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November 26, 1990

HAND-DELIVERED

William J. LeMay, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
State Land Office Building
Santa Fe, New Mexico 87503

RECEIVED

OIL CONSERVATION DIVISION

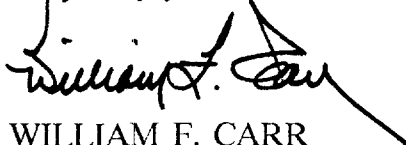
Case 10180

Re: In the Matter of the Application of Harvey E. Yates Company for
Compulsory Pooling, Eddy County, New Mexico

Dear Mr. LeMay:

Enclosed in triplicate is the Application of Harvey E. Yates Company in the above-referenced case. Harvey E. Yates Company respectfully requests that this matter be placed on the docket for the December 19, 1990 Examiner hearings.

Very truly yours,


WILLIAM F. CARR

WFC:mlh

Enclosures

cc w/enclosure: Ms Shari Darr

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November 28, 1990

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NOV 28 1990

OIL CONSERVATION DIVISION

Case 10180

HAND-DELIVERED

William J. LeMay, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
State Land Office Building
Santa Fe, New Mexico 87503

Re: In the Matter of the Amended Application of Harvey E. Yates Company for
Compulsory Pooling, Eddy County, New Mexico

Dear Mr. LeMay:

Enclosed in triplicate is the Amended Application of Harvey E. Yates Company in the
above-referenced case. Harvey E. Yates Company respectfully requests that this matter
be placed on the docket for the December 19, 1990 Examiner hearings.

Very truly yours,



WILLIAM F. CARR

WFC:mlh

Enclosures

cc w/enclosure: Ms Shari Darr

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

January 9, 1991

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE NEW MEXICO 87504
15051827-5800

Mr. William F. Carr
Campbell & Black
Attorneys at Law
Post Office Box 2208
Santa Fe, New Mexico

Re: CASE NO. 10180
ORDER NO. R-9402

Applicant:

Harvey E. Yates Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Division order recently entered in the subject case.

Sincerely,

Florene Davidson

FLORENE DAVIDSON
OC Staff Specialist

Copy of order also sent to:

Hobbs OCD X
Artesia OCD X
Aztec OCD

Other Thomas Kellahin

HEYCO

PETROLEUM PRODUCERS



HARVEY E. YATES COMPANY

P.O. BOX 1933

ONE SUNWEST CENTRE

505/623-6601

FAX 505/622-4221

ROSWELL, NEW MEXICO 88202-1933

February 11, 1991

OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case Number 10180
Order Number R-9402
HEYCO's West Taylor 12 Fed. #1

Gentlemen:

Harvey E. Yates Company (HEYCO) has reached voluntary agreement from all parties subject to the force-pooling provisions of Order Number R-9402.

Very truly yours,

Shari A. Darr
Landman

SAD/sm

CC Meridian Oil, Inc., Attn.: Don Davis
Chevron USA Inc., Attn.: James Baca

wstaylor.oc2/LL

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. 10180
 APPLICATION OF HARVEY E. YATES)
 COMPANY FOR COMPULSORY POOLING,)
 EDDY COUNTY, NEW MEXICO.)
 -----)

REPORTER'S TRANSCRIPT OF PROCEEDINGSEXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

December 19, 1990

8:30 a.m.

Santa Fe, New Mexico

This matter came on for hearing before the Oil
 Conservation Division on December 19, 1990, at 8:30 a.m.
 at the Oil Conservation Division Conference Room, State
 Land Office Building, 310 Old Santa Fe Trail, Santa Fe,
 New Mexico, before Maureen R. Hunnicutt, RPR, Certified
 Shorthand Reporter No. 166, for the State of New Mexico.

FOR: OIL CONSERVATION
 DIVISION

BY: MAUREEN R. HUNNICUTT, RPR
 Certified Shorthand Reporter
 CSR No. 166

I N D E X

December 19, 1990
 Examiner Hearing
 CASE NO. 10180

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APPEARANCES

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GORDON YAHNEY

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* * *

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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.
HARVEY E. YATES Attorneys at Law
COMPANY: BY: WILLIAM F. CARR, ESQ.
110 North Guadalupe
Santa Fe, New Mexico 87501

FOR MERIDIAN, INC.: KELLAHIN, KELLAHIN & AUBREY
Attorneys at Law
BY: W. THOMAS KELLAHIN, ESQ.
117 North Guadalupe
Santa Fe, New Mexico 87501

* * *

1 EXAMINER STOGNER: I'll call Case No. 10180.

2 MR. STOVALL: Application of Harvey E. Yates Company
3 for compulsory pooling, Eddy County, New Mexico.

4 EXAMINER STOGNER: Call for appearances.

5 MR. CARR: May it please the Examiner, my name is
6 William F. Carr, with the law firm Campbell & Black, P.A.,
7 of Santa Fe. I represent Harvey E. Yates Company, and I
8 have two witnesses.

9 EXAMINER STOGNER: Are there any other appearances?

10 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of the
11 Santa Fe law firm of Kellahin, Kellahin & Aubrey,
12 appearing on behalf of Meridian, Inc.

13 EXAMINER STOGNER: Do you have any witnesses,
14 Mr. Kellahin?

15 MR. KELLAHIN: No, sir.

16 EXAMINER STOGNER: Are there any other appearances?

17 Will the witnesses please stand and be sworn?

18 (The witnesses were duly sworn.)

19 EXAMINER STOGNER: Mr. Carr.

20 SHARI DARR,
21 the Witness herein, having been first duly sworn, was
22 examined and testified as follows:

23 DIRECT EXAMINATION

24 BY MR. CARR:

25 Q. Will you state your full name and place of

1 residence?

2 A. Shari Ann Darr, Roswell, New Mexico.

3 Q. And how do you spell Shari?

4 A. S-h-a-r-i.

5 Q. Ms. Darr, by whom you are employed and in what
6 capacity?

7 A. Employed by Harvey Yates Company as a petroleum
8 landman.

9 Q. Have you previously testified before the oil
10 conservation division?

11 A. No.

12 Q. Would you briefly summarize your educational
13 background and then review work experience for Mr.
14 Stogner?

15 A. I attended the University of Texas and received
16 my petroleum land management degree in 1981. I've been
17 employed by Harvey Yates Company since 1976. I've been a
18 certified -- I am a certified professional landman and
19 serve in that capacity now.

20 Q. Are you familiar with the application filed in
21 this case on behalf of Harvey E. Yates Company?

22 A. Yes.

23 Q. Are you familiar with the subject area?

24 A. Yes.

25 MR. CARR: Are the witness's qualifications

1 acceptable?

2 EXAMINER STOGNER: They are.

3 Q. (By Mr. Carr) Ms. Darr, would you briefly
4 state what Harvey E. Yates Company seeks with this
5 application?

6 A. Harvey E. Yates Company seeks to force pool the
7 rights from 3,595 feet to the base of the Delaware in a
8 proration unit, 40-acre proration unit, described as the
9 northwest quarter of the southwest quarter of
10 Section 12 in Township 18 South, Range 31 East.

11 Q. Have you prepared certain exhibits for
12 presentation in this hearing?

13 A. I have.

14 Q. Would you refer to what has been marked as
15 HEYCO Exhibit No. 1, identify that and review the
16 information on this exhibit for Mr. Stogner?

17 A. Exhibit 1 shows the proration unit we wish to
18 force pool, and that is in yellow. The arrow indicates
19 the proposed location.

20 Q. Is that well as proposed at a standard
21 location?

22 A. Yes, it is.

23 Q. What is the primary objective in that well?

24 A. The Grayburg.

25 Q. Let's go now to what has been marked as HEYCO

1 Exhibit No. 2. Identify that and review that for the
2 examiner.

3 A. Exhibit No. 2 is an ownership participation
4 listing. It breaks out the ownership in that proration
5 unit. And in the far right-hand column it tells about the
6 decisions these companies have made.

7 Q. At the present time what percentage of the
8 working interest has been voluntarily committed to this
9 well?

10 A. 25 percent.

11 Q. And the two outstanding interests are Meridian
12 and Chevron?

13 A. That's right.

14 Q. Could you review for Mr. Stogner the status of
15 your negotiations with each of these individuals?

16 A. We proposed the drilling of this well in July.
17 We proposed that to Meridian July 31st, and then on
18 August 9th we proposed the drilling of that well to
19 Chevron. We have had numerous discussions and numerous
20 telephone calls with both parties and have not come to a
21 conclusion.

22 Q. What is the status of your current negotiations
23 with Meridian?

24 A. I spoke with Meridian late last night, and they
25 informed me that they wished to join. I told them I

1 needed something in writing. They said they would fax
2 something this morning. I called the office about 15
3 minutes ago, and there had been nothing in our office yet
4 this morning.

5 Q. When a satisfactory arrangement is reached with
6 Meridian, HEYCO will drop them from this pooling
7 application; is that correct?

8 A. That's correct.

9 Q. Let's move to Exhibit No. 3. Would you
10 identify that, please?

11 A. Exhibit No. 3 is the AFE, Harvey Yates Company
12 prepared for the drilling of the West Taylor 12
13 Federal #1.

14 Q. What are the totals as reflected on that
15 exhibit?

16 A. Dry hole costs, \$180,390; and producing well
17 costs \$380,315. I might add that this AFE was prepared
18 when we proposed the well, and it would need to be
19 revised.

20 Q. And when you say that, in what way would it
21 need to be revised?

22 A. Drilling rates have increased, and they would
23 be adjusted appropriately.

24 Q. And after the receipt of a pooling order, will
25 a new AFE be submitted to each of -- to any interest owner

1 who may be subject to that pooling order?

2 A. For information only, not for approval.

3 Q. And would that be, though, the basis upon which
4 they would pay their proportionate share to avoid the
5 penalty?

6 A. Yes.

7 Q. Are the costs that are reflected on this AFE,
8 with the exception of the drilling costs that will have to
9 be increased to reflect current drilling costs, other than
10 that, is this AFE in line with what is charged for other
11 similar wells in this area?

12 A. Certainly.

13 Q. Have you made a good faith effort to obtain the
14 voluntary joinder of Chevron and Meridian in this
15 prospect?

16 A. Yes.

17 Q. And have you drilled other Delaware wells in
18 the immediate area?

19 A. We have. If you'll look on your Exhibit No. 1
20 in Section 13 in the southeast quarter, Harvey Yates
21 Company has drilled four similar wells.

22 Q. Could you refer to what has been marked as
23 HEYCO Exhibit No. 4 and review that for the Examiner?

24 A. Exhibit No. 4 contains a letter that was sent
25 to Meridian July 31st originally proposing the well and a

1 letter dated August 9th to Chevron proposing the well, a
2 followup letter to Chevron dated September 26, a followup
3 letter to Meridian dated October 30th, and then a
4 telephone log, a five-page telephone log.

5 Q. Does this telephone log reflect all contacts
6 that HEYCO has attempted with both Meridian and Chevron
7 attempting to obtain their voluntary joinder?

8 A. I believe so.

9 Q. How recently have you talked with Chevron?

10 A. All day yesterday.

11 Q. Is Exhibit -- what has been marked
12 Exhibit No. 5 a copy of an affidavit with attached letters
13 providing notice of today's hearing to both Meridian and
14 Chevron?

15 A. Yes, it is.

16 Q. Does Harvey Yates Company seek to be designated
17 operator of the proposed well?

18 A. We do.

19 Q. Will HEYCO call a geological witness to testify
20 as to the risk involved in this particular -- at this
21 proposed well?

22 A. Yes.

23 Q. Were Exhibits 1 through 5 either prepared by
24 you or compiled under your direction and supervision?

25 A. Yes, they were.

1 Q. Can you testify as to the accuracy of these
2 exhibits?

3 A. Yes, I can.

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

6 EXAMINER STOGNER: Exhibits 1 through 5 will be
7 admitted into evidence.

8 (HEYCO Exhibits 1 through 5
9 were admitted into evidence.)

10 MR. CARR: That concludes my direct examination of
11 Ms. Darr.

12 EXAMINER STOGNER: Thank you, Mr. Carr.

13 Mr. Kellahin, your witness.

14 MR. KELLAHIN: No questions, Mr. Examiner.

15 EXAMINATION

16 BY EXAMINER STOGNER:

17 Q. Ms. Darr, in referring to Exhibit No. 3, do you
18 have a rough, I should say, "guesstimate" of what the
19 amended cost would be in a percentage, say? Just a rough
20 figure.

21 A. I'd say roughly 5 to 10 percent.

22 Q. 5 or 10 percent more?

23 A. Yes.

24 Q. Not less from?

25 A. That's right, unfortunately.

1 Q. When you corresponded with Chevron and
2 Meridian, there were also other lands involved, not just
3 this particular acreage; is that correct?

4 A. That's right. Originally we proposed forming
5 an area that we would jointly develop, and that didn't fly
6 with Meridian, and Chevron never really addressed that
7 proposal. Meridian suggested making the area smaller, so
8 we did that; and then they decided that that wouldn't
9 work, and so they wanted it even smaller. We put it down
10 to 80 acres, from 720 to 80, and they still had numerous
11 conditions on that. So we said, "Let's just drill this
12 well. We need to test this area," and so that's what
13 we're doing, 40 acres.

14 Q. Now, this will be the first well in your
15 proposed area that you had contact with Chevron, the
16 720-acre joint operating area; is that correct?

17 A. That's right; but that has been, like I said,
18 reduced to 40.

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

21 MR. STOVALL: Yes, I do have one question.

22 EXAMINATION

23 BY MR. STOVALL:

24 Q. Your application seeks to pool from 3595 to the
25 base of the Delaware; is that correct?

1 A. Yeah.

2 Q. Are there no higher formations that could
3 possibly be --

4 A. There are about four layers of ownership in
5 that tract, and so we're trying to stay consistent with
6 that. There is the Queen unit in there. It's right in
7 the middle of what we're doing, so we're below that.

8 Q. Okay. So you're not concerned about the
9 problem of having to find a good hole, good well up hole.

10 A. That's right. We've considered that.

11 MR. STOVALL: That's all.

12 FURTHER EXAMINATION

13 BY EXAMINER STOGNER:

14 Q. Who's the operator of the Queen unit that is up
15 hole?

16 A. GRSJ Petroleum. I'm not sure who they are or
17 where they were.

18 Q. GRSA Petroleum?

19 A. "GRSJ."

20 Q. "J," okay.

21 EXAMINER STOGNER: Any other questions of Ms. Darr?

22 (No response.)

23 EXAMINER STOGNER: If not, she may be excused.

24 THE WITNESS: Thank you.

25

1 GORDON K. YAHNEY,
2 the Witness herein, having been previously duly sworn, was
3 examined and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. CARR:

6 Q. Will you state your full name for the record,
7 please?

8 A. Gordon K. Yahney.

9 Q. Would you spell your last name, please?

10 A. Y-a-h-n-e-y.

11 Q. Mr. Yahney, by whom are you employed and in
12 what capacity?

13 A. I'm employed by the Harvey E. Yates Company as
14 a geologist.

15 Q. Have you previously testified before this
16 division?

17 A. Yes, I have.

18 Q. And at the time of that prior testimony, were
19 your credentials as a geologist accepted and made a matter
20 of record?

21 A. Yes, they were.

22 Q. Are you familiar with the application filed in
23 this case and the acreage which is the subject matter of
24 this case?

25 A. Yes, I am.

1 MR. CARR: Are the witness's qualifications
2 acceptable?

3 EXAMINER STOGNER: They are.

4 Q. (By Mr. Carr) Mr. Yahney, would you refer to
5 what has been marked as HEYCO Exhibit No. 6, identify that
6 and review it for the examiner, please?

7 A. Okay. I have prepared HEYCO Exhibit No. 6. It
8 is a Grayburg-Locho Hills Sand Porosity Isopach Map.
9 Roughly stated, it's a pay map for our expected primary
10 objective. It displays a narrow one-to-two, wellwide
11 fairway of sand porosity which can be directly correlated
12 to Grayburg-Locho Hills sand strand line shelf sand
13 development. We expect this to be the pay in the -- the
14 main pay objective for the test.

15 Q. Anything else to present with Exhibit No. 6?

16 A. I have also prepared Exhibit No. 7.

17 Q. Let's go to that now and ask you to review
18 that.

19 A. Exhibit No. 7 is a geological cross section,
20 hung on a structural datum, takes in the shallow
21 formations from the Queen down through the top of the
22 Delaware. Our proposed TD for this well is 5,000 feet,
23 and that takes in the secondary objective to this well.
24 It's the San Andres/top-of-the-Delaware interval which is
25 productive a half mile and to the north in the Yates

1 Energy Thornbush well.

2 Q. What do these exhibits tell you about the risks
3 associated with drilling a successful well in this area?

4 A. There is a good amount of risk associated with
5 drilling a well in this area. Our primary objective is a
6 narrow, beach, shoreline sandstone, which varies
7 considerably in the pay thickness. In a couple of
8 examples on Exhibit No. 6, we have 10 to 12 foot of pay
9 change within a rough interval of 200 feet of surface
10 location in a couple of the wells in section 11.

11 Q. Are you prepared to make a recommendation to
12 the Examiner as to the risk penalty that should be
13 assessed against any interest owner who doesn't
14 voluntarily participate in the well?

15 A. Yes. I would like to recommend at this time
16 that a 200 percent penalty be enforced.

17 Q. Do you believe there is a chance that the well
18 at the proposed location, in fact, could be an economic
19 failure?

20 A. Yes, I do.

21 Q. Have you made an estimate of overhead and
22 administrative cost for this well while drilling, and
23 then, if successful, while production?

24 A. Yes, I have. Our current overhead and
25 administrative costs are as follows: \$5,500 for drilling

1 overhead. \$555 -- \$550, excuse me, for administrative
2 overhead during the drilling of the well; and after
3 successful completion, if such, \$1,300 per month if it's a
4 pumping well, \$1,000 flowing.

5 Q. Are these in line with what's being charged by
6 other operators in the area for similar wells?

7 A. I believe they are.

8 Q. Do you recommend that these figures be
9 incorporated into any order which results from this
10 hearing?

11 A. Yes, I do.

12 Q. In your opinion will approval of this
13 application be in the best interest of conservation and
14 prevention of waste and the protection of correlative
15 rights?

16 A. Yes, I believe it so.

17 Q. Were Exhibits 6 and 7 prepared by you?

18 A. Yes, they were.

19 MR. CARR: At this time, Mr. Stogner, we would move
20 the admission of the HEYCO Exhibits 6 and 7.

21 EXAMINER STOGNER: HEYCO's Exhibits 6 and 7 will be
22 admitted into evidence.

23 (HEYCO Exhibits 6 and 7
24 were admitted into evidence.)

25 MR. CARR: And that concludes our direct presentation

1 in this case.

2 EXAMINATION

3 BY EXAMINER STOGNER:

4 Q. Let's talk about the overhead charges. That
5 was \$5,500 while drilling?

6 A. That's correct.

7 Q. And pumping 1,300 a month?

8 A. 1,300 a month at successful well completion.
9 After completion that's operating costs.

10 Q. And a thousand dollars at flowing?

11 A. If it's flowing, yes, that is correct.

12 Q. So that could change if it flows for years and
13 then have to pump?

14 A. That's correct.

15 Q. You said these costs are online with other
16 wells in the area?

17 A. These costs are online with other wells in the
18 area. Most of the other wells in the area are part of
19 Tamano Bone Spring pool.

20 Q. And how deep for Tamano Bone Spring wells?

21 A. Roughly 8,000 feet.

22 Q. And this well is 5,000 or so feet?

23 A. Scheduled for 5,000 feet.

24 Q. Are you familiar with the Ernst & Young survey?

25 A. I do not believe that I am.

1 Q. Do you have any exhibits to substantiate the
2 overhead charges you're requesting today?

3 A. I do not, sir.

4 Q. In looking at your Exhibit No. 7 for force
5 pooling 39 -- from a depth of 3595 and the nearest well is
6 the second one from my left, I would assume, what is -- is
7 that a top of a particular formation?

8 A. The 3595 looks to be approximately the base of
9 the Queen sandstone interval. That is the pay in the --
10 it's the shallow Queen waterflood there, operated by GRSJ
11 Petroleum, according to the land plat.

12 Q. The target interval is the Delaware. Is there
13 any production in the Grayburg or San Andres formations in
14 this area?

15 A. The San Andres is producing from the Thornbush
16 Federal No. 1. It's in the southeast of the southwest of
17 Section 1, approximately half a mile to the northeast.
18 The Grayburg formation is currently producing from the
19 Read E. Steven's No. 2, Jamie Federal. That's in the
20 northwest northwest of Section 14.

21 Q. Northwest northwest?

22 A. Northwest northwest of Section 14.

23 Q. And those are the two nearest San Andres and
24 Grayburg producers?

25 A. I believe they are. There's also Grayburg

1 production, as Shari Darr mentioned, in the southeast
2 corner of Section 13, roughly a mile away.

3 Q. In looking at Exhibit No. 6, what about the
4 Delaware production? What is some of the closest
5 Delaware?

6 A. The closest Delaware production is also in the
7 southeast corner of Section 13, roughly a mile and a half
8 away, a mile to mile and a half away.

9 Q. Which particular wells?

10 A. The currently producing No. 2 South Taylor 13
11 Federal. It's in the southeast southeast of Section 13.

12 Q. Is it marked on this Exhibit 6? I can't see a
13 No. 2 well.

14 A. Okay. No, it is not marked on the
15 Exhibit No. 6. It is due south of the No. 4 and just at a
16 point which would be at the bottom line of the map.

17 Q. Is there a reason why it was left off this map?

18 A. This map here is a Grayburg map for the Loco
19 Hills sand, and it really -- the No. 4 well there is a
20 Grayburg producer.

21 Q. So there was no need of really including that
22 one on there?

23 A. Yes.

24 Q. Any other Delaware producers in 13 and 14 other
25 than that one?

1 A. Not to my knowledge.

2 Q. You've had quite a bit of control, at least in
3 the Grayburg. But these wells that you got the
4 information from, are they all Queen producers?

5 A. There's a few of them that are Queen producers,
6 and most of them are Tamano Bone Spring wells.

7 EXAMINER STOGNER: Are there any other questions of
8 this witness?

9 MR. KELLAHIN: Mr. Examiner, if I might.

10 EXAMINER STOGNER: Mr. Kellahin.

11 CROSS-EXAMINATION

12 BY MR. KELLAHIN:

13 Q. I'd like to ask a few questions to try to
14 understand your displays. Exhibit 6, this corresponds to
15 the Loco Hills sand shown on cross section 7 and
16 identified as Loco Hills?

17 A. It should; yes, it should.

18 Q. Okay.

19 A. Yes.

20 Q. These (indicating).

21 A. Correct. In the second well from the left-hand
22 side, you'll see the -- on the cross section you'll see
23 the words "Primary Objective." That is the Loco Hills
24 sand. The map figure 6 corresponds to that horizon.

25 Q. Have you used a porosity cutoff in preparing

1 the isopach?

2 A. Yes, I have.

3 Q. Where is that?

4 A. It's there on the key. Its cutoff is
5 12 percent.

6 Q. Okay. The greatest thickness that you've
7 contoured in Section 12 is what thickness?

8 A. Is 22 feet, present in the Taylor Deep well.

9 Q. You'll have to help me.

10 A. Taylor Deep --

11 Q. I don't see the names on the display, so I
12 don't know the --

13 A. Okay. The Taylor Deep 1-Y well, which is in
14 the northeast of the southwest of Section 12 there --

15 Q. Go slow for me now. The area shaded in yellow
16 on Exhibit 6 where the proposed well location is --

17 A. Okay.

18 Q. -- there's a well immediately to the south of
19 that?

20 A. Yes. That's the No. 4 Taylor well. It's a
21 Queen well that is -- as my map shows it to be an
22 injector, although I don't know that it is currently
23 injecting into the Queen formation.

24 Q. South of that is what appears to be a producing
25 oil well symbol and the number 25. Is that a thickness

1 number?

2 A. No, that is not. That is two separate wells
3 there. That is the No. 2 Taylor Deep Federal well, the
4 dry hole in the southeast southeast, and the No. 5 Taylor
5 Queen well, which is right adjacent to it. The Bone
6 Spring well, the No. 2, shows a zero thickness of sand
7 within the Loco Hills interval of pay.

8 Q. So if I look at Section 12, within that section
9 what is the greatest thickness of Loco Hills sand shown in
10 that section? What's your greatest contour thickness?

11 A. The greatest contour thickness would be
12 something above 20 feet, and we have a 22-foot value there
13 at the Taylor Deep 1-Y well.

14 Q. All right. I'm beginning to see how you did
15 it. Okay.

16 When we look in Section 12, do you have
17 currently any producing wells that are producing out of
18 this Loco Hills sand?

19 A. Currently producing; no, there is not.

20 Q. When we look in Section 13, are there any
21 currently producing Loco Hills sand wells?

22 A. Yes, there is.

23 Q. Where is that?

24 A. The No. 4 as shown on the bottom of your bottom
25 southeast; and then there's two additional wells, the

1 No. 1 and No. 3, South Taylor 13 Federal, both in the
2 southeast corner of Section 13 that aren't on the map --
3 on this particular map, but all three of those wells are
4 producing from the Loco Hills sand. Some of them
5 commingled with other horizons in the Grayburg.

6 Q. When we look at the 720-acre area that was to
7 be this working interest area initially proposed, when we
8 look at that area on this map, does your proposed 40-acre
9 spacing for the subject well represent that 40 acres
10 within the 720 that represent the least risk to you?

11 A. It would represent a 40-acre tract that would
12 have pretty close to the least risk.

13 Q. In your opinion, then, have you picked the best
14 first location for a well to test the Loco Hills within
15 the 720-acre area?

16 A. Yes, I have.

17 Q. Let's turn now to the secondary objective, the
18 Delaware, on your cross section, the second well over from
19 the right starting with the A side of the cross section.

20 A. The second from the left.

21 Q. I'm sorry. The second from the left, the
22 Taylor Deep 12. Your cross section shows the secondary
23 objective --

24 A. Yes.

25 Q. -- defined as the "Delaware"?

1 A. Yes, Delaware and the San Andres.

2 Q. On your cross section I see three wells that
3 appear to -- well, two of them are perforated in that
4 interval. The Thornbush Federal 1 is that perforation?

5 A. The Thornbush, it was probably jetted, sand
6 jetted across that interval, and it is producing from that
7 horizon you see there at 4630.

8 Q. When I go back to your Exhibit No. 6, now, the
9 closest producing well out of the Delaware sand, is that
10 the No. 2 well in the southeast of the southeast of 13?

11 A. Yes, it is.

12 Q. There's no closer Delaware producer to the
13 proposed well?

14 A. Not to my knowledge.

15 Q. Okay. Have you prepared a sand map on the
16 Delaware?

17 A. What kind of sand map?

18 Q. Well, similar to the one you did in Exhibit 6.

19 A. An exhibit? No, I have not.

20 Q. Why didn't you do that?

21 A. Okay. The sand -- Delaware sand in the
22 southeast southeast of Section 13, which we have
23 productive, is an interval roughly at the bottom of this
24 cross section. And it is producing from a -- when you map
25 it up, is producing from a structural closure. And that

1 horizon due to the topography on the Delaware sand is
2 producing there.

3 I do not see any type of structural closure
4 associated with the proposed location which would make
5 that interval perspective. What I do see is a possible
6 stratigraphic trap with the top sands of the Delaware of
7 the Cherry Canyon tongue coming up underneath the shelf
8 carbonates of the San Andres. And that type of trap is
9 productive about two miles to the east in the HEYCO, it
10 would be, west Young No. 8-1.

11 And this stratigraphic cross section, the
12 structural cross section that you see here, shows -- it's
13 trying to show the potential wedge-out of the uppermost
14 sand of the Delaware at this position which may be
15 productive.

16 Q. Are you picking your location in Section 13
17 based upon any analysis, then, of the potential of the
18 Delaware in that 40-acre tract?

19 A. As a secondary objective, yes; but the primary
20 emphasis has got to be on the Loco Hills sand and the
21 Grayburg.

22 Q. How did you support your geologic conclusion,
23 then, that you had the best location from a secondary
24 objective perspective for the well in this 40-acre tract
25 as opposed to some other 40-acre tract in the 720?

1 A. It's kind of hard to answer that, sir. If you
2 look at the structural -- if you've mapped up the
3 structural information in this area, this well that we're
4 proposing to drill should be pretty much on strike with
5 the Thornbush, which has a -- you know, it's been called
6 "San Andres" now. If you're going to get into
7 stratigraphic problems as to what San Andres is and what
8 Delaware is, you're going to have a nightmare.

9 But the oil that's coming out of this zone in
10 the San Andres is pretty much what I would call a Delaware
11 oil. It's not similar to the oils that you see up in the
12 San Andres shelf to the north and the Maljamar fields; and
13 I think it's pretty much a trap that is caused by the
14 pinch out of the Delaware sands, uppermost Delaware sands
15 underneath this San Andres carbonate.

16 Now, I've got production here in the Thornbush.
17 I'm on strike to it. I'm roughly in the same
18 stratigraphic level to it. I think I've got a good
19 secondary objective.

20 Q. One final question on Exhibit 7.

21 A. Yes.

22 Q. When I look at how you have located the
23 horizons on any of these logs, can we take one as a type
24 log, if you will, and show me the approximate top and
25 bottom of the interval to be pooled for the purposes of

1 this well?

2 A. The top of the interval to be pooled is evident
3 on this cross section. It's roughly 50 feet underneath
4 the correlation line designated the "top of the Queen."
5 The bottom of the interval to be pooled is not on the
6 cross section. It is approximately 900 feet below the
7 cutoff to the cross section, to the bottom of the cross
8 section here.

9 Q. The cutoff to the bottom of the cross section,
10 is that the Lovington?

11 A. Well, you've got a -- over on the left-hand
12 side, you've got a top picked as Delaware --

13 Q. Yes, sir.

14 A. -- roughly at 4,800 feet; and the top -- the
15 base of the Delaware, the Delaware sand package, comes in
16 at roughly at 6,000 feet in that same area.

17 MR. KELLAHIN: Thank you.

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

20 EXAMINATION

21 BY MR. STOVALL:

22 Q. Mr. Yahney, the intervals are actually not
23 marked on the -- the thickness intervals are not marked on
24 your contour lines, anyway.

25 A. The --

1 Q. Do you have to estimate them from looking at
2 various holes?

3 A. You're referring to Exhibit 6?

4 Q. Exhibit 6.

5 A. Your zero mark is there. It is marked. We
6 have a 5-foot contour interval. This is a window shot out
7 of a bigger map in the 25-foot line, which is the darker
8 one, which would be going through, say, the center of
9 Section 14. That's a 25-foot contour line.

10 Do you follow the map, now? Up here at the
11 proposed location --

12 Q. There's one that goes from the bottom, from 14
13 on the south side of the map and up through 15, goes kind
14 of off the edge of the map on 15?

15 A. Yes. That's a 25-foot contour line.

16 At the proposed location, you have a zero value
17 just south of the No. 4 well, a 5, a 10 and a 15; and they
18 are between the proposed location; and the next proration
19 unit to the north, you've got roughly a closed 20-foot
20 contour. That's where the sand would be greater than
21 20 feet.

22 MR. STOVALL: I have nothing further.

23 EXAMINER STOGNER: Are there any further questions of
24 the witness?

25 (No response.)

1 EXAMINER STOGNER: If not you may be excused.

2 Mr. Carr, do you have any further?

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

4 EXAMINER STOGNER: Gentlemen?

5 MR. KELLAHIN: No.

6 EXAMINER STOGNER: If nobody else has anything
7 further in this case, Case No. 10180 will be taken under
8 advisement.

9 (The foregoing hearing was concluded at the
10 approximate hour of 9:02 a.m.)

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18 I do hereby certify that the foregoing is
19 a complete record of the proceedings in
the Examiner hearing of Case No. 10180,
20 heard by me on 19 December 1980.

21 Robert E. Stogner, Examiner
Oil Conservation Division
22
23
24
25

1
2 STATE OF NEW MEXICO)
3) SS.
4 COUNTY OF SANTA FE)

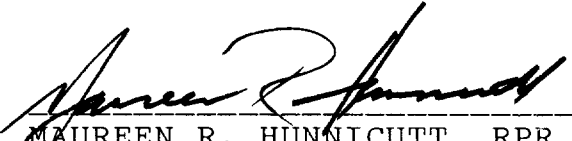
5 REPORTER'S CERTIFICATE

6 I, MAUREEN R. HUNNICUTT, RPR, a Certified Shorthand
7 Reporter and Notary Public, DO HEREBY CERTIFY that I
8 stenographically reported these proceedings before the Oil
9 Conservation Division; and that the foregoing is a true,
10 complete and accurate transcript of the proceedings of
11 said hearing as appears from my stenographic notes so
12 taken and transcribed under my personal supervision.

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

16 DATED at Santa Fe, New Mexico, this 19th day of
17 January, 1991.

18
19
20
21 My Commission Expires:
22 April 25, 1993


MAUREEN R. HUNNICUTT, RPR
Certified Shorthand Reporter
CSR No. 166, Notary Public