR. NUTTER: Any further questions?

BY MR. PORTER:

- Q Is this, the No. 20, the best potential you have had in the Paddock formation?
 - A Yes, sir.
 - Q 100 barrels a day?
 - A Yes, and on an 8/64ths choke.
- Q Which well did you say had a producing capacity of 45 barrels a day?
 - A 19-P located up in Section 17.
 - Q How old is that well?
 - A I'll have to look back.
- Q This doesn't have any bearing on the case, I was just checking.
- A Approximately, I would say it was, roughly, in 1954, approximately that age.

MR. PORTER: That's all.

MR. NUTTER: Any further questions of Mr.Coltharp? He may be excused.

(Witness excused)

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

MR. KELLAHIN: That's all I have, Mr. Nutter.

MR. NUTTER: Does anyone have anything further for Case 2123? We will take the case under advisement, and the hearing is adjourned.



STATE OF NEW MEXICO)

COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine shorthand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 18 day of Monthless, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Soul Develop NOTARY PUBLIC

My Commission expires:

June 19, 1963

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2/25, heard by me on ________, 19.60...

New Mexico Oil Conservation Commission

