

1 STATE OF NEW MEXICO
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3 OIL CONSERVATION DIVISION

4 IN THE MATTER OF THE HEARING)
5 CALLED BY THE OIL CONSERVATION)
6 DIVISION FOR THE PURPOSE OF)
7 CONSIDERING:) CASE NO. 10270
8 APPLICATION OF ORYX ENERGY)
9 COMPANY FOR COMPULSORY POOLING,)
EDDY COUNTY, NEW MEXICO)
)

10 REPORTER'S TRANSCRIPT OF PROCEEDINGS

11 EXAMINER HEARING

12 BEFORE: MICHAEL E. STOGNER, Hearing Examiner

13 March 21, 1991
14 12:05 p.m.
15 Santa Fe, New Mexico

16 This matter came on for hearing before the Oil
17 Conservation Division on March 21, 1991, at 12:05 p.m.
18 at Oil Conservation Division Conference Room, State Land
19 Office Building, 310 Old Santa Fe Trail, Santa Fe, New
20 Mexico, before Paula Wegeforth, Certified Court Reporter
21 No. 264, for the State of New Mexico.

22
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24 FOR: OIL CONSERVATION BY: PAULA WEGEFORTH
25 DIVISION Certified Court Reporter
CSR No. 264

I N D E X

March 21, 1991
Examiner Hearing

CASE NO. 10270

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APPEARANCES

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APPLICANT'S WITNESSES

SHELLEY L. LANE

Direct Examination by Mr. Carr

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Examination by Examiner Stogner

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REPORTER'S CERTIFICATE

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E X H I B I T S

ADMTD

APPLICANT'S EXHIBIT

1 through 5

12

A P P E A R A N C E S

FOR THE DIVISION: ROBERT G. STOVALL, ESQ.
General Counsel
Oil Conservation Commission
State Land Office Building
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

FOR THE APPLICANT: CAMPBELL & BLACK, P.A.
Attorneys at Law
BY: WILLIAM F. CARR, ESQ.
110 North Guadalupe Street
Santa Fe, New Mexico 87501

* * *

1 EXAMINER STOGNER: Call this hearing to order and call
2 next case, 10270, which is the application of Oryx Energy
3 Company for compulsory pooling, non-standard gas proration
4 unit, and an unorthodox well location, Eddy County,
5 New Mexico.

6 At this time I'll call for appearances.

7 MR. CARR: May it please the examiner, my name is
8 William F. Carr with the law firm Campbell & Black of
9 Santa Fe. I represent Oryx Energy Company.

10 At this point in time, Mr. Examiner, I can
11 advise you that the portion of the case relating to
12 compulsory pooling can be dismissed. We have obtained
13 voluntary joinder of all interest owners in this prospect.
14 We believe we have a standard 320-acre proration unit in
15 the Morrow formation, and therefore are only going to
16 present testimony concerning the unorthodox gas well
17 location.

18 I also can advise you that we have received
19 either a joinder or a waiver from virtually all offsetting
20 operators, but the reason for the location is geologic in
21 nature, and for that reason we're calling one witness, a
22 geologist, to explain the reason for this particular
23 unorthodox location.

24 EXAMINER STOGNER: And as far as the non-standard gas
25 proration unit, it's because it's a non-standard subsection

1 of sands further; is that correct?

2 MR. CARR: All right. If it takes it over the limit,
3 that would be the only reason for it. It is a south half
4 of that section -- is that right?

5 THE WITNESS: Correct.

6 MR. CARR: South half, yes.

7 EXAMINER STOGNER: Being 326.81-A in the agreement.

8 MR. CARR: All right. All right.

9 EXAMINER STOGNER: Will the witness please stand and
10 be sworn?

11 (Whereupon the witness was duly sworn.)

12 EXAMINER STOGNER: Mr. Carr.

13 SHELLEY L. LANE,

14 the Witness herein, having been first duly sworn, was
15 examined and testified as follows:

16 DIRECT EXAMINATION

17 BY MR. CARR:

18 Q. Would you state your full name for the record,
19 please?

20 A. Shelley Lane.

21 Q. Where do you reside?

22 A. Dallas, Texas.

23 Q. By whom are you employed and in what capacity?

24 A. By Oryx Energy as a petroleum geologist,
25 particularly an exploration geologist.

1 Q. Ms. Lane, have you previously testified before
2 this division and had your credentials as a geologist
3 accepted and made a matter of record?

4 A. Yes.

5 Q. Are you familiar with the application filed in
6 this case on behalf of Oryx Energy Company?

7 A. Yes, I am.

8 Q. Have you made a study of the subject area and
9 prepared certain exhibits for presentation here today?

10 A. Yes.

11 MR. CARR: Are the witness' qualifications acceptable?

12 EXAMINER STOGNER: They are.

13 Q. (By Mr. Carr) Could you briefly state what Oryx
14 seeks with this application?

15 A. Yes. Oryx is seeking an unorthodox location for
16 the Morrow gas formation, and this location will be 990
17 from the south line and 990 from the east line of
18 Section 19, and 18 south, 28 east, Eddy County, New Mexico.

19 Q. And it's Oryx's intention to dedicate the entire
20 south half of Section 19 to the well?

21 A. Yes.

22 Q. And since that is an irregular section, you
23 propose to dedicate the non-standard unit due to just the
24 survey variation?

25 A. Right.

1 Q. Are you familiar with the rules that govern the
2 development of the Morrow in this particular area?

3 A. Yes. A legal location would be 1980 from that
4 east line and 660 from the south line.

5 Q. So you're two times too close to the end line?

6 A. Encroaching to the east, yes, sir.

7 Q. And how much closer are you?

8 A. 990 feet.

9 Q. Could you refer to what has been marked as Oryx
10 Exhibit No. 1? Identify that for Mr. Stogner and review it
11 for him.

12 A. Yes. This is just an acreage plat showing four
13 sections in Sections 19, 20, 29 and 30 in 18 south, 28
14 east. We have the various operators and mineral owners
15 colored here.

16 The Oryx acreage that's a hundred percent is
17 solid yellow. Then the Oryx partial acreage is
18 cross-hatched. We also show the Chevron acreage, and they
19 have joined us. We show the Yates acreage. They have
20 joined us. Also Conoco is partners with Yates in the blue
21 tract, and they have also joined us. And then in the green
22 is Kaiser-Francis, and that would be the company that we
23 would be encroaching upon, and we have an agreement to
24 share data with Kaiser-Francis.

25 We have not heard anything from Texaco.

1 Q. They have 25 percent of the acreage toward whom
2 you're moving the well?

3 A. Right.

4 Q. Let's go now to Oryx Exhibit No. 2, and I'd ask
5 you to identify this and review it for the examiner.

6 A. This is a net sand isopach on the lower Morrow
7 formation. It's contured on an interval of ten feet. It
8 shows our proposed proration unit in the south half of
9 Section 19.

10 It also shows in red our proposed location that
11 would be 990 from the south and east of that section.

12 One thing that I should point out is the
13 green -- the thin green lines going from the southwest to
14 the northeast -- those are our seismic lines that we've
15 shot across this prospect, and then the darker green bars
16 or the thicker green bars would be seismic anomalies, which
17 to us indicate thicker portions of this lower Morrow sand.

18 And essentially this is a seismic-intensive
19 prospect, and what we are trying to do is be as close as
20 possible to the seismic anomaly that you see down in
21 Section 30 on that southermost line.

22 Q. If we move down to Section 30, that is actually
23 down-dip, is it not?

24 A. It is down-dip, and that was the reason we
25 didn't want to move into Section 30. We are regionally

1 moving down-dip from the northwest to the southeast. And
2 we don't want to be too far down-dip, so we're trying to
3 hit a happy medium there.

4 Q. If you move back to a standard location, you
5 would be moving away and out of what appears to be the
6 seismic anomaly?

7 A. That's correct.

8 Q. Does this exhibit also contain a trace for a
9 cross section that you will be presenting?

10 A. It does.

11 Q. Why does this particular unorthodox -- well, I
12 guess you've explained why you're proposing this particular
13 location, so let's go ahead and move to Exhibit No. 3 and
14 have you identify that for Mr. Stogner.

15 A. Okay. This is a piece of the southernmost
16 seismic line, showing the anomaly that we had just
17 previously discussed. And what it shows is we have the
18 Atoka C marked in a dark blue, and then the Morrow is in
19 sort of a brownish color with the actual lower Morrow sand
20 anomaly being colored in yellow.

21 And this is just essentially to show you what
22 we're looking at on seismic and the type of anomalies that
23 we're playing out here to show us thicker sands.

24 Q. Basically these yellow areas on Exhibit No. 3
25 would correspond to the dark green bars on the seismic

1 lines on Exhibit No. 2?

2 A. Correct.

3 Q. How important, in your opinion, is structure in
4 determining whether or not you're going to make a
5 successful well in this area?

6 A. Structure is important very locally in that you
7 have such discontinuous sands. One stringer may have a
8 different water contact. We -- there are a number of wells
9 to the west of us that have encountered thick Morrow sands,
10 but they are wet. So there is some relationship there.

11 It's kind of a double-edged sword. You can --
12 you want to make sure you get the sand, which is what we
13 think the seismic is telling us, but even then we don't
14 know if the sands will be wet.

15 Q. Let's go now to what has been marked as Oryx
16 Exhibit No. 4, and I'd ask you to identify and review that
17 for the examiner.

18 A. This is a cross section, and the line of the
19 cross section is shown on Exhibit 2. It goes from a well
20 in Section 23, the Beauregard, and that's in 18 south, 27
21 east, over to a -- the mid-stream 16 State Com in
22 Section 16 of 18 south, 28 east; and then to the Exxon A
23 State No. 1 in Section 16 of 18 south, 28 east.

24 And essentially the purpose of the cross section
25 is to just indicate the discontinuity of these Morrow sands

1 and their sort of erratic nature and just to illustrate
2 that we do feel like we need the seismic anomalies to allow
3 us to drill and actually find the sand since we have such
4 limited well control.

5 Q. In your opinion, is it necessary to drill at
6 this unorthodox location from a geologic point of view if
7 in fact you're going to develop the reserves under this
8 south half proration unit?

9 A. Yes, it is.

10 Q. In your opinion, do you have a real chance of
11 drilling a successful well at this location?

12 A. I think we do, yes.

13 Q. Do you believe that production from the subject
14 well should be restricted or penalized due to its
15 unorthodox location?

16 A. No.

17 Q. Why is that?

18 A. We feel that if -- that the sands are
19 discontinuous enough that there will not be any significant
20 drainage to offset operators, and we have reached an
21 agreement with Kaiser-Francis to share well information
22 with them so that they will have log data and be able to
23 come in and drill a well if they see fit.

24 Q. Miss Lane, is Exhibit No. 5 a copy of an
25 affidavit with attached notice letters confirming that

1 notice of this hearing has been provided to all affected
2 offsetting operators?

3 A. Yes.

4 Q. Do you believe that granting this application
5 will be in the best interests of conservation, the
6 prevention of waste and the protection of correlative
7 rights?

8 A. Yes, I do.

9 Q. Were Exhibits 1 through 5 either prepared by you
10 or were they compiled under your direction?

11 A. Yes.

12 Q. And you can testify to the accuracy of these
13 exhibits?

14 A. Yes.

15 MR. CARR: At this time, Mr. Stogner, we would move
16 the admission of Exhibits 1 through 5.

17 EXAMINER STOGNER: Exhibits 1 through 5 will be
18 admitted into evidence.

19 (Whereupon Applicant's Exhibits 1 through 5 were
20 admitted into evidence.)

21 MR. CARR: And that concludes my direct examination of
22 Miss Lane.

23 EXAMINATION

24 BY EXAMINER STOGNER:

25 Q. Miss Lane, when I look at -- I should say when I

1 compare Exhibit 4 and Exhibit No. 2, the Beauregard Com
2 No. 1 in Section 23 --

3 A. Yes.

4 Q. -- am I looking at the same well on that top
5 seismic line? If I follow it down to the south and west,
6 it intersects a well. Is that the same well?

7 A. That has -- it says "48 feet wet" under it?

8 Q. Yes.

9 A. Is that the well you were talking about?

10 Q. Yes.

11 A. Yes. That's the same well that's on the cross
12 section, correct.

13 Q. And was the -- what came first? The well or the
14 seismic?

15 A. The well came first.

16 Q. And you have a thick anomaly shown up where this
17 well is. Is that reflected on the thicker Morrow pay zone?

18 A. Yes. It shows -- you can see that 30-foot
19 isopach runs through there, and we have cut it off at 30
20 feet. We haven't -- I didn't go any thicker than 30 feet.
21 That was what we used.

22 But that sand was wet, so even though we did see
23 the anomaly on seismic and we saw thick sand, it was wet.

24 Q. And is that what you're trying to intersect with
25 your particular well?

1 A. We're trying to intersect a thick sand, yes,
2 sir, but hopefully not wet.

3 Q. Do you think the wetness in this particular area
4 has contributed to that pin fault which you show extending
5 from the southeast up to the Morrow?

6 A. Yes, sir. Our interpretation is that we have a
7 number of Mississippian and possibly extending into the
8 lower Morrow faults, and these are the purple faults.

9 And then this one Pennsylvanian fault we feel
10 extends all the way up through the section, and that this
11 particular fault may have allowed some leakage of
12 hydrocarbons and allowed the water to encroach in there.

13 EXAMINER STOGNER: I have no other questions of this
14 witness. Miss Lane may be excused.

15 Do you have anything further, Mr. Carr?

16 MR. CARR: Nothing further, Mr. Stogner.

17 EXAMINER STOGNER: Does anybody else have anything
18 further?

19 This case will be taken under advisement, and
20 let's take a lunch recess until one o'clock.

21

22 (The foregoing hearing was concluded at the
23 approximate hour of 12:20 p.m.)

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

REPORTER'S CERTIFICATE

I, PAULA WEGEFORTH, a Certified Court Reporter and Notary Public, DO HEREBY CERTIFY that I stenographically reported these proceedings before the Oil Conservation Division; and that the foregoing is a true, complete and accurate transcript of the proceedings of said hearing as appears from my stenographic notes so taken and transcribed under my personal supervision.

I FURTHER CERTIFY that I am not related to nor employed by any of the parties hereto, and have no interest in the outcome hereof.

DATED at Santa Fe, New Mexico, this 22nd day of April, 1991.

My Commission Expires:
 September 27, 1993

Paula Wegforth
 PAULA WEGEFORTH
 Certified Court Reporter
 CSR No. 264, Notary Public

I do hereby certify that the foregoing is
 a correct and true transcript of the proceedings in
 the above captioned hearing of Case No. 10270
 heard by me on 21 March 1991.

Mark H. Hogen
 Examiner

Oil Conservation Division