CASE 5051: Application of HILLIN PRODUCTION CO. FOR SPECIAL RULES FOR WINCHESTER-MORROW GAS POOL.

CASE No.
5051

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

August 22, 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Hillin Production Company for special pool rules, Eddy, County, New Mexico.

Case No. 5051

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

MR. STAMETS: Case 5051.

MR. DERRYBERRY: Case 5051: Application of Hillin Production Company for special pool rules, Eddy County, New Mexico.

MR. STEVENS: Mr. Examiner, I am Don Stevens, an attorney in Santa Fe, New Mexico, representing the Applicant. We have two witnesses to be sworn.

MR. STAMETS: Are there other appearances in this case?

MR. KELLAHIN: Tom Kellahin, of Kellahin and Fox, Santa Fe, appearing on behalf of Penn-Rock Oil Corporation.

MR. STAMETS: Do you have any witnesses, Mr. Kellahin?

MR. KELLAHIN: No, sir.

* * * *

DWAYNE HAMILTON,

was called as a witness, and after being duly sworn according to law, testified as follows:

DIRECT EXAMINATION

BY MR. STEVENS:

Q Would you state your name and residence and occupation?

A Dwayne Hamilton, Midland, Texas, geologist.

Q Have you testified previously before the New Mexico Oil Conservation Commission?

A No.

Q Would you briefly summarize your education and work

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6611 • ALBUQUERQUE, NEW MEXICO 87103
1211 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

experience?

A I was educated at the University of Oklahoma and graduated in 1958. I went to work for J. M. Field Corporation and worked for them until 1969.

Q During this period of time, were you actively concerned with oil and gas exploration and development?

A Yes, that was my total function.

MR. STEVENS: Are the qualifications of the witness acceptable?

MR. STAMETS: What is your profession?

THE WITNESS: Consulting geologist.

MR. STAMETS: Yes, his qualifications are acceptable.

Q (By Mr. Stevens) Briefly, Mr. Hamilton, would you explain what the Applicant seeks in this hearing?

A We are seeking 320-acre spacing in the Winchester-Morrow Gas Pool, and the promulgation of special pool rules for the unit so that each well drilled within the pool that are not presently drilled or being drilled would be spaced 150 feet either side of a line drawn between the center of the two governmental quarter sections allocated to any unit.

Q The standard spacing under the usual 320-acre gas spacing is 660 feet from the side line and 1980 feet from the boundary, is that correct?

A Yes.

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

Q And in fact, all this does is move the side line a greater distance, is that not correct?

A Yes.

Q In your proposed field rules, do you have exceptions for wells previously drilled or drilling?

A Yes, we do.

Q Would you go over Exhibit Number One in its entirety, and explain how it relates to this application?

A This is an area plat of the townships around the West Winchester-Morrow field. The West Winchester-Morrow field consists of wells in Sections 34 and 35, Township 19 South, Range 28 East and Section 2, Township 20 South, Range 28 East in Eddy County, New Mexico.

The yellow outlines are the Morrow units that have been drilled, and the others being drilled presently.

Q These are all the units allocable to the Winchester-Morrow field at this present time, is that correct?

A Correct.

Q And not all those are producers, are they?

A No. The well in the north half of Section 35 is dry in the Morrow. The well in the west half of Section 1 of 20 South, 28 East is dry in the Morrow. The Morrow producers are in the Southeast quarter of Section 34 and the Northwest quarter of Section 2, and also the Southeast quarter of Section 35, 19, 28.

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

Q Do the black circles indicate all the wells in the area that have penetrated the Morrow?

A That's correct.

Q Would you give us a summary of the history of the discovery well and the subsequent wells drilled as to when and what they might have covered?

A Okay. The discovery well was the Penn-Rock O Federal, which is in the Southeast of the Southeast of Section 35. It was completed from the Atoka-Morrow for about 1.2 million MCF a day.

Subsequently we drilled over in the Southeast quarter of Section 34, and that well is capable of something between a million and two million a day out of the Morrow sands. We drilled a hole in the North half of Section 2 of 20 South, 28 East, and it's a producer from the Morrow.

J. C. Williamson then drilled a well in the West half of Section 1, which was dry in the Morrow. We then drilled a well in the North half of Section 25, and it was dry in the Morrow.

Q What is the geology of the field area?

A This is a stratographic sand development channel or bar, one of the two, I really don't know which at this time, on a dip, a southeast dip, off into the basin.

Q Could you give us an idea of the usual porosity and

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

permeability and their variances?

A There is highly variable porosities ranging, I would estimate, from forty percent to something like twelve percent. The permeability varies from virtually nothing to twenty-five to thirty millidarcies. The flowing potentials have been one million, two million, and fourteen million on the three wells drilled in there.

Q Mr. Hamilton, what would be your opinion as to the effect of changing the state-wide rules for the location of gas wells in this field to your proposed rule of 150 feet on either side of a line drawn between the two quarter sections allocated to a unit?

A What it will do is keep these wells far enough away so that you have the optimum drainage from each well. I think to some extent this will have a strong chance of preventing waste. I think if you get in and drill two wells close together, any closer than these are, you are probably going to establish some sort of pressure which would allow water to move up.

Q Has this happened before, to your knowledge, in this type reservoir?

A Well, I have worked with this type of reservoir in Oklahoma and down here both, and I have seen cases where, of course you can never be certain as to what actually causes these things, but you pull water into wells

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

where you have these low pressure signs, and you also have to speculate as to the cause. I think this may be one of the causes, drilling these things too close together as you would get with wells on ordinary state-wide spacing.

Q What is the distance usually between the wells drilled in the field to date?

A Anywhere from half a mile to three-quarters of a mile apart.

Q What is the maximum closeness you can get between wells under the state-wide rules?

A Thirteen hundred twenty feet.

Q Which is one-quarter of a mile?

A Yes, sir.

Q If these rules were not adopted, then there could be the situation where wells could be drilled within a quarter mile as opposed to your current half-mile spacing between the wells?

A Right.

Q And this, in your opinion, would cause waste?

A Yes.

Q Is there any possibility of waste from close spacing of wells while one well is being produced and one well is being drilled nearby in the Morrow sands?

A Well, the wells are producing, and you have a low

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 •PHONE 243-6691 •ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST •ALBUQUERQUE, NEW MEXICO 87108

pressure area in there, and if you drill that close, if you drill within a quarter of a mile of that well, it will take water. What damages will result for sure, we don't know. But it is damaged, and you are going to damage it more by reducing the pressure.

In other words, if you drill that close to a producing well and you have low pressure out there because another well is there, you are going to tend to lose more fluid into the Morrow. I think this is because of the reduced pressure, and I think you could potentially cause a wider radius of damage than you would otherwise.

Q Aside from water encroachment and possible formation damage, does close spacing of wells tend to reduce ultimate recovery of gas in a reservoir?

A I think it could, because-- it depends, you know, where you are drilling the thing. If you get out in the lower permeability areas on the edge of a reservoir, you might get more gas out of the thing than you would otherwise.

I think there is an optimum amount of space or area that you should try and let all of these wells drain, and that's what we are really shooting for, to prevent waste; waste of money, waste of gas, possibly both.

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

Q Do you contemplate-- Does Hillin Production Company contemplate additional drilling of wells in this field based upon your present knowledge of the reservoir?

A Yes. We are drilling in the South half of Section 2, and we are also drilling-- or participating in a well in the West half of Section 34. We have additional acreage to the west all the way over to the west edge of 19 South, 28 East, and 20 South, 28 East.

Q You would be subject to rules you propose, then, in theory?

A Yes.

Q Was this exhibit prepared by you or under your direction?

A Yes.

Q Do you have anything you might wish to add to your testimony that I might not have asked you about at this point?

A No, nothing that I can think of offhand.

MR. STEVENS: I would like to move for the introduction of Exhibit One.

MR. STAMETS: Without objection, Applicant's Exhibit One will be admitted into evidence.

(Whereupon Applicant's Exhibit One was admitted in evidence.)

MR. STEVENS: I have no further questions of this witness at this time.

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-3691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

MR. STAMETS: Are there questions of the witness?

MR. KELLAHIN: Yes, sir.

* * * *

CROSS EXAMINATION

BY MR. KELLAHIN:

Q I don't believe you told us on direct examination exactly what acreage belongs to Hillin, what acreage is under Hillin's control.

A Well, it's Hillin et al. We own the North half-- Or we own a farm-out on the leases in the North half of Section 35, Township 19 South, Range 28 East. We own all of 34, 19, 26. We own the South half-- the North half of Section 33, 19, 28. We own the South half of 32, 19, 28. Going down to 20 South, 28 East, we own all of 2, the Northeast quarter of 3, all of 4-- Wait a minute. Bobby, what do you own in 4 there? I'm a little confused-- We own the East half of 4, I believe.

Q I am really interested in what acreage Hillin is the operator of.

A Hillin is the operator-- He was the operator of the DWU No. 1, which is in the East half-- or the Southeast quarter of Section 34.

Q The South half of Section 34?

A The Southeast quarter of 34, 19, 28.

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

Q That is Hillin Production Company that operates that?
A That's Bobby Hillin. Hillin Production Company is the operator of the two wells in Section 2, one drilled, one presently drilling.
Q Will you clarify for me your proposed rule for well locations? You have drawn a line between the two centers of the two quarter sections, is that right?
A No, we stop at the center.
Q And we are talking about 150 feet on each side of this line?
A Well, actually you would be drilling 150 feet either side of that line down to the center, but you would still be 1980 feet from the end of it.
Q You want to extend the 150 feet at the end also?
A Well, if you did that, you could get 150 feet off of it. You could drill right up against the line on the other end.
Q Then you would be 1170 feet from the end. That's my problem, I don't understand how you are drawing the line.
A Well, you draw it between the centers of the two quarter sections.
Q And you are talking about 150 feet on either side of the line?
A Yes.
Q We are not talking about a 150-foot line on the end of

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

the line?

A Well, you would still be-- No, you wouldn't be, you wouldn't be talking about 150 feet off the end of the line. You would be obligated to be 1980 feet from the short side, but you would be 150 feet off that center line.

MR. RAMEY: Why don't you draw a little unit and show us how the wells will be drilled?

(Whereupon the witness complied.)

A This would be the center--

Q (By Mr. Kellahin) Just for the benefit of the reporter, would you describe the quarter sections?

A This would be the section you are talking about (indicating). You are talking about a section being broken up into quarters. In this particular instance, we are taking the South half of the section,setting a unit up there, and drawing a line between these things.

Of course, on the long side boundary, you would be controlled by that line, and you would have to be 150 feet either side of that line.

Q Under that proposed configuration for a well location, are any of the present wells that have been drilled or are being drilled located within your rectangle? In other words, are all existing wells outside of that location?

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

A Yes, they are. But at the same time, you have at least a half a mile between all wells that are drilled. That's what we are trying to get around to, to maintain the optimum drainage radius on these wells.

Q What is the name of the well in the North half of Section 2?

A That's the Hillin Production Company JCW 2 No. 1.

Q What is the location of that well?

A Nineteen hundred eighty feet from the west and 660 feet from the north.

Q Does this well's drainage run into the South half of Section 35?

A If the sands that are productive in this well go up there into 35, I would suspect it does.

Q Would not Hillin be gaining an unfair advantage over the operator or the owner of the South half of Section 35 by the pre-existing location of this Hillin Production Company well in the North half of Section 2? Isn't this an unfair advantage in creating the rule whereby the owners of the South half of 35 are precluded from drilling at a location 1980 feet from the west and 660 feet from the south line?

A I think not, the reason being that the sand configuration, as I see it, doesn't go up there. At least, there is not much indication that there is very much sand, only

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

that there is a well in the South half of 35 producing from the sand that drains the thing anyway.

So if you take the attitude you are taking, to answer your question, your drainage would be in the east end of Section 2 and the west end of Section 35.

Q That is assuming both these wells are equally capable of producing the same quantity?

A Well, I don't think that's a fair assumption, because in that regard, they are not capable of producing the same. The well drilled in the Southeast of 35 made 3 million cubic feet of gas, on the drill stem test in excess of that actually. That well was completed for something in the neighborhood of one million.

Q I gather from your testimony you would have no particular objection to a location 1980 feet from the west and 660 feet from the south in the South half of Section 35?

A I would object to that.

Q Why is that?

A Because you are getting the wells too close together, and you are reducing the drainage area of the well. If you have a well there at that spot, it would be closer than any other two wells in the field, and you might start water moving by the low pressure through there. You may start waters that may not move ordinarily.

Q How did you figure your permeability in this case?

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87106

A We figured permeability on drill stem tests. That's the only way we have, because we haven't cored any of these wells.

Q Would you describe for me what this line is that is drawn perpendicular to the other contoured line through the pool?

A That's the general trend of the sands as we presently see them through there.

Q And what did you use to determine that line?

A Sand thicknesses.

Q Based on what type of test?

A Electric logs.

Q In your application-- In Hillin's application, you talk about approving as non-standard locations all those wells that are presently being drilled or which are now located in the pool. I assume you are talking about only those locations you have actually platted on this plat?

A That's correct.

Q The seven wells indicated on the plat?

A Right.

Q You are not referring to any locations that may have been established at this point, but where no drilling has commenced?

A That's correct.

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

MR. KELLAHIN: I have no further questions.

* * * *

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Hamilton, you mentioned some possible damage here because of the pressure situation, and because of drawing water into this. That's not exactly a common occurrence, but it has happened.

A That's right.

Q Have you ever seen this Morrow reservoir?

A I have seen it in Oklahoma. I do not have all that much experience with it in Southeastern New Mexico. The sands in Southeastern New Mexico appear to be identical to those in the Anadarko Basin. We have that problem up there-- We had the problem up there on various wells, and I think that that same thing is very likely to happen down here.

Q How thick is the pay in this area?

A The well we have in the North half of Section 2 has about 45 feet of sand in it, and I think that probably about 25 to 35 feet of that is net pay. The other well over in the Southeast quarter of Section 35 has about 30 feet, and the net in that is awfully hard to pick. It's mostly tight sand up there. The well up in the Southeast quarter of Section 25, I would guess,

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

has 10 feet, maybe 15.

Q And you have experienced some water in those formations?

A Yes.

Q And it is your contention that you will achieve better drainage with wider spacing?

A Right.

Q You would have no objection to wells being located not closer than ten feet to any quarter section?

A I see no objection to that right offhand.

MR. STAMETS: Are there other questions of this witness?

(No response)

MR. STAMETS: He may be excused.

(Witness excused.)

* * * *

J. H. CONINE, JR.,

was called as a witness, and after being duly sworn according to law, testified as follows:

DIRECT EXAMINATION

BY MR. STEVENS:

Q Would you state your name, residence, and by whom you are employed?

A Jim Conine, Midland, Texas. I'm an engineer and an oil operator,among other things.

Q What other things?

dearnley, meier & associates
200 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

A I'm in the junk business and other related things.

Q Have you previously testified before the New Mexico Oil Conservation Commission?

A I have not.

Q Would you briefly summarize your education and work experience?

A I am a graduate petroleum engineer from Texas Tech. I worked as a drilling engineer for Western Drilling Company for a period of three year. I worked for an outfit called Basin Engineering and Developing for a period of three years. I have been self employed for the last ten years.

Q During this period of self employment, have you practiced your profession as a petroleum engineer?

A As necessary.

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

MR. STAMETS: They are.

Q (By Mr. Stevens) Mr. Conine, you have heard what the Applicant seeks in this hearing. Could you explain for the Commission what will be the benefit if the Commission grants the application to place wells 150 feet either side of a line drawn between the center of the two quarter sections?

A Well, I think the consideration here in my opinion is

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 •PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

the damage done to the Morrow formation upon the entry of drilling fluids and water and so forth. We have proved this in numerous cases in the South Carlsbad and Burton Flats fields.

We have indications that we have less productivity after we have drilled on down to the bottom into the Lower Morrow, and we did not have as good productivity as was indicated on the drill stem test. So I think the major concern is to try and keep the bottomhole pressure as static as possible or as high as possible for new wells being drilled.

Q In that case, how will this proposed distance in spacing prevent this?

A I can quote some numbers because I have them, and I think they mean something, and I will be rounding off these pressures to the nearest 2500 pound initial bottomhole pressures.

In the Winchester gas field, the bottomhole pressure is some 4500 pounds. Your flowing bottomhole pressure on the four point test was 4000 pounds, and given a 500 pound draw-down at the place where we placed the bottomhole pressure, you would get the 4500 pounds. Generally in that area, due to other drilling complications, the highest weight mud that can be drilled seems to be 10 pound brine water. If you drill in the

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 •PHONE 243-6691 •ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST •ALBUQUERQUE, NEW MEXICO 87108

area where you have the 4500 pounds of pressure, you have about 500 pounds differential. So you have a 500 pound differential to take the liquid into the reservoir and damage it.

In the event that later on as this reservoir is drilled, if we allow these wells to be drilled very close together, a person drilling a well will be damaged by the fact that you have withdrawn it previously due to the fact that you will lose more fluid and damage the permeability by the swelling of the sands in there.

So in order to prevent waste as much as possible to further wells, these rules should be adopted.

Q In this connection, will wider spacing-- Generally speaking, in your capacity as a petroleum engineer, will you recover greater amounts of gas when wells are spaced farther apart as opposed to closer together?

A Well of course, that's kind of a hypothetical situation. The best you could possibly determine in the reservoir is if you're going to let them go on 320-acre spacing and keep the wells one-half mile apart, you could determine it that way.

Q That's about the maximum you could get them apart?

A That's as far as you can get them apart.

Q And anything less than that--

A Would result in damage to the reservoir.

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

Q Do you have any comments or statements or opinions to make regarding this application?

A No.

MR. STEVENS: No further questions, Mr. Examiner.

MR. STAMETS: Any questions?

MR. KELLAHIN: Yes, sir.

* * * *

CROSS EXAMINATION

BY MR. KELLAHIN:

Q I am not sure exactly what your reasons are for the damage you feel will be done to the Morrow. Are you talking about damage that would be done to the operator that is drilling a new well, or damage being done to an existing well that the operator is offsetting?

A I think it's both. Let's just take the case of where you move in and you are drilling a well in an area that could possibly have some reservoir pressure lower than you would having to drill a ten-pound brine. You would use more liquid in the formation, and thereby damage your formation more than if you were out farther in the section.

And if your bottomhole pressure gets down to 3500 pounds, it's going to be more of a problem.

Q This is a problem for the operator drilling the additional well?

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 •PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

A And it also could be a problem if you had created some reduced pressure. You know, when you take the gas out of a reservoir, the pressure has to go down. So in the event you drill in there with some liquid and with lower pressure, the further apart they are, the less likely either will be damaged.

Q Would it be your position that the pool should have 640-acre spacing?

A I think so.

Q That would have been better?

A I think it might have been.

Q Of course, there would have been no way to anticipate that when these first wells were drilled in there?

A I don't think so, because we never did come up with excellent permeability. You know, the area is pretty doggy. The JCW Well had low permeability.

Q Which well is the JCW?

A It's in the North half of Section 2, 20, 28.

Q So it was not until that well in the North half of Section 2 was drilled that you perhaps were in a position to determine that no further wells should have been drilled?

A I didn't say no further wells should be drilled, I didn't say that at all.

Q Okay, then will you tell me what you said?

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

A I said until that well was drilled, until this well was drilled (indicating), there was indication that in order to get any gas, you might have to drill on 80-acre spacing for that matter. But this well proves that this reservoir is comparable to the Burton Flats or the South Carlsbad.

Q This well in the North half of Section 2 is the best well in the pool, isn't it?

A To my knowledge, it is. I hope it is not for much longer.

MR. KELLAHIN: I have no further questions.

MR. STAMETS: Are there any further questions of the witness?

(No response)

MR. STAMETS: He may be excused.

(Witness excused.)

MR. STAMETS: Do you have anything further, Mr. Stevens?

MR. STEVENS: No further testimony.

MR. STAMETS: Mr. Kellahin, do you have any testimony at this point?

MR. KELLAHIN: No, sir.

MR. STAMETS: Do you have a statement?

MR. KELLAHIN: Yes, sir.

MR. STAMETS: You may proceed.

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

MR. KELLAHIN: Mr. Examiner, it is the position of Penn-Rock that the Applicant in his application should be denied.

It is our position that Hillin is seeking an unfair advantage, and is attempting to protect its best well in the pool, and obviously precluding the other owners of acreage to the north from offsetting this well in any future manner.

There seems to be no other basis for setting up the drilling locations as indicated by the application. Mr. Hamilton testified that there was the possibility of a pressure sink being created, although he did admit that to his knowledge, it had never occurred in the Morrow sands of this particular area of New Mexico before.

It is our position that the pool has been developed fairly and reasonably under the state-wide rules of 1980 feet from the outer boundary and 660 feet from the inner boundary. We feel that we ought to continue with those spacing rules, and not adopt the rules proposed by the Applicant.

Thank you.

MR. STAMETS: Mr. Stevens, do you have a statement?

MR. STEVENS: Mr. Examiner, the attorney for Penn-Rock states that there is an unfair advantage to be gained by these field rules. I might point out that these

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

rules would apply also to the Applicant, and the Applicant has many more wells to drill, and he will be subject to these rules. It has been pointed out that even with the state-wide rules, we have ended up with wells that are a half a mile apart. We feel this should be continued for the purpose of preventing waste.

The unfair advantage mentioned by the protestant to our mind isn't so unfair to the protestant. These rules do not preclude the protestant from drilling a well, I would presume, presuming he could get two wells on one half section or plug one and drill another. The only requirement these rules would provide is that it be a little farther away than he would like for the obvious purpose of preventing waste.

The argument that state-wide rules have worked for the benefit of the State and should be continued here is good, but state-wide rules are state-wide rules. Historically, we have discovered that New Mexico operators will come in and ask for different rules because the state-wide rules are not favorable for their particular area.

This 150 feet on either side of the line would be used for the sole purpose of trying to maintain this half-mile spacing between wells, because under the present rules,undoubtedly you can have a situation, and perhaps this is one, where you are within a quarter mile of another

dearnley, meier & associates
209 SIMMS BLDG.•P.O. BOX 1092•PHONE 243-6691•ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST•ALBUQUERQUE, NEW MEXICO 87108

well producing from the same zone with 360-acre spacing.

Based on the evidence presented here, that probably would constitute waste. We urge that these rules be adopted by the Commission to prevent waste and to also protect correlative rights.

MR. STAMETS: Is there anything further in this case?

(No response)

MR. STAMETS: We will take the case under advisement.

* * * *

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, RICHARD E. McCORMICK, a Certified Shorthand 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.

Richard E. McCormick
CERTIFIED SHORTHAND REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5057, heard by me on August 22, 1973.

Richard L. Stamets, Examiner
New Mexico Oil Conservation Commission

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 •PHONE 243-6691 •ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST •ALBUQUERQUE, NEW MEXICO 87108

I N D E X

E X H I B I T S

EXHIBIT		ADMITTED	OFFERED
Applicant's #1	Area plat	10	5

dearnley, meier & associates
209 SIMMS BLDG.• P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

OIL CONSERVATION COMMISSION

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

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

September 17, 1973

Re: CASE NO. 5051
ORDER NO. R-4624
Applicant:
Hillin Production Co.

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

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC

Other Mr. Donald G. Stevens

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. 5051
Order No. R-4624

APPLICATION OF HILLIN PRODUCTION
COMPANY FOR SPECIAL POOL RULES,
WINCHESTER-MORROW GAS POOL,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 22, 1973, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 13th day of September, 1973, the Commission, a quorum being present, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 5051 is hereby dismissed.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

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

S E A L

dr/

BEFORE THE OIL AND GAS CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF HILLIN PRODUCTION COMPANY FOR
POOL RULES IN THE WINCHESTER MORROW
GAS FIELD, EDDY COUNTY, NEW MEXICO : No. 5051

MOTION TO DISMISS

COMES NOW the Applicant, Hillin Production Company, a corporation duly qualified to do business in the State of New Mexico, and respectfully requests the dismissal of its application for pool rules in the above numbered case.

DONALD G. STEVENS

Donald G. Stevens

Attorney for Hillin Production Co.

Docket No. 23-73

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 22, 1973

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

The following cases will be heard before Richard L. Stamets, Examiner, or Elvis A. Utz, Alternate Examiner:

CASE 4548: (Reopened) (Continued from the August 9, 1973, Examiner Hearing)

In the matter of Case No. 4548 being reopened pursuant to the provisions of Order No. R-4157, which order established special rules and regulations for the Catclaw Draw-Morrow Gas Pool, Eddy County, New Mexico, including a provision for 640-acre proration units. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing.

CASE 5046: Application of David Fasken for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a gas well at an unorthodox location 660 feet from the South and West lines of Section 7, Township 18 South, Range 26 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, to which well the S/2 of said Section 7 would be dedicated.

CASE 5047: Application of Chace Oil Company for the amendment of Order No. R-4555, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the special rules and regulations for the South Lindrith Gallup-Dakota Pool, Rio Arriba County, New Mexico, as promulgated by Order No. R-4555, to provide for the classification of oil wells and gas wells, the assignment of 320-acre units to gas wells, and to provide for approval of unorthodox locations for wells drilled as oil wells but classified as gas wells upon completion.

CASE 5048: Application of Roger C. Hanks for creation of a pool and special rules therefor, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the South Dagger Draw-Upper Pennsylvanian Pool for his Preston Federal Well No. 1 located in Unit L of Section 35, Township 20 South, Range 24 East, Eddy County, New Mexico. Applicant further seeks the promulgation of special rules for said pool, including a provision for 320-acre spacing for all wells in said pool, for the classification of oil wells and gas wells, for a limiting gas-oil ratio of 8,000 to 1, and for the assignment of a depth bracket allowable for oil wells of 267 barrels of oil per day.

CASE 5049: Application of Mobil Oil Corporation for a triple completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the triple completion (conventional) of its Federal "LL" Well No. 1 located in Unit N of Section 13, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, to produce gas from the Canyon, Atoka, and Morrow formations through three strings of tubing.

CASE 5050: Application of Read and Stevens, Inc. for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority

(Case 5050 continued from Page 1)

to dispose of produced salt water into the Montoya formation in the perforated interval from 6225 feet to 6245 feet in its Federal "L" Well No. 1, located in Unit B of Section 21, Township 6 South, Range 27 East, Haystack-Cisco Pool, Chaves County, New Mexico.

CASE 5051: Application of Hillin Production Company for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Winchester-Morrow Gas Pool, Eddy County, New Mexico, including a provision for 320-acre spacing and specified well locations.

CASE 5052: Application of Atlantic Richfield Company for a non-standard gas proration unit and simultaneous well dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a non-standard 320-acre gas proration unit comprising the NW/4, E/2 NE/4, SW/4 NE/4, and NE/4 SE/4, of Section 35, Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its J. P. Combest Wells Nos. 1 and 4 located in Units H and E, respectively, of said Section 35.

CASE 5053: Southeast nomenclature case calling for the creation, extension and contraction of certain pools in Eddy and Lea Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Burton Flat-Atoka Gas Pool. The discovery well is the Monsanto Company Miller Federal No. 1 located in Unit G of Section 3, Township 21 South, Range 27 East, NMPM. Said pool described as:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM
Section 3: Lots 1 through 8

(b) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Burton Flat-Strawn Gas Pool. The discovery well is the Monsanto Company, Burton Flat Deep Unit No. 3 located in Unit V of Section 3, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM
Section 3: S/2

(c) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Canyon production and designated as the Carlsbad-Canyon Gas Pool. The discovery well is the Morris R. Antweil Randall No. 1 located in Unit K of Section 21, Township 22 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM
Section 21: S/2

(d) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Happy Valley-Morrow

(Case 5053 continued from Page 2)

Gas Pool. The discovery well is The Superior Oil Company State Q Com No. 1 located in Unit L of Section 34, Township 21 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM
Section 34: W/2

(e) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the LaHuerta-Morrow Gas Pool. The discovery well is the Cities Service Oil Company Cawley A Com No. 1 located in Unit K of Section 28, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM
Section 28: S/2

(f) Extend the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM
Section 28: NE/4 SE/4

(g) Extend the Fowler-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM
Section 10: SE/4

(h) Extend the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM
Section 1: S/2
Section 2: All

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

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM
Section 24: SE/4

(j) Extend the Parrish Ranch-Upper Pennsylvanian Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM
Section 13: E/2 SE/4

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM
Section 18: N/2 S/2 and SE/4 NE/4

Exar

(Case 5053 continued from Page 3)

(k) Extend the Penasco Draw San Andres-Yeso Pool in Eddy C New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM
Section 32: W/2

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM
Section 5: W/2 NW/4 and NE/4 NW/4

(l) Extend the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM
Section 11: E/2, E/2 SW/4, S/2 SE/4 NW/4 and NE/4 SE/4 NW/4

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

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM
Section 36: NE/4

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

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
Section 12: SE/4 SE/4
Section 13: E/2 NE/4

(o) Extend the Winchester-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM
Section 34: E/2

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM
Section 2: N/2

(p) Contract the vertical limits of the Townsend Pennsylvanian Pool in Lea County, New Mexico, to include the Cisco formation only and redesignate said pool the Townsend-Cisco Pool comprising:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM
Section 4: SW/4

CASE 4745: (Reopened) (Continued from the August 9, 1973, Examiner Hearing)

In the matter of Case No. 4745 being reopened pursuant to the provisions of Order No. R-4365, which order established special rules and regulations for the Penasco Draw San Andres-Yeso Pool, Eddy County, New Mexico, including a provision for classification of oil wells and gas wells, the spacing thereof, and a limiting gas-oil ratio of 3000 to 1. All interested parties may appear and show cause why said pool rules should remain in effect.

RECEIVED
AUG - 1 1973
OIL CONSERVATION COMM
Santa Fe

BEFORE THE OIL AND GAS CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF HILLIN PRODUCTION COMPANY FOR POOL RULES IN THE WINCHESTER MORROW GAS FIELD, EDDY COUNTY, NEW MEXICO : No. 5051

APPLICATION

COMES NOW the Applicant, Hillin Production Company, a corporation duly qualified to do business in the State of New Mexico, and states:

1. Applicant is currently an Operator of a gas well in the Winchester Morrow Gas Pool and contemplates the drilling of additional wells in said pool.

2. Applicant hereby applies for an order providing for special pool rules in the Winchester Morrow Gas Pool located in Sections 34 and 35 of Township 19 South, Range 28 East and in Section 2, Township 20 South, Range 28 East, Eddy County, New Mexico, in the following particulars:

   a. Each well to be located on half a governmental section consisting of 320 acre spacing, more or less.

   b. Exceptions to 320 acre units where the acreage amount varies due to variations in the legal subdivisions of the United States Public Land Surveys.

   c. Each well within the field and within one mile thereof to be located and drilled within

DOCKET MAILED
Date 8-9-73

150' either side of a line drawn between the center of the two governmental quarter sections allocated to the unit.

d. The locations of all wells presently drilling to or located in the Winchester Morrow Gas Pool or within one mile thereof be approved as non-standard locations.

3. Applicant desires a hearing before the Oil Conservation Commission concerning this matter.

WHEREFORE, APPLICANT PRAYS:

1. That the Commission set this matter down for hearing before it at the earliest possible convenience.

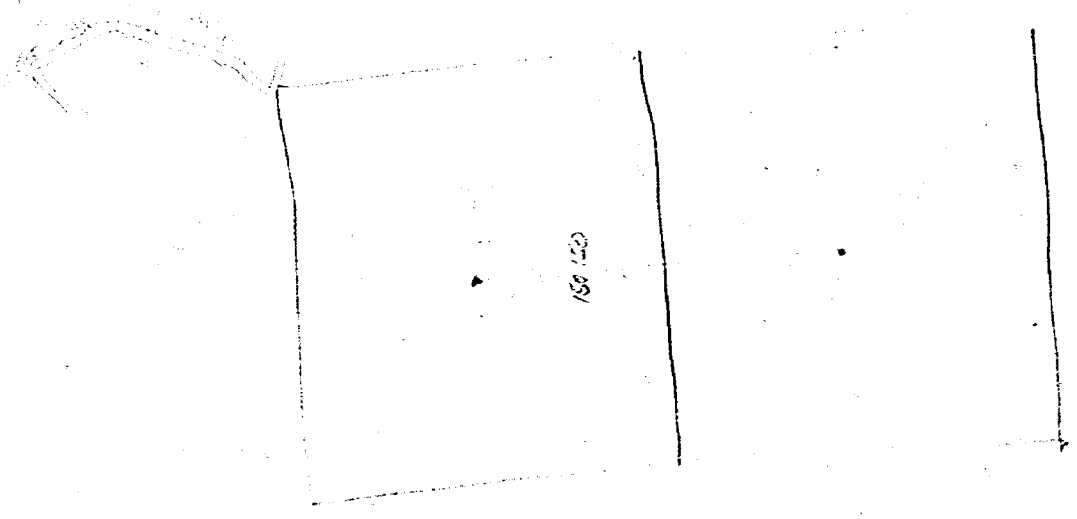
2. That notice be given as required by law.

3. That upon hearing, an order be issued granting the Application as set forth herein.

DONALD G. STEVENS

Donald G. Stevens

Attorney for Hillin Production Co.



DRAFT

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. 5051

Order No. R- 4624

Application of Hillin Production Company for Special Pool Rules, Winchester - Morrow Gas Pool, Eddy County, New Mexico

9-6-72

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 22, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of _____, 19__, the Commission, a quorum being present, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

That the applicant's request for dismissal should be granted.

IT IS THEREFORE ORDERED:

That Case No. 5051 is hereby dismissed.

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