STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
25 May 1983

EXAMINER HEARING

IN THE MATTER OF:

Application of Julian Ard for a non-standard unit, or, in the alternative, compulsory pooling, Chaves County, New Mexico. CASE 7865

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: W. Perry Pearce, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: Ernest L. Padilla, Esq.
P. O. Box 2523
Santa Fe, New Mexico 87501

MR. STAMETS: We'll call next Case 7865.

MR. PEARCE: That case is on the application of Julian Ard for a non-standard proration unit or, in the alternative, compulsory pooling, Chaves County, New Mexico.

MR. STAMETS: The testimony in this case had been previously presented and the case has been re-advertised.

Does anyone have anything further to present at this time in this Case Number 7865?

There being nothing, the case will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the examiner hearing of Case No. 7865 heard by me on 5-25 1983.

Richard L. Stamets, Examiner
Oil Conservation Division

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BEFORE: Michael E. Stogner, Examiner

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I N D E X

E X H I B I T S

MR. STOGNER: Call next Case Number 7865.

MR. MILLS: Application of Julian Ard for a nonstandard proration unit, or in the alternative, compulsory pooling, Chaves County, New Mexico.

MR. PADILLA: Mr. Examiner -- go ahead.

MR. MILLS: This case will be re-noticed because of an error in describing the section under consideration; however, we're going to consider the case this morning because the applicant is here, traveled a distance, and is represented.

If there are any problems, obviously, and it is protested, there will be an opportunity for anybody in opposition to have a full hearing in the future.

MR. PADILLA: Mr. Examiner, I'm Ernest L. Padilla of Santa Fe, New Mexico. I have one witness to be sworn.

(Witness sworn.)

WILLIAM J. LEMAY,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. PADILLA:

Q. Mr. Lemay, for the record would you please state your name and where you reside?

A. William J. Lemay. I'm an independent petroleum geologist in Santa Fe, New Mexico.

Q. What is your connection with the applicant in this case?

A. At the request of the applicant I have made a study of the area, a geological study, to determine pertinent factors involved in Case Number 7865.

Q. Can you tell us what the purpose of this case is today?

A. The purpose of the case is to show that the well drilled by Mr. Ard in the southeast quarter of Section Four is a very marginal gas well and would drain not more than 160 acres, which is requested by the application.

Or, in the alternative, to grant a 320-acre standard proration unit and force pool the 40 acres which is the northwest quarter of the northeast quarter of Section 4.

The well was drilled not anticipating gas when it was initially staked and drilled.

MR. MILLS: Mr. Padilla, can we just back up a minute and have -- and qualify the witness as an expert at this time before we continue further?

MR. PADILLA: I was going to ask that his qualifications be accepted.

MR. MILLS: Okay, I didn't know if you were or not. I assumed you might but I didn't want him to keep testifying before that was done, just in case there would be any problems.

Q. Have you previously testified before the Oil Conservation Division and had your credentials accepted as a matter of record?

A. Yes, I have.

MR. PADILLA: Are his qualifications acceptable, Mr. Examiner?

MR. STOGNER: They are.

MR. MILLS: Thank you.

Q. I think you've already stated a little bit of the background of what the -- the well was originally staked as an oil location, is that correct?

A. That is correct.

Q. That would be under 40-acre spacing?

A. Yes, that is correct.

Q. What formations were tested under that oil

test?

A. The test well went to Granite Wash and the first completion was attempted in what is generally referred to as the Montoya formation. Other people refer to this as the Pre-Mississippian limestone or dolomite. It is in southeast New Mexico predominantly an oil reservoir.

Q. Going on to what has been marked -- have you prepared certain exhibits for introduction today?

A. I have.

Q. Going on to what has been marked as Exhibit Number One, can you tell us what that is and what it contains?

A. Exhibit Number One is a land plat of the subject area showing surrounding wells, acreage ownership, and the nonstandard 160-acre proration unit, which is requested by the applicant, along with what would be a normal standard 320-acre gas proration unit.

Q. Can you tell us what -- is that the one that is depicted in blue?

A. Yes. The orange shown would depict the nonstandard proration unit; the blue would depict the standard proration unit; and the location of the Ard well, Ard No. 1 Acme, would be a standard location within that 320-acre proration unit.

Q. Would it also be a standard location for the

160-acre unit?

A. It would be under the 160-acre gas proration unit, yes.

Q. Going on to what has been marked as Exhibit Number Two, can you tell us what that is and what it shows?

A. Exhibit Number Two is a structure map in the subject area, showing the structural attitude on top of the Mississippian limestone, which is a deep structural marker in the area. Also, that map shows the location of the ARd No. 1 Acme Well and the other Atoka gas wells producing in the subject area, being an Atoka gas well in Section 13 and one in Section 23, which is barely shown on the map.

Now, these wells are approximately three miles south and east of the subject well.

You will note a structural nosing, a strong structural nose, extending from the subject area southeast to encompass these two producing Atoka gas wells.

Q. Do you have anything further on Exhibit Number Two, Mr. Lemay?

A. No, except to say that experience has shown in this general area that structure is not normally the controlling factor in gas accumulation in the Pennsylvanian; that accumulations are normally stratigraphic. That's not to say that -- that this nose and other structural influences

may not be a factor in gas entrapment; however, in general, Pennsylvanian gas is -- has more stratigraphic controlling factors than structural.

Q. Going on to what you have marked as Exhibit Number Three, can you tell us what that is and what it shows?

A. Exhibit Number Three is a portion of the compensated neutron density log from the subject well, showing the attempted completions in both the Montoya and Mississippian sections, and the completion interval in the Atoka.

As previously mentioned, the well was initially drilled as an oil test to the Montoya and porosity was encountered at approximately 6635. This is where the -- the limestone becomes dolomitic and carries very high porosities.

The interval was from approximately 6646 to 54, was perforated. It is the top of the good porosity in the Montoya, and tested 26 barrels of water per hour, plus 250,000 cubic feet of gas after acidizing with 500 gallons, and numerous other tests, the well flowed 18 barrels of water per hour plus 130,000 cubic feet of gas. I say numerous tests because this happened over a period of about a week and they would shut the well in, develop some tubing pressure, and then the gas would flow for awhile but then the water would come and eventually shut the well off.

So the tests within the MOntoya interval were all water and gas, but the water was -- was quite strong, large volumes of it, and the gas was never reported over 250,000 cubic feet.

After this well proved to be non -- this zone proved to be noncommercial, the operator came back to the top of the Mississippain, where they -- where he perforated two intervals from 6394 to 6400, and from 6424 to 34. These intervals were treated together by acidizing with 500 gallons of acid and both zones together flowed less than 100,000 cubic feet of gas per day. This was, of course, after a bridge plug was set at 6590 to isolate the lower zone.

After this zone showed itself to be noncommercial, the operator set a bridge plug at 6360 and perforated the current producing interval within the Atoka formation, being from 6268 to 6275, with eight shots. The well was acidized with 500 gallons, re-acidized with 2400 gallons, and a 4-point test showed the well to have a calculated absolute open flow of 141,000 cubic feet of gas per day, a very weak well. This is from a sandstone interval within the Atoka.

Q. Mr. Lemay, the well is presently completed, though, as a gas well, is that correct?

A. That is correct.

Q. And that requires under current spacing re-

gulations 380 -- or 320 acres to be dedicated to the well.

A. Within the Pennsylvanian interval, which the Atoka is part of, the standard proration unit is 320 acres, yes, sir.

Q. Therefor, the Oil Conservation Division requires a hearing prior to completion of the gas well originally -- or proposed as an oil test.

A. That is correct. The wildcat was staked, I mean the well was staked as a wildcat, but the main objective was an oil zone.

MR. PADILLA: Mr. Examiner, we have logs for the well. If you would care to have these logs we could also submit those as exhibits in addition to a copy of the log.

MR. STOGNER: I would like to, yes, sir, please, since you have them here.

MR. PADILLA: We haven't marked these as exhibits, but we'll mark these as Exhibit Number Six later on.

MR. STOGNER: All right.

Q. Mr. Lemay, going on to what has been marked as Exhibit Number Four, can you tell us what that is?

A. Exhibit Number Four is a copy of the C-105, completion form, as filed with the New Mexico Oil Conservation

Division. It shows the perforated intervals that are -- were marked on Exhibit Number Three, and the results from those intervals are -- were given on Exhibit Number Three. It also shows that the well is currently shut in awaiting a gas market or gas contract. There is no -- no pipeline right in the area, high pressure line, certainly; there is none of those in the immediate area, and it also shows the completion test of the well or the calculated absolute open flow of 141 MCFGPD.

Q. What does Exhibit Number Five show?

A. Exhibit Number Five is the multipoint pressure test taken on the Atoka zone of the subject well, the C-122 form, from which the calculated absolute open flow was obtained. The data indicates a low permeability reservoir and with very, very weak deliverability.

Q. Mr. Lemay, based upon -- can you -- or based upon these exhibits that you have testified about today, can you give us an estimate or an opinion as to whether or not the well can adequately drain 160 acres?

A. Yes. Mr. Examiner, the well is certainly a weak well, as indicated by the pressure data and the calculated open flow potential. Although there has been no producing history connected with this well, and certainly not a lot of producing history at all with the Atoka in the area, log characteristics indicate that it's relatively tight. It's

it a narrow zone, a sandstone zone.

In general, these tight Atoka sands do not drain a very large area because they have low permeability. Therefor it would be my estimate that -- that the well would drain, probably, no more than 160 acres, and probably something -- something less than that figure.

In talking with the operator, I understand that he's having a hard time getting a gas hookup for the well because of the weak status of the well, and that the only conversations he's had with any purchaser was with Mapco, who, again this is hearsay, they haven't signed a contract, it's a low pressure line crossing this Section 7 or Section 9 from the White Creek Ranch Field, part of a gathering system.

They talked in the range of $2.00; that's verbal conversation, it's not anything that's been offered, which is certainly quite a bit less than the 107 price, which is the top price that could be gotten for high quality gas in the area.

This area has been classified as a tight reservoir, the Atoka section has, so it would qualify for 107 price, which currently is approximately $5.35 per thousand.

The low deliverability of the well is -- is a big factor in Mr. Ard trying to get some kind of a contract with a low pressure line so it would have some deliverability

into that line.

Q. Going back to Exhibit Number One, Mr. Lemay, can you tell us which -- as far as the compulsory pooling portion of the case, which tract has not consented to the drilling of the well?

A. It's my understanding that Mr. Dale Nichols, who owns the northwest quarter of the northeast quarter of Section 4, did not consent to the drilling of the well, and again, it is my understanding from talking with the operator, that he has no -- no interest in joining the well.

Q. Can you elaborate the lack of interest on that, as to why he doesn't want to join?

A. Well, I think, considering the very marginal nature of the well, the total cost of the well to date, and I think all the bills have been submitted and paid by this time, total cost to date is $441,587.35, and it would take a fair amount of gas, especially at $2.00 a thousand, to pay that kind of well out.

So it's extremely marginal and Mr. Nichols is just exercising a business judgment in not wanting to be a working interest partner and pay for his proportion of that well on a 320-acre gas proration unit.

Q. Can you tell us what the -- going back to, say, before the well was drilling, can you tell us something

about what the -- and realizing that the well has already been drilled, can you tell us what you think the risk penalty factor would have been prior to drilling the well?

A. Well, I'd say it was a wildcat well, and certainly any well that's a wildcat, with the dry holes around it to the north, and in fact in all directions, closest production being at least three miles away from the Atoka reservoir that basically has very little production history, I think I would certainly estimate that to be -- the penalty factor would be the highest allowed by the governing body, in this case the Oil Conservation Division.

That's a judgmental factor, but it would certainly appear to me that the well would be as risky as any other well that could be contemplated.

Q. Do you think that the well will pay out?

A. Again, it would be a calculated guess, or a guesstimate, G-U-E-S-T-I-M-A-T-E, in my opinion this well would not pay out.

Q. Can you give us an opinion as to what the risk factor should be?

A. I would certainly recommend the 200 percent risk factor, which is the highest allowed by Commission regulations.

Q. Do you have an estimate as to what the over-

head charges should be for a producing well?

A. Yes. I would estimate a fair charge would be $3500 per month for a drilling well and a fixed overhead charge of $350 per month for a producing well.

Q. And Julian Ard is currently producing the well and desires to continue being the operator of the well under a compulsory pooling order, is that correct?

A. Well, he's not producing the well to date, but he is the operator of record, and therefor, he would be, of course, the logical one to -- to continue to be the operator of record, and if and when the well gets on production, he would be the operator, yes.

MR. PADILLA: Mr. Examiner, I have nothing -- no further questions of the witness.

We ask that Exhibits One through Six be admitted into evidence and pass the witness.

MR. STOGNER: Exhibits One through Six will be admitted in evidence.

CROSS EXAMINATION

BY MR. STOGNER:

Q. Mr. Lemay, you said that this well was in a tight formation area.

A. That is correct.

Q. What -- do you know what tight formation number or what our case number was that approved that?

A. Mr. Examiner, I don't. I do know that the Atoka formation was given tight formation status, or at least recommended by the Oil Conservation Division for tight formation status.

I don't -- I'm not sure whether the time limit has taken its course and FERC has officially designated this as tight formation or not. I don't have the case number.

Q. Do you know if this well has been applied for 107 classification?

A. That I don't know. I think it would almost be academic because of the low producing nature of not only the well but the lack of any interest, gas market interest, on this well.

Q. Although it is producing or when you get a line hooked up to it will be producing out of the tight formation area.

A. Yes.

Q. Or formation, rather.

A. Right.

Q. You stated in the testimony that the nearest Atoka producer was about three miles away. Is it on this map or --

A. Barely. The Exhibit Number Two is a structure map showing not only the Mississippian structure but the -- those wells that are producing gas or are capable of producing gas from the Atoka formation. There are two wells, one of which being in Section 13 of 8, 27; the other in Section 23, which you can just barely see on the very bottom righthand corner of the map.

Q. Are they both wildcat wells or are they in a pool?

A. I'm not sure, Mr. Examiner. They were completed from an interval that appeared to be the same interval generally the Atoka interval, and I -- I think they are part of a pool, but basically my study did not go into that pool.

Q. Do you -- maybe my next question will be arbitrary, then. Do you know what the proration unit dedicated to those wells was?

A. I'm assuming 320's because of the age of the reservoir and the fact that the wells had not been drilled on 160's; they appear to be on 320 spacing.

Q. Do you know if there are any wells producing from the Atoka to the north of this area?

A. Mr. Examiner, I do not. There is the Haystack Field, which produces from the Atoka, and it would be slightly north of this. I think it's in Township 6 South and

maybe 26 or 27 East. That would be north of this area.

I don't have a regional map to give you the exact location. That particular Haystack Field, although it's Cisco production, appears to be predominantly controlled by structure, where the down dip wells make quite a bit of water.

In fact, many of the wells have been plugged out in there, structural accumulation.

MR. STOGNER: I have no further questions of Mr. Lemay.

Is there any further questions of this witness? If not, he will be excused today; however, since this case will be readvertised and continued to the May 25th Examiner hearing, in which case if there is anybody contesting the case, then they may do so at that time and I'd like you to appear again at that time. I may have some questions, too, if that's no problem.

Does anybody else have anything to come before Case Number 7865 today?

If not, Case Number 7865 will be -- will remain open pending the May 25th Examiner hearing.

MR. PADILLA: Thank you, Mr. Examiner.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7865, heard by me on May 11 1983.

Michael E. Stogner, Examiner
Oil Conservation Division

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