ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 1 OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. 2 SANTA FE, NEW MEXICO 3 11 May 1988 4 EXAMINER HEARING 5 6 IN THE MATTER OF: 7 Application of Hixon Development Com-CASE 8 pany for compulsory pooling, Rio Ar-9377 riba County, New Mexico. 9 10 11 BEFORE: David R. Catanach, Examiner 12 13 14 TRANSCRIPT OF HEARING 15 16 17 APPEARANCES 18 19 For the Division: Charles E. Roybal Attorney at Law 20 Legal Counsel to the Division State Land Office Bldg. 21 Santa Fe, New Mexico 87501 22 For the Applicant: 23 24 25

STATE OF NEW MEXICO

Number 9377.

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MR. CATANACH: Call next Case

MR. ROYBAL: Case 9377.

Application of Hixon Development Company for compulsory pooling, Rio Arriba County, New Mexico.

MR. CATANACH: The applicant has requested that this case also be continued to the May 25th, 1988 hearing.

(Hearing concluded.)

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

Sally W. Boyd CSR

1	ENERGY, MINERALS AND NAT	NEW MEXICO TURAL RESOURCES DEPARTMENT		
2	STATE LAND	TION DIVISION OFFICE BLDG. NEW MEXICO		
3	25 May 1988			
4	EXAMINER HEARING			
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6				
7	IN THE MATTER OF:			
8	Application of Hixon Development Com- CASE pany for compulsory pooling, Rio 9377			
9	Arriba County, New Mexico.			
10				
11	BEFORE: Michael E. Stogner,	Examiner		
12				
13	TRANSCRIPT OF HEARING			
14				
15	APPEA	RANCES		
16	For the Division:	Charles E. Roybal		
17		Attorney at Law Legal Counsel to the Division		
18		State Land Office Bldg. Santa Fe, New Mexico 87501		
19	For the Applicant:	Tommy Roberts		
20	• •	Attorney at Law P.O. Box 129		
21		Farmington, New Mexico 87499		
22				
23				
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25				

BARON FORM 250.603 TOLL FREE IN CALIFORNIA 800 227 2434 NATIONWIDE 800-227 0120

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INDEX

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4	STATEMENT	BY	MR.	ROBERTS
•	AN AL FRANCISCO			**************************************

JOHN CORBETT

7	Di

Direct Examination by Mr. Roberts

Cross Examination by Mr. Stogner

Cross Examination by Mr. Roybal

EXHIBITS

Hixon Exhibit One, Package of Exhibits Items Numbered 1 through 21

omitting 10.

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Case Number 9377.

MR. STOGNER: Let's call next

MR. ROYBAL: Case 9377. Appli-

5 cation of Hixon Development Company for compulsory pooling,

6 Rio Arriba County, New Mexico.

MR. STOGNER: Call for appear-

ances.

MR. ROBERTS: Mr. Examiner, my

10 name is Tommy Roberts. I'm an attorney in Farmington, New

Mexico.

12 I'm appearing on behalf of the

applicant, Hixon Development Company.

I have one witness to be sworn.

MR. STOGNER: Are there any

16 other appearances?

Mr. Roberts, is your witness

18 | the same one that appeared in the last case, No. 9369?

MR. ROBERTS: Yes.

20 MR. STOGNER: Let the record

21 reflect that Mr. Corbett was previously sworn and had his

22 credentials accepted in the previous case, Number 9369.

Mr. Roberts.

MR. ROBERTS: Mr. Examiner, if

you don't mind, I'd like to again give a brief introductory

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MR. STOGNER: Please do.

MR. ROBERTS: The Tapacitos No.

2 Well, which is the well we're dealing with in this application, was drilled on a standard 320-acre spacing unit in

accordance with existing pool rules applicable to the Gav-

ilan Mancos Oil Pool.

Commission Order No. R-7407-E

changed the standard spacing in the pool to 640 acres with

the flexibility to drill an infill well.

That order excepted and exemp-

ted existing spacing units from the provisions of the new

spacing rule.

In this case all working interest owners have agreed to the reformation of the existing unit to a 640-acre spacing unit. The owners of the overriding royalty interest under oil and gas leases covering lands in Section 25 have not indicated concurrence in the reformation, and because the immediate result of the spacing unit reformation will be the dilution of revenue interests, Hixon Development Company believes it is necessary to establish in the record that the reformation of a spacing unit will be in the best interest of conservation, will allow the parties to avoid the drilling of unnecessary wells, and will result in the protection of correlative rights of all interest owners

in the section, we believe that a hearing on the reformation 1 question affords an opportunity to all interest owners 2 to appear and submit evidence in support of any objection to 3 the action which the Oil Conservation Division is requested to take in this matter. 5 I would -- with that, Mr. Exam-6 iner, I would begin my questioning of Mr. Corbett. 7 MR. STOGNER: Before we do, Mr. 8 Roberts, one little thing that needs to be cleared up. 9 the advertisement we showed 10 that the (unclear) is presently dedicated to the south half, 11 which, of course, it is not, it is dedicated to the west 12 half, an error on my part. 13 looking through In the 14 advertisement, this would not affect the call of the hearing 15 and so we'll therefore let it slide and go ahead and hear 16 your case today and take it under advisement. 17 18 MR. ROBERTS: I concur with that. 19 MR. STOGNER: Mr. Roberts. 20 21 JOHN CORBETT. 22 being called as a witness and having been previously sworn 23

upon his oath, testified as follows, to-wit:

25

24

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25C16P3

DIRECT EXAMINATION

3 BY MR. ROBERTS:

Q Mr. Corbett, refer to the exhibit package which you have marked as Exhibit Number One and would you explain the format of that exhibit package?

7 A This is a package consisting of five sec8 tions.

Section one is items consisting of maps showing Section 25, the section in question, an area map and some summaries of the ownership.

Section two is pressure and production data from the Gavilan Mancos Pool used in modeling my economic analyses of the proration units.

Section three are economic projections for working interest owners for working interest ownership in the well.

Section four is economic analyses for overriding royalty interests in Section 25.

Section five is our evidence of notification of interest owners in Section 25, 26 North, Range 2 West.

Q Mr. Corbett, as a preliminary matter, I believe you've indicated that Item No. 10 is not relative to this particular well in this particular application and is

N FORM 25C16P3 TOLL FREE IN CALIFORNIA 800-227-2434 NATIONWIDE 800-227-0120

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1
    it your request that that item be deleted from the exhibit
2
   package?
3
             Α
                        Item number 10 has been removed from the
   package and should be crossed out in the table of contents.
4
                       As a result of that deletion there are 20
5
             0
    items in the exhibit package instead of 21, is that correct?
6
7
                       That's correct.
             λ
                        Would you refer to Item number 1 please
8
             Q
   and identify it, explain its significance to this applica-
    tion?
10
             Α
                        Item number 1 is an area map showing the
11
   Section 25.
                 Range 2 West, Township 26 North, in Rio Arriba
12
    County, New Mexico. The west half of the section is a pro-
13
    raiton unit dedicated to the Tapacitos Well No.
                                                        2.
                                                             It's
14
   been highlighted in green.
15
                       Also shown on the map are a number of
16
           The pressure data from these wells is included later
17
    wells.
    in the (unclear).
18
19
                       When was the well spudded and when was it
             Q
20
    completed?
                       The Tapacitos No. 2 was completed in May
21
    of 1984. It was drilled in early 1984.
22
23
             Q
                       In what formation was the well completed?
24
             Α
                       In Gavilan Mancos.
25
             Q
                       And what is its current status?
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Virgil Hartquist owns 5 percent overriding royalty interest that's reflected on this as an NRI. That's incorrect. There should be an overriding royalty.

That quarter section is Lease No. NM 31577. It's a Federal lease with a 12-1/2 percent royalty (inaudible).

Q Refer to Item No. 3 and identify that exhibit and explain its significance to this application.

A Item No. 3 is an interest ownership summary showing the working interest in the west half proration unit and the revenue interests and the overriding interests in the west half. It also shows working interest, revenue interest, and royalty interest in the east half should that be made into one proration unit.

And finally it shows a 640-acre proration unit which is what we're proposing and it illustrates the dilution of interests going from 320-acre proration units to a 640-acre proration unit.

Describe the nature of the agreement entered into among the working interest owners in Section 25, with respect to the reformation of the existing spacing unit.

A The agreement will bring in Meridian Oil.

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FORM

BARON FORM 25C16P3 TOLLFREE IN CALFORNIA 800-227-2434 NATIONWIDE

The Tapacitos Well No. 2, the Wild-

from the Gavilan Pool.

1

BARON FORM ZSCIBP3 TOLL FREE IN CALIFORNIA 800-227-2434 NATIO

encompassing these wells isn't draining -- being drained efficiently, additional wells on 640 acres are probably not
necessary and one well is certainly capable of draining 640
acres.

Q Mr. Corbett, refer to what have been labeled as Item Nos. 5 through 9, if you will, and go through each of those items and explain their significance to this application.

A Item 5 shows cumulative production from the wells shown on the previous graph and their pressures as of February, 1988.

The significance of that is that even though certain wells aren't producing, withdrawing a lot of oil, they are being drained from wells at a distance and suggest the areal extent of drainage for one well in this area is very large.

Item No, 6 is a production history for the Gavilan Mancos Oil Pool. This is input data that was used in modeling projections for declines for economic analyses for reformation of our proration unit.

Item No. 7 is a graph of the data presented in Item No. 6. It illustrates the decline in oil production and some increasing gas production for the Gavilan Mancos Oil Pool, and these curves can be compared to the regression analysis following in Items 8 and 9.

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TOLL FREE IN CALIFORNIA

Item No. 8 is a graph of oil production and a regression analysis. I believe in the table of contents -- oh, I'm sorry. This is a regression analysis of the historical data so that I can see that my projected production declines are accurate and the significance of this is that the Gavilan Mancos oil production is declining at 36.6 percent annually.

Item No. 9 is a regression analysis for gas production from the Gavilan Mancos that shows that historically gas production is increasing at 26.16 percent per year.

Q Refer to Item No. 11, identify it.

A Item No. 11 is input data for a one-well scenario with one well draining all of Section 25. There is -- an important point to note here is that we don't feel that Tapacitos No. 2 is necessarily efficiently draining Section Number 25. We feel that this is because of wellbore problems.

The well was originally drilled to the Dakota by Southland Royalty and completed in the Dakota. They moved up-hole and bypassed the Mancos. They attempted to complete in the Mesaverde and the Pictured Cliffs.

The well was finally completed by Dugan Production but its production rates don't indicate that it's adequately draining Section 25.

Our well testing has shown that this is probably a problem with the wellbore and not actually a problem of transmissibility in this section.

Q What specific evidence do you have that allow you to be suspect of the integrity of the wellbore?

A Referring back to the production graph and the production versus pressure curve, you can see that other wells that are in pressure communication with the well have much higher recoveries. That would seem to indicate that some of this oil is being drained by wells outside of Section 25.

Q Mr. Corbett, would you identify the variables that you've utilized in your economic evaluation for this scenario of one well draining Section 25?

A The price of oil and gas are per current postings. Under capital investments you'll see \$600,000, which would be a replacement well for the Tapacitos 2.

We then propose to have that well spaced on 640 acres and draining the entire section.

Based on what we believe a reasonable production rate for that well would be, and a 36.6 percent pool decline, one well draining all of Section 25 should have recoverable reserves of approximately 60,000 barrels of oil and 1.8 billion cubic feet of gas.

Q What proportion of the calculated

The reserves

interest and 80 percent net revenue interest.

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NATIONWIDE

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under Section 25 aren't changed from the one-well scenario.
1
                        Basically, are the -- is the source of
2
             Q
         input data for this scenario the same as the source
3
        input data for the first scenario that you have presen-
   the
5
   ted?
                       Yes, it is.
             A
6
                       Refer to Item No. 14, please.
7
             Q
                       Item No. 14 is an economic evaluation of
             Α
8
   Section 25, given the drilling of two new wells to drain two
9
   320-acre proration units in that section.
10
                       The significance of this is that the re-
11
           are similar to the one-well case, although slightly
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   less, again because you can operate one 20-barrel a day well
13
   where you may not be able to -- it may be too costly to
14
   operate two 10-barrel a day wells.
15
                       Because there would be two wells draining
16
    the section, there's some economic benefit in draining the
17
   section more quickly because of the time value of money.
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    The primary importance of this sheet is a 10 percent dis-
19
    counted cash flow that is $415,019.
20
                       Refer to Item No. 15; explain what it il-
21
             0
22
    lustrates.
             A
                       Item No. 15 is a direct comparison of the
23
    one-well scenario and the two-well scenario in Section 25.
24
    The production revenue is decreased by some $90,000 because
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BARON FORM 25C16F3 TOLL FREE IN CALIFORNIA 800-227-2434 NATIONWIDE

The operating expenses are increased and there is an additional \$600,000 for drilling a second well on the east half of the section. Because you have two wells draining the section, it's drained faster and given the time value of money you see a benefit of \$72,000, but the difference in present value between the two is \$759,202, which would be economic waste if we were forced to drill a second well on a 320-acre proration unit.

Q Would it be your conclusion, then, that the drilling of a second well on a 320-acre spacing would be an uneconomical venture for those parties responsible for the cost of that well?

A Yes, it would.

Q In your opinion would prudent investors elect to drill a second well given those economics?

A No, they wouldn't.

Q In your opinion, Mr. Corbett, would the existence of a second well in this section result in the increased recovery of reserves?

A No, it would not.

Q Refer to Item Nos. 16, 17, 18, 19, and 20 in the exhibit package and discuss the contents of those particular items.

FORM 25C16P3 TOLL FREE IN CALIFORNIA BOD-227-2434 NATIONWIDE E

 A These are economic scenarios similar to those done for the 100 percent working interest - 80 percent net revenue interest, but the calculations were done for Ms. Robinson's 7.5 percent overriding royalty interest.

The input data is the same in every case with the exception of the interest. They show that with one well draining the section the present value of her interest is \$136,943.

With two wells draining the section her interest has a value of \$134,512. The difference is because of a loss in production revenue because the two wells won't recover the same reserves that the one well would.

There's no change in operating expenses and drilling costs. There's some benefit because of the time value of money but she has a net loss in a two-well scenario with two 320-acre proration units of \$2,431.

Q Do you have an opinion as to the impact of reformation on economics for an overriding royalty interest owner not participating in the existing spacing unit but who would participate in a reformed spacing unit, and give particular attention to the interest of Virgil Hartquist, which I believe is a 5 percent overriding royalty interest in the northeast quarter of Section 25.

A In that case, because a prudent operator would not drill a second well in the east half of Section 25, Mr. Hartquist's override won't become productive unless

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PARON FORM ACTION TOLL FREE IN CALIFORNIA BOO-227-2434 NATIONWIDE

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contacted.

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record in each case with the appropriate correspondence.
1
                                                Since we didn't
                                MR.
                                     STOGNER:
2
   -- since we didn't consolidate the cases, if you'll
3
   give me a copy of the Charlotte letter, that should suffice.
                       Mr. Corbett, in your opinion will the
5
   granting of this application result in the prevention of
6
   both economic and physical waste, result in the protection
7
   of correlative rights, and be in the best interest of con-
8
   servation?
                      Yes, it will.
            A
10
                      Were the separate items comprising Exhi-
            Q
11
   bit Number One, which you've identified as Items 1 through
12
   21, either prepared by you or at your direction and under
13
   your supervision?
14
                      Yes, they were.
            A
15
                                MR. ROBERTS: Mr. Examiner, I'd
16
   move the admission of Exhibit Number One, which consists of
17
18
   actually 20 exhibits.
                                 MR.
                                      STOGNER:
                                               Exhibit One with
19
   all of its items will be admitted into evidence at this
20
   time.
21
                                 MR.
                                      ROBERTS: We have no other
22
   questions.
23
24
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BARON FORM 25C16P3 TOLL FREE IN CALIFORNIA BOO-227-2434

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CROSS EXAMINATON

3 BY MR. STOGNER:

4 Q Mr. Corbett, you can straighten me out on an issue here.

In your testimony you said that the Tapacitos Well No. 2 in your opinion is not draining this total 640 acres because of a problem with the wellbore, is that correct?

A That's correct.

Q Does Hixon propose to do some workover to get this wellbore in order where it will drain 640 acres?

A We're evaluating that. The well, because it had been completed in the Dakota, the Mesaverde, and the Pictured Cliff, has a number of perforations in it above where we would hope to be refracing the well.

Also the well has 4-1/2 inch casing and we would be needing to frac down tubing and that could present some problems. We may be better off simply to drill a new well.

So you're proposing to drill another well regardless, is that correct?

A Another well may be necessary. We're still evaluating the potential for stimulating the well but barring that, we would end up drilling a new well in that

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proration unit. 1 2 Q In the proposed 640-acre proration unit. We'd like to do it on 640 acres. 3 Α If -if we don't get a 640-acre proration unit, then it would probably be necessary on 320. 5 6 But in your opinion what -- what kind of 7 acreage is this Tapacitos Well No. 2 draining presently? I'm reluctant to say how big of an area Α 8 it's draining. Based on its reserves it's draining an area 9 10 -- it's recovery is approximately half of that from the so you can assume that if Tapacitos No. 4 11 Tapacitos No. 4, is draining the full section that this may be draining 12 approximately 320 acres. 13 14 MR. STOGNER: I have no further questions of this witness. 15 16 Are there any other questions of Mr. Corbett? 17 18 MR. ROYBAL: Mr. Hearing 19 Officer, just one follow-up question on the question you 20 just asked. 21 22 CROSS EXAMINATION 23 BY MR. ROYBAL: 24 And that is, Mr. Corbett, you did state Q 25 that you felt that a second well would not affect the amount

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TOLL FREE IN CALIFORNIA BOD-227-2434

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of production from Section 25, is that correct?
1
                       A second well won't necessarily increase
            A
2
   the recoverable oil under Section 25.
3
                       I guess I'm --
            Q
            Α
                           think a second well is needed to re-
5
   cover either -- okay, the oil that has yet to be recovered
6
   under Section 25 could be recovered either by replacing the
7
   Tapacitos No. 2 with a viable wellbore or by -- on 640 ac-
8
   res, or by replacing it on its 320 and drilling a second
9
   well in the east half of the section on that 320.
10
                       I think either scenario will have a com-
11
   parable recovery, the difference being $600,000 in addi-
12
   tional drilling and completion costs for the second well.
13
                       Thank you.
14
            Q
                                 MR.
                                      STOGNER:
                                                 Are there any
15
   other questions of this witness?
16
                                 If not, he may be excused.
17
18
                                 Anything further in Case Number
   9377?
19
                                 MR. ROBERTS: No, Mr. Examiner.
20
                                 MR.
                                      STOGNER:
                                                The case will be
21
   taken under advisement.
22
23
                        (Hearing concluded.)
24
25
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BARON FORM 25C16P3 TOLL FREE IN CALIFORNIA 800-227-2434 NAT

CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) 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 Cor

Oil Conservation Division