NEW MEXICO OIL CONSERVATION DIVISION

Examiner Hearing Santa Fe, New Mexico June 10, 1999 -- 8:15 A.M. LLEGIBLE

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STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 12,191

APPLICATION OF OXY USA, INC., FOR AN UNORTHODOX GAS WELL LOCATION AND AN EXCEPTION TO DIVISION RULE 104.D(3) FOR SIMULTANEOUS DEDICATION, EDDY COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

27 JUN 24

BEFORE: DAVID R. CATANACH, Hearing Examiner

7: 0:

June 10th, 1999

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, June 10th, 1999, at the New Mexico Energy, Minerals and Natural Resources Department,
Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico,
Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

June 10th, 1999 Examiner Hearing CASE NO. 12,191

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| ROBERT L. DOTY (Geologist) | _ |
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| RICHARD E. FOPPIANO (Engineer) | |
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EXHIBITS

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APPEARANCES

FOR THE DIVISION:

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By: W. THOMAS KELLAHIN

FOR YATES PETROLEUM CORPORATION:

CAMPBELL, CARR, BERGE and SHERIDAN P.A. Suite 1 - 110 N. Guadalupe P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: PAUL R. OWEN

* * *

WHEREUPON, the following proceedings were had at 1 2 8:18 a.m.: EXAMINER CATANACH: We'll go ahead and call the 3 hearing to order this morning for Docket Number 17-99. 4 I'll go ahead and call the dismissals and continuances 5 first. 6 (Off the record) 7 EXAMINER CATANACH: Okay, and at this time we'll 8 9 call Case 12,191. MR. CARROLL: Application of OXY USA, Inc., for 10 11 an unorthodox gas well location and an exception to 12 Division Rule 104.D(3) for simultaneous dedication, Eddy County, New Mexico. 13 EXAMINER CATANACH: Call for appearances in this 14 15 case. MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of 16 the Santa Fe law firm of Kellahin and Kellahin, appearing 17 on behalf of the Applicant. I have two witnesses to be 18 19 sworn. MR. OWEN: Paul Owen of the Santa Fe law firm 20 21 Campbell, Carr, Berge and Sheridan, appearing on behalf of Yates Petroleum Corporation. I have no witnesses in this 22 matter. 23 24 EXAMINER CATANACH: Any additional appearances? 25 Okay, will the witnesses please stand and be

sworn in? 1 (Thereupon, the witnesses were sworn.) 2 MR. KELLAHIN: Mr. Examiner, our first witness is 3 OXY's geologist, Mr. Bob Doty. 4 5 ROBERT L. DOTY, the witness herein, after having been first duly sworn upon 6 his oath, was examined and testified as follows: 7 8 DIRECT EXAMINATION 9 BY MR. KELLAHIN: 10 Mr. Doty, for the record, would you please state your name and occupation? 11 12 Α. My name is Robert Doty. I'm a petroleum 13 geologist with OXY USA. 14 Q. And where do you reside? 15 Α. Midland, Texas. On prior occasions have you testified as a 16 17 petroleum geologist before the Division? Yes, sir. 18 Α. 19 And as part of your responsibilities for OXY, have you made a geologic study of the proposed unorthodox 20 location for the subject well that's the matter of this 21 case? 22 23 Yes, sir. Α. 24 And it's referred to you as the Jazz Federal Well Q. Number 1, is it not? 25

A. Yes, sir.

- Q. Is this a well location that you as a geologist have recommended to your management?
 - A. Yes, sir.

MR. KELLAHIN: We tender Mr. Doty as an expert petroleum geologist.

EXAMINER CATANACH: He is so qualified.

- Q. (By Mr. Kellahin) Mr. Doty, let me have you refer to Exhibit 1. Would you identify for us on this plat the spacing unit for the proposed Jazz Federal well?
- A. Yes, sir. Mr. Examiner, the area in yellow on Exhibit 1 is the proposed spacing unit for the Jazz Federal Number 1.

The gas well symbols on this map are all producing from the Morrow and are all active in the Morrow. The Roscoe Federal Number 1 is on the same spacing unit. The Jazz Federal is proposed to simultaneous dedication with the Roscoe and at a nonstandard location.

The open circles on the map are proposed or drilling locations by other operators. There's five of them on the western side, and to the -- farther to the north, and four of the five are nonstandard locations.

Q. When we look in Section 5, the north half of Section 5, there's an open circle that shows a proposed well by Yates called the Lucky Coyote well?

1 A. Yes, sir.

- Q. Are you familiar with that proposal by Yates?
- A. Yes, sir.
 - Q. In what way, sir?
 - A. This is a nonstandard location proposed by Yates that's on today's docket following our case.
 - Q. Has OXY exchanged waivers of objection with Yates concerning the Jazz well and the Lucky Coyote well?
 - A. Yes, sir.
 - Q. Let me turn your attention now to Exhibit Number 2. Again, let's focus on the north half of Section 4, and let's find the Roscoe well.
 - A. Yes, sir.
 - Q. Within the Morrow intervals, where does this well produce?
- A. The Roscoe Federal Number 1 well produces from a lowermost Morrow sand, a basal sand sitting directly on top of the Chester limestone, the Mississippian Chester limestone. It's the only well in this are that produces from that sand. And in fact, that sand only appears in one other well, the well to the south, the OXY LD4 where it's nonproductive, that sand is thin and nonproductive in that well.
 - Q. When we look at the LD4 channel that is mapped in the north-south orientation and color-coded in the tan,

what portion of the Morrow does that represent?

- A. It represents an upper portion of the lower

 Morrow sand, and in fact that is illustrated on Exhibit 3,

 if I could --
 - O. Let's do that.
 - A. Okay.

- Q. Let's turn to Exhibit 3. We'll come back to 2 in a moment, but let's identify that sand. If you'll turn to Exhibit 3, let's use the log of the Roscoe well, first of all, in the center --
 - A. Yes, sir.
- Q. -- to show the Examiner what you mean when you talk about the Roscoe sand, and then we'll compare that to the LD4 sand.
- A. Yes, sir. Mr. Examiner, Exhibit 3 is a cross-section, A-A', hung on the Chester limestone. That's that blue area at the bottom of the page. It's an easily recognizable marker in the area.

The Roscoe well is the center on that crosssection, and that lowermost sand that is labeled "Roscoe
Sand" is the producing interval in that well. There are a
couple of other nonproductive sands above it that have no
permeability.

The Roscoe sand has quite a big of pore volume, it's fairly thick in that well, but the performance of that

well has not been very good, so that sand is most likely very limited in its extent.

To the right on that cross-section is the LD4 well, which is immediately south of the Roscoe. This well was drilled in early 1998, and this is basically the discovery well for all this recent activity out here.

That thick mass of 30-foot sand labeled the LD4 sand is an excellent reservoir, and that is the reservoir that has been the subject of all the recent activity.

There is a thin sliver of sand in the Roscoe well that is roughly the same stratigraphic equivalent, and that's that upper nonproductive sand. That sand has no permeability. We have not completed in that sand. That sand cannot produce any reserves that might exist in that LD4 sand.

So the orange trend on Exhibit 2 on the map reflects the extent of that LD4 sand in the LD4 well.

- Q. What's the vertical separation in footage between the base of the LD sand and the top of the Roscoe sand?
 - A. Approximately 120 feet.
- Q. Is there any doubt in your mind as a geologist, having looked at all the data available, that in fact the Roscoe sand is separate and distinct from the LD4 sand?
 - A. No doubt at all.
 - Q. Let's go back to Exhibit 2 then. You indicated

that in the south half of 4, OXY's LD4 well was the discovery well for the LD4 sand?

A. Yes, sir.

- Q. The approximate date of that well is when?
- A. Early 1998.
- Q. What has been the sequence, then, of attempts to find and develop that sand member?
- A. We relied -- When we drilled the LD4 sand, we ran Schlumberger's version of the imaging tool. It's called their FMI. It's basically a high-resolution dipmeter that you can -- the application for that tool is to identify the strike of channels from cross-bedding orientation.

We ran that on the LD4, which suggested a north-south strike. Based on that, we drilled the Wallace Number 2 well to the south, in the south half of Section 9. Now, these wells were drilled out of order. The Wallace 2 was drilled before the Wallace 1. And the Wallace 2 missed the channel. It had just a little bit of sand, which is frequent. All the wells out here, you'll find a foot or two in that same stratigraphic interval.

We then drilled the Roscoe Federal Number 1 as a north offset to the LD4, again based on that FMI interpretation, and likewise missed the sand and wound up with that thin two-foot interval.

Subsequent to that, we drilled the Wallace State

Number 1 and caught a portion of that sand which is producing.

The red triangles, by the way, on this map are producing from this LD4 channel. The only well that isn't is the Roscoe Federal on this map.

We then drilled the Lucky Dog in the south half of Section 33 and also caught about six feet of the channel. That well is one of the wells on the cross-section; it's on the left portion of the cross-section.

Then this year Yates drilled their Riverside ASS

Number 1 in the south half of Section 8, and they gutted

the channel, over 50 feet of sand. That's a superb well,

producing over 20 million a day, thereabouts.

OXY then drilled the Wallace State Number 3 as an east offset and likewise gutted the channel with over 50 feet of sand, and our well also is performing similarly to Yates.

- Q. So the Riverside and Wallace State 3 are both at unorthodox location?
 - A. Yes, sir.

- Q. And what has been the sequence between Yates and OXY concerning how to have an opportunity for each operator to access the LD4 sand?
- A. Well, we have -- Yates has an interest in a lot of our wells out here, and we've evolved into sharing data,

and we have similar geological pictures, as it is.

And it's also fairly clear now that the sand does thicken to the west of the Roscoe and probably right along that section line between Sections 4, 5, 8, 9, so forth.

And it's also clear that there are reserves to be recovered on each side that may require nonstandard locations to capture.

- Q. After the Riverside and Wallace State 3 wells are drilled and find the LD4 sand, how did Yates and OXY attempt to determine the width and the orientation as you moved your well locations to the north?
- A. Right now, this -- my current interpretation is very similarly to Yates, and it's based on subsurface geology, which suggests a thickening of the lower Morrow section west of the Roscoe well, in effect, a depo center on that western side.

Now, I have interpreted this differently in the past, based on the FMI data that we had in the Roscoe which suggested that that very thin sand might thicken to the northeast. However, recent drilling and recent experience with that FMI tool suggests that utilizing that application in very thin sands really isn't warranted.

So our best interpretation right now is, indeed, the channel occurs west of the Roscoe, and we have significant undrained reserves on the western portion of

the Roscoe lease that cannot be contacted by the Roscoe well.

- Q. Having recognized that the Roscoe Federal 1 well has no opportunity to recover the LD4 sand gas reserves in that same spacing unit, you have proposed the Jazz Federal 1 well then?
 - A. Yes, sir.

- Q. What has caused you to locate the well in the southwest of the northwest, as opposed to being a direct offset to the Lucky Coyote well?
- A. Basically, we feel like we need a nonstandard location to reduce risk in encountering this sand. We also felt like we needed to logically compete with the proposed development that should occur in Section 5. We felt like also, from a standpoint of drainage patterns, it would be most reasonable not to directly offset that well.
- Q. In the absence of the Jazz Federal, what do you conclude about the opportunity to protect the spacing unit from offsetting drainage?
- A. In the absence of the Jazz Federal the reserves that exist in that LD4 channel on the Roscoe tract will be wasted. If we are offset by the Yates wells then those reserves will be captured and our correlative rights will be at risk. There are also reserves in the Roscoe Federal that remain that, if we're unable to simultaneously

dedicate, those reserves will be wasted.

MR. KELLAHIN: Chat concludes my examination of Mr. Doty. We move the admission of his Exhibits 1, 2 and 3.

EXAMINER CATANACH: Exhibits 1, 2 and 3 will be admitted as evidence.

EXAMINATION

BY EXAMINER CATANACH:

- Q. Mr. Doty, your Jazz Federal Number 1 well is kind of crowding that western boundary of that proration unit.

 What in your mind is going to be the effect of moving that further east toward a standard location?
- A. As it stands right now, the OXY LD4 well is more on the eastern portion of the channel. Its deliverability is in the 5-million-a-day range. When you gut the channel, as the Yates Riverside ASS did and the OXY -- and the Wallace State Number 3 did, deliverability is in excess of 20 million a day, and that's the kind of rates that are going to sales right now.

For us to effectively compete with a well that does gut the channel, we are going to have to be in the same position from a standpoint of permeability and deliverability. We think if we went to a standard location, we may very well have an LD4 look-alike, and then we fear that the Yates well will have a deliverability four

or five times ours.

- Q. Well, can you quantify the amount of sand thickness that you might be losing if you go to a standard location under this? Is that possible?
- A. Yes, sir. The LD4 well had 33 feet of sand; the two wells, the Riverside and the Wallace 3, had 55 feet on average. I think the Yates had 57. We had 54 or 55, on that order.

So we could be losing 20 feet of sand, which our only analogy is, that 20 feet relates to about 15 million a day in deliverability.

- Q. Is there anything structurally that gives you any concern in this?
 - A. No, sir. Structure is not germane to this play.
- Q. You don't believe that the -- what you call the Roscoe sand, you don't think that's going to be present at the Jazz Federal Number 1?
- A. No, sir. It's present in the Roscoe, and the LD4 has that thin sliver.

Also, the Roscoe has produced about 170 million cubic feet, on that order, with maybe a quarter of a B remaining reserves. The pay thickness in the Roscoe is very thick. It just suggests very limited extent to that sand.

Q. Is that sand being produced in the LD4?

No, sir, it's non-productive in the LD4. 1 Α. If you happen to encounter that sand in the Jazz 2 0. Federal Number 1, do you know what OXY's intentions would 3 be with regards to that? 4 If it was our only zone in the hole, we would 5 Α. hope that we could utilize that sand to help pay out the 6 7 well. If we do -- If our mapping plays out and we 8 encounter that LD4 channel, we certainly don't want to mess 9 up a completion, a huge-rate sand, with a bailout, no. 10 That sand will probably just barely pay out the 11 Roscoe. 12 What does that well make? Do you know? 13 Q. It's around 300 MCF a day currently. Α. 14 But the remaining reserves are of value to us in 15 that well. 16 That offset well in the north half of Section 5, 17 0. that hasn't been drilled yet? 18 No, sir. The only well of these five, the well 19 Α. in the north half of 8 is currently drilling. 20 EXAMINER CATANACH: Mr. Owen, do you have any 21 questions? 22 I have no questions, Mr. Examiner. 23 MR. OWEN: 24 EXAMINER CATANACH: All right, this witness may 25 be excused.

RICHARD E. FOPPIANO, 1 the witness herein, after having been first duly sworn upon 2 his oath, was examined and testified as follows: 3 4 DIRECT EXAMINATION BY MR. KELLAHIN: 5 Mr. Foppiano, for the record, sir, would you 6 Q. 7 please state your name and occupation? My name is Richard E. Foppiano, and I'm employed 8 by OXY USA as a senior advisor in regulatory matters. 9 Q. And where do you reside? 10 I'm at Houston, Texas. 11 Α. Are you, in addition, a professional petroleum 12 engineer? 13 14 Yes, I am, and I'm experienced in production Α. engineering. I have about five, seven years of production 15 engineering experience. 16 As part of your responsibilities as an engineer 17 Q. for OXY, have you made an evaluation of the Roscoe Federal 18 Number 1 well's remaining recoverable volume? 19 Yes, I have. 20 Α. 21 Q. In addition, have you studied the possibility of temporarily abandoning the Roscoe Federal well and 22 producing the spacing unit gas reserves from the Jazz 23

Federal well by itself?

Α.

Yes, I have.

24

25

0. In addition, were you responsible for identifying 1 the appropriate persons to whom notice was sent of the 2 simultaneous dedication request and of the proposed 3 unorthodox location? 4 Α. Yes. 5 And finally, did you obtain the appropriate 6 Q. waivers from the offset affected interest owners? 7 A. Yes, I did. 8 MR. KELLAHIN: We tender Mr. Foppiano as an 9 expert witness. 10 EXAMINER CATANACH: He is so qualified. 11 12 (By Mr. Kellahin) Let's start with the subject 13 matter of the Roscoe Federal well, how it's performed and what you calculate to be its remaining production. 14 15 To have a forum for your opinions, would you turn to Exhibit 4 and identify what you've prepared? 16 Exhibit 4 is a decline curve for the Roscoe 17 Α. Federal Number 1 well. The scale on the left are the daily 18 gas rates in MCF per day, and on the bottom is a time 19 20 scale. And I'd like to just call the Examiner's attention to a few items. 21 You can see the well commenced production, went 22 on line, the latter part of 1998 and has produced about six 23 or eight -- about eight or ten months there, you can see. 24

And what I've done with this decline curve is attempt to

25

estimate, based on the decline curve, the remaining recoverable reserves from each well, using an economic limit of 25 MCF per day.

This is a fairly dry gas well. It makes some condensate and minor amounts of water. And what we see from this decline curve, as you can see based on my extrapolation, I chose the later time periods, the later data, to use as the basis for extrapolation, because early production figures were based on the well producing above line pressure, and there about January of 1999 it reached line pressure and has been flowing against line pressure ever since. And so I felt like that was a pretty good basis for making some estimate, and it equates to about a 50-percent decline rate, which is a fairly steep decline rate.

So using a 25-MCF-a-day economic limit and that 50-percent annual decline rate, as you see, I estimate remaining recoverable reserves for the Roscoe Federal at around 236,000 MCF.

And based on a cumulative production of 174,000 MCF, the estimated ultimate recovery -- and I'm just reading these numbers from the box in the upper right-hand corner -- we see an ultimate recovery from the Roscoe of only 410,000 MCF, which is, in my experience, indicative of a fairly marginal Morrow completion.

Another interesting thing to note from this examination is that it looks like the well has about a little over four more years of productive economic life in its current Morrow completion.

And so this exhibit is presented to put a number, put an estimate, to the amount of remaining recoverable reserves that we feel like would be at risk if we had to plug off the -- or temporarily abandon the current Morrow completion in order to drill the Jazz federal well to effectively protect our spacing unit from the Yates Lucky Coyote well in the north half of Section 5.

That, as I understand, according to current regulations, is one opportunity available to us to stay in compliance with current regulations. And if we had to do that, we feel like those 236,000 MCF would be at risk and the potential of being lost, and waste would occur as a result of that.

- Q. Mr. Foppiano, if the Roscoe Federal well is the only well in the area producing the Roscoe sand reserves, why can't it be shut in until such time as the Jazz Federal is completed and produced and return, then, to the Roscoe Federal well and get the remaining reserves there?
- A. Well, certainly that is an option available to us. But there are two hurdles associated with that.

The first hurdle is, under our operating

agreement, it requires 100-percent approval of all the parties to be able to abandon a current economic zone. So to be able to even shut that well in requires the concurrence of all the parties.

2.3

And the other working interest owners in the Roscoe Federal own substantial working interest in some of the offset wells, so it's a situation that we are not altogether certain we would be able to secure 100-percent approval. We think we probably could.

But even if we could, and decided to temporarily abandon this Morrow completion in the Roscoe Federal, we feel like, based on our experience of producing Morrow wells, that such long-term abandonment will cause damage to this marginal Roscoe sand as identified by Bob Doty, and that -- and risk those remaining recoverable reserves.

Our experience indicates -- and I've got an exhibit to illustrate that experience -- that with these minor amount of liquids that are produced from these dry gas sands, that long-term shut-in of low-productive zones with low reservoir energy, we might ultimately not be able to return that well to production in the Morrow completion in the Roscoe at some later date, if we decide to shut it in for a long period of time.

Q. Even though the Roscoe produces small volumes of water and condensate, in your opinion there is substantial

risk of not being able to return it to production if it is shut in?

A. That is our opinion, yes.

- Q. Let's turn to your analogy. If you'll look at Exhibit 5, describe for us what you're showing.
- A. Exhibit 5 is another production history curve for our Tracy A Com Number 1 well. It's located in the Burton Flat-Morrow Pool in southeast New Mexico. It's also in Eddy County.

And I asked our engineers for some analogue to base our experience on, what happens to a Morrow well when we shut it in for a long period of time, and this was the example that they came up with that they feel like is the basis for their fear for a long-term shut-in for marginal Morrow wells.

What happened on this well -- you can tell by the red curve, which is the gas rate -- is, it was shut in substantially there in the mid-1980s to late 1980s for several years, and then in 1989 we attempted to bring it back on line. And you can see by the red curve how it took many years for that well to recover back to its original rate. And this well obviously had substantially more recoverable reserves than what we're looking at here.

So this is an example of what we feel like would happen to the Roscoe if we had to shut it in for four years

and drill the Jazz well and produce it from -- and do something else with the Roscoe well while we produce the Jazz well, to protect our correlative rights.

- Q. Is there any engineering data available that is inconsistent with the geologic conclusions that Mr. Doty reached a while ago?
- A. No, I would concur with Mr. Doty's conclusions that what's producing out of the Roscoe, while I haven't done any volumetric calculations, would appear to be very limited in areal extent. Quite frankly, we're not drilling the Jazz well or proposing to drill the Jazz well, looking for a Roscoe look-alike. We can't justify a Morrow well based on 400 M a day, 400,000 cubic feet of recovery.

And so we don't anticipate even penetrating a Roscoe sand look-alike, but we feel like we need to be able to produce whatever is potentially productive in the Morrow interval, in the Jazz Federal well, when we drill it, in case our geologic interpretation is wrong and we drill another marginal well. We will need as much ability to pay that well out and recover our cost as possible.

So if the worst case happens and it does encounter marginal Morrow sands, we are asking for simultaneous dedication to be able to recover whatever recoverable hydrocarbons are available on that side of the spacing unit in the Morrow.

Q. In response to Mr. Catanach's question, Mr. Doty testified that the Jazz Federal's unorthodox location is far superior to the closest standard location in the north half. He expressed that opinion based upon the loss of some 20 feet of thickness and associated that directly with productivity and rate of recovery.

Do you share that opinion, or do you have a different opinion?

A. I share that opinion. I think the -- Based on where Yates has proposed to locate the Lucky Coyote well, I think the most effective way for us to be able to protect our correlative rights is to try to intersect the channel sand that is similar geologic position, meaning reservoir thickness, as the Yates well would be.

And I might also mention that while Mr. Doty may be a lot more confident where that zero line is on the channel sand, the more we move to a standard location, the more we're getting closer to where that zero line could be, and I think it increases, substantially increases, the risk of getting substantially less than 30 feet.

- Q. Do you think it is more efficient to place the Jazz Federal well at its proposed location than directly adjacent to the Lucky Coyote well?
- A. I think it will. There will be less interference between our proposed well and the Yates Lucky Coyote well.

| 1 | Q. Were you responsible for identifying the various |
|----|--|
| 2 | affected persons surrounding the spacing unit for the |
| 3 | simultaneous dedication as well as those parties towards |
| 4 | whom the Jazz Federal well encroached? |
| 5 | A. Yes. |
| 6 | Q. And were you able to obtain waivers of objection |
| 7 | from all the affected parties that showed any interest in |
| 8 | this case? |
| 9 | A. From some of the affected parties, but not all. |
| 10 | Q. Are there any objections you are aware of that |
| 11 | have not been satisfied? |
| 12 | A. None. |
| 13 | Q. Let me turn your attention to Exhibit 6, ask you |
| 14 | if you have reviewed this, and does it represent the list |
| 15 | of all the parties, persons, that you have sent notice to |
| 16 | concerning this Application? |
| L7 | A. Yes. |
| 18 | MR. KELLAHIN: Mr. Examiner, with the |
| L9 | introduction of Exhibit 6, we move the introduction of the |
| 20 | exhibits Mr. Foppiano has sponsored, Exhibits 4, 5 and 6. |
| 21 | EXAMINER CATANACH: Exhibits 4, 5 and 6 will be |
| 22 | admitted as evidence. |
| 23 | EXAMINATION |
| 24 | BY EXAMINER CATANACH: |
| 25 | Q. Mr. Foppiano, can you identify where these |

interest owners -- where their interests lie within this area?

A. I can. I might not be able to -- It might take me a few minutes to do it right here and now. I'd have to refer back to my information that I've gotten from our land department.

I can answer the question conceptually, the way we approached the notice, if that would help.

Q. Okay, let's try that.

A. Okay. What we did is, we looked for, pursuant to Rule 104, the spacing units that this north half of Section 4 was encroaching upon, which in our view would be the north half of 5 and the south half of 5.

And so what we did is, we looked for operators. There were none, so we identified the owners of leasehold interests in the Morrow for Section 5. And so some of those parties that are on that list are included there.

Additionally, we looked all the way around the spacing units, surrounding the north half of Section 4, for operators. And this was satisfy our interpretation of notice requirements for the simultaneous dedication. And so we gave notice to offset operators there. If there were none, we looked for the interest owners and identified them and gave notice to them.

Q. I'm sorry, and that would be for the area

surrounding the north half of Section 4?

A. Yes.

- Q. Which would include some acreage in Section 33, for instance?
 - A. Yes.
 - Q. And do you know where else?
- A. 34, Section 3, south half of Section 4, and of course Section 5 and Section 32.
- Q. Okay. OXY operates all of Section 4; is that correct?
 - A. Correct.
- Q. And the south half of Section 5, that Mannix 5
 State Number 1, do you know if that's going to be a Yates
 well?
- A. No, it's going to be operated by Mannix. The well -- We understand from Mannix that the well is anticipated to be drilled at that location. We think it's been staked at that location. We have not as of yet seen an application for the nonstandard location authority, which we would expect as an offset operator to see.

And the interest owners there are Santa Fe Energy Resources, and I believe OXY also has a small interest there, Yates -- I'm sorry, Yates doesn't have an interest.

I'm trying to remember. I'd have to look back on my information to give you more than what I can recollect

right there. Mewbourne has an interest also, in the south 1 half of 5. 2 And I might add that I have talked to Mannix and 3 I have talked to South -- Santa Fe Energy Resources, and 4 neither have an objection to our location. 5 Okay, I believe you stated that Mewbourne had an 6 Q. interest in that? 7 That's my understanding, that Mewbourne has an 8 interest in the south half of 5. Okay, I don't see them on the notice. 0. 10 MR. KELLAHIN: I think you mean Nearburg. 11 I'm sorry, yes. I said Mewbourne. THE WITNESS: 12 I apologize. It's Nearburg. I should not try to stretch 13 my recollections without referring to... 14 (By Examiner Catanach) Okay. OXY operates the 15 south half of 33; is that right? 16 Yes, sir. 17 Α. And it looks like in the east half of 32 that's 18 19 another Yates well, or proposed Yates well? Proposed Yates well, yes, sir. 20 21 Q. Okay. That Yates location in Section 5 has not been approved yet; is that right? 22 That is my understanding. I believe it's on the 23 Α. 24 docket for today.

25

Q.

Okay. Did you have enough information available

to calculate a drainage area for the Roscoe Federal Number 1?

- A. I do believe I could have calculated a drainage area for the Roscoe Federal Number 1, but to be quite honest with you, it would have been based on an assumption of constant thickness, and I believe the cross-section reveals that that's probably not correct. So I chose not to try to estimate it, because that assumption clearly is not of constant thickness.
- Q. But as I understand it, you guys are seeking authority -- If that Roscoe sand is present in the Jazz Federal Number 1, you want authority to produce it?
 - A. Correct.

- Q. Would part of that request be based upon the assumption that the Roscoe Federal Number 1 may not be able to drain that entire half-section in that sand, or did you make that assumption?
- A. It is based on that assumption, that just from what we see, we don't believe that the Roscoe Federal 1, if that sand extended over to the Jazz location, would be draining it, based on its performance. But obviously we don't think -- Even if it does extend over there, it would probably be of a lot smaller thickness than it is in the Roscoe well, which would also adversely impact its ability to drain that big of an area.

I might also add that the log information from the Roscoe indicates that it is fairly tight, which is obviously supported by the low cumulative recovery from that thick of a sand, which the low permeability would also tend to lead one to believe that it's going to drain a very small area around the Roscoe, and that's it.

- Q. Mr. Foppiano, I know you're involved in the Rule 104 changes that are being circulated and proposed by the Division, and included in that is a proposal where an operator would have the option to drill a second well, gas well, on a 320-acre proration unit.
 - A. Yes, sir.

- Q. Do you have a feel for whether or not that is ultimately going to be approved by the Division, or the Commission?
- A. Truthfully, no, I do not. In fact, we just had a meeting yesterday where we discussed it among industry -- or day before yesterday, excuse me -- and we are essentially waiting on the Division to propose the rules. And based on the testimony at the last Commission hearing, we're really not sure what the Division is going to propose.

And so I just would have to tell you a big I don't know what that answer is going to be. I'd dearly love to know, but I don't know.

MR. CARROLL: I think it's been posted on the 1 Internet. 2 THE WITNESS: It has? 3 EXAMINER CATANACH: I think it has. MR. KELLAHIN: I don't know that we've seen the 5 final Division proposal after the last Commission hearing. 6 You may have it, and we don't have it. 7 MR. CARROLL: I think it's posted on the 8 9 Internet. (By Examiner Catanach) Are you aware of industry 10 0. opposition to that rule change? 11 To the rule change -- all the rule changes --12 No, just that one provision about drilling a Q. 13 second well on a 320. 14 I would have to answer that, that I'm aware of 15 Α. concerns surrounding the infill more than I am opposition 16 That's how I would characterize some of the to it. 17 feedback that I've had. 18 19 And some of those concerns relate to --20 MR. CARROLL: It's not posted. 21 THE WITNESS: -- to people having just become aware of what was proposed in January, without realizing 22 what industry suggested for notice, and then some other 23 24 concerns related to force-pooling. So at this point I would have to characterize 25

them not so much as opposition but just some concerns associated with the infill provision.

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MR. KELLAHIN: Mr. Examiner, if I might supplement that response, all those companies that worked on the project supported the concept of a second well, the optional second well. They recognize that there would be specific areas that might have to be excluded, and you would have to ask for special pool rules or something to take care of that. But in general, they supported the concept of the second well.

There was a group of companies that wanted notice when it occurred so that they could identify a particular area that ought to be treated differently from the general rule. I'm not aware of any opposition that came forward and said don't do that.

MR. CARROLL: Mr. Examiner, if I could interject, Rand Carroll on behalf of the Division, we haven't posted the Rule 104 on the Internet yet, but it will include the provision for a second well.

EXAMINER CATANACH: And that's just the proposed rule --

MR. CARROLL: Right.

EXAMINER CATANACH: -- the Division?

MR. CARROLL: Right. So the Division agrees with industry.

| 1 | EXAMINER CATANACH: Whether or not the Commission |
|----|--|
| 2 | will ultimately approve it still remains to be seen? |
| 3 | MR. CARROLL: That's correct. |
| 4 | EXAMINER CATANACH: Okay, I have no further |
| 5 | questions of this witness. |
| 6 | I'm sorry, Mr. Owen, did you have |
| 7 | MR. OWEN: No questions, Mr. Examiner. |
| 8 | MR. KELLAHIN: That concludes our presentation, |
| 9 | Mr. Catanach. |
| 10 | EXAMINER CATANACH: Okay, there being nothing |
| 11 | further in this case, Case 12,191 will be taken under |
| 12 | advisement. |
| 13 | (Thereupon, these proceedings were concluded at |
| 14 | 9:03 a.m.) |
| 15 | * * * |
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| 17 | I do haraby certify that the for your is |
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CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL June 10th, 1999.

STEVEN T. BRENNER

to buylet - home

CCR No. 7

My commission expires: October 14, 2002