1 2 3	STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 5 March 1986
4 5	EXAMINER HEARING
6 7 8 9	IN THE MATTER OF: Application of Nearburg Producing CASE Company for downhole commingling, 8847 Eddy County, New Mexico.
10 11 12 13 14	BEFORE: Michael E. Stogner, Examiner
16	TRANSCRIPT OF HEARING
17 18	APPEARANCES
19 20 21 22	For the Oil Conservation Division: Legal Counsel to the Division Oil Conservation Division State Land Office Bldg. Santa Fe, New Mexico 87501
23 24 25	For the Applicant: William F. Carr Attorney at Law CAMPBELL & BLACK P. A. P. O. Box 2208 Santa Fe, New Mexico 87501

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We'll call next

Case Number 8847.

Case Number 6647

MR. TAYLOR: The application of Nearburg Producing Company for downhole commingling, Eddy County, New Mexico.

MR.

MR. CARR: May it please the Examiner, my name is William F. Carr, with the law firm Campbell & Black P. A. of Santa Fe, appearing on behalf of Nearburg Producing Company.

I have one witness.

STOGNER:

MR STOGNER: Are there any

other appearances?

There being none, will the witness please stand to be sworn.

(Witness sworn.)

MR. CARR: Mr. Examiner, when I called the case in I gave you the correct information and the legal advertisement of the case is correct.

I then gave notice pursuant to Rule 1207 and I have an error in the notice that I gave to interest owners. I provided notice originally indicating it was in Section 5 instead of Section 15.

We discovered it when Mr. Yates called and asked what we were doing to take over his Green-

Since we were coming before you today on the other case, we would like to put the testimony on today in this matter, continue the case to March 19th, and at that time we will have complied with Rule 1207.

wood Lease and at that time we agreed to send new notice.

MR. STOGNER: Okay, Mr. Carr, so the notice that we received was correct.

MR. CARR: Yes.

MR. STOGNER: So that makes our docket and the advertisement in the papers correct.

MR. CARR: That's correct. It was an error that I made in giving notice to other interest owners pursuant to Rule 1207.

MR. STOGNER: Have those corrected --

MR. CARR: Yes. We will offer letters dated February 24. These were letters correcting the notice that we had given about two weeks prior to that time.

MR. STOGNER: Okay. Thank you,

Mr. Carr. We'll go ahead and hear the testimony today but

will hold this case until March 19th at which time we will

call for any additional appearances at that time.

5 1 Please continue. 2 3 LOUIS J. MAZZULLO, 4 being called as a witness and being duly sworn upon his 5 oath, testified as follows, to-wit: 6 7 DIRECT EXAMINATION 8 BY MR. CARR: 9 Would you state your full name, please? Q 10 Α My name is Louis J. Mazzullo. 11 Mr. Mazzullo, where do you reside? 0 12 A Midland, Texas. 13 By whom are you employed? 14 I'm Geological Manager for Nearburg Pro-15 ducing Company of Dallas, out of our Midland Office. 16 Have you previously testified before this Q 17 Division and had your credentials as a geologist accepted 18 and made a matter of record? 19 A I have. 20 Are you familiar with the application of 21 Nearburg Producing Company in this case? 22 A I am. 23 Are you familiar with the subject well? Q 24 A Yes, I am. 25 MR. CARR: Are the witness'

qualifications acceptable?

MR. STOGNER: They are.

Q Mr. Mazzullo, what does Nearburg Producing Company seek with this application?

A Nearburg Producing Company seeks approval for downhole commingling of gas production from both the Atoka and Morrow formations in their No. 1 Osage Boyd Well, which is located in Section 15 of Township 19 South, 25 East, in Eddy County, New Mexico.

Q Mr. Mazzullo, would you review the history of this matter for Mr. Stogner and in so doing summarize the events which result in today's hearing?

A We originally re-entered this old well-bore back in December of 1984 and it took us several months to work on it, but we have finally established production out of it in May of 1985, and from that time on we have been negotiating for a gas contract in order to sell the gas from the well.

We've produced that well out of what we consider to be, or we completed that well out of what we considered to be entirely the Morrow formation. Prior to our grant -- getting a gas contract lined up and prior to any production, we were informed by the Artesia Office of this Division that we were in fact producing gas from two different formations, a fact that I was not aware of at the

time we completed the well.

Q Did you meet with representatives of the Division in Artesia?

A Yeah, I took a -- I flew out especially to meet with Les Clements and Darrell Moore down in the Artesia Office, at which time we discussed this matter in detail.

. .

Q And what was the outcome of that meeting?

A The outcome of that meeting was that Mr. Clements and Mr. Moore suggested to me that Nearburg seek this hearing today in order to resolve the issue. It was upon their recommendation that we're here today and that we're making this application.

Q And they recommended that you approach this with a downhole commingling application.

A They did and they recommended that we do so here in person.

Q Have you prepared certain exhibits for introduction in this case?

A I have six exhibits.

Q Would you refer to what has been marked as Exhibit Number One and just identify this for Mr. Stogner?

A Exhibit Number One are extracts from our daily drilling reports on the subject well, the No. 1 Osage

Boyd.

And is there anything in that exhibit you'd like to call to the Examiner's attention or does it basically support the testimony you've already given concerning the development of the property?

A It basically supports the data -- the testimony I've already given. I might just reiterate that it is a re-entry of an old well, the Hondo No. 1 Osage Boyd, which was plugged and abandoned in 1974.

We originally began our operations, our re-entry operations, on December 3rd, 1984, and you can read through and see the perforation program, the extensive testing that we carried on throughout several months time. The frac job on the 4th of May of 1985, which we finally had to resort to in order to stimulate production, and the results of the 4-point test on the 14th of May, 1984 -- 5.

Q Would you now refer to what has been marked as Nearburg Exhibit Number Two, identify this, and review the information contained on this exhibit?

A Exhibit Number Two is a location plat of the subject well in Township 19 South, 25 East, Section 15, showing in color code the surrounding offset operators. I can go through this right now and tell you what the color codes mean.

The yellow solid area with the red tri-

angle is -- the red triangle does identify the No. 1 Osage Boyd Well and the yellow solid area identifies the acreage, standup 320-acre proration unit dedicated to this well.

Q That is operated by Nearburg?

A And that is operated by Nearburg Producing Company. Just as an aside, you might note on the original -- on the daily reports it's referred to as the Chama
No. 1 Osage Boyd. We have had a subsequent name change to
Nearburg; it's the same company.

At any rate, the yellow outline in Section 22 identifies the acreage that is operated by, and wells operated by, Nearburg Producing Company.

The gray shaded areas which overlap into Section 22 and the very northeast quarter of Section 21 are operated by Anadarko Production Company.

The blue shaded areas in the southeast quarter of Section 16 is operated by Monsanto.

The pink, or light red, shaded areas in the east half of Section 15 and the northeast quarter of Section 16 are operated by Yates.

The green shaded area in Section 10 is operated by Texaco, and finally the south half of Section 9, the gray striped area, is operated by Fasken, David Fasken.

Q Does this exhibit also show offsetting wells in the area?

A Yes, it does.

Now, in the wells that you're proposing be commingled in the subject well, is the ownership common in both of those zones?

A It is.

Q Would you now go to Nearburg Exhibit Number Five and review that for Mr. Stogner?

A Exhibit Number Five is a copy of Form C
105, which was submitted by our Engineering Manager in

November of 1985. Basically what it tries to show is the

gross perforation interval from 8866 feet to 9110 feet. The

specific perforations within those gross interval are indi-

cated on Exhibit Number One previously submitted.

The other thing that I would like to show is that we had set 4-1/2 inch casing in this well to the intermediate, which was at approximately 13,000 feet, and that this 4-1/2 inch casing was cemented up to 7900 feet,

well above the perforations.

The third thing I would like to show on this exhibit is that the production from this well is entirely gas. It's dry gas. There has been no water and no

distillate produced.

Q Now, Mr. Mazzullo, the well produces no liquids at all.

A No liquids at all.

Q Would you go to Exhibit Number Four and review this, please?

A Exhibit Number Four is a stratigraphic cross section which was submitted as part of a 102 NGPA gas filing on the subject well. This filing was submitted to the New Mexico Oil Conservation Division in Santa Fe, and it was made subsequent to my discussions with the Artesia OCD personnel.

What it shows is the subject well, which is indicated by the triangle and the red gas symbol, and the location of the well and the cross section is indicated on the map that's in the lower lefthand corner of the exhibit.

First of all, the map shows a 2-1/2 mile radius around the wellbore, which is used to determine NGPA determinations, as you know.

Within that 2-1/2 mile radius there are several marker wells, which are entirely Morrow marker wells. There isn't a single Atoka marker well within that 2-1/2 mile radius.

The nearest Atoka production is just outside the boundaries in Section 12. It's an Andarko well which produces gas from the Atoka.

There are other Atoka wells just south of the circle in Section 28 and in the adjoining township.

The second thing shown on the cross sec-

tion are the -- is the gross perforation interval in the subject well, as well as the specific perforations which are indicated by the red highlighting.

You will note that gas production has been established from two sands down at the base of the perforation interval, as well as some very thin-bedded sands at the top of the perforation interval.

Prior to discussing subject well with the OCD personnel in Artesia, I have done an extensive amount of regional work on the Morrow. I'm published on the Morrow in this field and my determination has always been that the Morrow top is located at the base of the Atoka shale, as I indicate on this cross section, where it says datum base, Atoka Shale. That has been my regionally correlated top of Morrow which I've always gone by.

However, I found out subsequent to completing this well that the OCD has a differet opinion about where the top of the Morrow is. They say that the top of the Morrow by some regional cross sections which they use as a basis for all of their pool designations, is located along that dashed line I've indicated as NMOCD top of Morrow.

Fossil evidence and my regional evidence both indicate that the Morrow extends above that dashed line but because of the established cross sections that they have

1 2 3

been working with since 1957, the OCD and I differ on the interpretation, and that's where the basic misunderstanding has come in about what we were actually producing from.

Q As a result of these two interpretations of the top of the Morrow, it was recommended that you come forward with the commingling application.

A That's right. Mr. Clements and Mr. Moore recommended that we come to you with this application.

Q Mr. Mazzullo, would you refer to Nearburg Exhibit Number Five and review this for Mr. Stogner?

A Exhibit Number Five is a document that I prepared from various well potential test data on file at the OCD, which shows the basic compositions of the gases produced Pennsylvanian horizons in several wells immediately surrounding our wellbore.

You will note that the range in specific gravities, percent CO2 and perent nitrogen in Morrow, Atoka, and Strawn wells are basically similar. There's no real difference in composition among the three different formation gases that come out in this area.

You'll note at the bottom that our Osage Boyd has a similar specific gravity and similar nitrogen content to all those Pennsylvanian wells regardless of which formation they've come out of.

The only difference in our gas is a high

 apparent -- higher apparent CO2 content, which we attribute to the fact that we fraced this well with a high volume of CO2, and when you potential a well in New Mexico you're not always required to completely purge your load out before you run your potential. So this is reflecting, more or less, some load CO2 that's still left in the formation.

Q Mr. Mazzullo, based on the gas composition, do you see that any downhole problems would result from the comingling being sought?

A I don't see any downhole problems, incompatibility of gases, or anything like that.

Q Would you identify what has been marked as Nearburg Exhibit Number Six, please?

submitted by Campbell & Black to the offset operators informing them of our application in this case. We have received our -- we have received notice that they have received them, all the operators have received these letters and Mr. Carr just previously told you what the problem was with the error that he -- that he caused in this -- in this letter, but basically these are the letters that were sent out.

Q And they do reflect that the matter will be coming on for hearing on March 19th.

A That's right.

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1	Q In your opinion, Mr. Mazzullo, will		
2	granting the application be in the best interst of conserva-		
3	tion, the prevention of waste, and the protection of correl-		
4	ative rights?		
5	A Yes, I do.		
6	Q Were Exhibits One through Six either pre-		
7	pared by you or compiled under your direction?		
8	A They were.		
9	MR. CARR: At this time, Mr.		
10	Stogner, we would offer into evidence Nearburg Producing		
11	Company Exhibits One through Six.		
12	MR. STOGNER: Exhibits One		
13	through Six will be admitted into evidence.		
14			
15	MR. CARR: That concludes my direct examination of Mr. Mazzullo.		
16	direct examination of Mr. Mazzullo.		
17	GDOGG TWINTINGTON		
18	CROSS EXAMINATION		
19	BY MR. STOGNER:		
-	Q Mr. Mazzullo, do you or the Division		
20	District Office in Artesia have some sort of an allocation		
21	formula on which to base the split the production between		
22	the two zones?		
23	A No, we don't.		
24	Q How do you propose that an allocation be		
25	formulated?		

1 I really can't propose an allocation for-A 2 mula at this time since we have never independently tested 3 any -- either one of the zones, because we were under the assumption we were producing out of one zone, so we never 5 conducted such tests. 6 Are both zones -- is the ownership in 7 both zones common? Yes, they are. 9 Q did the production in this well When 10 first go on line or first get connected? 11 A We haven't produced from this pending 12 this outcome. 13 Do you have -- do you have a market for 14 this gas or a pipeline --15 Α Yeah, we have -- we have a contract right 16 now that's pending. 17 MR. STOGNER: I have no further 18 questions of this witness. 19 Is there any other questions of 20 Mr. Mazzullo at this time? 21 MR. CARR: Nothing further, Mr. 22 Stogner. 23 MR. STOGNER: If not, he may be 24 excused.

Anything further in Case Number

8847 at this time?

MR. CARR: Nothing further.

MR. STOGNER: The record will be kept open concerning this case until the March 19th, 1986

hearing in which it will be called for any additional testi-

mony which might be presented at that time.

(Hearing concluded.)

CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) 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 le. Boyd COR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case 116. 884, heard by me on 1986

Oil Conservation Division