

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:)
APPLICATION OF GECKO, INC.)

CASE NOS. 11,008
11,009
(Consolidated)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGSEXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

June 23, 1994

Santa Fe, New Mexico

27 1994

This matter came on for hearing before the Oil
Conservation Division on Thursday, June 23, 1994, at Morgan
Hall, State Land Office Building, 310 Old Santa Fe Trail,
Santa Fe, New Mexico, before Steven T. Brenner, Certified
Court Reporter No. 7 for the State of New Mexico.

* * *

I N D E X

June 23, 1994
Examiner Hearing
CASE NOS. 11,008, 11,009 (Consolidated)

PAGE

APPLICANT'S WITNESSES:

STEVE THOMSON

Direct Examination by Mr. Kellahin	4
Examination by Examiner Stogner	15

REPORTER'S CERTIFICATE	19
------------------------	----

* * *

E X H I B I T S

	Identified	Admitted
Exhibit 1	6	15
Exhibit 2	6	15
Exhibit 3	9	15
Exhibit 4	14	15

* * *

A P P E A R A N C E S

FOR THE DIVISION:

RAND L. CARROLL
Attorney at Law
Legal Counsel to the Division
State Land Office Building
Santa Fe, New Mexico 87504

FOR THE APPLICANT:

KELLAHIN & KELLAHIN
117 N. Guadalupe
P.O. Box 2265
Santa Fe, New Mexico 87504-2265
By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 10:05 a.m.:

3 Q. (By Examiner Stogner) We'll call next cases,
4 11,008 and 11,009.

5 MR. CARROLL: Application of GECKO, Inc., for an
6 unorthodox oil well location, Lea County, New Mexico.

7 EXAMINER STOGNER: Call for appearances.

8 MR. KELLAHIN: If the Examiner please, I'm Tom
9 Kellahin of the Santa Fe law firm of Kellahin and Kellahin,
10 appearing on behalf of the Applicant, and I have one
11 witness to be sworn.

12 EXAMINER STOGNER: Are there any other witnesses
13 in either of these cases, or both?

14 Will the witness please stand to be sworn?

15 STEVE THOMSON,
16 the witness herein, after having been first duly sworn upon
17 his oath, was examined and testified as follows:

18 DIRECT EXAMINATION

19 BY MR. KELLAHIN:

20 Q. Mr. Thomson, for the record, sir, would you
21 please state your name and occupation?

22 A. My name is Steve Thomson. I'm president of
23 GECKO, Incorporated.

24 Q. In addition to being president of the company,
25 which is the Applicant in these two cases, do you hold any

1 degrees?

2 A. Yes, I have a bachelor of science in chemical
3 engineering and a bachelor of science in geology.

4 Q. On prior cases have you testified on behalf of
5 your company, have you testified in your professional
6 capacity, in fact, in prior nonstandard location case, did
7 you not, sir?

8 A. In New Mexico.

9 Q. Yes, sir.

10 A. Yes, sir, I have.

11 Q. And your qualifications as an expert were
12 accepted and made a matter of record by the Division?

13 A. Yes, sir.

14 Q. Are you here again this morning to testify in
15 that same capacity concerning two proposed nonstandard or
16 unorthodox well locations in Strawn oil pools in
17 southeastern New Mexico?

18 A. Yes, sir.

19 Q. And as part of that study, have you independently
20 made certain technical geologic conclusions about the
21 optimum place in each of these two spacing units in which
22 to locate your respective wells?

23 A. Yes, I have.

24 MR. KELLAHIN: We tender Mr. Thomson as an expert
25 witness.

1 EXAMINER STOGNER: Mr. Thomson is so qualified.

2 Q. (By Mr. Kellahin) We have marked, Mr. Thomson,
3 as Exhibit 1 the survey plat, the Division Form C-102, for
4 the GECKO State 26 well in Section 26. And if you'll also
5 look at Exhibit Number 2, which is the survey plat for the
6 other well, it's the State 36, located in Section 36.

7 Do you have those, sir?

8 A. Yes, I do.

9 Q. All right. Let's take a moment and describe the
10 ownership arrangements.

11 If you'll start with Exhibit 1, the proposed
12 spacing unit is an 80-acre tract consisting of the south
13 half of the southwest quarter of Section 26?

14 A. Yes, that's correct.

15 Q. Have you consolidated all the interest owners for
16 the formation of that spacing unit?

17 A. No, we have not.

18 Q. All right. But you intend to do so before the
19 well is producing, that the owners will be consolidated in
20 some voluntary fashion?

21 A. Yes, that's correct.

22 Q. All right. With regards to that well and its
23 location, the information we have is, that well would be
24 located within the current boundaries of the Casey-Strawn
25 Pool?

1 A. Yes, that's correct.

2 Q. Are you aware of what the pool rules for that
3 pool require for acreage dedication to oil wells?

4 A. Yes, I do.

5 Q. And what is it?

6 A. It's 80 acres.

7 Q. And where must you drill a well within that 80-
8 acre tract to have it at a standard well location?

9 A. It's 150 feet from the center of the quarter-
10 quarter section.

11 Q. Okay. When we look at Exhibit 1, describe for us
12 in what way your proposed well is unorthodox.

13 A. The proposed location is -- From the 150-foot
14 from the center of a quarter-quarter section is
15 approximately 200 feet to the southwest of where an
16 orthodox location would be.

17 Q. The encroachment -- If you'll look at Exhibit 1,
18 the encroachment goes towards Unit Letter M with the
19 wellbore located in Unit Letter N?

20 A. That's correct.

21 Q. So the encroachment goes towards the interest
22 owners that are going to share in this spacing unit?

23 A. That's correct.

24 Q. Let's turn to Exhibit Number 2.

25 A. Okay.

1 Q. This is your other Strawn well, and although this
2 section joins at the corner the Casey-Strawn Pool for
3 Section 26, we are now in Section 36, and it is designated
4 as the Shipp-Strawn Pool, is it not?

5 A. That's correct.

6 Q. What are the spacing rules for the Shipp-Strawn
7 Oil Pool?

8 A. They're the same as Casey. It's 80 acres, and
9 orthodox location is 150 feet from the center of a quarter-
10 quarter section.

11 Q. Does it matter to you, sir, as the operator of
12 either of these wells, in which pool the Division decides
13 to put each of these wells?

14 A. No, it does not matter to the operator.

15 Q. All right. When we look at the direction in
16 which your well in 36, shown on Exhibit 2, is unorthodox --

17 A. Yes, sir.

18 Q. -- if you'll look at that display and describe
19 for us in what way that well is unorthodox.

20 A. It's unorthodox. We've moved the well to the
21 southeast of an orthodox location, which we would be
22 encroaching, I guess, on Unit F, which is in the same
23 spacing.

24 And we're also encroaching, I guess, on the next
25 laydown 80 to the south, which would be Unit L.

1 Q. Yes, sir, you're encroaching on Unit Letters L, K
2 and F?

3 A. Yes, sir, that's correct.

4 Q. Are the interest owners common in all four of
5 those 40-acre tracts?

6 A. Yes, they are.

7 Q. So the encroachment is towards parties that would
8 share in production from the well?

9 A. That's correct.

10 Q. All right. Let me have you turn now to Exhibit
11 Number 3. Describe for us what Exhibit 3 represents.

12 A. Exhibit 3 is an isopach map drawn on the Strawn
13 formation. It's contoured in feet. It's the thickness of
14 the lithologic unit that produces from the Strawn Pool.

15 What's shown on the map is both sections that are
16 the subject of this hearing, Section 36 and Section 26, as
17 well as a little bit of geology in Section 35.

18 Q. What's the basis of the data that was used to
19 generate the display?

20 A. The basis of the data is subsurface well control
21 and seismic data in the area.

22 Q. This represents a 3-D seismic illustration?

23 A. The data is 3-D seismic.

24 Q. All right. You have plotted information that
25 applies to each of these two wells, do you not?

1 A. Yes, I have.

2 Q. Let's turn to Section 36 and look at the basis
3 for your location in 36.

4 A. Okay, in Section --

5 Q. On the display you have drawn some blue lines?

6 A. Yes.

7 Q. What do those blue lines represent?

8 A. The blue lines are outlining quarter-quarter
9 sections, showing what the spacing units would be.

10 Also, you can see some -- at least in the space
11 of the quarter-quarter sections to the south, there's some
12 blue circles drawn. Those are the 150-foot radius that
13 would be the orthodox location positions in those
14 respective units.

15 Q. Let's look first at the red dot that's located in
16 the northwest of the northwest of Section 36. Do you see
17 that dot?

18 A. Yes.

19 Q. What does that represent?

20 A. The northwest of the northwest of 36 is a well
21 that's a standard location that we are currently in the
22 process of drilling.

23 Q. And that is a well to be drilled to the Strawn
24 formation?

25 A. Yes, that's right.

1 Q. The spacing unit that's dedicated to that well in
2 the northwest of the northwest is what, sir?

3 A. It is the north half of the northwest quarter.

4 Q. Okay. And so as we move down, then, below that
5 well in Unit Letter E of 36 --

6 A. Yes, sir.

7 Q. -- you have another red dot?

8 A. Yes, that is the proposed location that's the
9 subject of this hearing.

10 Q. And the spacing unit then would be the --

11 A. -- south half of the northwest quarter.

12 Q. -- south half of the northwest quarter?

13 A. Right.

14 Q. Within each of those two 40-acre tracts,
15 approximately at the center, there is a blue circle in each
16 of those 40-acre tracts?

17 A. That's correct.

18 Q. What does that represent?

19 A. That's the 150 foot from the radius from the
20 center of that quarter-quarter section that an orthodox
21 location would have to be drilled at.

22 Q. All right. Describe for us how you interpret the
23 display and what has caused you to propose to locate this
24 well where the red dot is, rather than within the
25 boundaries of either of the two circles.

1 A. The key to this prospect -- You can see in the
2 southeast quarter of the northwest quarter of 36 is a well
3 Sohio drilled, the State 36 Number 1.

4 Q. All right, I'm having trouble seeing it. If you
5 see the word "State" --

6 A. State 36, the black dot is just to the --

7 Q. Just to the west of the "S"?

8 A. -- the west in a map view of that "S".

9 Q. All right, tell me about that well.

10 A. That well was a producer in the Shipp-Strawn
11 field. Actually, I didn't plot it on here, but in the
12 files at the Commission the bottomhole location of that
13 well is actually 200 feet to the north and then another
14 hundred feet to the west, which in our geologic
15 interpretation puts it in the thinnest area of this
16 isopach.

17 It still was completed and produced, in round
18 numbers, about 10,000 barrels of oil from the Strawn.
19 That's really the basis of our prospect, of this section.

20 The orthodox location we are drilling in the
21 northwest of the northwest is honoring that show well, plus
22 drilling in the thickest part of the reservoir in that
23 spacing unit. We feel like the well Sohio drilled at an
24 orthodox location is probably on the edge or the very, very
25 flank position of an additional part of the reservoir

1 that's going to be to the southeast of where they drilled.

2 We feel like to make a successful well we need to
3 move the location to the southeast, towards the thickest
4 part of that reservoir, based on our interpretation.

5 Q. And either of the two existing standard well
6 location opportunities do not achieve that objective?

7 A. No, sir.

8 Q. All right. Let's turn your attention now to the
9 well in Section 26.

10 A. Yes, sir.

11 Q. Describe for us, when we look at the same
12 display, now, what the spacing unit is and how it's
13 outlined on that display.

14 A. That spacing unit proposed is a laydown 80, which
15 would be the south half of the southwest quarter of Section
16 26.

17 This is -- There's essentially no well control on
18 this prospect. This is a -- if you will, purely a seismic
19 prospect with respect to this spacing unit.

20 The well, as you can see, is proposed in Unit M.
21 The blue circle that's drawn would be the standard location
22 in Unit M.

23 Q. The objective of the proposed unorthodox location
24 is to take advantage not only of potential reservoir
25 thickness but structural position?

1 A. Yes. We would need to look at Exhibit 4 to show
2 the structural interpretation.

3 Q. All right, sir, let's do that. Identify Exhibit
4 4 for us.

5 A. Exhibit 4 is a structure map of the same area
6 drawn on the top of the Strawn formation.

7 In Section 26 is shown -- The green dot would be
8 the orthodox location if it was drilled exactly in the
9 center of the quarter-quarter section. The orange dot is
10 the location we're proposing.

11 Q. What do you achieve at the unorthodox location
12 that you can't obtain at the standard location?

13 A. Well, we're gaining quite a bit of structure as
14 well as staying in the thickest part of the reservoir, and
15 without any shows or any near wells to go by, we feel like
16 we have to take advantage of the structural position and
17 the thickness to give us a chance to have a successful
18 well.

19 Q. Were Exhibits 3 and 4 prepared by you or compiled
20 under your direction and supervision?

21 A. Yes, sir.

22 Q. And you have verified the accuracy of the survey
23 plats, Exhibits 1 and 2?

24 A. Yes, sir.

25 Q. They were prepared by a licensed surveyor working

1 under your direction?

2 A. Yes, sir.

3 Q. In your opinion, will approval of this
4 Application be in the best interests of conservation, the
5 prevention of waste and the protection of correlative
6 rights?

7 A. Yes, sir.

8 MR. KELLAHIN: That concludes my examination of
9 Mr. Thomson. We move the introduction of his Exhibits 1,
10 2, 3 and 4.

11 EXAMINER STOGNER: Exhibits 1, 2, 3 and 4 in
12 consolidated Cases 11,008 and 11,009 will be admitted into
13 evidence.

14 EXAMINATION

15 BY EXAMINER STOGNER:

16 Q. Mr. Thomson, referring to Exhibit Number 3, and
17 that's the Exhibit I'll be asking the questions on, going
18 to that well in Unit E of Section 36, the old well --

19 A. Yes, sir.

20 Q. -- could you go into a little more detail about
21 the history of that, when it was drilled, who drilled it,
22 and was it a directional-drill intent, or did you have a
23 bottomhole survey or something?

24 A. It was drilled -- I can't remember, Mr. Examiner,
25 if it was drilled in late 1987 or early 1988. I know it

1 was plugged in 1989. It was a -- It was planned and
2 drilled as a vertical hole. The directional survey I found
3 in the Commission's files in Hobbs, by DIG, Incorporated,
4 they did a multi-shot of the open hole -- or actually I
5 guess they did a multi-shot of the open hole and then they
6 did a gyro survey of the intermediate hole.

7 Q. Who drilled that?

8 A. Operator?

9 Q. I mean, who was the operator again?

10 A. Sohio Petroleum.

11 Q. Sohio, okay.

12 A. Yes, sir.

13 Q. I couldn't remember if it was someone else.

14 On this exhibit there are a lot of dots spread
15 out in a grid system.

16 A. Yes, sir.

17 Q. Do those represent anything?

18 A. They are data points on the 3-D seismic survey,
19 receiver points, if you will.

20 Q. And this is the points which you obtained data
21 from to establish this exhibit?

22 A. Yes, sir.

23 Q. Now, as far as geologically speaking, I know
24 we've heard this several times, but what is the structure
25 in the Strawn pods in this area? Could you go into a

1 little more detail on that?

2 A. In general, these are algal mound buildups. You
3 hear the word "reef" used from time to time; it's not a
4 true reef, but it is a reeflike structure. It depends on
5 vertical growth from a base. The base in this particular
6 area is the Atoka.

7 The geology in the area, I guess, that is going
8 on today is, the larger mounds, if you will, have been
9 discovered, produced, basically depleted. We're playing
10 out on the flanks of some of the major fields, the Shipp
11 and the West Kno and Casey and some of the others.

12 What we're chasing is erosional remnants of
13 mounds that are left. The flow patterns around some of the
14 larger mounds eroded and cut channels in, I guess, some of
15 the flanking mounds, and that's the erosional remnants that
16 we're chasing. They're very small and very hard to find.

17 Q. In the well in Section 36, if I remember right,
18 it was stated by your testimony that the offsetting three
19 quarter-quarter sections that this well is encroaching upon
20 is all common interest?

21 A. Yes, sir.

22 Q. Do you know, is that a state lease, state common
23 school lease?

24 A. That is a state lease. That state lease covers
25 the north half of the section and the southeast quarter --

1 No, excuse me, the southwest quarter. The southeast
2 quarter is HBP.

3 Q. Are you anticipating these wells to be on pump or
4 pump-jack or...

5 A. There's only one or two wells I know of that have
6 been completed in the Strawn that never went on pump.

7 Q. I mean, were they all put on pump-jack, or did
8 they have submersible pumps of any kind?

9 A. I do not know of any submersible pumps.

10 EXAMINER STOGNER: Okay. Any other questions of
11 this witness?

12 You may be excused.

13 MR. KELLAHIN: That concludes our presentation,
14 Mr. Examiner.

15 EXAMINER STOGNER: Does anybody else have
16 anything further in either Case 11,008 or 11,009?

17 With that, both cases will be taken under
18 advisement.

19 (Thereupon, these proceedings were concluded at
20 10:25 a.m.)

21 * * *

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case Nos. 11008 and 11009
25 heard by me on 23 June 1994.

 , Examiner
Oil Conservation Division

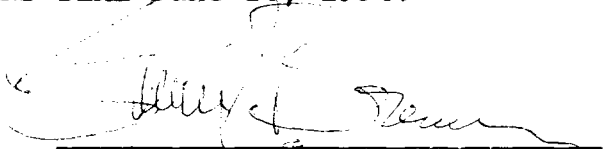
1 CERTIFICATE OF REPORTER

2
3 STATE OF NEW MEXICO)
4) ss.
COUNTY OF SANTA FE)

5
6 I, Steven T. Brenner, Certified Court Reporter
7 and Notary Public, HEREBY CERTIFY that the foregoing
8 transcript of proceedings before the Oil Conservation
9 Division was reported by me; that I transcribed my notes;
10 and that the foregoing is a true and accurate record of the
11 proceedings.

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

16 WITNESS MY HAND AND SEAL June 26, 1994.

17
18 
19 STEVEN T. BRENNER
CCR No. 7

20
21 My commission expires: October 14, 1994
22
23
24
25