

1 NEW MEXICO OIL CONSERVATION DIVISION

2 STATE LAND OFFICE BUILDING

3 STATE OF NEW MEXICO

4 CASE NO. 10406

5

6 IN THE MATTER OF:

7 The Application of Amoco Production

8 Company for a Secondary Recovery

9 Project, Lea County, New Mexico.

10

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12

13 BEFORE:

14 MICHAEL E. STOGNER

15 Hearing Examiner

16 State Land Office Building

17 October 31, 1991

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21 REPORTED BY:

22 CARLA DIANE RODRIGUEZ
23 Certified Shorthand Reporter
24 for the State of New Mexico

24

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ORIGINAL

A P P E A R A N C E S

FOR THE NEW MEXICO OIL CONSERVATION DIVISION:

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FOR THE APPLICANT:

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BY: WILLIAM F. CARR, ESQ.

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BY: ERNEST L. PADILLA

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WITNESSES FOR THE APPLICANT:

1. DANIEL A. JANIK, JR.

Examination by Mr. Currens

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Examination by Mr. Padilla

20

Examination by Mr. Stogner

21

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1 EXAMINER STOGNER: Call next case, No.
2 10406.

3 MR. STOVALL: And a Happy Halloween to
4 the application of Amoco Production Company for a
5 secondary recovery project, Lea County, New
6 Mexico.

7 EXAMINER STOGNER: Call for
8 appearances.

9 MR. CURRENS: Mr. Examiner, Dan
10 Currens, Amoco Production Company.

11 MR. PADILLA: Mr. Examiner, Ernest L.
12 Padilla, Santa Fe, New Mexico, for John H.
13 Hendricks Corporation. I have no witnesses.

14 EXAMINER STOGNER: Are there any other
15 appearances? Mr. Currens.

16 MR. CURRENS: Thank you, Mr. Examiner.
17 I was going to have one witness that will need to
18 be sworn.

19 (The witness was sworn.)

20 MR. CURRENS: This, of course, as
21 you've just said, is Amoco's application to
22 initiate a water injection program in the Fowler,
23 Upper Yeso pool in Lea County. My one witness
24 has been sworn.

25 DANIEL A. JANIK, JR.

1 Having been first duly sworn upon his oath, was
2 examined and testified as follows:

3 EXAMINATION

4 BY MR. CURRENS:

5 Q. Would you state your name, please.

6 A. My name is Daniel A Janik, Jr.

7 Q. By whom are you employed, Mr. Janik?

8 A. Amoco Production Company.

9 Q. In what capacity?

10 A. In the capacity of a petroleum engineer
11 in Houston, Texas.

12 Q. In conjunction with your duties as a
13 petroleum engineer with Amoco Production Company,
14 have you had occasion to prepare certain exhibits
15 for presentation at this hearing today?

16 A. Yes, I have.

17 Q. You're familiar with the application
18 and the elements that are involved therein?

19 A. Yes, I am.

20 Q. Have you testified before this Division
21 before?

22 A. Yes, I have.

23 Q. And your qualifications have been
24 accepted?

25 A. Yes, they have.

1 MR. CURRENS: I would offer Mr. Janik
2 as being qualified as an expert petroleum
3 engineer in this matter.

4 EXAMINER STOGNER: Mr. Janik is so
5 qualified.

6 Mr. Currens, before we go any further,
7 I believe on the record we should, maybe, clarify
8 your qualifications as far as being able to serve
9 in your capacity today.

10 MR. CARR: May it please the Examiner,
11 my name is William F. Carr with the law firm
12 Campbell, Carr, Berge & Sheridan of Santa Fe.

13 Mr. Currens is appearing in association
14 with me, and I have entered an appearance in this
15 case.

16 EXAMINER STOGNER: Thank you, Mr. Carr.

17 Q. (BY MR. CURRENS) Mr. Yanik, directing
18 your attention to what's been marked as Amoco's
19 Exhibit No. 1, please tell us what's shown there?

20 A. Exhibit No. 1 is a location map. The
21 red arrow on the map indicates the Fowler field,
22 being in the southeast portion of Lea County, New
23 Mexico. The map also has some other offsetting
24 fields on the map.

25 Q. All right. Moving on to Exhibit 2,

1 what do you show us on Exhibit 2, please?

2 A. Exhibit 2 is a plat map for the South
3 Mattix Federal Unit which is located in the
4 Fowler field. This map indicates all wells in
5 the South Mattix Unit.

6 We would point out that in the legend
7 in the lower left-hand corner, the dark circles
8 indicate current wells in the unit. The open
9 circles indicate proposed wells that would need
10 to be drilled as part of our proposed water
11 injection project. The larger open circle
12 indicates a proposed new producer that would need
13 to be drilled in the Fowler, Upper Yeso, and the
14 smaller open circles, four of those, indicate
15 injection wells that would need to be drilled.

16 Q. There are a number of wells that don't
17 have any circles around the well symbols. Does
18 the South Mattix Unit produce from a number of
19 different pools?

20 A. That is correct. As the legend
21 indicates, those dark dots with the circles
22 around it are those that are currently in the
23 Fowler, Upper Yeso. The other ones are in other
24 horizons.

25 Q. Let me direct your attention to Exhibit

1 No. 3, and very briefly, please, tell us what you
2 show there.

3 A. Exhibit No. 3 is a Pertinent Data
4 Sheet, and the title says "Pertinent Data Sheet,
5 Fowler (Upper Yeso) Field." More correctly, that
6 should be stated "Pertinent Data Sheet, Fowler
7 (Upper Yeso) Pool."

8 The data indicated here is general
9 data, such as the discovery well, and the number
10 of wells; the producing mechanism, being
11 solution-gas drive.

12 There is some formation data toward the
13 middle of the page, and fluid data also. Toward
14 the bottom of this exhibit there's some reserve
15 data. I would point out that there's two columns
16 of reserve data there, one entitled "Field."
17 Field, again should be "Pool." It's the reserve
18 data for the Fowler, Upper Yeso Pool. And the
19 SMUF column stands for South Mattix Unit Federal,
20 and those reserve data are associated with the
21 South Mattix Federal Unit, again Fowler, Upper
22 Yeso Pool.

23 Q. All right. How many wells are
24 producing on the South Mattix Unit from the Upper
25 Yeso?

1 A. 15, currently.

2 Q. What's your current production?

3 A. That's also indicated at the very
4 bottom of Exhibit No. 3. The current production
5 in the South Mattix Federal Unit, from the
6 Fowler, Upper Yeso Pool, is 100 barrels of oil
7 per day, which would indicate that with 15 wells,
8 on an average you're talking a little less than
9 seven barrels a day per well on an average.

10 Q. Okay. Anything else that you want to
11 direct our attention to on that exhibit?

12 A. No.

13 Q. What's Exhibit 4?

14 A. Exhibit No. 4 is a portion of a gamma
15 ray sonic log of the Pan American Petroleum
16 Corporation, now Amoco, South Mattix Unit No.
17 16. A portion of this log is being used as a
18 type log for the Fowler, Upper Yeso Pool.

19 Q. What do you show on that log?

20 A. The Fowler, Upper Yeso Pool consists of
21 the Lower Paddock and the Blinebry. Indicated on
22 this type log, the Lower Paddock begins at 5088
23 feet and the top of the Blinebry begins at 5231
24 feet. Basically the entire Fowler, Upper Yeso
25 Pool is indicated on this type log.

1 I would also want to point out that in
2 the right-hand margin, where there's some average
3 porosity and permeability data, there's also some
4 zonation indicated; for example Zone 1, Zone 2,
5 et cetera. We would point out this is strictly
6 an Amoco convention for zoning this pool.

7 Q. It's done for reservoir work?

8 A. That is correct.

9 Q. Okay. Anything else on Exhibit 4?

10 A. No.

11 Q. Let's go to Exhibit No. 5, please,
12 which looks like a performance curve?

13 A. That's correct. Exhibit No. 5 is a
14 performance curve for the South Mattix Unit,
15 Fowler, Upper Yeso production.

16 Basically the predominant curves are in
17 the bottom half of this plot, and the legend on
18 the left-hand side indicates what the different
19 curves are indicating. You see the curve made of
20 open circles is oil production. You can see that
21 the oil production for the Fowler, Upper Yeso
22 Pool in the South Mattix Unit's production from
23 1970 to 1991, you can see it had over 700 barrels
24 of oil per day in 1973 and is down now to the
25 current 100 barrels of oil per day.

1 Other curves on this plot, the X's
2 indicate the cumulative oil production. The
3 triangles indicate gas production, and the
4 squares indicate water production. We would
5 indicate that the low water production again
6 indicates we are looking at a solution-gas drive
7 here.

8 Q. Okay. Anything else on that one?

9 A. No.

10 Q. Let's look, then, at Exhibit No. 6.
11 What do you show us on Exhibit 6?

12 A. Exhibit No. 6 is a map of the South
13 Mattix Unit area, this time with the proposed
14 injection pattern that Amoco is proposing as part
15 of this water injection project.

16 The legend to the left indicates what
17 the various dots and symbols represent. The
18 solid green dots indicate producing wells
19 currently in the Fowler, Upper Yeso Pool in the
20 South Mattix Unit. The open red circle indicated
21 in #40, is the proposed producer that would need
22 to be drilled as part of this project.

23 EXAMINER STOGNER: I'm sorry, which one
24 was that?

25 THE WITNESS: #40. It's in the

1 triangle portion to the south of the pattern, and
2 it's an open red circle.

3 A. The open red circles with the blue
4 arrows indicate the four injection wells that
5 would need to be drilled for the proposed
6 waterflood project. Those are wells numbered 41,
7 42, 43 and 44.

8 Also, we have green circles with blue
9 arrows. Those indicate the three wells that
10 would have to be converted to Fowler, Upper Yeso
11 injection wells, and those are wells numbered 21,
12 33 and 35.

13 Q. Okay. Now, with respect to these five
14 wells that are to be drilled, one a producer and
15 four injectors, have we physically staked those
16 locations and looked at them on the ground and
17 seen that they're satisfactory locations?

18 A. Yes, we have, and that's what's
19 indicated at the bottom of the exhibit on
20 approved locations. Those locations have been
21 staked.

22 Q. Otherwise these would be nonstandard
23 locations, and we're seeking approval of those
24 nonstandard locations in conjunction with this
25 hearing today for our waterflood?

1 A. That is correct. As you can tell, the
2 pattern is a somewhat modified 25-acre five spot,
3 which would require unorthodox locations, but we
4 feel this is an efficient pattern.

5 Q. All right, sir. Nothing else on
6 Exhibit 6?

7 A. No.

8 Q. Exhibit 7 appears to be a tabulation of
9 all the injection well locations that we would be
10 utilizing initially in this pilot waterflood
11 area, is that right?

12 A. That is correct. Listed on Exhibit No.
13 7 are the injection wells. You'll notice that
14 Well Nos. 21, 33 and 35, those are the three
15 conversions, Wells 41, 42, 43 and 44 would be the
16 newly drilled injection wells, and on this
17 exhibit are the footage locations for each of
18 these injection wells.

19 Q. Okay. How are these injection wells to
20 be equipped?

21 A. This is shown on Exhibit 8, which is a
22 typical wellbore sketch for these proposed
23 injection wells. Basically, the schematic of
24 Exhibit 8 indicates that injection would take
25 place through 2-3/8" tubing set on a packer, with

1 injection occurring into the perms from 5200 to
2 5600 feet.

3 I would point out, as we indicated In
4 our Form C-108, this tubing would be plastic
5 coated.

6 Q. Okay. How do you intend that injection
7 control or control of the injection volumes and
8 pressure be accomplished?

9 A. I would direct your attention to
10 Exhibit No. 9, which is a schematic of the
11 automation that we plan for this project.

12 On the left-hand side of this schematic
13 you see RTU, which is the remote terminal unit,
14 and basically the other items indicated there are
15 transducers tied to the pressure gauges. You've
16 got an actuator valve and a turbine meter.

17 Basically what we're saying is that
18 tied to automation we will be able to control the
19 injection into each injection well based on rate
20 and/or surface pressure.

21 Q. So this is a method by which we can
22 accomplish whatever pressure limitations go with
23 this injection project?

24 A. That is correct.

25 Q. The conventional .2 psi per foot that

1 the commission standard is, that can be
2 accomplished through this?

3 A. That is correct.

4 Q. Okay. What do you show on Exhibit No.
5 10, Mr. Yanik?

6 A. Exhibit No. 10 is the cost estimate for
7 this waterflood project or water injection
8 project.

9 I would direct your attention to the
10 total, the total for the drilling and the
11 equipping of this project is 1.641 million
12 dollars.

13 Q. Okay. Do you have an exhibit that
14 shows us what we hope to accomplish by this
15 particular injection program we're proposing
16 here?

17 A. Yes, I do. That is Exhibit No. 11.
18 Exhibit 11 has two forecasted production curves
19 on it. First, the solid green line or curve is
20 the forecasted barrels of oil per day production
21 for the South Mattix Unit, Fowler, Upper Yeso
22 pool, without a water injection project.

23 The dotted green line with blue X's
24 indicates the forecasted production of this pool
25 in the South Mattix Unit with the water injection

1 project that we are proposing. This was based on
2 the Craig model, which is a standard used in the
3 industry.

4 Q. I noticed that this has a title of
5 "Waterflood Area Profile," so I take it that
6 this is not all of the Upper Yeso production from
7 the South Mattix Unit federal lease, but just
8 from this waterflood area?

9 A. That is correct.

10 Q. Are there a couple of other matters
11 that we need to cover here?

12 A. I would say that still on Exhibit No.
13 11, that this incremental that's indicated on the
14 curve, results in an estimated 733,000 barrels of
15 additional oil being produced.

16 Q. All right. Again, just from this pilot
17 area?

18 A. That is correct.

19 Q. And, of course, the results of what we
20 get from the pilot have to do with whatever else
21 may happen in the future?

22 A. That is correct.

23 Q. Okay. Now, a couple of other matters
24 you have, I believe?

25 A. Yes. Exhibit No. 12 we've included

1 based on our examination of the C-108 that we
2 filed, and it appears that we inadvertently, in
3 the C-108, did not include a map with the circles
4 around the proposed injection wells. We did
5 include a map, but I don't believe the circles
6 were on them.

7 What Exhibit 12 is, is the boundary
8 that results from putting the half-mile radius
9 circles around each injection well, so this just
10 shows what that boundary is.

11 I would also mention that Exhibit No.
12 13 is associated with this same boundary and
13 indicates the well data for wells within the--

14 Q. The pink circle?

15 A. The pink circle.

16 Q. The pink outline? Let's not call it a
17 circle. The pink outline?

18 A. Right. It's a composite boundary of
19 the circles drawn for each injection well.

20 Q. Now, with respect to all of these wells
21 that are within those radii, do those wells
22 appear to be satisfactorily equipped with respect
23 to fresh water protection?

24 A. Yes, they do. They're all sufficient
25 to protect the one zone that could possibly be

1 fresh water productive in this area, the
2 Ogallala, although this is really a fresh-water
3 poor area, and we really don't know of any
4 fresh-water source wells in the vicinity nor any
5 windmills.

6 Q. What's going to be our water source out
7 here?

8 A. The water source for our injection
9 project will be the produced Upper Yeso water,
10 produced Ellenburger water, and we believe this
11 will be sufficient for this water injection
12 project.

13 However, if we would need additional
14 water in the future, the Texaco Jal water system
15 would be the additional source.

16 Q. Mr. Yanik, did you provide notice to
17 the parties as required by the Rules?

18 A. Yes, I did.

19 Q. Do you have the proof of--the green
20 cards? the return cards?

21 A. Yes, I do.

22 MR. CURRENS: I would give these to
23 you.

24 MR. STOVALL: Mr. Currens, would you,
25 and you may want to consult with Mr. Carr as far

1 as providing an affidavit of notice that's
2 required?

3 MR. CURRENS: All right, sir. With his
4 testimony that he had done so, I had not brought
5 an affidavit, but I certainly will prepare one.

6 MR. STOVALL: It's easier to have the
7 affidavit and the list of names.

8 MR. CURRENS: Yes, sir. We will supply
9 that.

10 Q. (BY MR. CURRENS) Mr. Yanik, do you
11 expect that the approval of Amoco's application
12 here today would give us an opportunity to
13 recover hydrocarbons that would otherwise not be
14 recoverable, while still protecting correlative
15 rights within the area?

16 A. Yes, I do.

17 Q. Do you have anything further?

18 A. No.

19 MR. CURRENS: Mr. Examiner, I would
20 offer Exhibits 1 through 13, and offer Mr. Yanik
21 for any questions.

22 EXAMINER STOGNER: Exhibits 1 through
23 13 will be admitted into evidence.

24 Mr. Padilla, I would open up any
25 questioning to you.

1 MR. PADILLA: I just have a couple of
2 questions, Mr. Examiner.

3 EXAMINATION

4 BY MR. PADILLA:

5 Q. Mr. Yanik, looking at your Exhibit No.
6 6, it's my understanding that this simply shows a
7 pilot project as far as the initial injection is
8 concerned, correct?

9 A. That is probably correct. I just want
10 to specify that sometimes people have a
11 connotation that a pilot is not economical on its
12 own and it's strictly to provide data. In this
13 case I believe what we've indicated is, we expect
14 this area to be an economical project. However,
15 it is correct in that it is like a pilot in that
16 we hope to gain information that could then be
17 used in the future for possible expansion to a
18 larger unit.

19 Q. Do you have any plans now for expansion
20 beyond what is shown on this exhibit?

21 A. At this time, no, until we can study
22 the results of this area.

23 Q. Would you have to come back to the
24 Division to seek further permission at the time
25 that you expand the project?

1 A. Yes, we would.

2 MR. PADILLA: I have nothing further,
3 Mr. Examiner.

4 EXAMINER STOGNER: Thank you, Mr.
5 Padilla.

6 EXAMINATION

7 BY EXAMINER STOGNER:

8 Q. Mr. Yanik, in looking at Exhibit No. 4,
9 you show the perforated interval being 5160 to
10 5180 in this particular well, and then the bounds
11 of the pool as being from 5088 feet to 5231 feet,
12 is that correct?

13 A. No. The bounds of the pool,
14 essentially, it's the entire Lower Paddock, which
15 begins at 5088, but then it's the entire
16 Blinebry. What I indicated here was the top of
17 the Blinebry at 5231, but it essentially goes to
18 the top of the Tubb, which is indicated on
19 Exhibit 4 at 5815.

20 However, you saw on our schematic of
21 our injection wells, we're looking at injecting
22 really more around 52- to 5600, thereabouts.
23 That's because the bottom portion which we've
24 indicated as our Zone 4, is not considered pay.

25 Q. Is the Blinebry a part of the Upper

1 Yeso pool?

2 A. Yes. This was combined. At one time
3 there was a Lower Paddock reservoir or pool and a
4 Blinebry, and those were combined. The Fowler,
5 Upper Yeso is, by definition, the Lower Paddock
6 and the Blinebry.

7 Q. Do you know when it was combined?

8 A. Yes. I can look that up. This was
9 Order No. R-3987, consolidating the
10 Fowler-Blinebry and Fowler-Lower Paddock pools
11 into the Fowler, Upper Yeso pool, Lea County, New
12 Mexico, July 15, 1970.

13 Q. Now, most of your injection wells will
14 be injecting into what portion of this formation
15 or pool?

16 A. They will be injecting in that Lower
17 Paddock and a bulk of the Blinebry, but not that
18 bottom hundred feet or so.

19 Q. So, using this as a type log, anything
20 from 5088 to about--

21 A. --about 5650 or so.

22 Q. 5650. That's fair game, essentially,
23 in your application today?

24 A. Uh-huh. You know, actually I guess
25 our--that's right. That's correct, because we

1 don't anticipate any injection in that bottom
2 portion of the Blinebry.

3 Q. In the volumes and pressures that
4 you're planning to inject, I might have missed
5 the numbers. What is your maximum injection
6 pressure that you're requesting?

7 A. We included that in our C-108, and--

8 Q. I don't seem to have that. That was
9 mailed earlier, I would assume?

10 A. Yes. That was earlier in October.

11 MR. CURRENS: We can sure send you
12 another copy.

13 Q. I will check with David Catanach or the
14 Director. I have a feeling he might have it on
15 his desk somewhere.

16 MR. STOVALL: And we'll incorporate
17 that into the record?

18 EXAMINER STOGNER: I better do that.
19 I'll dig it up and make sure it gets placed on
20 the record.

21 Q. So I might be asking some questions
22 that you have that information on. I'm sorry.

23 A. That's all right. What we anticipate
24 is an estimated average injection pressure of 200
25 psig with an estimated maximum injection pressure

1 which would be, what we're requesting, of 800
2 psig. 800 psig, again below the .2 psi, which
3 would be the standard.

4 Q. Looking at Exhibit No. 8, which is your
5 typical wellbore sketch for an injection well,
6 will the pipe or your tubing, will it be lined?

7 A. Yes. It will be plastic coated, that
8 is correct.

9 Q. Now referring to Exhibit No. 13 at this
10 time, in scanning this exhibit, I'll go down to
11 Well #9 on the first page, I believe it's the
12 fifth one down?

13 A. Yes.

14 Q. Okay. This well is currently producing
15 out of what zone?

16 A. #9 is currently producing as an Upper
17 Yeso well.

18 Q. It appears like it was a deeper test
19 when it was drilled, or according to this
20 information, is that correct?

21 A. That is probably correct.

22 Q. When it was recompleted back up into
23 the Upper Yeso formation, did it undergo any
24 other cementing, squeeze jobs or anything like
25 that that you have on record, do you know?

1 A. Let me check if I've got that data with
2 me. Yes. I show a bridge plug at 5800 feet with
3 a cement cap. I show a bridge plug at 5700 feet
4 with a cement cap.

5 Q. Any squeeze outside of the casing?
6 What I'm getting at, it looks like your top of
7 cement is at 9700 feet in the production string,
8 and between 3814 and 9700 feet it appears that
9 the back side of the casing is open. Is that
10 what--or am I missing something?

11 A. Could you say that again?

12 Q. According to your diagram here or your
13 Exhibit No. 13, it appears that from 3814 feet,
14 which is the bottom of your 9-5/8" casing, to the
15 top of the production string of 9700 feet, it
16 appears that the production string is open to all
17 formations and not cemented.

18 A. Okay. Between--it appears, also above
19 that bridge plug on this sketch, I don't have it
20 listed here but it's marked--and it must not have
21 been indicated, I apologize--there were perms at
22 5258 to 5683, and there's indicated cement here
23 on the sketch. So there apparently was a squeeze
24 at that point.

25 MR. CURRENS: We can confirm that, Mr.

1 Examiner, send you additional data on it.

2 EXAMINER STOGNER: If you would. And
3 send me a--

4 MR. CURRENS: Wellbore sketch?

5 EXAMINER STOGNER: --wellbore schematic
6 of that.

7 MR. CURRENS: Yes.

8 A. It's got it indicated here, it just
9 doesn't specifically have the word "squeeze" at
10 this point.

11 Q. What I'm interested in is the top of
12 cement behind that production string, especially
13 in the injection interval--

14 MR. CURRENS: Yes, sir.

15 Q. --and immediately below and immediately
16 above.

17 A. All right.

18 Q. In Going through this Exhibit No. 13,
19 I'm kind of concerned a little bit on the Well
20 #4, the third one from the bottom. It looks like
21 the top of your cement behind the long string of
22 seven-inch, comes up to 5,287, and I'm wondering
23 if that is adequate to project any migration
24 within that half-mile. Might there be some, you
25 know open--

1 MR. CURRENS: Let us check further on
2 that one and supplement that as well.

3 EXAMINER STOGNER: If you would.

4 Q. Okay. Next page, it looks like Well
5 #21, if you could send additional information on
6 that for me.

7 A. Okay.

8 Q. Going on down, the #2H well, that's the
9 second one from the bottom.

10 MR. CURRENS: That's Exxon's AB.

11 A. Okay.

12 Q. That's all the ones I have at this
13 time. If you can supplement, what did I give you
14 four wells?

15 A. That's correct.

16 Q. If you can supplement this exhibit with
17 the schematics and additional information, I
18 would appreciate it.

19 A. Sure will.

20 Q. You give a figure on your--this is
21 referring to Exhibit No. 11. In your testimony
22 you give an estimated additional recovery of
23 something above 7,000 barrels. What was that
24 number again?

25 A. That was 733,000.

1 Q. 733,000 additional barrels of recovery?

2 A. Right. That is correct.

3 Q. I'm comparing Exhibit No. 2 and Exhibit
4 No. 6. I guess I'm a little confused. Bear with
5 me. The #41, 42, 43 and 44, those are proposed
6 injection wells to be drilled, right?

7 A. That is correct.

8 Q. The #21 will be an injector well to be
9 converted, right?

10 A. That is correct.

11 Q. The #40 will be a new producing well?

12 A. That is correct.

13 Q. #33 and 35, those appear on your
14 Exhibit #2 as just a black dot. I'm assuming
15 they're producing from some other formation at
16 this time?

17 A. That is right. In fact, #33 is
18 indicated as shut in, so those would be, as part
19 of the conversion, moving up into to the Fowler,
20 Upper Yeso, moving into that formation.

21 Q. Okay. Now, your estimated 700,000
22 barrels of additional recovery, is it just off of
23 this proposed pilot at this time?

24 A. Yes, from that area of the pilot.

25 Q. Will there be any--

1 A. There could possibly be some production
2 associated with this flood from some of those
3 wells around that, but the bulk would be from the
4 pattern as shown.

5 Q. If this pilot project appears to be
6 successful, are there any plans of Amoco at this
7 time to expand the project?

8 A. There is no plan definite now, but I
9 would say that the definite plan that is
10 established now is to do this project, use this
11 data, and it for sure will be evaluated and
12 brought to management's attention as to whether
13 it looks like this project could be expanded,
14 that is correct.

15 I can't promise what would occur
16 because of other projects and economics. I can't
17 confirm that. A lot will depend on what results
18 from this initial pilot area, if you will. We
19 will definitely look at the data here and make
20 that recommendation or show the results to
21 management.

22 Q. Okay. Now, the outlines of your
23 Exhibit No. 6 and Exhibit No. 2 showing the unit
24 boundary, that is a 100-percent federal unit, is
25 that correct?

1 A. That is correct.

2 Q. Could you give me a little run down of
3 the history of that unit, for the record?

4 A. I don't have it with me. Let's see if
5 I have anything here on that.

6 Q. Do you know when it was approved?

7 MR. CURRENS: Mr. Examiner, I can't
8 give you the precise date, but it was roughly
9 1950. Initial production was from the
10 Ellenburger about 50 to 52. In fact, all of the
11 early development was Ellenburger until, well, in
12 54 they had this first Yeso well which was
13 probably a Lower Paddock at that time.

14 A number of other horizons have been
15 explored in here, and it's produced from three or
16 four different horizons. Just very broadly.

17 EXAMINER STOGNER: And that's what I'm
18 looking for is broad information, because being a
19 federal unit, we really have no unit case file on
20 that. I believe we do have information on record
21 in our office from some independent sources, and,
22 with your information, I'll make an
23 administrative review of that particular
24 information.

25 MR. CURRENS: I'm telling you those

1 dates from my memory.

2 EXAMINER STOGNER: Actually, it was
3 approved on June 1, 1948 effective on June 1,
4 1948. So you did very good. There was an
5 enlargement of 160 acres approved in 1954.

6 A. And that's probably--you see, we have
7 that discovery well here in the Upper Yeso on the
8 Pertinent Data Sheet, February of 54.

9 Q. (BY EXAMINER STOGNER) The well
10 locations, let's see, which exhibit was that?
11 That was the list of the--

12 A. Exhibit No. 7? You're talking about
13 the injection well locations?

14 Q. Yes.

15 A. Yes. That's Exhibit No. 7.

16 Q. Have those wells been staked and
17 approved by the BLM?

18 A. They have been--the applications have
19 been sent in to the BLM. They've not been
20 approved yet by the BLM, but they have been
21 staked and these locations were okay as far as
22 what we could see in-house.

23 Q. But they are subject to--

24 A. --the BLM approval, that is correct.

25 Q. They could be subject to change, but

1 minor changes for surface resource?

2 A. That is correct. Although we feel that
3 by--because we had some original locations that
4 got approved in Amoco that were already revised
5 slightly, when they actually went out to the
6 field to stake them, so we feel these will
7 suffice as far as surface locations.

8 Q. I had just one other question here.
9 You give a tabulation of the current production,
10 and you said there were 15 wells in this unit
11 area at this time?

12 A. That was based on that plat, Exhibit
13 No. 2, I believe. The plat map, Exhibit No. 2,
14 indicated with the circles--the larger circles
15 around the dark dots, and those are the current
16 Upper Yeso wells in the South Mattix Unit that
17 are not shut in.

18 When we were talking about that 100
19 barrels of oil per day production, that was from
20 the producing wells. Now, there are additional
21 Upper Yeso wells, but as you note on Exhibit 2,
22 some of those are indicated as currently shut in.

23 Q. Of the wells that are going to be
24 directly affected by the proposed waterflood
25 project, what are current productions, average

1 productions per day on those wells, in particular
2 #39 and 27, have they reached stripper status?

3 A. Yes. Number 39 is producing two
4 barrels of oil per day. And what was the other
5 one you asked about, Mr. Examiner?

6 Q. #27.

7 A. 27 is even shut in. It last tested
8 one.

9 Q. How about some of the wells just
10 immediately around it, like the #10, the 20, the
11 9?

12 A. #10 is making seven barrels of oil per
13 day, #20, 13. And that's probably one of the
14 high ones. #9 is two. 22, eight barrels of oil
15 per day.

16 Q. So for all intents and purposes, this
17 could be classified as really a stripper area?

18 A. I believe that is correct.

19 EXAMINER STOGNER: Are there any other
20 questions of this witness?

21 Mr. Currens, does Amoco wish to request
22 a procedure for administrative authorization to
23 expand this area? And when I say "expand,"
24 putting in additional injection wells?

25 MR. CURRENS: Mr. Examiner, that

1 certainly would be convenient. We'll still have
2 to come back to the Division in that case, and I
3 think that would satisfy Mr. Padilla's
4 opportunity to look at it. And, yes, we would.

5 EXAMINER STOGNER: Why would it have to
6 go to hearing, Mr. Currens?

7 MR. CURRENS: Well, it wouldn't have to
8 go to hearing, but we would still have to come
9 back to the Division with that application.

10 EXAMINER STOGNER: I see what ear
11 you're saying. That's right. But an
12 administrative process?

13 MR. CURRENS: Yes.

14 MR. STOVALL: When you're talking about
15 Mr. Padilla, in terms of Hendricks getting notice
16 and the opportunity to review your application?

17 MR. CURRENS: Yes, sir.

18 EXAMINER STOGNER: For the record, Mr.
19 Padilla, where is the Hendricks' interest?

20 MR. PADILLA: Mr. Examiner, I'm not
21 really sure where it may be. I think it's on the
22 Exhibit No.--it may be part of the Conoco acreage
23 that is shown on that map.

24 EXAMINER STOGNER: In Section 10?

25 MR. PADILLA: In Section 10. It's the

1 exhibit with the pink circle around it. I know
2 their working interest is tied with Conoco's.

3 EXAMINER STOGNER: But it is a working
4 interest and not an operator?

5 MR. PADILLA: It may be an operator as
6 well. I don't know where it is.

7 EXAMINER STOGNER: Okay. But you were
8 served notice, or Hendricks was?

9 MR. PADILLA: Yes.

10 EXAMINER STOGNER: Other than the four
11 wellbore schematics and the affidavit for--

12 MR. STOVALL: In fact, I'll give you
13 the cards back, Mr. Currens, and you can attach
14 them to the affidavit.

15 EXAMINER STOGNER: Is there anything
16 further, Mr. Currens?

17 MR. CURRENS: I have nothing.

18 EXAMINER STOGNER: Mr. Padilla?

19 MR. PADILLA: I have nothing, Mr.
20 Examiner.

21 EXAMINER STOGNER: Mr. Carr?

22 MR. CARR: Nothing further.

23 EXAMINER STOGNER: Anybody else have
24 anything further?

25 MR. STOVALL: Not me.

1 EXAMINER STOGNER: If not, I'll hold
2 the record open pending additional information
3 and reserve the right to either reopen or,
4 perhaps, ask for some additional information.

5 MR. STOVALL: 10 days? Is that enough
6 time to get it in?

7 THE WITNESS: Oh, yes. We should be
8 able to send it in real quick.

9 EXAMINER STOGNER: In that case, that's
10 all we'll have on this particular case.

11 Let's take about a 10-minute recess.

12 (And the proceedings concluded.)
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18

19 I do hereby certify that the foregoing is
20 a complete record of the proceedings in
the Examiner hearing of Case No. 10406,
heard by me on 31 October 1991.

21 
22 Oil Conservation Division
23
24
25

CERTIFICATE OF REPORTER

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

I, Carla Diane Rodriguez, Certified
Shorthand Reporter and Notary Public, HEREBY
CERTIFY that the foregoing transcript of
proceedings before the Oil Conservation Division
was reported by me; that I caused my notes to be
transcribed under my personal supervision; 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 6,
1991.

CARLA DIANE RODRIGUEZ, RPR
Certified Shorthand Reporter No. 91