

CASE 7091: LAYTON ENTERPRISES, INC.
FOR A NON-STANDARD PRORATION UNIT, LEA
COUNTY, NEW MEXICO

Case No.

7091

Application

Transcripts

Small Exhibits

ETC



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

January 23, 1981

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

Re: CASE NO. 7091
ORDER NO. R-6566

Mr. George Hunker
Hunker-Fedric
Attorneys at Law
Post Office Box 1037
Roswell, New Mexico 88201

Applicant:

~~Layton Enterprises, Inc.~~

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD _____ x
Artesia OCD _____ x
Aztec OCD _____ x

Other

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7091
Order No. R-6566

APPLICATION OF LAYTON ENTERPRISES,
INC. FOR A NON-STANDARD PRORATION
UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 25, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of January, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Layton Enterprises, Inc., seeks approval of an 80-acre non-standard oil proration unit comprising the N/2 NW/4 of Section 14, Township 9 South, Range 34 East, NMPM, Vada-Pennsylvanian Pool, Lea County, New Mexico, to be dedicated to an old well to be re-entered 660 feet from the North line and 1830 feet from the West line of said Section 14.

(3) That there is a reasonable expectancy that the entire NW/4 of said Section 14 may be presumed productive of oil from the Vada-Pennsylvanian Pool.

(4) That the owner of the S/2 NW/4 of said Section 14 appeared at the hearing and objected to the formation of the proposed 80-acre non-standard proration unit comprising the N/2 NW/4 of Section 14.

(5) That the entire NW/4 of Section 14, comprising a standard 160-acre proration unit, was originally dedicated to

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Case No. 7091
Order No. R-6566

the well which applicant proposes to re-enter and to dedicate to the N/2 NW/4 only.

(6) That said well was prematurely abandoned in 1978 due to equipment failure in the wellbore.

(7) That approval of the application and formation of the proposed 80-acre non-standard proration unit would leave the S/2 NW/4 of Section 14 undedicated to any well unless the owner thereof drilled a well on said lands.

(8) That the Vada-Pennsylvanian Pool in the area of the subject application was developed approximately ten to twelve years ago and has undergone considerable depletion since original development.

(9) That although there probably are recoverable reserves remaining under the S/2 NW/4 of Section 14, such reserves are probably insufficient to render the drilling and completion of a well thereon economical.

(10) That approval of the application would impair the correlative rights of the owner of the S/2 NW/4 of Section 14.

(11) That to protect his correlative rights if the application were approved, the owner of the S/2 NW/4 of Section 14 would be required to drill a well thereon.

(12) That said well, being unnecessary, would cause economic waste.

(13) That the application should be denied, and the applicant, owner of the N/2 NW/4 of Section 14, and the owner of the S/2 NW/4 of Section 14 should communitize their lands to form a standard 160-acre unit for the Vada-Pennsylvanian Pool to be dedicated to the subject well.

IT IS THEREFORE ORDERED:

(1) That the application of Layton Enterprises, Inc., for a non-standard 80-acre unit comprising the N/2 NW/4 of Section 14, Township 9 South, Range 34 East, NMPM, Vada-Pennsylvanian Pool, Lea County, New Mexico, is hereby denied.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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Case No. 7091
Order No. R-6566

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

SEAL

rd/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
25 November 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Layton Enterprises,
Inc., for a non-standard proration
unit, Lea County, New Mexico.

CASE
7091

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

George H. Hunker, Jr.
HUNKER, FEDRIC P. A.
P. O. Box 1837
Roswell, New Mexico 88201

For Robert L. Thornton:

William F. Carr, Esq.
CAMPBELL & BLACK P. A.
Jefferson Place
Santa Fe, New Mexico 87501

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SALLY W. BOYD, C.S.R.

Rt. 1 Box 195-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 192-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

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1 MR. NUTTER: We'll call next Case Number
2 7091.

3 MR. PADILLA: Application of Layton En-
4 terprises, Inc., for a non-standard proration unit, Lea
5 County, New Mexico.

6 MR. HUNKER: George H. Hunker, Jr.,
7 Hunker-Fedric P. A., Roswell, New Mexico, appearing on behalf
8 of the operator, Layton Enterprises, Inc.. I have one witness
9 and five exhibits.

10 MR. CARR: Mr. Examiner, I am William F.
11 Carr with the law firm Campbell and Black, P. A., Santa Fe,
12 appearing on behalf of Robert L. Thornton. I have one wit-
13 ness.

14 MR. NUTTER: Will both witnesses please
15 stand and be sworn?

16
17 (Witnesses sworn.)

18
19 DONALD R. LAYTON
20 being called as a witness and being duly sworn upon his oath,
21 testified as follows, to-wit:

22
23 DIRECT EXAMINATION

24 BY MR. HUNKER:

25 Q. What is your name and address?

1 A. Donald R. Layton, Lubbock, Texas.

2 Q. And what is your occupation?

3 A. I'm president of Layton Enterprises, Inc.,
4 in Lubbock, Texas.

5 Q. Have you testified as a petroleum engineer
6 before this Commission?

7 A. Yes, sir, I have.

8 Q. And were your qualifications acceptable
9 at that time?

10 A. Yes, sir.

11 MR. HUNKER: Are the witness' qualifica-
12 tions accepted?

13 MR. NUTTER: Yes, they are.

14 Q. Mr. Layton, are you familiar with the
15 application that has been filed in connection with this mat-
16 ter?

17 A. Yes, sir, I am.

18 Q. And what's the purpose of the application?

19 A. The purpose of the application is to esta-
20 blish a project area comprised of four non-standard 80-acre
21 proration units within the confines of the Vada-Pennsylvanian
22 Field.

23 Q. And has administrative approval been
24 given on three of those?

25 A. Yes, sir, it has, the two locations in

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 Section 10, 9, 34, and one in Section 11, 9, 34, have been
2 administratively approved.

3 Q Looking at the map that's been marked
4 Applicant's Exhibit Number One, will you identify this instru-
5 ment and show the Examiner what this reveals?

6 A All right, sir. This is a map of the
7 Vada-Pennsylvanian Pool. More than that, it shows the entire
8 Bough C trend in Lea and Roosevelt Counties, New Mexico, which
9 is comprised actually of a number of separately designated
10 fields. At one time there were other fields that have since
11 been incorporated into the Vada-Penn, but at this point in
12 time in addition to the Vada we have the Allison-Penn, the
13 Bough-Penn, and the Inbe-Penn still retaining original identi-
14 ties.

15 Q How long have you operated wells in this
16 area, Mr. Layton?

17 A In this field about four years. In this
18 area something like twenty-five years.

19 Q What is the spacing rule with regard to
20 the Vada-Penn Field?

21 A Vada-Penn is 160 acre proration units.

22 Q And the Allison-Penn Field, the field on
23 the far right?

24 A The Allison-Penn is 80-acre spacing pro-
25 ration units.

1 Q And the Bough-Penn Field?

2 A The Bough-Penn is actually 40-acre pro-
3 ration units. It has more generally been developed on 80-
4 acre spacing, although a portion of the field at least actually
5 resembles 40-acre spacing, which is the standard proration
6 unit.

7 Q On the southwest corner of this plat there
8 appears some legend with regard to the Inbe. Will you --

9 A Yes, sir, the Inbe Field, again, is 80-
10 acre standard proration units and pretty generally has been
11 developed on that pattern.

12 Q Tell the Examiner what else does that
13 plat reveal?

14 A All right, this plat shows some of the
15 recovery data with respect to total number of acreage covered
16 by the -- now this is not-the acreage figure covers only those
17 established and producing proration units. It does not cover
18 any other contingent acreage.

19 It shows the acreage, the total number of
20 wells that are or have produced oil from this reservoir and
21 the cumulative recovery from each field and the recovery in
22 barrels per acre from each of these.

23 We also, just by way of information, de-
24 signated a small area called the application area, which I
25 randomly selected in two directions, a 2400 acre plot and 15

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 wells and showed the recovery for that immediate area sur-
2 rounding the 80 acres involved in the application.

3 Q With regard to the project in the north
4 half of the northwest quarter of Section 14, 9 South, 34 East,
5 what are your company's plans?

6 A We plan to make a re-entry on a well known
7 as our No. 1 Pyron (sic), which is located in the northeast
8 of the northwest quarter, or the east half of the north half
9 of the northwest quarter of Section 14.

10 Q How much acreage will that well drill in
11 your -- will that well drain in your opinion, Mr. Layton?

12 A In my opinion, considering the current
13 bottom hole pressure conditions in that field, will at best
14 drain 80 acres.

15 Q Will you refer to what's been marked as
16 Exhibits Two, Three, and Four, and explain to the Examiner
17 what these fields show -- what these plats show?

18 A All right. These are just detail plats
19 of the Allison, Bough, and Inbe-Penn Fields, showing the gen-
20 eral spacing pattern, showing the 80-acre proration units as
21 they were developed. They have no other significance on the
22 case other than that. The larger map does not include the
23 well locations in the adjacent fields. It only includes well
24 locations for the Vada, and these are simply to show the de-
25 tail.

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

1 Q Significant recoveries have been made
2 in the Allison-Penn Field and I'd like for you to explain the
3 reason for that.

4 A All right. The Allison field has recovered
5 1888 barrels per acre. Incidentally, all of these figures
6 are through 1-1-1980, taken from the Commission records.

7 The Allison Field has recovered 1888 bar-
8 rels per acre on 80-acre spacing and with a relatively low
9 gas/oil ratio through all of its producing history. Currently
10 the gas/oil ratio for the Allison Field is averaging approxi-
11 mately 2500-to-1. I believe all of this area has a GOR
12 limit of 10,000-to-1. It's produced well below that through-
13 out its entire life.

14 Q In your opinion can the Vada-Penn area
15 be economically developed on an 80-acre spacing?

16 A Yes, sir, in my opinion it can.

17 Q Looking to what's been marked Applicant's
18 Exhibit Number Five, will you identify this instrument and
19 tell the Examiner what it reveals?

20 A Yes, sir, this is a comparison of the gas/
21 oil ratios involved in the first eight years of the producing
22 life of each field. Now these are not corresponding years,
23 so I have designated them year of field production. The
24 fields were drilled at slightly different times, and this is
25 just a comparison of the gas/oil ratios of each field and it's

SALLY W. BOYD, C.S.R.

Rt. 1 Box 194-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 notable on this exhibit, I think, that the Vada Field, which
2 is the only area developed on 160-acre spacing, the gas/oil
3 ratio increases much more rapidly than the other two, and
4 maintains a much higher level at the end of eight years.

5 I might add in fairness that in the later
6 stages of any field, of course, you can usually expect the
7 higher gas/oil ratios, but through the first eight years,
8 which actually these are the years when most of the oil, or
9 most of the cumulative was produced from each of these reser-
10 voirs.

MR. NUTTER: Now these are field-wide

11 production ratios, is that it?

12 A. Yes, sir, these are field-wide and they're
13 based on yearly averages for the entire field. I might make
14 note that the Inbe appears to be declining the first few years
15 and this is directly due, I think, to the stage of development
16 and a lower rate of development probably caused this. It was
17 a slow, a steady rate of drilling and the --

MR. NUTTER: More --

18 New areas --

19 MR. NUTTER: -- new lower ratio wells

20 coming in.

21 A. Yes, sir, that's right, more new wells
22 with lower ratios coming in that held the average down.
23 The Vada, by contrast, of course, was
24

25

1 developed very rapidly. The Allison also was developed at a
2 slightly lower rate, although I think faster than the Inbe
3 Field was drilled.

4 Q When was the Vada-Penn initially developed,
5 Mr. Layton?

6 A I believe the first activity in the Vada
7 was either in 1967, late 1967, or '68. The majority of the
8 drilling took place from 1968 on through 1971.

9 Q What were the economics at that time?

10 A The economics werenot all that good. The
11 oil prices were low in a depressed market condition and I
12 think operators were faced then with a situation where they
13 needed the larger spacing, higher allowables, in order to
14 more quickly amortize their investment in drilling.

15 Q In your opinion will the granting of your
16 application adversely affect any offsetting owner?

17 A No, sir, in my opinion it will not.

18 Q Do you believe that the granting of your
19 application would be in the interest of the prevention of
20 waste and protection of correlative rights and the best in-
21 terest of conservation?

22 A Yes, sir.

23 Q Do you have anything else to add with re-
24 gard to -- to the exhibits or with regard to this particular
25 prospect?

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A I think we've generally covered it fairly
2 well, George.

3 MR. HUNKER: I have no further questions,
4 Mr. Examiner.

5 MP. NUTTER: Mr. Carr?

6 MR. CARR: I have just a couple of ques-
7 tions of Mr. Layton.

8
9 CROSS EXAMINATION

10 BY MR. CARR:

11 Q Mr. Layton, how would you characterize
12 the Vada-Penn Pool in the immediate area now in terms of the
13 extent to which that reservoir has been depleted? Has it
14 been substantially depleted?

15 A Yes, sir, I would say it has been sub-
16 stantially depleted.

17 Q In your opinion developing a reservoir
18 or a tract within a reservoir that has been substantially
19 depleted as opposed to one that has not been so depleted,
20 doesn't this bear on the economics of drilling a well?

21 A Certainly does.

22 Q And wouldn't most of the development in
23 the Allison and the other fields on this smaller spacing
24 have been done prior to the time the reservoirs were substan-
25 tially depleted?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A. Yes, I would say that's true, yes.

2 Q. Do you think it would be economic in a
3 depleted reservoir to develop, say, the Allison, if it was in
4 the comparable status in terms of its depletion as the Vada-
5 Penn? Do you think it would be economic to go in and develop
6 that on 80's or 40-acre tracts?

7 A. I have not made a study of the Allison
8 itself, for instance. It -- of course every case has to stand
9 on its own. We have studied the Vada in particular for some
10 time and although the economics certainly are not as great as
11 we would like for them to be, we feel, obviously feel that
12 they are there.

13 Q. How much does it cost to drill a well in
14 the Vada-Penn in this immediate area?

15 A. To drill and complete, I assume you mean.

16 Q. Yes, sir.

17 A. Probably a pumping well completed and in
18 the tanks, looking at \$450,000.

19 Q. And it's my understanding you're planning
20 to go in and re-enter an existing hole and thereby affect some
21 savings, is that correct?

22 A. Yes, some savings because of equipment
23 we still have in that well, surface casing, intermediate casing.

24 Q. When was the subject well originally
25 drilled?

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Phone (505) 455-7409

1 A. I believe in 1969.

2 Q And then there have been subsequent prob-
3 lems with that well, I believe.

4 A. Yes, sir, there were; equipment failure
5 in 1978 caused its premature abandonment.

6 Q And then it's been reworked, or something,
7 once since then, is that correct, or has it been shut in?

8 A. No, it's been plugged since then.

9 Q Originally what acreage was dedicated to
10 this well?

11 A. The 160 acres comprising the northwest
12 quarter of Section 14.

13 MR. CARR: That's all I have.

14
15 CROSS EXAMINATION

16 BY MR. NUTTER:

17 Q When did you say the equipment in the well
18 failed, Mr. Layton?

19 A. 1978.

20 Q And it caused the premature abandonment,
21 then.

22 A. Yes, sir, it did.

23 Q What was dedicated to the well at the time
24 it was originally drilled and throughout its producing life,
25 Mr. Layton?

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Santa Fe, New Mexico 87501
Phone (505) 435-7409

1 A. That northwest quarter of Section 14.

2 Q. Being a standard unit in the --

3 A. Yes, sir, a standard 160-acre unit.

4 Q. Now, why are you seeking a non-standard
5 80-acre unit now instead of the original 160-acre standard
6 unit?

7 A. I have the common leasehold on the south-
8 east quarter of Section 10, south half of the southwest quarter
9 of Section 11, and this 80-acre tract, being the north half
10 of the northwest quarter of Section 12. This is all a common
11 lease owned by the Pyron Estate and I still have equipment
12 located on that lease, production facilities, surface facili-
13 ties and the like, and it's my intent to form a 4-well pro-
14 ject on this 320 acres with four 80-acre units, four wells
15 producing into this common surface facility.

16 Q. Now you mentioned the description of the
17 lands, being the southeast quarter of Section 10. Now the
18 Division recently approved two non-standard units there.

19 A. Yes, sir, that's right.

20 Q. Being the north half of the southeast and
21 the south half of the southeast.

22 A. Yes, sir.

23 Q. And I believe that the north half of the
24 southeast was to be dedicated to a new well that was to be
25 drilled.

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A. Yes, sir, that's right.

2 Q. And the south half of the southeast was to
3 be dedicated to an old well that's located in the southwest
4 quarter southeast quarter of Section 10.

5 A. That's correct.

6 Q. Which is to be recompleted.

7 A. Yes, sir.

8 Q. Now the south half of the southwest of
9 Section 11 was approved as an 80-acre non-standard unit to be
10 dedicated to an old well located in the southeast southwest
11 to be recompleted.

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

13 Q. And now you're proposing to -- here a
14 non-standard 80-acre unit to be dedicated to another old well
15 that would be recompleted.

16 A. That's correct, yes, sir.

17 MR. HUNKER: How much value do you have
18 in that old well, Mr. Layton, in your opinion?

19 A. Probably \$100,000 in the existing equip-
20 ment and the related costs of installing that equipment.

21 MR. HUNKER: That's your surface casing
22 and your intermediate casing?

23 A. That's right.

24 Q. And it belongs to Layton Enterprises?

25 A. Yes, sir, it does.

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Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

1 Q Now we have three -- four non-standard
2 units in this package, three of which would be dedicated to
3 old wells. Did you operate those old wells. Did you operate
4 those old wells when they were in production?

5 A Just the one in the current application,
6 or the current question we're discussing. I operated --

7 Q You operated this one.

8 A Yes, sir.

9 Q And you're the one that abandoned it in
10 '78 --

11 A Yes, sir.

12 Q -- when it had this mechanical failure.

13 A That's correct.

14 Q What was the nature of the mechanical
15 failure, Mr. Layton?

16 A That was very simple. The rod ^{string} ~~screen~~ (sic)
17 failed going in the hole and dropped and stacked up iron for
18 about 3000 feet from the bottom up and sheared the casing
19 off at the same time, tubing and casing; ultimately caused
20 the casing to collapse. At that time we spent considerable
21 money on the well trying to save it then, but oil prices
22 were considerably lower at that point than they are now, of
23 course, and we just reached the end of our economic --

24 Q Now is it your intent to try to drill
25 around this junk that's in the hole?

1 A Yes, sir, we intend to drill around it
2 this time. That's a more expensive process, of course, but
3 we feel like ---

4 Q You don't know if you can fish the junk
5 out.

6 A Not satisfactorily, no. I think -- I
7 think we'd be sending good money after bad. But at the time
8 we plugged the well the cost of sidetracking just could not
9 be justified by the current economics. We think now that it
10 can.

11 MR. NUTTER: Are there any other questions
12 of the witness? He may be excused.

13 MR. HUNKER: I'd like to offer in evidence
14 if I haven't already, Exhibits One through Five.

15 MR. NUTTER: Applicant's Exhibits One
16 through Five will be admitted in evidence.

17 MR. HUNKER: Thank you very much, Mr.
18 Examiner.

19 MR. NUTTER: Yes, sir.

20 MR. CARR: May it please the Examiner, at
21 this time I would call Robert L. Thornton, T-H-O-R-N-T-O-N.

22 ROBERT L. THORNTON

23 being called as a witness and being duly sworn upon his oath,
24 testified as follows, to-wit:
25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

DIRECT EXAMINATION

BY MR. CARR:

Q. Mr. Thornton, for the record will you

state your full name and place of residence?

A. Robert L. Thornton, Ft. Worth, Texas.

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

A. I'm self-employed as a geologist and petroleum landman.

Q. Have you previously testified before this

Commission and had your credentials accepted and made a matter of record?

A. No, I have not.

Q. Will you briefly summarize for the Examiner

your educational background and your work experience?

A. I graduated from the University of Texas

in 1971 with an economics Bachelor's degree. I worked as a

stockbroker and commodity broker until 1977. January of '77

I re-entered the University of Texas and-- and pursued education in geology and petroleum engineering. In 1978, September of 1978, I received a petroleum engineering Bachelor's

degree and was about three hours short -- three -- six hours

short of obtaining a geology degree. On this basis I was

hired by Houston Oil and Minerals and I worked in Houston Oil

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1 and Minerals as a geologist, as a development geologist most
2 of that time, and then in July of 1979 I left Houston Oil and
3 Minerals to form my own company, and I've been in that pur-
4 suit since that time.

5 Q Mr. Thornton, are you familiar with the
6 application filed in this case by Mr. Layton?

7 A Yes, I am.

8 MR. CARR: At this time, Mr. Nutter, we
9 would ask that the witness be qualified as a practical oilman.

10 MR. NUTTER: Mr. Thornton is qualified.

11 Q Mr. Thornton, what interest do you own in
12 the area which will be affected by the application of Layton?

13 A I own a lease that is a 5/6ths royalty
14 lease -- or 1/6th royalty lease to the State, on the State
15 lands that are represented by the 80-acre tract which is the
16 south half of the northwest quarter of Section 14, Township 9
17 South, Range 34 East.

18 Q When did you acquire this lease?

19 A I acquired it on November 1st -- or the
20 lease was dated November 1st, 1979.

21 Q And you did state this was a State lease
22 with 1/6th royalty.

23 A Correct.

24 Q What is the general producing formation in
25 the area?

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A. In the Vada-Penn Field the basic formation
2 that produces is the Bough C.

3 Q And in respect to your lease, where is
4 there presently Vada-Penn production?

5 A. There have -- at one time there was Vada-
6 Penn production on all the leases that adjoin my lease, and
7 currently there is -- or at least through 1979, which is the
8 end of '79, which is the data that I have, there was production
9 on the south and on the east of my lease at Mr. Layton's well,
10 a well that he has plugged, was not plugged for lack of pro-
11 duction. It was once a producer and it was plugged because
12 he had some problems with the well.

13 Q Mr. Thornton, I'll show you what has been
14 marked for identification as our Exhibit Number One and ask
15 you if you would identify that, please?

16 A. This is a copy of the map that was entered,
17 was sent by Mr. Layton in his application to set up the non-
18 standard proration units.

19 MR. CARR: Mr. Nutter, we have only one
20 copy of this with us and immediately following the hearing I
21 will provide you with additional copies.

22 MR. NUTTER: Okay.

23 Q Now, Mr. Thornton, will you explain to the
24 Examiner the status of the wells offsetting your lease as to
25 their producing capabilities?

1 A. The Tenneco -- there's a Tenneco well to
2 the east, which is in the -- which is in the -- has 160 acres
3 in the northeast quarter of that section, which produced 998
4 barrels during the year of 1979, 980 barrels during the year
5 of 1979.

6 The Prudential well, which is directly to
7 the south of my lease, dedicated the 160 acres in the south-
8 west quarter of the same section, the Prudential No. 1 Vada-
9 Pruda, for the last three years has produced under 5000 barrels
10 per year.

11 Q. And then we have Mr. Layton's well?

12 A. Mr. Layton's well to the north, in the last
13 year of operation produced about 5000 barrels, also, and it
14 was abandoned, as he said, due to technical problems.

15 Q. Is the Vada-Pennsylvanian Pool developed
16 in the area by wells to which 160 acres are dedicated?

17 A. Generally, yes.

18 Q. In your opinion is the acreage, being the
19 south half of the northwest quarter of Section 14, being your
20 lease, is that acreage productive in the Vada-Penn?

21 A. Yes, it -- yes, because wells -- I believe
22 so because wells in all directions have produced.

23 Q. Would you anticipate that a new well
24 drilled on your lease would be of comparable quality to wells
25 offsetting it?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7419

1 A. I would assume that since the well to the
2 north is producing 5000 barrels in the last year and the one
3 to the south 5000 barrels, the ones on the east and west have
4 been -- well, I would assume that it would -- could be pre-
5 sumed to produce about 5000 barrels a year.

6 Q. Would you consider this a marginal well?

7 A. I would consider it very marginal, consi-
8 dering the costs of drilling a new well.

9 Q. Now, what acreage was originally dedicated
10 to Mr. Layton's -- the well that Mr. Layton plans to rework
11 on this quarter section?

12 A. Originally the well was drilled by Tenneco
13 and I believe the south half of the lease that I presently
14 own was owned by Cities Service. It was -- there was 160-acres
15 put together to form -- to drill that one well. They dedicated
16 the northwest quarter of the 160-acre tract in that section.

17 Q. And did the acreage that you now have
18 under lease share in the cost of drilling of the existing well?

19 A. Yes, they did.

20 Q. Did they share in the production from
21 that well?

22 A. Yes, they did.

23 Q. What happened to the prior communitization
24 agreement for the northwest quarter of Section 14?

25 A. Due to the technical problems that Mr.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

1 Layton had when he abandoned, he decided to abandon the well,
2 then he decided at that time not to re-enter --- not to re-
3 drill the well or to re-enter it at that time, and because of
4 that delay, 60-day delay, a delay in excess of 60 days, the
5 communitization and the lease expired.

6 Q Are you aware of any characteristic of
7 producing formation which would prevent the well Mr. Layton is
8 proposing to recomplete, prevent that well from draining your
9 lease?

10 A I am not aware of any such characteristic
11 and I don't believe there would be such.

12 Q Is it your testimony that you believe your
13 lease will be drained by the well which is the subject of this
14 application?

15 A I believe that it will be so drained.

16 Q Now I believe you heard Mr. Layton testify
17 as to the costs of drilling a new well in this area. Do you
18 concur in his statement?

19 A I would say that is a -- that \$450-\$500,000
20 would be a reasonable cost.

21 Q What do you understand the costs of re-
22 entering and recompleting the well would be for Mr. Layton?

23 A Well, for Mr. Layton, he told me that the
24 costs would be about \$350,000, and by the way, let me point
25 out one thing. He mentioned a value for the equipment and

1 casing, et cetera, that are in the well, there's no tubing,
2 of course, that's of any value, I question whether the depre-
3 ciated value of -- of 10-year old equipment would be what he
4 specified.

5 Q Mr. Thornton, if Mr. Layton's application
6 was denied, you would be willing to join with him and share
7 the cost of the reworking and operating on the existing well?

8 A Yes, I would.

9 Q And you would be willing to pay the reason-
10 able value of your share of any equipment or material on the
11 lease?

12 A Yes, under a reasonable operating agreement.

13 Q In your opinion would it be possible for
14 you to drill a well on the south half of Section 14 to pro-
15 tect that acreage against drainage from the well which Mr.
16 Layton is proposing to rework?

17 A Considering the \$500,000 cost and the
18 1/6th royalty, I do not believe it to be a desirable economic
19 prospect, and let me -- let me go into some figures on that.

20 Assuming 5000 barrels a day and --

21 MR. NUTTER: Not 5000 barrels a day.

22 A I'm sorry, per year, 5000 barrels a day
23 it would be economic. 5000 barrels a year, and about \$28.00
24 a barrel net after production taxes and windfall taxes, and
25 a 5/6ths lease, that comes out to approximately \$117-\$118,000

SALLY W. BOYD, C.S.R.

Rt. 1 Box 93-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 The costs of operating it would be in the neighborhood of
2 \$18,000. That would leave net revenues, assuming no problems
3 whatsoever with the well, which, of course, we've seen can
4 happen on the Layton lease, for instance, would be about
5 \$100,000. Considering a half a million cost and with interest
6 rates nearing 20 percent, there's no way that you can come out
7 economically on a 20 percent net return.

8 In addition, using Mr. Layton's Exhibit
9 One, the Applicant's Exhibit One, for barrels per acre that
10 have been recovered over the entire lifetime of this field,
11 which Mr. Layton himself said was substantially depleted, there
12 are 938 barrels per acre assumed to come -- over the field-
13 wide average coming from that field, and with essentially 1000
14 barrels times \$30.00 a barrel times 40 acres, that would be,
15 if the lease were entirely new, it would produce \$3,240,000
16 worth of net revenues.

17 Even assuming that it's 75 percent depleted,
18 which I believe it may be more so, that would leave 25 percent
19 of, say, that oil in the ground, which would be an ultimate
20 recovery of about \$800,000 off of a half a million dollar in-
21 vestment.

22 MR. NUTTER: Now you said assuming 40
23 acres.

24 A. I mean assuming 80 acres.

25 MR. NUTTER: 80 acres.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A Which is Mr. Layton's desire.

2 Q If Mr. Layton's application is granted,
3 in your opinion would there be any practical way for you to
4 protect your lease from drainage?

5 A I do not believe so.

6 Q Do you believe reserves from your lease
7 would be produced by the Layton well?

8 A Yes, I do.

9 Q If at a later date after the well is re-
10 completed and you were able to determine that an additional
11 well necessary to effectively and efficiently drain the north-
12 west quarter of Section 14, at that time would you be willing
13 to participate in the drilling of an additional well if it
14 qualified under the NGPA for a higher price?

15 A Probably, yes.

16 Q In your opinion would granting this appli-
17 cation impair your correlative rights?

18 A It certainly would.

19 Q Do you have anything further to add to
20 your testimony?

21 A No.

22 MR. CARR: At this time, Mr. Nutter, we
23 would offer into evidence Applicant's Exhibit -- or Thornton
24 Exhibit Number One.

25 MR. NUTTER: Thornton Exhibit One will be

1 admitted in evidence.

2 MR. CARR: I have nothing further.

3 MR. NUTTER: Mr. Hunker?

4 MR. HUNKER: Yes, sir.

5
6 CROSS EXAMINATION

7 BY MR. HUNKER:

8 Q Mr. Thornton, are you a reservoir engineer?

9 A No, I am not. I've had some training.

10 Q Are you qualified to make a statement
11 that in your opinion the Layton well will in fact drain your
12 acreage?

13 A Well, I haven't done any research into it
14 at this point.

15 Q In connection with the Prudential well to
16 the south, do you feel that that well may be draining your
17 80-acre tract?

18 A I would assume it is.

19 Q In connection with the economics, you'd
20 be willing to pay for 50 percent of the cost of drilling the
21 new well, is that correct?

22 A Correct.

23 Q You'd be willing to pay what part of the
24 cost of Mr. Layton's hole in the ground, surface casing, and
25 intermediate casing?

1 A. At its reasonably depreciated value, con-
2 sidering the age of the equipment.

3 MR. NUTTER: You'd pay 50 percent of the
4 reasonable arrived at depreciated value.

5 A. Right, 50 percent, uh-huh.

6 Q. You have mentioned depreciated value. The
7 pipe might be worth more today than it was -- than it originally
8 cost, isn't that correct?

9 A. That's correct, but it's also ten years
10 old, or eleven years old.

11 Q. If you did participate in the drilling of
12 this well and paid your part of the cost, what part of the
13 well would you own?

14 A. I would assume that I would own -- I'm
15 not familiar with the law regarding -- regarding it. I would
16 assume I would have 50 percent of it.

17 Q. Well, if you have half the communitized
18 tract, you'd have 50 percent.

19 A. 50 percent.

20 Q. So the economics of the situation would
21 give you a half a well, isn't that correct?

22 A. Correct.

23 Q. And you would thereby dilute the interest
24 that Mr. Layton has in the well, isn't that correct?

25 A. That's correct, he would own one half the

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 433-7409

1 well, also.

2 Q Do you realize that it might not be econ-
3 omic for Mr. Layton to -- to drill -- to reenter this well if
4 he has to share the production with somebody else?

5 A He would have the same percentage profit
6 margin. As far as his time and effort, I'll be glad to handle
7 operation or find an operator in the area.

8 Q But he'd only have 50 percent of the well,
9 isn't that correct?

10 A That's true.

11 Q He would be diluted to the extent of 50
12 percent.

13 A That's correct.

14 Q What is the term of your oil and gas lease
15 from the State of New Mexico?

16 A It's a 5-year lease.

17 Q And it was dated November the 1st, 1979,
18 is that correct?

19 A That is correct.

20 Q So you have roughly another 3 years within
21 which to evaluate that property, is that ...

22 A Roughly 4 years.

23 Q Roughly four years. In your opinion will
24 Mr. Layton's well improve the marketability of your oil and
25 gas lease?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A I do not believe so because other companies
2 will look at the 80-acre -- say I was trying to sell it and
3 find a marketability, other company would look at it and try
4 to figure out how they could economically produce the 80 acres
5 and drill a well and --

6 Q Have you submitted your lease to anyone
7 for purchase?

8 A Yes, I have.

9 Q Have you had any success?

10 A No.

11 Q Have you tried to get anybody to drill on
12 your lease?

13 A Not at this time.

14 Q Well, since you acquired it in '79 have
15 you tried to get somebody to develop it or have you tried to
16 put together a fund to develop it yourself?

17 A Not to this time. I assumed that when I
18 bought it, if I were going to be reentering it, I'd be reentering
19 the other well. That was my original economic basis.

20 Q You realize that this is a marginal prospect,
21 don't you?

22 A Yes, I do.

23 Q And that the investment of \$350,000 or
24 thereabouts is a rather heavy money commitment.

25 A It certainly is.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

Q And Mr. Layton is willing to assume this entire risk. Don't you think that that in itself will help to evaluate your acreage?

A There is no conceivable way in my mind that an 80-acre well, given the production history, the production in the field in barrels per acre, could justify the expense, and therefor the lease would have zero market value, and zero incentive to its development.

Q Well, the 50 percent rule is going to apply, just --

A In my -- in that case it's draining 160 acres of production. 160 acres times 983 barrels is twice as much oil as 80 times 938 barrels.

Q And Mr. Layton expressed the opinion as a petroleum engineer that in his judgment his well would only drain 40 acres. Do you recall that testimony?

A I do recall that testimony.

Q Would you disagree with that testimony?

A I am disagreeing to the best of my ability

to.

MR. HUNKER: Thank you, Mr. Examiner, I have nothing further.

MR. CARR: I have just one more question.

MR. NUTTER: Mr. Carr.

REDIRECT EXAMINATION

BY MR. CARR:

Q Mr. Thornton, I want to be sure I understand your testimony.

You were stating that in your opinion you would have one-half of a well, is that correct?

A That is correct.

Q And is it also your testimony that for one-half of the well you're willing to pay one-half of the costs involved in that?

A That is correct.

Q I believe you concurred with Mr. Hunker's statement that \$350,000 was a very heavy commitment to make for the development of -- or the reentry of this well.

A I do concur.

Q By the same token, \$500,000 would be an extremely heavy burden to go and drill a new hole.

A Substantially more.

MR. CARR: I have nothing further.

MR. NUTTER: Does anyone have any questions or Mr. Thornton? He may be excused.

MR. HUNKER: I'd like to recall Mr. Layton for just one or two questions.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 DONALD R. LAYTON

2 being recalled, testified as follows, to-wit:

3
4 REDIRECT EXAMINATION

5 BY MR. HUNKER:

6 Q In connection with reentry prospect, Mr.
7 Layton, of Pyron No. 1, do you contemplate setting a whipstock
8 at bottom of the intermediate casing?

9 A Yes, sir, at or a point below, whatever is
10 convenient with the formation as it be.

11 Q And the new hole will be drilled down to
12 the Bough C, is that correct?

13 A Yes, sir, that's correct.

14 Q The Bough C will be tested?

15 A Yes, sir.

16 Q Have you prepared an AFE in connection
17 with this particular project?

18 A I've just prepared an estimate of myself,
19 since we're pretty internal in our operation. A formal AFE
20 is not usually the case.

21 Q Well --

22 A But we have prepared an estimate and the
23 \$350,000 is what we assume it will cost after considering the
24 value of the equipment already on hand; that is, the surface
25 equipment and the surface and intermediate casing strings, and

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

1 the cost of the placing and cementing both of those.

2 Q You'll save some money on drilling, too,
3 won't you, drilling expense to the bottom of the intermediate?

4 A Actually, no, because this will be a day
5 work project. No contractor would take a footage contract,
6 of course, from that point. They make all their money in the
7 first half of the hole on a footage contract, so it will be
8 day work. It will also involve some additional cost in the
9 whipstock operation itself, so as far as rig cost, we figure
10 it's at best even with drilling a new top to bottom well.

11 The main consideration was the utilization
12 of the existing surface and intermediate casing strings.

13 Q I'll ask you one other question. In your
14 opinion, if your application is not granted, would it become
15 not feasible for you to develop this -- to make this reentry?

16 A It really isn't feasible to me, I don't
17 believe, because it would become a joint operation, which in-
18 volves additional administrative costs; it would lower our
19 potential margin of profit. Just making a profit doesn't
20 really interest us unless we think the profit is sufficient to
21 justify our time and effort, which go into such an operation.

22 Q In connection with the opinion that you
23 expressed about drainage, why are you so firm about this,
24 about this matter? That is to say that the well will only
25 drain 40 acres?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A. I think the gas/oil ratio, Exhibit Five
2 that we showed, pretty clearly sets that out. The reservoir
3 is not being drained. The gas is being produced from the
4 Morrow, which is not moving to the wellbores of the existing
5 producing wells; therefor you get a high gas/oil ratio. The
6 one of the oldest points that we look at in reservoir deter-
7 mination, possibly, is that gas/oil ratio, because you get
8 into a system of a thing called relative permeability within
9 any reservoir, within the formation when pressures drop below
10 a certain point you have gas escaping, solution gas escaping
11 from the oil, which causes the high gas/oil ratio, and this
12 can move readily. Most formations have a greater, much
13 greater affinity to the production of free gas than they do
14 of any liquid, water or oil. Consequently, your gas breaks
15 out due to the lowered pressures and it will travel readily
16 to any point of lower pressure, being a wellbore, leaves the
17 oil right where it was in the beginning and it's not moving
18 on that account.

19 The -- this was a slightly different re-
20 servoir initially. It was a -- probably a two-headed pro-
21 ducing mechanism. First of all it was a water-charged reser-
22 voir and the expansion of the connate water was one of the
23 primary producing mechanisms and the other, as in most reser-
24 voirs, was the expansion of solution gas.

25 Once you allow this gas to break free, to

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone: (505) 455-7409

1 a free state, and travel away from the wellbore, it's not
2 moving fluid with it any more, and the oil just sets in place
3 right where it was.

4 The recovery efficiencies, I think, of the
5 two fields, or the several fields, then clearly indicates that
6 this is what has happened, that the wide spacing has not been
7 efficient and left oil every place where it was originally
8 with a certain amount of it being produced away initially, but
9 probably with rather high saturations. A comparison of the
10 Vada and the Allison shows that the Allison has produced twice
11 that amount of oil under essentially the same conditions, the
12 same reservoir quality, same thickness, same characteristics.

13 For that reason, I don't think there's
14 any way that we can set a well out at some point in 160-acre
15 tract now and say that it's going to drain 160 acres. It
16 didn't do it in the first place. There's no reason to think
17 that it would now.

18 Q Do you have anything else to add to your
19 testimony?

20 A I might mention something about depreciated
21 values of equipment, appreciating that Mr. Thornton hasn't been
22 involved in that particular phase of it as we operators have
23 recently. I think that point is best illustrated by a gentle-
24 man recently who had new pumping units to sell and just made
25 the comment to me. He said, we're the highest new pumping

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 unit on the market but we're cheaper than used ones.

2 Used equipment is at a premium right now
3 because there's a great deal of demand for it. This particular
4 casing in our intermediate string is -- is K-55, 32-pound,
5 8-5/8ths. It currently at new prices is around \$15.00 plus
6 per foot, plus drayage and all those things, the important
7 thing being that you can't buy any. So it's worth nearly
8 anything, really. That was one of the big factors that en-
9 couraged us to make the reentry, which admittedly is more
10 hazardous, and except for that consideration just as expensive
11 as drilling a new well top to bottom.

12 MR. HUNKER: Very well, I have no further
13 questions. Do you have any questions, Mr. Carr?

14 MR. CARR: Just a couple.

16 RECROSS EXAMINATION

17 BY MR. CARR:

18 Q I think you just answered it. It's the
19 availability of the equipment that is causing you to go ahead
20 and reenter as opposed to drilling a new well?

21 A Yes, sir, that's right.

22 Q You think the cost would be about the
23 same?

24 A I think it would be higher, if you could
25 find any.

1 Q For the -- aren't the costs of the reentry
2 as opposed to --

3 A Oh, I'm sorry, I --

4 Q -- a new well about the same?

5 A Yes, other than the consideration of that
6 surface equipment, it would be about the same.

7 Q I believe you testified that the wide
8 spacing in your opinion was not efficient.

9 A Yes, sir.

10 Q The standard spacing is, however, 160
11 acres, is that not correct?

12 A Yes, sir, it was.

13 Q And that was based on what was believed
14 could be effectively drained by one well.

15 A I think it was developed more as an econ-
16 omic spacing at that time. The field had very high porosity,
17 of course, and was capable of high rates, which initially
18 would, I think, tend to lead anyone to think that it probably
19 could be efficiently produced on the wider spacing.

20 I think the data, of course, bears out
21 quite plainly that it was not efficient. Nevertheless, I
22 don't say that it wasn't the thing to do. It almost certainly
23 was; a great deal of the Vada Field might never have been
24 drilled had it not been for the wider spacing and higher
25 allowables and the opportunity for faster amortization of the

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

1 costs.

2 Q I think you testified that if your appli-
3 cation was denied, you would perhaps not reenter the well at
4 all, is that correct?

5 A Well, I would have no basis to reenter the
6 well at this point. I would have no authority to because the
7 Commission will not grant me that authority on that 80 acres.

8 Q And you would not be interested in re-
9 entering the well if you were compelled to put 160-acre unit
10 together. Was that your testimony?

11 A I'm not particularly interested in that,
12 no. In the first place, the economics are greatly diluted so
13 far as I am concerned. As far as my time and effort, which
14 is -- may not be worth a lot to anyone else, but it's worth
15 a great deal to me.

16 The other thing that I might point out
17 at this point, I think the correlative rights of the royalty
18 owners under my tract would be grossly violated in this case,
19 because I'm firmly convinced we would produce no oil from
20 that tract to the south, yet my royalty owners would be giving
21 up half of their oil interest to that tract, as I would.
22 I presumably would be compensated monetarily but they would
23 not. They would just lose half of the --

24 Q They would be entitled, however, to share
25 in any production from the tract at a later date as well, is

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 that correct?

2 A. Yes, that's correct, they would.

3 Q. You stated that you would not be particu-
4 larly interested in forming a 160-acre unit. Would you be
5 particularly interested in joining in a well that Mr. Thornton
6 might drill on a 160-acre unit?

7 A. I'd have to look at his economics and
8 his operator.

9 MP. CARR: I have nothing further.
10 A. I'll have to --

11 RE CROSS EXAMINATION

12 BY MR. NUTTER:

13 Q. Mr. Layton, you talk about the rights of
14 your royalty owners being violated, be it right or be it
15 wrong, the spacing is 160 acres in the pool and theoretically
16 that says that one well will drain 160 acres. So theoretic-
17 cally their rights could not be violated.

18 A. Is that a foredrawn conclusion that it
19 will drain 160 acres?

20 Q. The Commission years ago stated that one
21 well will adequately and efficiently drain 160 acres, and I
22 say, be it right or be it wrong, that's the rule of the land
23 in that pool.

24 Also, Mr. Layton, you stated that your
25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 economic interest would be diluted by the presence of Mr.
2 Thornton in a 160-acre unit. There's a certain amount of risk
3 involved in spending whatever money it's going to take to
4 reenter this well and put it back on production, and a risk
5 in the payout. Your -- your risk would also be diluted --

6 A. Oh, yes.

7 Q -- if he put up the money in advance of --
8 his share of the money.

9 A. Right. I have a theory about that, Mr.
10 Nutter, that if you take no risk at all, you can't lose any-
11 thing, either, so neither do you make anything, but I don't
12 think risk worries any bona fide operator very much, because
13 we take that every day. We take it when we get out of bed
14 in the morning.

15 Q Well, you ought to hear them talk about
16 a risk in these compulsory pooling cases.

17 A. That's possibly true, but I'm looking at
18 it from a different angle right now. But I'd like to mention
19 that Mr. Thornton's testimony, he suggests that he could not
20 drill a well on his tract because the economics will not
21 justify it. But it seems to me that the economics for half
22 a well are just exactly the same as they are for drilling a
23 whole well.

24 Q What is the cumulative production from
25 the well that you've got now, the one you're going to reenter?

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A. I believe it's 210,000 barrels.

2 Q. Now when you reenter that and set your
3 whipstock or your Dyna-drill, whatever, what direction will
4 you take off in?

5 A. Doesn't particularly matter because we
6 will only be angling it one to two degrees, which would just
7 keep us away from the junk, is all. At bottom hole, at the
8 most 200 feet from the original wellbore, so it really is of
9 no significance to us at all.

10 Q. If you set it in any specified direction
11 you would have to have a hearing prior to doing this. If you
12 drilled in an indeterminate direction to sidetrack --

13 A. I see.

14 Q. -- junk in the hole, I think you wouldn't
15 have to have a hearing.

16 A. I wasn't -- I haven't previously had ex-
17 perience with that so I wasn't certain what the rule was, and
18 I have not checked that with the district office to see what
19 they would require.

20 MR. NUTTER: Are there any further ques-
21 tions of Mr. Layton? He may be excused.

22 Do you have anything further in this case,

23 Mr. Hunker?

24 MR. HUNKER: No more, thank you, sir.

25 MR. NUTTER: Does anyone have anything

1 they wish to offer in Case Number 7191?
2
3 We'll take the case under advisement.
4
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(Hearing concluded.)

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that
the foregoing Transcript of Hearing before the Oil Conserva-
tion Division was reported by me; that the said transcript
is a full, true, and correct record of the hearing, prepared
by me to the best of my ability.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 7091
heard by me on 11/25 1980.

[Signature] Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

25 November 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Layton Enterprises,
Inc., for a non-standard proration
unit, Lea County, New Mexico.

CASE
7091

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

George H. Hunker, Jr.
HUNKER, FEDRIC P. A.
P. O. Box 1837
Roswell, New Mexico 88201

For Robert L. Thornton:

William F. Carr, Esq.
CAMPBELL & BLACK P. A.
Jefferson Place
Santa Fe, New Mexico 87501

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 MR. NUTTER: We'll call next Case Number
2 7091.

3 MR. PADILLA: Application of Layton En-
4 terprises, Inc., for a non-standard proration unit, Lea
5 County, New Mexico.

6 MR. HUNKER: George H. Hunker, Jr.,
7 Hunker-Fedric P. A., Roswell, New Mexico, appearing on behalf
8 of the operator, Layton Enterprises, Inc.. I have one witness
9 and five exhibits.

10 MR. CARR: Mr. Examiner, I am William F.
11 Carr with the law firm Campbell and Black, P. A., Santa Fe,
12 appearing on behalf of Robert L. Thornton. I have one wit-
13 ness.

14 MR. NUTTER: Will both witnesses please
15 stand and be sworn?

16
17 (Witnesses sworn.)
18

19 DONALD R. LAYTON
20 being called as a witness and being duly sworn upon his oath,
21 testified as follows, to-wit:
22

23 DIRECT EXAMINATION

24 BY MR. HUNKER:

25 Q What is your name and address?

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Phone (505) 455-7409

1 A Donald R. Layton, Lubbock, Texas.

2 Q And what is your occupation?

3 A I'm president of Layton Enterprises, Inc.,

4 in Lubbock, Texas.

5 Q Have you testified as a petroleum engineer

6 before this Commission?

7 A Yes, sir, I have.

8 Q And were your qualifications acceptable

9 at that time?

10 A Yes, sir.

11 MR. HUNKER: Are the witness' qualifica-

12 tions accepted?

13 MR. NUTTER: Yes, they are.

14 Q Mr. Layton, are you familiar with the

15 application that has been filed in connection with this mat-

16 ter?

17 A Yes, sir, I am.

18 Q And what's the purpose of the application?

19 A The purpose of the application is to esta-

20 blish a project area comprised of four non-standard 80-acre

21 proration units within the confines of the Vada-Pennsylvanian

22 Field.

23 Q And has administrative approval been

24 given on three of those?

25 A Yes, sir, it has, the two locations in

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1 Section 10, 9, 34, and one in Section 11, 9, 34, have been
2 administratively approved.

3 Q Looking at the map that's been marked
4 Applicant's Exhibit Number One, will you identify this instru-
5 ment and show the Examiner what this reveals?

6 A All right, sir. This is a map of the
7 Vada-Pennsylvanian Pool. More than that, it shows the entire
8 Bough C trend in Lea and Roosevelt Counties, New Mexico, which
9 is comprised actually of a number of separately designated
10 fields. At one time there were other fields that have since
11 been incorporated into the Vada-Penn, but at this point in
12 time in addition to the Vada we have the Allison-Penn, the
13 Bough-Penn, and the Inbe-Penn still retaining original identi-
14 ties.

15 Q How long have you operated wells in this
16 area, Mr. Layton?

17 A In this field about four years. In this
18 area something like twenty-five years.

19 Q What is the spacing rule with regard to
20 the Vada-Penn Field?

21 A Vada-Penn is 160 acre proration units.

22 Q And the Allison-Penn Field, the field on
23 the far right?

24 A The Allison-Penn is 80-acre spacing pro-
25 ration units.

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Phone (505) 455-7409

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1 Q And the Bough-Penn Field?

2 A The Bough-Penn is actually 40-acre pro-
3 ration units. It has more generally been developed on 80-
4 acre spacing, although a portion of the field at least actually
5 resembles 40-acre spacing, which is the standard proration
6 unit.

7 Q On the southwest corner of this plat there
8 appears some legend with regard to the Inbe. Will you --

9 A Yes, sir, the Inbe Field, again, is 80-
10 acre standard proration units and pretty generally has been
11 developed on that pattern.

12 Q Tell the Examiner what else does that
13 plat reveal?

14 A All right, this plat shows some of the
15 recovery data with respect to total number of acreage covered
16 by the -- now this is not--the acreage figure covers only those
17 established and producing proration units. It does not cover
18 any other contingent acreage.

19 It shows the acreage, the total number of
20 wells that are or have produced oil from this reservoir and
21 the cumulative recovery from each field and the recovery in
22 barrels per acre from each of these.

23 We also, just by way of information, de-
24 signated a small area called the application area, which I
25 randomly selected in two directions, a 2400 acre plot and 15

1 wells and showed the recovery for that immediate area sur-
2 rounding the 80 acres involved in the application.

3 Q With regard to the project in the north
4 half of the northwest quarter of Section 14, 9 South, 34 East,
5 what are your company's plans?

6 A We plan to make a re-entry on a well known
7 as our No. 1 Pyron (sic), which is located in the northeast
8 of the northwest quarter, or the east half of the north half
9 of the northwest quarter of Section 14.

10 Q How much acreage will that well drill in
11 your -- will that well drain in your opinion, Mr. Layton?

12 A In my opinion, considering the current
13 bottom hole pressure conditions in that field, will at best
14 drain 80 acres.

15 Q Will you refer to what's been marked as
16 Exhibits Two, Three, and Four, and explain to the Examiner
17 what these fields show -- what these plats show?

18 A All right. These are just detail plats
19 of the Allison, Bough, and Inbe-Penn Fields, showing the gen-
20 eral spacing pattern, showing the 80-acre proration units as
21 they were developed. They have no other significance on the
22 case other than that. The larger map does not include the
23 well locations in the adjacent fields. It only includes well
24 locations for the Vada, and these are simply to show the de-
25 tail.

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1 Q Significant recoveries have been made
2 in the Allison-Penn Field and I'd like for you to explain the
3 reason for that.

4 A All right. The Allison field has recovered
5 1888 barrels per acre. Incidentally, all of these figures
6 are through 1-1-1980, taken from the Commission records.

7 The Allison Field has recovered 1888 bar-
8 rels per acre on 80-acre spacing and with a relatively low
9 gas/oil ratio through all of its producing history. Currently
10 the gas/oil ratio for the Allison Field is averaging approxi-
11 mately 2500-to-1. I believe all of this area has a GOR
12 limit of 10,000-to-1. It's produced well below that through-
13 out its entire life.

14 Q In your opinion can the Vada-Penn area
15 be economically developed on an 80-acre spacing?

16 A Yes, sir, in my opinion it can.

17 Q Looking to what's been marked Applicant's
18 Exhibit Number Five, will you identify this instrument and
19 tell the Examiner what it reveals?

20 A Yes, sir, this is a comparison of the gas/
21 oil ratios involved in the first eight years of the producing
22 life of each field. Now these are not corresponding years,
23 so I have designated them year of field production. The
24 fields were drilled at slightly different times, and this is
25 just a comparison of the gas/oil ratios of each field and it's

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 notable on this exhibit, I think, that the Vada Field, which
2 is the only area developed on 160-acre spacing, the gas/oil
3 ratio increases much more rapidly than the other two, and
4 maintains a much higher level at the end of eight years.

5 I might add in fairness that in the later
6 stages of any field, of course, you can usually expect the
7 higher gas/oil ratios, but through the first eight years,
8 which actually these are the years when most of the oil, or
9 most of the cumulative was produced from each of these reser-
10 voirs.

11 MR. NUTTER: Now these are field-wide
12 production ratios, is that it?

13 A Yes, sir, these are field-wide and they're
14 based on yearly averages for the entire field. I might make
15 note that the Inbe appears to be declining the first few years
16 and this is directly due, I think, to the stage of development
17 and a lower rate of development probably caused this. It was
18 a slow, a steady rate of drilling and the --

19 MR. NUTTER: More --

20 A New areas --

21 MR. NUTTER: -- new lower ratio wells
22 coming in.

23 A Yes, sir, that's right, more new wells
24 with lower ratios coming in that held the average down.

25 The Vada, by contrast, of course, was

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
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Phone (505) 455-7409

1 developed very rapidly. The Allison also was developed at a
2 slightly lower rate, although I think faster than the Inbe
3 Field was drilled.

4 Q When was the Vada-Penn initially developed,
5 Mr. Layton?

6 A I believe the first activity in the Vada
7 was either in 1967, late 1967, or '68. The majority of the
8 drilling took place from 1968 on through 1971.

9 Q What were the economics at that time?

10 A The economics werenot all that good. The
11 oil prices were low in a depressed market condition and I
12 think operators were faced then with a situation where they
13 needed the larger spacing, higher allowables, in order to
14 more quickly amortize their investment in drilling.

15 Q In your opinion will the granting of your
16 application adversely affect any offsetting owner?

17 A No, sir, in my opinion it will not.

18 Q Do you believe that the granting of your
19 application would be in the interest of the prevention of
20 waste and protection of correlative rights and the best in-
21 terest of conservation?

22 A Yes, sir.

23 Q Do you have anything else to add with re-
24 gard to -- to the exhibits or with regard to this particular
25 prospect?

1 A I think we've generally covered it fairly
2 well, George.

3 MR. HUNKER: I have no further questions,
4 Mr. Examiner.

5 MR. NUTTER: Mr. Carr?

6 MR. CARR: I have just a couple of ques-
7 tions of Mr. Layton.

8
9 CROSS EXAMINATION

10 BY MR. CARR:

11 Q Mr. Layton, how would you characterize
12 the Vada-Penn Pool in the immediate area now in terms of the
13 extent to which that reservoir has been depleted? Has it
14 been substantially depleted?

15 A Yes, sir, I would say it has been sub-
16 stantially depleted.

17 Q In your opinion developing a reservoir
18 or a tract within a reservoir that has been substantially
19 depleted as opposed to one that has not been so depleted,
20 doesn't this bear on the economics of drilling a well?

21 A Certainly does.

22 Q And wouldn't most of the development in
23 the Allison and the other fields on this smaller spacing
24 have been done prior to the time the reservoirs were substan-
25 tially depleted?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A Yes, I would say that's true, yes.

2 Q Do you think it would be economic in a
3 depleted reservoir to develop, say, the Allison, if it was in
4 the comparable status in terms of its depletion as the Vada-
5 Penn? Do you think it would be economic to go in and develop
6 that on 80's or 40-acre tracts?

7 A I have not made a study of the Allison
8 itself, for instance. It -- of course every case has to stand
9 on its own. We have studied the Vada in particular for some
10 time and although the economics certainly are not as great as
11 we would like for them to be, we feel, obviously feel that
12 they are there.

13 Q How much does it cost to drill a well in
14 the Vada-Penn in this immediate area?

15 A To drill and complete, I assume you mean.
16 Q Yes, sir.

17 A Probably a pumping well completed and in
18 the tanks, looking at \$450,000.

19 Q And it's my understanding you're planning
20 to go in and re-enter an existing hole and thereby affect some
21 savings, is that correct?

22 A Yes, some savings because of equipment
23 we still have in that well, surface casing, intermediate casing.
24 Q

25 When was the subject well originally
26 drilled?

1 A. I believe in 1969.

2 Q And then there have been subsequent prob-
3 lems with that well, I believe.

4 A Yes, sir, there were; equipment failure
5 in 1978 caused its premature abandonment.

6 Q And then it's been reworked, or something,
7 once since then, is that correct, or has it been shut in?

8 A No, it's been plugged since then.

9 Q Originally what acreage was dedicated to
10 this well?

11 A The 160 acres comprising the northwest
12 quarter of Section 14.

13 MR. CARR: That's all I have.

14
15 CROSS EXAMINATION

16 BY MR. NUTTER:

17 Q When did you say the equipment in the well
18 failed, Mr. Layton?

19 A 1978.

20 Q And it caused the premature abandonment,
21 then.

22 A Yes, sir, it did.

23 Q What was dedicated to the well at the time
24 it was originally drilled and throughout its producing life,
25 Mr. Layton?

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Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A That northwest quarter of Section 14.

2 Q Being a standard unit in the --

3 A Yes, sir, a standard 160-acre unit.

4 Q Now, why are you seeking a non-standard
5 80-acre unit now instead of the original 160-acre standard
6 unit?

7 A I have the common leasehold on the south-
8 east quarter of Section 10, south half of the southwest quarter
9 of Section 11, and this 80-acre tract, being the north half
10 of the northwest quarter of Section 12. This is all a common
11 lease owned by the Pyron Estate and I still have equipment
12 located on that lease, production facilities, surface facili-
13 ties and the like, and it's my intent to form a 4-well pro-
14 ject on this 320 acres with four 80-acre units, four wells
15 producing into this common surface facility.

16 Q Now you mentioned the description of the
17 lands, being the southeast quarter of Section 10. Now the
18 Division recently approved two non-standard units there.

19 A Yes, sir, that's right.

20 Q Being the north half of the southeast and
21 the south half of the southeast.

22 A Yes, sir.

23 Q And I believe that the north half of the
24 southeast was to be dedicated to a new well that was to be
25 drilled.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 195-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A Yes, sir, that's right.

2 Q And the south half of the southeast was to
3 be dedicated to an old well that's located in the southwest
4 quarter southeast quarter of Section 10.

5 A That's correct.

6 Q Which is to be recompleted.

7 A Yes, sir.

8 Q Now the south half of the southwest of
9 Section 11 was approved as an 80-acre non-standard unit to be
10 dedicated to an old well located in the southeast southwest
11 to be recompleted.

12 A Yes, sir, that's correct.

13 Q And now you're proposing to -- here a
14 non-standard 80-acre unit to be dedicated to another old well
15 that would be recompleted.

16 A That's correct, yes, sir.

17 MR. HUNKER: How much value do you have
18 in that old well, Mr. Layton, in your opinion?

19 A Probably \$100,000 in the existing equip-
20 ment and the related costs of installing that equipment.

21 MR. HUNKER: That's your surface casing
22 and your intermediate casing?

23 A That's right.

24 Q And it belongs to Layton Enterprises?

25 A Yes, sir, it does.

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 Q Now we have three -- four non standard
2 units in this package, three of which would be dedicated to
3 old wells. Did you operate those old wells. Did you operate
4 those old wells when they were in production?

5 A Just the one in the current application,
6 or the current question we're discussing. I operated --

7 Q You operated this one.

8 A Yes, sir.

9 Q And you're the one that abandoned it in

10 '78 --

11 A Yes, sir.

12 Q -- when it had this mechanical failure.

13 A That's correct.

14 Q What was the nature of the mechanical

15 failure, Mr. Layton?

16 A That was very simple. The rod ^{string} screen ~~screen~~ ^{string}
17 failed going in the hole and dropped and stacked up iron for
18 about 3000 feet from the bottom up and sheared the casing
19 off at the same time, tubing and casing; ultimately caused
20 the casing to collapse. At that time we spent considerable
21 money on the well trying to save it then, but oil prices
22 were considerably lower at that point than they are now, of
23 course, and we just reached the end of our economic --

24 Q Now is it your intent to try to drill
25 around this junk that's in the hole?

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Phone (505) 455-7409

1 A Yes, sir, we intend to drill around it
2 this time. That's a more expensive process, of course, but
3 we feel like --

4 Q You don't know if you can fish the junk
5 out.

6 A Not satisfactorily, no. I think -- I
7 think we'd be sending good money after bad. But at the time
8 we plugged the well the cost of sidetracking just could not
9 be justified by the current economics. We think now that it
10 can.

11 MR. NUTTER: Are there any other questions
12 of the witness? He may be excused.

13 MR. HUNKER: I'd like to offer in evidence
14 if I haven't already, Exhibits One through Five.

15 MR. NUTTER: Applicant's Exhibits One
16 through Five will be admitted in evidence.

17 MR. HUNKER: Thank you very much, Mr.
18 Examiner.

19 MR. NUTTER: Yes, sir.

20 MR. CARR: May it please the Examiner, at
21 this time I would call Robert L. Thornton, T-H-O-R-N-T-O-N.

22
23 ROBERT L. THORNTON
24 being called as a witness and being duly sworn upon his oath,
25 testified as follows, to-wit:

SALLY W. BOYD, C.S.R.

Rt. 1 Box 93-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

DIRECT EXAMINATION

BY MR. CARR:

Q Mr. Thornton, for the record will you state your full name and place of residence?

A Robert L. Thornton, Ft. Worth, Texas.

Q By whom are you employed and in what capacity?

A I'm self-employed as a geologist and petroleum landman.

Q Have you previously testified before this Commission and had your credentials accepted and made a matter of record?

A No, I have not.

Q Will you briefly summarize for the Examiner your educational background and your work experience?

A I graduated from the University of Texas in 1971 with an economics Bachelor's degree. I worked as a stockbroker and commodity broker until 1977. January of '77 I re-entered the University of Texas and-- and pursued education in geology and petroleum engineering. In 1978, September of 1978, I received a petroleum engineering Bachelor's degree and was about three hours short -- three -- six hours short of obtaining a geology degree. On this basis I was hired by Houston Oil and Minerals and I worked in Houston Oil

1 and Minerals as a geologist, as a development geologist most
2 of that time, and then in July of 1979 I left Houston Oil and
3 Minerals to form my own company, and I've been in that pur-
4 suit since that time.

5 Q Mr. Thornton, are you familiar with the
6 application filed in this case by Mr. Layton?

7 A Yes, I am.

8 MR. CARR: At this time, Mr. Nutter, we
9 would ask that the witness be qualified as a practical oilman.

10 MR. NUTTER: Mr. Thornton is qualified.

11 Q Mr. Thornton, what interest do you own in
12 the area which will be affected by the application of Layton?

13 A I own a lease that is a 5/6ths royalty
14 lease -- or 1/6th royalty lease to the State, on the State
15 lands that are represented by the 80-acre tract which is the
16 south half of the northwest quarter of Section 14, Township 9
17 South, Range 34 East.

18 Q When did you acquire this lease?

19 A I acquired it on November 1st -- or the
20 lease was dated November 1st, 1979.

21 Q And you did state this was a State lease
22 with 1/6th royalty.

23 A Correct.

24 Q What is the general producing formation in
25 the area?

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Rt. 1 Box 191-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

1 A In the Vada-Penn Field the basic formation
2 that produces is the Bough C.

3 Q And in respect to your lease, where is
4 there presently Vada-Penn production?

5 A There have -- at one time there was Vada-
6 Penn production on all the leases that adjoin my lease, and
7 currently there is -- or at least through 1979, which is the
8 end of '79, which is the data that I have, there was production
9 on the south and on the east of my lease at Mr. Layton's well,
10 a well that he has plugged, was not plugged for lack of pro-
11 duction. It was once a producer and it was plugged because
12 he had some problems with the well.

13 Q Mr. Thornton, I'll show you what has been
14 marked for identification as our Exhibit Number One and ask
15 you if you would identify that, please?

16 A This is a copy of the map that was entered,
17 was sent by Mr. Layton in his application to set up the non-
18 standard proration units.

19 MR. CARR: Mr. Nutter, we have only one
20 copy of this with us and immediately following the hearing I
21 will provide you with additional copies.

22 MR. NUTTER: Okay.

23 Q Now, Mr. Thornton, will you explain to the
24 Examiner the status of the wells offsetting your lease as to
25 their producing capabilities?

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Phone (505) 455-7409

1 A The Tenneco -- there's a Tenneco well to
2 the east, which is in the -- which is in the -- has 160 acres
3 in the northeast quarter of that section, which produced 998
4 barrels during the year of 1979, 980 barrels during the year
5 of 1979.

6 The Prudential well, which is directly to
7 the south of my lease, dedicated the 160 acres in the south-
8 west quarter of the same section, the Prudential No. 1 Vada-
9 Pruda, for the last three years has produced under 5000 barrels
10 per year.

11 Q And then we have Mr. Layton's well?

12 A Mr. Layton's well to the north, in the last
13 year of operation produced about 5000 barrels, also, and it
14 was abandoned, as he said, due to technical problems.

15 Q Is the Vada-Pennsylvanian Pool developed
16 in the area by wells to which 160 acres are dedicated?

17 A Generally, yes.

18 Q In your opinion is the acreage, being the
19 south half of the northwest quarter of Section 14, being your
20 lease, is that acreage productive in the Vada-Penn?

21 A Yes, it -- yes, because wells -- I believe
22 so because wells in all directions have produced.

23 Q Would you anticipate that a new well
24 drilled on your lease would be of comparable quality to wells
25 offsetting it?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 153-B

Santa Fe, New Mexico 87501

Phone: (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 192-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

1 A. I would assume that since the well to the
2 north is producing 5000 barrels in the last year and the one
3 to the south 5000 barrels, the ones on the east and west have
4 been -- well, I would assume that it would -- could be pre-
5 sumed to produce about 5000 barrels a year.

6 Q. Would you consider this a marginal well?

7 A. I would consider it very marginal, consi-
8 dering the costs of drilling a new well.

9 Q. Now, what acreage was originally dedicated
10 to Mr. Layton's -- the well that Mr. Layton plans to rework
11 on this quarter section?

12 A. Originally the well was drilled by Tenneco
13 and I believe the south half of the lease that I presently
14 own was owned by Cities Service. It was -- there was 160-acres
15 put together to form -- to drill that one well. They dedicated
16 the northwest quarter of the 160-acre tract in that section.

17 Q. And did the acreage that you now have
18 under lease share in the cost of drilling of the existing well?

19 A. Yes, they did.

20 Q. Did they share in the production from
21 that well?

22 A. Yes, they did.

23 Q. What happened to the prior communitization
24 agreement for the northwest quarter of Section 14?

25 A. Due to the technical problems that Mr.

1 Layton had when he abandoned, he decided to abandon the well,
2 then he decided at that time not to re-enter -- not to re-
3 drill the well or to re-enter it at that time, and because of
4 that delay, 60-day delay, a delay in excess of 60 days, the
5 communitization and the lease expired.

6 Q Are you aware of any characteristic of
7 producing formation which would prevent the well Mr. Layton is
8 proposing to recomplete, prevent that well from draining your
9 lease?

10 A I am not aware of any such characteristic
11 and I don't believe there would be such.

12 Q Is it your testimony that you believe your
13 lease will be drained by the well which is the subject of this
14 application?

15 A I believe that it will be so drained.

16 Q Now I believe you heard Mr. Layton testify
17 as to the costs of drilling a new well in this area. Do you
18 concur in his statement?

19 A I would say that is a -- that \$450-\$500,000
20 would be a reasonable cost.

21 Q What do you understand the costs of re-
22 entering and recompleting the well would be for Mr. Layton?

23 A Well, for Mr. Layton, he told me that the
24 costs would be about \$350,000, and by the way, let me point
25 out one thing. He mentioned a value for the equipment and

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 casing, et cetera, that are in the well, there's no tubing,
2 of course, that's of any value, I question whether the depre-
3 ciated value of -- of 10-year old equipment would be what he
4 specified.

5 Q Mr. Thornton, if Mr. Layton's application
6 was denied, you would be willing to join with him and share
7 the cost of the reworking and operating on the existing well?

8 A Yes, I would.

9 Q And you would be willing to pay the reason-
10 able value of your share of any equipment or material on the
11 lease?

12 A Yes, under a reasonable operating agreement.

13 Q In your opinion would it be possible for
14 you to drill a well on the south half of Section 14 to pro-
15 tect that acreage against drainage from the well which Mr.
16 Layton is proposing to rework?

17 A Considering the \$500,000 cost and the
18 1/6th royalty, I do not believe it to be a desirable economic
19 prospect, and let me -- let me go into some figures on that.

20 Assuming 5000 barrels a day and --

21 MR. NUTTER: Not 5000 barrels a day.

22 A I'm sorry, per year, 5000 barrels a day
23 it would be economic. 5000 barrels a year, and about \$28.00
24 a barrel net after production taxes and windfall taxes, and
25 a 5/6ths lease, that comes out to approximately \$117-\$118,000

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

1 The costs of operating it would be in the neighborhood of
2 \$18,000. That would leave net revenues, assuming no problems
3 whatsoever with the well, which, of course, we've seen can
4 happen on the Layton lease, for instance, would be about
5 \$100,000. Considering a half a million cost and with interest
6 rates nearing 20 percent, there's no way that you can come out
7 economically on a 20 percent net return.

8 In addition, using Mr. Layton's Exhibit
9 One, the Applicant's Exhibit One, for barrels per acre that
10 have been recovered over the entire lifetime of this field,
11 which Mr. Layton himself said was substantially depleted, there
12 are 938 barrels per acre assumed to come -- over the field-
13 wide average coming from that field, and with essentially 1000
14 barrels times \$30.00 a barrel times 40 acres, that would be,
15 if the lease were entirely new, it would produce \$3,240,000
16 worth of net revenues.

17 Even assuming that it's 75 percent depleted,
18 which I believe it may be more so, that would leave 25 percent
19 of, say, that oil in the ground, which would be an ultimate
20 recovery of about \$800,000 off of a half a million dollar in-
21 vestment.

22 MR. NUTTER: Now you said assuming 40
23 acres.

24 A. I mean assuming 80 acres.

25 MR. NUTTER: 80 acres.

SALLY W. BOYD, C.S.R.
Rt. 1 Box 195-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A Which is Mr. Layton's desire.

2 Q If Mr. Layton's application is granted,
3 in your opinion would there be any practical way for you to
4 protect your lease from drainage?

5 A I do not believe so.

6 Q Do you believe reserves from your lease
7 would be produced by the Layton well?

8 A Yes, I do.

9 Q If at a later date after the well is re-
10 completed and you were able to determine that an additional
11 well necessary to effectively and efficiently drain the north-
12 west quarter of Section 14, at that time would you be willing
13 to participate in the drilling of an additional well if it
14 qualified under the NGPA for a higher price?

15 A Probably, yes.

16 Q In your opinion would granting this appli-
17 cation impair your correlative rights?

18 A It certainly would.

19 Q Do you have anything further to add to
20 your testimony?

21 A No.

22 MR. CARR: At this time, Mr. Nutter, we
23 would offer into evidence Applicant's Exhibit -- or Thornton
24 Exhibit Number One.

25 MR. NUTTER: Thornton Exhibit One will be

1 admitted in evidence.

2 MR. CARR: I have nothing further.

3 MR. NUTTER: Mr. Hunker?

4 MR. HUNKER: Yes, sir.

5
6 CROSS EXAMINATION

7 BY MR. HUNKER:

8 Q Mr. Thornton, are you a reservoir engineer?

9 A No, I am not. I've had some training.

10 Q Are you qualified to make a statement
11 that in your opinion the Layton well will in fact drain your
12 acreage?

13 A Well, I haven't done any research into it
14 at this point.

15 Q In connection with the Prudential well to
16 the south, do you feel that that well may be draining your
17 80-acre tract?

18 A I would assume it is.

19 Q In connection with the economics, you'd
20 be willing to pay for 50 percent of the cost of drilling the
21 new well, is that correct?

22 A Correct.

23 Q You'd be willing to pay what part of the
24 cost of Mr. Layton's hole in the ground, surface casing, and
25 intermediate casing?

1 A At its reasonably depreciated value, con-
2 sidering the age of the equipment.

3 MR. NUTTER: You'd pay 50 percent of the
4 reasonable arrived at depreciated value.

5 A Right, 50 percent, uh-huh.

6 Q You have mentioned depreciated value. The
7 pipe might be worth more today than it was -- than it originally
8 cost, isn't that correct?

9 A That's correct, but it's also ten years
10 old, or eleven years old.

11 Q If you did participate in the drilling of
12 this well and paid your part of the cost, what part of the
13 well would you own?

14 A I would assume that I would own -- I'm
15 not familiar with the law regarding -- regarding it. I would
16 assume I would have 50 percent of it.

17 Q Well, if you have half the communitized
18 tract, you'd have 50 percent.

19 A 50 percent.

20 Q So the economics of the situation would
21 give you a half a well, isn't that correct?

22 A Correct.

23 Q And you would thereby dilute the interest
24 that Mr. Layton has in the well, isn't that correct?

25 A That's correct, he would own one half the

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 well, also.

2 Q Do you realize that it might not be econ-
3 omic for Mr. Layton to -- to drill -- to reenter this well if
4 he has to share the production with somebody else?

5 A He would have the same percentage profit
6 margin. As far as his time and effort, I'll be glad to handle
7 operation or find an operator in the area.

8 Q But he'd only have 50 percent of the well,
9 isn't that correct?

10 A That's true.

11 Q He would be diluted to the extent of 50
12 percent.

13 A That's correct.

14 Q What is the term of your oil and gas lease
15 from the State of New Mexico?

16 A It's a 5-year lease.

17 Q And it was dated November the 1st, 1979,
18 is that correct?

19 A That is correct.

20 Q So you have roughly another 3 years within
21 which to evaluate that property, is that -

22 A Roughly 4 years.

23 Q Roughly four years. In your opinion will
24 Mr. Layton's well improve the marketability of your oil and
25 gas lease?

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-2409

1 A I do not believe so because other companies
2 will look at the 80-acre --- say I was trying to sell it and
3 find a marketability, other company would look at it and try
4 to figure out how they could economically produce the 80 acres
5 and drill a well and ---

6 Q Have you submitted your lease to anyone
7 for purchase?

8 A Yes, I have.

9 Q Have you had any success?

10 A No.

11 Q Have you tried to get anybody to drill on
12 your lease?

13 A Not at this time.

14 Q Well, since you acquired it in '79 have
15 you tried to get somebody to develop it or have you tried to
16 put together a fund to develop it yourself?

17 A Not to this time. I assumed that when I
18 bought it, if I were going to be reentering it, I'd be reentering
19 the other well. That was my original economic basis.

20 Q You realize that this is a marginal prospect,
21 don't you?

22 A Yes, I do.

23 Q And that the investment of \$350,000 or
24 thereabouts is a rather heavy money commitment.

25 A It certainly is.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

Q And Mr. Layton is willing to assume this entire risk. Don't you think that that in itself will help to evaluate your acreage?

A There is no conceivable way in my mind that an 80-acre well, given the production history, the production in the field in barrels per acre, could justify the expense, and therefor the lease would have zero market value, and zero incentive to its development.

Q Well, the 50 percent rule is going to apply, just --

A In my -- in that case it's draining 160 acres of production. 160 acres times 983 barrels is twice as much oil as 80 times 938 barrels.

Q And Mr. Layton expressed the opinion as a petroleum engineer that in his judgment his well would only drain 40 acres. Do you recall that testimony?

A I do recall that testimony.

Q Would you disagree with that testimony?

A I am disagreeing to the best of my ability

to.

MR. HUNKER: Thank you, Mr. Examiner, I

have nothing further.

MR. CARR: I have just one more question.

MR. NUTTER: Mr. Carr.

REDIRECT EXAMINATION

BY MR. CARR:

Q Mr. Thornton, I want to be sure I understand your testimony.

You were stating that in your opinion you would have one-half of a well, is that correct?

A That is correct.

Q And is it also your testimony that for one-half of the well you're willing to pay one-half of the costs involved in that?

A That is correct.

Q I believe you concurred with Mr. Hunker's statement that \$350,000 was a very heavy commitment to make for the development of -- or the reentry of this well.

A I do concur.

Q By the same token, \$500,000 would be an extremely heavy burden to go and drill a new hole.

A Substantially more.

MR. CARR: I have nothing further.

MR. NUTTER: Does anyone have any questions or Mr. Thornton? He may be excused.

MR. HUNKER: I'd like to recall Mr. Layton for just one or two questions.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 194-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

DONALD R. LAYTON

being recalled, testified as follows, to-wit:

REDIRECT EXAMINATION

BY MR. HUNKER:

Q In connection with reentry prospect, Mr. Layton, of Pyron No. 1, do you contemplate setting a whipstock at bottom of the intermediate casing?

A Yes, sir, at or a point below, whatever is convenient with the formation as it be.

Q And the new hole will be drilled down to the Bough C, is that correct?

A Yes, sir, that's correct.

Q The Bough C will be tested?

A Yes, sir.

Q Have you prepared an AFE in connection with this particular project?

A I've just prepared an estimate of myself, since we're pretty internal in our operation. A formal AFE is not usually the case.

Q Well --

A But we have prepared an estimate and the \$350,000 is what we assume it will cost after considering the value of the equipment already on hand; that is, the surface equipment and the surface and intermediate casing strings, and

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 the cost of the placing and cementing both of those.

2 Q You'll save some money on drilling, too,
3 won't you, drilling expense to the bottom of the intermediate?

4 A Actually, no, because this will be a day
5 work project. No contractor would take a footage contract,
6 of course, from that point. They make all their money in the
7 first half of the hole on a footage contract, so it will be
8 day work. It will also involve some additional cost in the
9 whipstock operation itself, so as far as rig cost, we figure
10 it's at best even with drilling a new top to bottom well.

11 The main consideration was the utilization
12 of the existing surface and intermediate casing strings.

13 Q I'll ask you one other question. In your
14 opinion, if your application is not granted, would it become
15 not feasible for you to develop this -- to make this reentry?

16 A It really isn't feasible to me, I don't
17 believe, because it would become a joint operation, which in-
18 volves additional administrative costs; it would lower our
19 potential margin of profit. Just making a profit doesn't
20 really interest us unless we think the profit is sufficient to
21 justify our time and effort, which go into such an operation.

22 Q In connection with the opinion that you
23 expressed about drainage, why are you so firm about this,
24 about this matter? That is to say that the well will only
25 drain 40 acres?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 194-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

SALLY W. BOYD, C.S.R.
Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7405

1 A. I think the gas/oil ratio, Exhibit Five
2 that we showed, pretty clearly sets that out. The reservoir
3 is not being drained. The gas is being produced from the
4 Morrow, which is not moving to the wellbores of the existing
5 producing wells; therefor you get a high gas/oil ratio. The --
6 one of the oldest points that we look at in reservoir deter-
7 mination, possibly, is that gas/oil ratio, because you get
8 into a system of a thing called relative permeability within
9 any reservoir, within the formation when pressures drop below
10 a certain point you have gas escaping, solution gas escaping
11 from the oil, which causes the high gas/oil ratio, and this
12 can move readily. Most formations have a greater, much
13 greater affinity to the production of free gas than they do
14 of any liquid, water or oil. Consequently, your gas breaks
15 out due to the lowered pressures and it will travel readily
16 to any point of lower pressure, being a wellbore, leaves the
17 oil right where it was in the beginning and it's not moving
18 on that account.

19 The -- this was a slightly different re-
20 servoir initially. It was a -- probably a two-headed pro-
21 ducing mechanism. First of all it was a water-charged reser-
22 voir and the expansion of the connate water was one of the
23 primary producing mechanisms and the other, as in most reser-
24 voirs, was the expansion of solution gas.

25 Once you allow this gas to break free, to

1 a free state, and travel away from the wellbore, it's not
2 moving fluid with it any more, and the oil just sets in place
3 right where it was.

4 The recovery efficiencies, I think, of the
5 two fields, or the several fields, then clearly indicates that
6 this is what has happened, that the wide spacing has not been
7 efficient and left oil every place where it was originally
8 with a certain amount of it being produced away initially, but
9 probably with rather high saturations. A comparison of the
10 Vada and the Allison shows that the Allison has produced twice
11 that amount of oil under essentially the same conditions, the
12 same reservoir quality, same thickness, same characteristics.

13 For that reason, I don't think there's
14 any way that we can set a well out at some point in 160-acre
15 tract now and say that it's going to drain 160 acres. It
16 didn't do it in the first place. There's no reason to think
17 that it would now.

18 Q Do you have anything else to add to your
19 testimony?

20 A I might mention something about depreciated
21 values of equipment, appreciating that Mr. Thornton hasn't been
22 involved in that particular phase of it as we operators have
23 recently. I think that point is best illustrated by a gentle-
24 man recently who had new pumping units to sell and just made
25 the comment to me. He said, we're the highest new pumping

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 unit on the market but we're cheaper than used ones.

2 Used equipment is at a premium right now
3 because there's a great deal of demand for it. This particular
4 casing in our intermediate string is -- is K-55, 32-pound,
5 8-5/8ths. It currently at new prices is around \$15.00 plus
6 per foot, plus drayage and all those things, the important
7 thing being that you can't buy any. So it's worth nearly
8 anything, really. That was one of the big factors that en-
9 couraged us to make the reentry, which admittedly is more
10 hazardous, and except for that consideration just as expensive
11 as drilling a new well top to bottom.

12 MR. HUNKER: Very well, I have no further
13 questions. Do you have any questions, Mr. Carr?

14 MR. CARR: Just a couple.

15
16 RECROSS EXAMINATION

17 BY MR. CARR:

18 Q I think you just answered it. It's the
19 availability of the equipment that is causing you to go ahead
20 and reenter as opposed to drilling a new well?

21 A Yes, sir, that's right.

22 Q You think the cost would be about the
23 same?

24 A I think it would be higher, if you could
25 find any.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 433-7409

1 Q For the -- aren't the costs of the reentry
2 as opposed to --

3 A Oh, I'm sorry, I --

4 Q -- a new well about the same?

5 A Yes, other than the consideration of that
6 surface equipment, it would be about the same.

7 Q I believe you testified that the wide
8 spacing in your opinion was not efficient.

9 A Yes, sir.

10 Q The standard spacing is, however, 160
11 acres, is that not correct?

12 A Yes, sir, it was.

13 Q And that was based on what was believed
14 could be effectively drained by one well.

15 A I think it was developed more as an econ-
16 omic spacing at that time. The field had very high porosity,
17 of course, and was capable of high rates, which initially
18 would, I think, tend to lead anyone to think that it probably
19 could be efficiently produced on the wider spacing.

20 I think the data, of course, bears out
21 quite plainly that it was not efficient. Nevertheless, I
22 don't say that it wasn't the thing to do. It almost certainly
23 was; a great deal of the Vada Field might never have been
24 drilled had it not been for the wider spacing and higher
25 allowables and the opportunity for faster amortization of the

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

1 costs.

2 Q I think you testified that if your appli-
3 cation was denied, you would perhaps not reenter the well at
4 all, is that correct?

5 A Well, I would have no basis to reenter the
6 well at this point. I would have no authority to because the
7 Commission will not grant me that authority on that 80 acres.

8 Q And you would not be interested in re-
9 entering the well if you were compelled to put 160-acre unit
10 together. Was that your testimony?

11 A I'm not particularly interested in that,
12 no. In the first place, the economics are greatly dilated so
13 far as I am concerned. As far as my time and effort, which
14 is -- may not be worth a lot to anyone else, but it's worth
15 a great deal to me.

16 The other thing that I might point out
17 at this point, I think the correlative rights of the royalty
18 owners under my tract would be grossly violated in this case,
19 because I'm firmly convinced we would produce no oil from
20 that tract to the south, yet my royalty owners would be giving
21 up half of their oil interest to that tract, as I would.
22 I presumably would be compensated monetarily but they would
23 not. They would just lose half of the ...

24 Q They would be entitled, however, to share
25 in any production from the tract at a later date as well, is

1 that correct?

2 A Yes, that's correct, they would.

3 Q You stated that you would not be particu-
4 larly interested in forming a 160-acre unit. Would you be
5 particularly interested in joining in a well that Mr. Thornton
6 might drill on a 160-acre unit?

7 A I'd have to look at his economics and
8 his operator.

9 MR. CARR: I have nothing further.

10 A I'll have to --

11
12 RECROSS EXAMINATION

13 BY MR. NUTTER:

14 Q Mr. Layton, you talk about the rights of
15 your royalty owners being violated, be it right or be it
16 wrong, the spacing is 160 acres in the pool and theoretically
17 that says that one well will drain 160 acres. So theoreti-
18 cally their rights could not be violated.

19 A Is that a foredrawn conclusion that it
20 will drain 160 acres?

21 Q The Commission years ago stated that one
22 well will adequately and efficiently drain 160 acres, and I
23 say, be it right or be it wrong, that's the rule of the land
24 in that pool.

25 Also, Mr. Layton, you stated that your

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-R
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 economic interest would be diluted by the presence of Mr.
2 Thornton in a 160-acre unit. There's a certain amount of risk
3 involved in spending whatever money it's going to take to
4 reenter this well and put it back on production, and a risk
5 in the payout. Your -- your risk would also be diluted --

6 A Oh, yes.

7 Q -- if he put up the money in advance of --
8 his share of the money.

9 A Right. I have a theory about that, Mr.
10 Nutter, that if you take no risk at all, you can't lose any-
11 thing, either, so neither do you make anything, but I don't
12 think risk worries any bona fide operator very much, because
13 we take that every day. We take it when we get out of bed
14 in the morning.

15 Q Well, you ought to hear them talk about
16 a risk in these compulsory pooling cases.

17 A That's possibly true, but I'm looking at
18 it from a different angle right now. But I'd like to mention
19 that Mr. Thornton's testimony, he suggests that he could not
20 drill a well on his tract because the economics will not
21 justify it. But it seems to me that the economics for half
22 a well are just exactly the same as they are for drilling a
23 whole well.

24 Q What is the cumulative production from
25 the well that you've got now, the one you're going to reenter?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 192-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A. I believe it's 210,000 barrels.

2 Q. Now when you reenter that and set your
3 whipstock or your Dyna-drill, whatever, what direction will
4 you take off in?

5 A. Doesn't particularly matter because we
6 will only be angling it one to two degrees, which would just
7 keep us away from the junk, is all. At bottom hole, at the
8 most 200 feet from the original wellbore, so it really is of
9 no significance to us at all.

10 Q. If you set it in any specified direction
11 you would have to have a hearing prior to doing this. If you
12 drilled in an indeterminate direction to sidetrack --

13 A. I see.

14 Q. -- junk in the hole, I think you wouldn't
15 have to have a hearing.

16 A. I wasn't -- I haven't previously had ex-
17 perience with that so I wasn't certain what the rule was, and
18 I have not checked that with the district office to see what
19 they would require.

20 MR. NUTTER: Are there any further ques-
21 tions of Mr. Layton? He may be excused.

22 Do you have anything further in this case,
23 Mr. Hunker?

24 MR. HUNKER: No more, thank you, sir.

25 MR. NUTTER: Does anyone have anything

1 they wish to offer in Case Number 7191?

2 We'll take the case under advisement.

3
4 (Hearing concluded.)

5

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SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7091, heard by me on 11/25 1982.

[Signature], Examiner
Oil Conservation Division

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October 1, 1980

New Mexico Oil Conservation Division
Energy and Minerals Dept.
P O Box 2088
Santa Fe, New Mexico 87501

Attn: Mr. J. D. Ramey

Attn: *Don Nutter*

Re: Requested Non-Standard Proration Units
Pyrone Lease, SE $\frac{1}{4}$ Sec 10, S $\frac{1}{2}$ SW $\frac{1}{4}$ Sec 11,
N $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 14, T9S, R34E
Lea County, New Mexico Vada Penn Field

Gentlemen:

Layton Enterprises, Inc. holds an oil and gas lease on the captioned lands totaling 320 acres, more or less. Three plugged and abandoned wells are located on the lease as shown on the attached plat.

Our projected development program for this lease is as follows:

1. Re-enter Well #1 located 660' FNL and 1830' FWL, Sec 14, T9S, R34E on a non-standard 80 acre proration unit.
2. Re-enter Well #2 (formerly Superior Oil Co. Pyron #1) located 510' FSL & 1980' FWL Sec. 11, T9S, R34E on a non-standard 80 acre proration unit.
3. Re-enter Well #3 (formerly BTA Odell #1) located 660' FSL and 1980' FEL, Sec 10, T9S, R34E on a non-standard 80 acre proration unit.
4. Drill Well #4 at a point 1980' FSL and 660' FEL, Sec 10, T9S, R34E, on a non-standard 80 acre proration unit.

It should be noted that the order of the projected development is chronological by well numbers and may not be the actual order in which the work is eventually done.

We request approval of the aforementioned non-standard proration units on the basis of the following considerations:

1. That additional allowable advantage will not be gained because the reservoir is in a near depleted state and production volumes will be far below established unit allowable.
2. That all of the four non-standard units may reasonably be presumed to be productive of oil from the Vada-Pennsylvanian Pool and that the entire non-standard oil proration units can be efficiently and economically drained and developed by the aforementioned wells.
3. That approval of the subject application will afford us the opportunity to produce our just and equitable share of the oil in the Vada Pennsylvanian Pool, and will prevent waste and otherwise protect correlative rights.
4. That within the same contiguous reservoir there are areas with different pool designations where 40 acre or 80 acre proration units have always been standard.
5. That a precedent of 80 acre proration unit in the Vada Pennsylvanian Pool has been previously established with the granting of such by Order No. R-6000 in Case No. 6527, such unit located within one mile of the area covered by this application.

Attached are plats of the lease, the surrounding area, and a list of offset operators or mineral owners to whom copies of this application have been sent by certified mail.

Very truly yours,

LAYTON ENTERPRISES, INC.

Donald R. Layton
Donald R. Layton
President

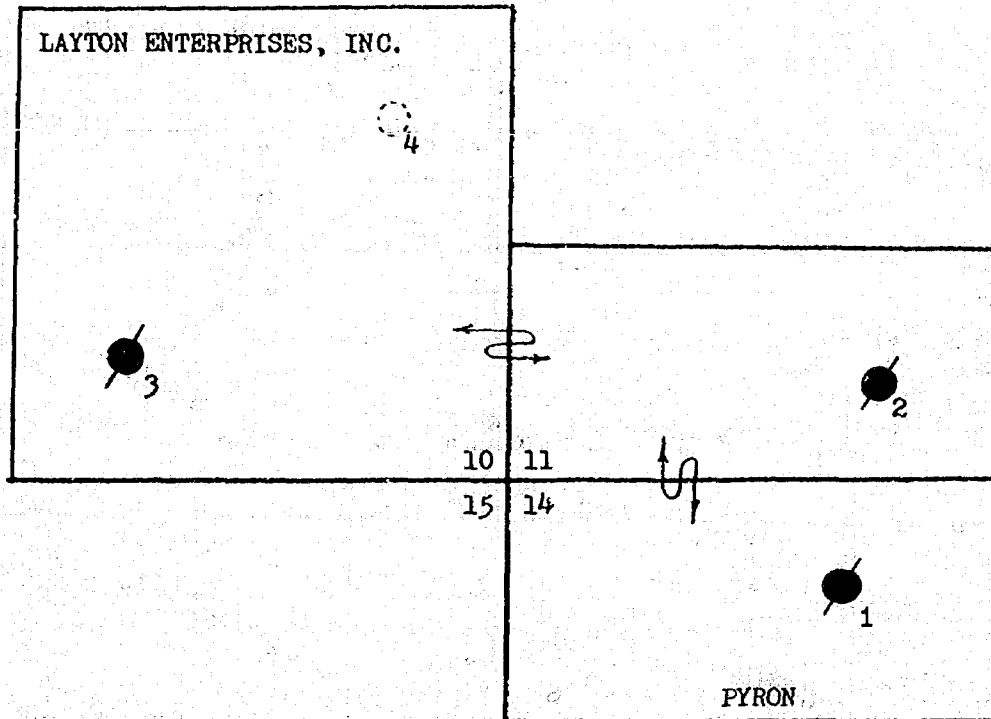
DRL/11

Attachments (3)

R 34 E

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9
S

LAYTON ENTERPRISES, INC.



0 1000 2000

Tenneco Oil
6800 Park Ten Blvd. Suite 200 North
San Antonio, Texas 78213

Maurice L. Brown Co.
Crossroads, New Mexico 88114

United States Geological Survey
Box 1157
Hobbs, New Mexico 88240

Mattie Price
P O Box 13
Tatum, New Mexico 88267

R. L. Thornton
1920 Commerce Bldg.
Ft. Worth, Texas 76102

John Wooley et al
S. Star Route
Box 42B
Portales, New Mexico 88130

Docket No. 37-80

Dockets Nos. 40-80 and 41-80 are tentatively set for December 10 and 30, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - NOVEMBER 18, 1980

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 7088: Application of Southern Union Exploration Co. for reconsideration of Division Order No. R-6175, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks (a) that Order No. R-6175 be set aside, or (b) to except the E/2 of Section 32, Township 25 South, Range 24 East, Eddy County, New Mexico, from the terms of said order, or (c) clarify said order with respect to the E/2 of Section 32, Township 25 South, Range 24 East.

Docket No. 38-80

DOCKET: COMMISSION HEARING - MONDAY - NOVEMBER 24, 1980

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 7075: (Continued and Readvertised)

Application of Benson-Montin-Greer Drilling Corporation for the amendment of pool rules, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the Special Rules and Regulations for the West Puerto Chiquito-Mancos Oil Pool as promulgated by Order No. R-2565-B and amended by Order No. R-6469, to require that wells completed or recompleted on standard units in said pool be located in the west half of the section at least 1650 feet from the outer boundary of the spacing and proration unit, and that the drilling of wells be controlled so as to allow no more than a 330-foot horizontal deviation from the surface location. Further, that the location of wells on certain specified non-standard proration units approved by Order No. R-6469 should be no closer than 660 feet to the outer boundary of the non-standard unit nor closer than 330 feet to a quarter section line or 10 feet to a quarter-quarter section line. Said specified non-standard units are the two 640-acre units in Township 24 North, Range 1 West; the two 480-acre units in Township 24 North, Range 1 East; the four 640-acre units in Township 26 North, Range 1 West; the 640-acre unit in Township 26 North, Range 1 East; and the two 640-acre units, the three 600-acre units, and the 400-acre unit, all in Township 27 North, Range 1 West. Applicant further seeks an administrative procedure whereby unorthodox locations could be approved upon receipt of written waivers from all offsetting operators being "crowded" by the unorthodox location.

Docket No. 39-80

DOCKET: EXAMINER HEARING - TUESDAY - NOVEMBER 25, 1980

9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 7055: (Continued from October 29, 1980, Examiner Hearing)

Application of Union Oil Company of California for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Eaves-Lea Unit Area, comprising 2209 acres, more or less, of State and Federal lands in Township 21 South, Ranges 32 and 33 East.

CASE 7077: (Continued from November 12, 1980, Examiner Hearing)

Application of Threshold Development Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Conoco "10" State Com Well No. 1 located in Unit 1 of Section 10, Township 19 South, Range 29 East, Turkey Track Field, to produce oil from the Wolfcamp formation and gas from the Atoka formation through parallel strings of tubing.

- CASE 7089:** Application of Summit Energy, Inc. for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Blinbry formation through its Gulf Bunin Well No. 2 located in Unit C of Section 13, Township 21 South, Range 37 East.
- CASE 7090:** Application of Dorchester Exploration, Inc. for directional drilling and an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter the old Union Hill Well No. 1, the surface location of which is 2310 feet from the North and West lines of Section 27, Township 12 South, Range 28 East, and to directionally drill in an indeterminate direction from a kick-off point at 7300 feet, bottoming said well at an approximate depth of 8100 feet in the Mississippian formation less than 330 feet away from the surface location. The W/2 of said Section 27 would be dedicated to the well.
- CASE 7091:** Application of Layton Enterprises, Inc. for a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the N/2 NW/4 of Section 14, Township 9 South, Range 34 East, Vada-Pennsylvanian Pool, to be dedicated to an old well to be re-entered 660 feet from the North line and 1830 feet from the West line of said Section 14.
- CASE 7051:** (Continued from October 15, 1980, Examiner Hearing)
- Application of Petro Lewis Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole-commingling of Blinbry and Drinkard production in the wellbore of its L. G. Warlick "B" Well No. 2 located in Unit G of Section 19, Township 21 South, Range 37 East.
- CASE 6940:** (Continued from October 1, 1980, Examiner Hearing)
- Application of Adobe Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down through the Wolfcamp formation underlying the NW/4 SE/4 for oil and the SE/4 for gas, Section 23, Township 20 South, Range 38 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 6996:** (Continued from October 1, 1980, Examiner Hearing) (To be continued to December 10, 1980, Examiner Hearing)
- Application of John E. Schalk for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Blanco Mesaverde Pool underlying the NE/4 of Section 8, Township 25 North, Range 3 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 6668:** (Continued and Readvertised)
- In the matter of Case 6668 being reopened pursuant to the provisions of Order No. R-6139 which order promulgated temporary special rules and regulations for the South Culebra Bluff-Bone Spring Pool in Eddy County, New Mexico, including a provision for 80-acre spacing units. Operators in said pool may appear and show cause why the pool should not be developed on 40-acre spacing units.
- CASE 7092:** Application of Delta Drilling Company for pool extension, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the extension of the South Culebra Bluff-Bone Spring Pool to include all of Sections 2, 11, 13, 14, 23, and 24, Township 23 South, Range 28 East.
- CASE 7093:** Application of Mesa Petroleum Company and Yates Petroleum Corporation for designation of a tight formation, Torrance, Guadalupe, DeBaca, Lincoln, and Chaves Counties, New Mexico. Pursuant to Section 107 of the Natural Gas Policy Act of 1978 and 18 CFR Section 271.701-705, applicants, in the above-styled cause, seek the designation as a tight formation of the Abo formation underlying the following described lands in the above-named counties:
- all of Townships 1 North thru 4 North, Ranges 14 East thru 27 East; all of Townships 5 North thru 7 North, Ranges 14 East thru 26 East; all of Townships 1 South thru 5 South, Ranges 14 East thru 27 East; all of Township 6 South, Ranges 14 thru 28 East; N/2 only of Township 7 South, Ranges 14 East thru 17 East; all of Townships 7 South and 8 South, Ranges 18 East thru 28 East; all of Townships 9 South and 10 South, Ranges 18 East thru 27 East; all of Township 11 South, Ranges 18 East thru 25 East; all of Township 12 South, Ranges 18 East thru 24 East; all of Township 13 South, Ranges 18 East thru 23 East; and all of Township 14 South, Ranges 18 East thru 22 East; also all of Township 9 1/2 South, Range 24 East.

CASE 7094: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, assigning a discovery allowable, contracting, and extending certain pools in Chaves, Eddy, and Lea Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Yates production and designated as the Northeast Lusk-Yates Pool. Further, to assign approximately 14,790 barrels of discovery allowable to the discovery well, Sun Oil Company Jennings B Federal Well No. 1 located in Unit K of Section 15, Township 19 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM
Section 15: SW/4

(b) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Yates production and designated as the North Querecho Plains-Yates Gas Pool. The discovery well is Lewis B. Burleson, Inc. Berry Federal Well No. 1 located in Unit E of Section 35, Township 18 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 35: NW/4

(c) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the Triple X-Atoka Gas Pool. The discovery well is Getty Oil Company HNG 4F State Well No. 1 located in Unit F of Section 4, Township 24 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 24 SOUTH, RANGE 33 EAST, NMPM
Section 4: W/2

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Devonian production and designated as the Tulk-Devonian Pool. The discovery well is Santa Fe Energy Company State NM3 Well No. 1 located in Unit P of Section 3, Township 15 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 32 EAST, NMPM
Section 3: SE/4

(e) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Vaca Draw-Morrow Gas Pool. The discovery well is HNG Oil Company Bell Lake 11 Federal Well No. 1 located in Unit B of Section 11, Township 25 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 25 SOUTH, RANGE 33 EAST, NMPM
Section 11: N/2

(f) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production and designated as the North Young-Bone Spring Pool. The discovery well is Harvey E. Yates Company Young Deep Unit Well No. 1 located in Unit D of Section 10, Township 18 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 10: NW/4

(g) CONTRACT the Anderson Ranch-Wolfcamp Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 16 SOUTH, RANGE 32 EAST, NMPM
Section 3: Lots 9, 10, 15, and 16

(h) CONTRACT the Querecho Plains-Yates Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 35: NW/4

(i) CONTRACT the South Red Lake-Seven Rivers Pool in Eddy County, New Mexico, by the deletion of the following described area:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM
Section 15: W/2 SW/4
Section 22: NW/4

- (j) EXTEND the Airstrip-Lower Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM
Section 23: SE/4

- (k) EXTEND the North Anderson Ranch-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 32 EAST, NMPM
Section 2: Lots 11, 12, 13, and 14
Section 3: Lots 9, 10, 15, and 16

- (l) EXTEND the Antelope Ridge-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM
Section 24: SW/4
Section 25: NW/4

- (m) EXTEND the West Arkansas Junction-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 36 EAST, NMPM
Section 20: SW/4
Section 29: NW/4

- (n) EXTEND the Bass-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 28 EAST, NMPM
Section 21: E/2
Section 28: All

- (o) EXTEND the Bell Lake-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM
Section 29: N/2
Section 30: E/2
Section 31: NE/4

- (p) EXTEND the Blinebry Oil and Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM
Section 22: SE/4

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
Section 8: NW/4

- (q) EXTEND the Bull's Eye-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 29 EAST, NMPM
Section 6: E/2 SW/4
Section 7: E/2 NW/4

- (r) EXTEND the Denton-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 37 EAST, NMPM
Section 22: SE/4

- (s) EXTEND the Diamond Mound-Morrow Gas Pool in Chaves and Eddy Counties, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 27 EAST, NMPM
Section 35: S/2

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM
Section 31: E/2

TOWNSHIP 16 SOUTH, RANGE 28 EAST, NMPM
Section 3: Lots 1, 2, 3, 4, 5, 6, 7,
8, 9, 10, 11, 12, 13, 14,
15, and 16
Section 4: Lots 1, 2, 7, 8, 9, 10,
15, and 16

- (t) EXTEND the Dublin Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 28 EAST, NMPM
Section 28: All
Section 29: N/2

- (u) EXTEND the Eagle Creek Permo-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 24 EAST, NMPM
Section 36: E/2

- (v) EXTEND the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM
Section 18: All

- (w) EXTEND the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM
Section 22: NW/4

- (x) EXTEND the East Grama Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM
Section 2: SE/4

- (y) EXTEND the Hardy-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM
Section 1: S/2

- (z) EXTEND the Hardy-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM
Section 1: S/2

- (aa) EXTEND the Leamex-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM
Section 21: S/2 NW/4

- (bb) EXTEND the Loco Hills Queen-Grayburg-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM
Section 2: SW/4 SW/4
Section 3: All
Section 4: E/2
Section 11: NW/4 NW/4

- (cc) EXTEND the South Loco Hills Queen-Grayburg-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM
Section 31: NE/4 NE/4

- (dd) EXTEND the Northeast Lovington-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM
Section 29: NW/4

- (ee) EXTEND the Penasco Draw Permo-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 24 EAST, NMPM
Section 25: S/2
Section 36: All

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM
Section 1: N/2

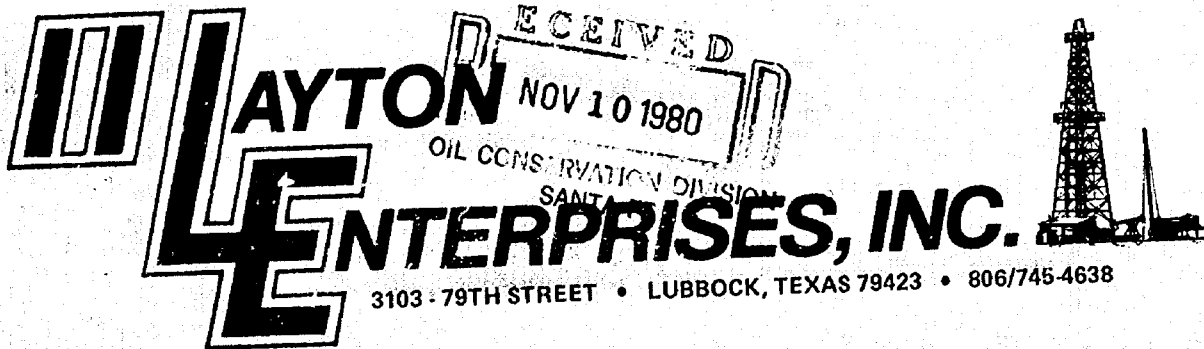
(ff) EXTEND the Saunders Permo-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 14 SOUTH, RANGE 33 EAST, NMPM
Section 28: NW/4

(gg) EXTEND the Scharb-Bone Spring Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 19 SOUTH, RANGE 35 EAST, NMPM
Section 4: SW/4
Section 5: SE/4

(hh) EXTEND the Tom-Tom San Andres Pool in Chaves County, New Mexico, to include therein:
TOWNSHIP 7 SOUTH, RANGE 31 EAST, NMPM
Section 29: SE/4

(ii) EXTEND the Twin Lakes-San Andres Associated Pool in Chaves County, New Mexico, to include therein:
TOWNSHIP 8 SOUTH, RANGE 29 EAST, NMPM
Section 19: W/2 NE/4 and NW/4 SE/4
Section 31: E/2

(jj) EXTEND the Vacuum-Abo Reef Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 18 SOUTH, RANGE 35 EAST, NMPM
Section 9: SW/4



Nov. 4, 1980

New Mexico Oil Conservation Division
Energy & Minerals Dept.
P O Box 2088
Santa Fe, New Mexico 87501

Case 7091

Attn: Mr. J. D. Ramey Re: Requested Non-Standard Proration Unit
N $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 14, T9S, R34E
Lea County, New Mexico

Gentlemen:

We have previously requested approval of the captioned proration unit. In view of a pending objection, we request a hearing on this matter on the November 25, 1980 docket.

Very truly yours,

LAYTON ENTERPRISES, INC.

Donald R. Layton
Donald R. Layton
President



Robert L. Thornton Company

1920 Commerce Bldg. • Fort Worth, Texas 76102 • 817/870-1216

October 21, 1980

New Mexico Oil Conservation Division
Energy and Minerals Dept.
P.O. Box 2008
Santa Fe, N.M. 87501

Attn: Mr. Dan Nutter
Mr. J. D. Ramey

Case 7091

RE: Requested Non-Standard Proration
Unit, Lea Co, N.M., N $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 14,
T9S. R34E, N.M.P.M.

Dear Mr. Nutter:

In a letter to the N.M. Oil Conservation Division dated October 1, 1980, Mr. Donald R. Layton requested that a non-standard 80 acre proration unit be allowed with respect to the N $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14, T 9S, R 14E, N.M.P.M.

I am the owner of the 80 acre tract S $\frac{1}{4}$ NW $\frac{1}{4}$ of the same section. It is my contention that the allowance of the formation of this proposed non-standard proration unit may adversely affect my position.

Therefore, I hereby request that a hearing on the Layton application be held to determine the relative merits of approval or denial of the request in concern.

It is my understanding that at this time, this request is the only action necessary by myself to initiate this hearing and that no reasons need be stated at this time. If this impression is incorrect please advise me of such.

I would also like it understood that my action is only in regard to this one 80 acre tract, and I do not at this time feel my position would be jeopardized by the formation of the other three non-standard proration units requested by Mr. Layton and therefore do not object to administrative procedures for their approval.

Thank you very much for your attention to this matter. I shall be awaiting notification of the proposed hearing date.

Very truly yours,

Robert L. Thornton
Robert L. Thornton

cc: Layton Enterprises, Inc.
Attn: Donald R. Layton

Oil Properties

Application of Rayton Enterprises, Inc.,
for a non-standard proration unit, Lea
County, New Mexico.

Applicant, in the above styled cause, seeks
approval for an 80-acre non-standard oil
proration unit comprising the $N\frac{1}{2}$ NW $\frac{1}{4}$ of
Section 14, Township 9 South, Range 34 East,
Vaca-Pennsylvanian Pool to be dedicated to ~~use~~
an old well to be re-entered 660 feet from the
North line and 1830 feet from the west line
of said Section 14.

Copy of docket to Rayton, also to:
Robert L. Thornton
1920 Commerce Bldg
Fort Worth, Texas 76102

HNSPs
Rule 3 R-3779-A
11-5-80



October 1, 1980

New Mexico Oil Conservation Division
Energy and Minerals Dept.
P O Box 2088
Santa Fe, New Mexico 87501

Attn: Mr. J. D. Ramey

Re: Requested Non-Standard Proration Units
Pyrone Lease, SE $\frac{1}{4}$ Sec 10, S $\frac{1}{2}$ SW $\frac{1}{4}$ Sec 11,
N $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 14, T9S, R34E
Lea County, New Mexico Vada-Penn Field

Gentlemen:

Layton Enterprises, Inc. holds an oil and gas lease on the captioned lands totaling 320 acres, more or less. Three plugged and abandoned wells are located on the lease as shown on the attached plat.

Our projected development program for this lease is as follows:

- will be objected to by R.L. Thompson*
1. Re-enter Well #1 located 660' FNL and 1830' FWL, Sec 14, T9S, R34E on a non-standard 80 acre proration unit.
 2. Re-enter Well #2 (formerly Superior Oil Co. Pyron #1) located 510' FSL & 1980' FWL Sec. 11, T9S, R34E on a non-standard 80 acre proration unit.
 3. Re-enter Well #3 (formerly BTA Odell #1) located 660' FSL and 1980' FEL, Sec 10, T9S, R34E on a non-standard 80 acre proration unit.
 4. Drill Well #4 at a point 1980' FSL and 660' FEL, Sec 10, T9S, R34E, on a non-standard 80 acre proration unit.

It should be noted that the order of the projected development is chronological by well numbers and may not be the actual order in which the work is eventually done.

We request approval of the aforementioned non-standard proration units on the basis of the following considerations:

1. That additional allowable advantage will not be gained because the reservoir is in a near depleted state and production volumes will be far below established unit allowable.
2. That all of the four non-standard units may reasonably be presumed to be productive of oil from the Vada-Pennsylvanian Pool and that the entire non-standard oil proration units can be efficiently and economically drained and developed by the aforementioned wells.
3. That approval of the subject application will afford us the opportunity to produce our just and equitable share of the oil in the Vada Pennsylvanian Pool, and will prevent waste and otherwise protect correlative rights.
4. That within the same contiguous reservoir there are areas with different pool designations where 40 acre or 80 acre proration units have always been standard.
5. That a precedent of 80 acre proration unit in the Vada Pennsylvanian Pool has been previously established with the granting of such by Order No. R-6000 in Case No. 6527, such unit located within one mile of the area covered by this application.

Attached are plats of the lease, the surrounding area, and a list of offset operators or mineral owners to whom copies of this application have been sent by certified mail.

Very truly yours,

LAYTON ENTERPRISES, INC.

Donald R. Layton
Donald R. Layton
President

DRL/11

Attachments (3)

DRAFT

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7091

Order No. R- 6566

APPLICATION OF LAYTON ENTERPRISES, INC.
FOR A NON-STANDARD PRORATION UNIT,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 25
19 80, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter
NOW, on this day of December, 19 80, the Division
Director, having considered the testimony, the record, and the
recommendations of the Examiner, and being fully advised in the
premises,

FINDS:

(1) That due public notice having been given as required by
law, the Division has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Layton Enterprises, Inc.
seeks approval of an 80-acre non-standard gas proration unit
comprising the N/2 NW/4 of Section 14, Town-
ship 9 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico,
its an old well to be re-entered 660 feet from the North line and
1830 feet from the West line of said Section 14.
Unit of said Section 14.

(3) That the entire NW/4 of said Section 14 may
be presumed productive of gas from the Vada-Pennsylvanian
Gas Pool, and that the entire non-standard gas proration unit can
be efficiently and economically drained and developed by the
aforesaid well.

(4) That the owner of the S/2 NW/4 of said Section 14 appeared at the hearing and objected to the formation of the proposed 80-acre non-standard proration unit comprising the ~~N/2~~ N/2 NW/4 of Section 14.

(5) That the entire NW/4 of Section 14, comprising a standard 160-acre proration unit, was originally dedicated to the well which applicant proposes to re-enter and to dedicate ^{to} the N/2 NW/4 only.

(6) That said well was prematurely abandoned in 1978 due to equipment failure in the well bore.

(7) That approval of the application and formation of the proposed 80-acre non-standard proration unit would leave the S/2 NW/4 of Section 14 undedicated to any well unless the owner thereof drilled a well on said lands.

(8) That the Vada-Pennsylvanian Pool in the area of the subject application was developed approximately ten to twelve years ago and has undergone considerable depletion since original development.

(9) That although there probably are recoverable reserves remaining under the S/2 NW/4 of Section 14, such reserves are probably insufficient to render the drilling and completion of a well thereon economical.

(10) That approval of the application would impair the correlative rights of the owner of the S/2 NW/4 of Section 14.

(11) That to protect his correlative rights if the application were approved, the owner of the S/2 NW/4 of Section 14 would be required to drill a well thereon.

(12) That said well, being unnecessary, would cause economic waste.

(13) That the application should be denied, and the applicant, owner of the N/2 NW/4 of Section 14, and the owner of the S/2 NW/4 of Section 14 should communitize their lands to form a standard 160-acre unit for the Vada-Pennsylvanian Pool to be dedicated to the subject well.

IT IS THEREFORE ORDERED:

(1) That the application of Layton Enterprises, Inc., for a non-standard 80-acre unit comprising the N/2 NW/4 of Section 14, Township 9 South, Range 34 East, NMPM, Vada-Pennsylvanian Pool, Lea County, New Mexico, is hereby denied.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.