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:

IN THE MATTER OF CASE 12,179 BEING) REOPENED PURSUANT TO THE PROVISIONS OF) DIVISION ORDER NO. R-11,208, WHICH ORDER) PROMULGATED TEMPORARY SPECIAL POOL RULES) FOR THE EAST HOBBS-SAN ANDRES POOL IN) LEA COUNTY, NEW MEXICO) CASE NO. 12,179

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REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE:	MICHAEL	Е.	STOGNER,	Hearing	Examiner

November 15th, 2001

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, November 15th, 2001, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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APPEARANCES

FOR THE DIVISION:

DAVID K. BROOKS Attorney at Law Energy, Minerals and Natural Resources Department Assistant General Counsel 1220 South St. Francis Drive Santa Fe, New Mexico 87505

FOR LYNX ENERGY COMPANY, INC.:

JAMES G. BRUCE, Attorney at Law 3304 Camino Lisa Santa Fe, New Mexico 87501 P.O. Box 1056 Santa Fe, New Mexico 87504

FOR ENERQUEST OIL AND GAS, LTD.:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR 110 N. Guadalupe, Suite 1 P.O. Box 2208 Santa Fe, New Mexico 87504-2208 By: WILLIAM F. CARR

* * *

WHEREUPON, the following proceedings were had at 1 2 8:53 a.m.: EXAMINER STOGNER: At this time I'll call Case 3 4 Number 12,179, which is in the matter of Case 12,179 being reopened pursuant to the provisions of Division Order 5 Number R-11,208, which order promulgated temporary special 6 7 pool rules for the East Hobbs-San Andres Pool in Lea 8 County, New Mexico. 9 At this time I'll call for appearances. 10 MR. BRUCE: Mr. Examiner, my name is James Bruce 11 from Santa Fe. I represent Lynx Energy Company, Inc., and 12 I have one witness. 13 EXAMINER STOGNER: Any other appearances? 14 MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe office of Holland and 15 16 Hart, L.L.P. We represent Energuest Oil and Gas, Ltd. Ι 17 do not have a witness. 18 EXAMINER STOGNER: Any other appearances? 19 How many witnesses again, Mr. Bruce? 20 MR. BRUCE: Just one. 21 EXAMINER STOGNER: Will the witness please stand 22 and be sworn? 23 (Thereupon, the witness was sworn.) 24 MR. BRUCE: Before we begin, Mr. Examiner, I'd 25 request that the record from the prior hearing in this

matter be incorporated into this hearing. 1 EXAMINER STOGNER: Let's see, for the record that 2 case was heard by Mr. Catanach in May of 1999, in which the 3 order was issued in June of that year. 4 The record of the original case heard in 1999, in 5 6 Case 12,179, will be reviewed and considered in this 7 matter. Thank you. 8 WILLIAM JONES, 9 the witness herein, after having been first duly sworn upon 10 his oath, was examined and testified as follows: DIRECT EXAMINATION 11 BY MR. BRUCE: 12 13 Q. Would you please state your name for the record? 14 Α. William Jones. 15 Q. Where do you reside? 16 Α. I live at 7026 Desko Drive, Dallas, Texas. 17 Q. Who do you work for and in what capacity? I work for Lynx Energy Company as an engineer and 18 Α. 19 executive vice president. 20 Is Lynx an operator in this pool? Q. 21 Yes, sir, they are. Α. 22 Q. And is Lynx here in support of making the pool 23 rules permanent? 24 Α. Yes, we are. 25 Have you previously testified before the Q.

1	Division?
2	A. No, sir, I have not.
3	Q. Would you please summarize your educational and
4	employment background?
5	A. I have a BS degree in petroleum engineering from
6	Mississippi State University. I have 33 years of
7	experience working for various independents and majors. I
8	started with Shell Oil Company and, I guess, have been with
9	Lynx since February of 1999.
10	Q. Have you testified and qualified as an expert
11	witness in any other states?
12	A. I have testified in Texas.
13	Q. And were your credentials as a petroleum engineer
14	recognized as a matter of record?
15	A. Yes, sir.
16	Q. And does your area of responsibility at Lynx
17	include the Permian Basin?
18	A. Yes, it does.
19	Q. And are you familiar with engineering matters
20	related to production from this pool?
21	A. Yes, sir.
22	MR. BRUCE: Mr. Examiner, I'd tender Mr. Jones as
23	an expert petroleum engineer.
24	EXAMINER STOGNER: Mr. Jones is so qualified.
25	Q. (By Mr. Bruce) Now, Mr. Jones, you didn't

1	prepare any geologic presentation, did you?
2	A. No, sir, I did not.
3	Q. Now, two years ago, or a year and a half ago when
4	this matter was heard, geology was presented, was it not?
5	A. Yes, it was.
6	Q. And have you seen the exhibits previously
7	presented in this matter?
8	A. I have.
9	Q. To the best of your knowledge, has there been any
10	change in the basic geology in this pool?
11	A. No.
12	Q. Could you identify Exhibit 1 for the Examiner?
13	A. Exhibit 1 is a lease plat showing Lynx Energy's
14	40-acre tract within the Hobbs East Pool. We have three
15	producing wells, Laney Reese 1, 2 and 3.
16	Q. Does the I forget exactly now, the pool kind
17	of extends to the east and west of your lease?
18	A. Yes, sir, it does.
19	Q. Okay. I think east to the Texas state line, does
20	it not?
21	A. That is correct.
22	Q. Okay. Would you identify Exhibit 2 for the
23	Examiner and discuss production from your lease?
24	A. Okay. Exhibit 2 is production curve, and it
25	summarizes the 1, 2 and 3 wells. As you can see, we had

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only one well producing on the lease for a long time, and 1 then we subsequently drilled a well, brought our production 2 up significantly and then drilled the third well and have 3 been producing pretty close to the 160-barrel-a-day 4 allowable. 5 Another point that I want to make is that with 6 7 this subsequent drilling we have actually seen a decrease 8 in GOR. This is a relatively thick section, San Andres. The two new wells are completed lower in the section and 9 10 are producing at a lower GOR than the old original well. 11 Is this a solution gas drive reservoir? ο. 12 Yes, sir, it is, a solution gas drive. Α. Does the low or decreasing GOR indicate that 13 0. 14 there would be no adverse -- there is no adverse effect on the reservoir --15 That is --16 Α. 17 Q. -- from producing at the higher rates? 18 Yes, sir, that's correct. Α. 19 Now, these wells in this pool have some pretty Q. 20 high cumulative production, do they not? 21 Α. They do. 22 In what range? Q. 23 In the 400,000 to 500,000 barrels. And of course Α. this is over an extremely long period of time. 24 The pool was discovered, I think, probably in the 1950s. 25

1	Q. Okay.
2	A. Yeah.
3	Q. But it's been fairly steady production for quite
4	some time in your lease?
5	A. Very much so.
6	Q. Okay. Taking an exhibit out of order, what is
7	Exhibit 4, Mr. Jones?
8	A. Exhibit 4 are just the most recent gauge sheets
9	that we have. We have two tank batteries. The Number 1
10	well goes into one tank battery, and it's called the Laney
11	Reese. And then the 2 and 3 well go into a separate tank
12	battery, and it's denoted as the Laney Reese Number 2.
13	As you can see, for October the three wells
14	together produced slightly over 4800 barrels, which is the
15	160-barrel-a-day allowable.
16	Q. And production appears to be pretty constant from
17	these wells; is that right?
18	A. Yes, sir, it is. And we also have the first ten
19	days of November, gauge sheets there attached for the same
20	two tank batteries, and it substantiates that we're
21	continuing to produce at 160 or slightly above.
22	Q. Now, looking back to Exhibit 2, when did you
23	drill the third well, approximately?
24	A. When this I guess that's late 1999.
25	Q. After the allowable was

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After the allowable was approved and the increase Α. 1 2 in allowable. Okay, so you drilled that well based upon the 3 Q. increased allowable? 4 5 Α. Yes, sir. It would have -- We were producing at or above the current allowable, so it would have been, you 6 know, uneconomic for us to drill a new well. We weren't 7 8 able to produce the oil that it could produce. Q. Okay. Do you believe that Lynx's lease is 9 capable of exceeding the 160-barrel-a-day allowable? 10 Yes, sir, with some additional work we think we 11 Α. could improve production. 12 Could you refer to Exhibit 3, identify that for 13 Q. the Examiner and tell him why you think you can obtain 14 additional production? 15 Yes, sir. These are logs on the Laney Reese 16 Α. Number 2 well. If you'll look at the compensated neutron 17 log, the perforations are marked, and we're currently 18 19 producing in the lower part of the San Andres. We have the best porosity, which we have, I guess, internally called 20 21 the P-1. This is the zone that has produced for the last 40 years in the field. Our Number 1 well produces from 22 23 this zone only, and it's, you know, 10 to 15 barrels a day 24 on a very regular basis. 25 We think we could, at the minimum, add another 15

1	barrels a day by perforating this zone in our Number 2
2	well.
3	Q. Okay. Now, today you're here just to maintain
4	the current allowable?
5	A. Yes, sir. Yes.
6	Q. But obviously there is extra capacity on your
7	lease?
8	A. That's correct. And
9	Q. What Go ahead.
10	A. I just want to make the point that we drilled the
11	second well based upon the increased allowable, and so far
12	our economics have worked very well. But it would, I
13	think, do us harm if the allowable were reduced.
14	Q. And again you have seen no adverse effect on
15	reservoir performance because of the increased allowable?
16	A. No, none whatsoever.
17	Q. Now, regarding some other factors of keeping the
18	allowable in place, there has been some discussion of
19	unitization or secondary recovery in this pool, has there
20	not?
21	A. Yes, sir, there has.
22	Q. And what are some normal parameters used out in
23	this area for unitization parameters?
24	A. I think in most waterfloods the current
25	production would be a parameter, cumulative production

1	would be a parameter. Of course acreage is always a
•	
2	parameter.
3	Q. Ultimate primary?
4	A. Ultimate primary would definitely be.
5	Q. Does Lynx need to maintain the production
6	Well, let's take a step back.
7	There are numerous well units in this pool that
8	are not producing at top allowable?
9	A. That is correct.
10	Q. And they have produced a lot of their primary
11	production?
12	A. They have.
13	Q. And so does Lynx need to maintain the rate of
14	production to support its case in unitization if that
15	eventually occurs?
16	A. Yes, sir, that's correct. We have only the 40-
17	acre tract, so the parameters that would be most
18	advantageous to us would be, of course, current production
19	rates and ultimate production.
20	Q. Were Exhibits 1 through 4 prepared by you or
21	under your supervision?
22	A. Yes, they were.
23	Q. And in your opinion is the making permanent of
24	the 160-barrel-per-day allowable in the interests of
25	conservation and the prevention of waste?

1	A. Yes.
2	MR. BRUCE: Mr. Examiner, I'd move the admission
3	of Lynx Exhibits 1 through 4.
4	EXAMINER STOGNER: Exhibits 1 through 4 will be
5	admitted into evidence.
6	EXAMINATION
7	BY EXAMINER STOGNER:
8	Q. Okay, I'm going to refer to Exhibit Number 1.
9	Now, this is a 40-acre lease?
10	A. Yes, sir.
11	Q. Okay, which well is which on this map?
12	A. I just noticed that the Number 3 well isn't
13	posted on there.
14	The Number 1 is the one without a number on it,
15	and then you see the Number 2. The Number 3 is in the
16	southeast quarter.
17	Q. Okay. Now, what's the footage on the Number 3?
18	A. I'm sorry, I'll have to get that for you. I
19	don't have it.
20	MR. BRUCE: I believe it's 330 off the both of
21	the lines.
22	Q. (By Examiner Stogner) It is a standard location?
23	A. Yes, sir, it is a standard location.
24	Q. And all three wells are at standard locations?
25	A. Yes.

Okay, so the one in the middle is the Number 1? Q. 1 Yes, sir. 2 Α. And the one in the southwestern portion is the 3 ο. 4 Number 2? Correct. And the number 3 is 330 and 330, you're 5 Α. 6 right. 7 When you say 330, 330, you're talking about 330, Q. 8 330 off the south and east --Yes, sir. Α. 9 -- lease lines, not section lines? 10 0. 11 Right. Α. Okay. Now, let's see, when I refer to Exhibit 12 Q. Number 2, was both the Number 1 and 2 producing -- Okay, 13 the Number 1 was producing in 1970? Let me re-ask it that 14 15 way. Yes, sir. 16 Α. 17 Q. Okay, when did the Number 2 come on? 18 Α. When the -- I don't remember the exact date, but 19 the day that it was logged was June of 1999, if you'll look at June of 1999 on that curve when it first went up and 20 then leveled out. 21 22 Q. That's the Number 2 well? Yes, sir. 23 Α. 24 And the Number 3 again? Q. 25 Was drilled when the curve went up again, and Α.

that was -- It was either late 1999 or early 2000. I don't 1 remember the exact date. 2 Now, I understand from the original hearing that 3 0. 4 some of the wells had been watered out in certain parts of the pool. Does water drive play any part in the reservoir 5 drive mechanism in this --6 7 Α. We have not seen that at all. 8 Q. What kind of water production -- Well, you do show water production here, don't you? 9 10 Yes, sir, our Number 3 well makes some water. Α. 11 The Number 1 and 2 do not make any to speak of at all. 12 Q. Well, if they're doing so good, why don't you increase the allowable? 13 14 Α. What we would like to do is do some additional 15 work out there. I've talked to Chris Williams, and he said 16 the modus operandi is to go to him, get a test allowable 17 for 30 days, go do our work, and if we do improve the 18 production, then we could come back for another hearing. 19 Q. Okay, what I was leading at was, what kind of 20 effect would you have on the reservoir if you had more than a 160-barrel allowable? 21 I do not believe that we would have any adverse 22 Α. 23 effect on it. By adding additional perforations in the 24 Number 2 well, then we would just be increasing the rate at 25 which the production would be withdrawn from the reservoir.

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1	Q. So you don't feel the increased draw would do any
2	harm to the reservoir energy?
3	A. No, sir, I do not believe so. I think we're at a
4	point in this reservoir where we've kind of reached
5	equilibrium as far as gas-oil ratio.
6	As you can see on that curve, it's pretty flat,
7	and increasing withdrawals would not, in my opinion, have
8	any adverse effect as far as gas coming out of solution.
9	And that would be the detriment to you, is if your gas came
10	out of solution in the reservoir and started occupying
11	reservoir space.
12	Q. So at this time you're maintaining off the lease
13	160 barrels a day?
14	A. That is correct.
15	Q. Are you having to control more than one well to
16	keep the 160 barrels from going over?
17	A. No, we have enough periodic down time and that
18	type of thing, you know, with wells gas-locking, that kind
19	of thing.
20	In fact, we've got a well right now that we need
21	to change the pump on, the Number 1 well. And when we have
22	mechanical-type problems, that keeps the wells from
23	producing over the allowable. If we could produce 24 hours
24	a day, 30 days a month, then we would have capability of
25	going over the 160. But from a mechanical consideration,

1 we have not done that.

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2	Q. Now it was referred to originally from the
3	shallowest to the deepest, the P-1, P-2, P-3 and P-4
4	porosity zones. Are you familiar with that nomenclature?
5	A. Yes, sir.
6	Q. Okay. Of the Exhibit Number 3 that you presented
7	today, what's represented from the perfs on this wellbore?
8	A. We have perforated the P-2, P-3, and then the P-1
9	is not perforated. And that P-1 is the interval from 4432
10	to 4474.
11	Q. That would be your P-1?
12	A. Yes, sir.
13	Q. Are any of these wells perforated in the P-1
14	interval?
15	A. Yes, sir, the Number 1 Well.
16	Q. I'm sorry, the Number what?
17	A. Number 1.
18	Q. Number 1.
19	A. And it's only in that P-1 interval. It was the
20	first well drilled on the lease. It did not penetrate the
21	P-2, P-3 and P-4.
22	Q. Is it pretty well keeping constant off of that
23	well?
24	A. Yes, sir, about 10 to 12, some days 15 barrels a
25	day. In October it made 458 barrels, I believe. 479

barrels, I'm sorry. 1 2 And that gauge sheet that says the Laney Reese is it by itself; it goes into a separate tank battery. 3 There's a little different ownership, so... 4 Is there any natural flow between the P-1, P-2, 5 Q. P-3 and P-4 zones? 6 7 Α. We do not believe the vertical permeability is 8 such that there is natural flow between them. Did you frac the Well Number 2 and 3 when --9 Q. 10 Α. No, sir, they were not frac'd. They are not frac'd. 11 ο. No, they are not frac'd. 12 Α. 13 **Q**. This is all natural or did you do any kind of stimulation? 14 15 Α. We did some small acid jobs. We used a PIP-2. You're familiar with that, it's a packer apparatus which 16 17 treats selected perforations individually. 18 Q. Essentially a spot -- acid spot type? 19 Α. Yes. But you isolate individual perforations. 20 You've got a packer apparatus where you've got a cup above 21 and below, so that you're pumping right into -- so you're sealed off from perforations below and the perforations 22 23 above. 24 Q. Was this stimulation job designed by you or one 25 of your other staff members?

One of my other staff members. Α. 1 Do you know currently how many producing wells 2 Q. there might be in the pool by other operators, roughly? 3 Probably -- I think there's probably 12 or 15 4 Α. that Energuest has. I think that's pretty close to right. 5 Mr. Examiner, the other wells that are 6 MR. CARR: 7 operated by Energuest are 18. 8 THE WITNESS: Eighteen, okay. Thank you. 9 EXAMINER STOGNER: I'll throw this question out. 10 Is Lynx and EnerQuest the only two operators? 11 MR. BRUCE: I believe they are. 12 EXAMINER STOGNER: Mr. Carr, is that your belief? 13 MR. CARR: I believe that's correct. 14 (By Examiner Stogner) Is yours the only lease Q. 15 that you know that is capable of producing the allowable? I think that's correct. 16 Α. 17 Q. Do you know of any other multi-well 40-acre 18 tracts out here, other than yours? 19 Α. I don't know exactly how EnerQuest's lease No. 20 situation is. They have multiple leases. Whether they're just 40 acres or not, I don't know. But they do have 21 22 multiple leases that have three to four wells on them. 23 Q. But you don't know if they share the same 24 proration unit such as yours? 25 No, I do not. Α.

EXAMINER STOGNER: Okay. I have no other 1 questions of this witness. Any other questions of this 2 3 witness? MR. BROOKS: No. 4 MR. BRUCE: No, sir. 5 MR. CARR: Mr. Stogner? 6 7 EXAMINER STOGNER: Mr. Carr? 8 MR. CARR: We have checked, and Texland does 9 operate one well within the pool, so there would be three 10 operators within the pool. We do not have a multiple-well 11 spacing unit. 12 EXAMINER STOGNER: Well, maybe you should, Mr. 13 Carr. 14 MR. CARR: Maybe we should, Mr. Stogner. 15 EXAMINER STOGNER: Is there anything further of this witness? 16 17 MR. BRUCE: No, sir. 18 EXAMINER STOGNER: You may be excused. 19 THE WITNESS: Thank you. 20 EXAMINER STOGNER: Does anybody else have 21 anything further? 22 MR. CARR: I'd just like to make it clear for the 23 record that EnerQuest does support maintenance of the 160barrel-a-day allowable. 24 25 EXAMINER STOGNER: Well, that's good, because

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1	EnerQuest was the original applicant; is that correct?
2	MR. CARR: Yes, sir, we were.
3	EXAMINER STOGNER: Okay. Reopened Case 12,179
4	will be taken under advisement at this time.
5	Let's take about a ten-minute recess.
6	(Thereupon, these proceedings were concluded at
7	9:15 a.m.)
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14	hereby certify that the foregoed
15	sommer hearing of Case No. 12179
16	11 2 15 Nov. 2001
17	Oil Conservation Division
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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 November 26th, 2001.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 2002