1	STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING		
2			
3	SANTA FE, NEW MEXICO		
4	2 March 1988		
5	EXAMINER HEARING		
6			
7	IN THE MATTER OF:		
8 9	Application of Marshall Pipe and CASE Supply Company for compulsory pooling, 9321 Roosevelt County, New Mexico.		
10			
11			
12			
13	BEFORE: Michael E. Stogner, Examiner		
14			
15	TRANSCRIPT OF HEARING		
16			
17			
18	APPEARANCES		
19			
20	For the Division:		
21			
22			
23	For the Applicant:		
24			
25			

Γ

MR. STOGNER: Call next Case Number 9321, which is the application of Marshall Pipe and Supply Company for compulsory pooling, Roosevelt County, New Mexico. The applicant has also requested this case be continued to the Examiner's Hearing scheduled for March 16th, 1988. (Hearing concluded.)

STATE OF NEW MEXICO

JAMES GRADY

9	LESLIE BENTZ
10	Direct Examination by Mr. Dickerson
11	Cross Examination by Mr. Catanach
12	
13	

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24				

Call next Case

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D

7 case?

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9309, the application of Marshall Pipe and Supply Company for an unorthodox gas well location, Roosevelt County, New Mexico.

MR.

Are there appearances in this

CATANACH:

MR. DICKERSON: Mr. Examiner,

I'm Chad Dickerson of Artesia, New Mexico, on behalf of the applicant and I have two witnesses in this case, one of whom has already been sworn.

I'd also request that Case 9309 and 9321 be consolidated for the purpose of testimony inasmuch as they involve the same acreage, the same proposed same well location.

MR. CATANACH: At this time let me call Case Number 9321, which is the application of Marshall Pipe and Supply Company for compulsory pooling, Roosevelt County, New Mexico.

Are there any other appearances

in either of these cases?

Will the witnesses please stand

to be sworn in?

(Mr. Grady sworn; Ms. Bentz previously sworn.)

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

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JAMES GRADY,

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

DIRECT EXAMINATION

BY MR. DICKERSON:

Mr. Grady, will you state your name, your occupation, and where you reside, please?

My name is James Grady and I'm a petroleum landman. I reside in Morrison, Colorado.

Mr. Grady, you've not previously testified before this Division as a petroleum landman, have you?

No, I haven't.

Will you briefly summarize your educational and employment history for the Examiner?

I have a BA degree from the University of Missouri. I've been in the oil business since 1952; 13 years of Stanoline, Amoco, and Creede Companies; 7 years Depco Petroleum; and since then independent.

And in connection with your profession as an independent landman, have you been employed on behalf of Marshall Pipe and Supply, the applicant in these cases --

> Marshall, that's correct. Α

-- or one of its --Q

```
5
1
            A
                      Yes.
2
                      -- partners in this area?
3
                      All the partners.
4
                       And have you performed land work and are
5
  you familiar with the land situation in the area of the
6
   proposed well?
                      Yes, I am.
                                MR.
                                      DICKERSON:
                                                    Tender
                                                            Mr.
  Grady as an expert petroleum landman.
                                     CATANACH: He is so quali-
                                MR.
                      Mr. Grady, will you briefly summarize the
   purpose of Marshall Pipe and Supply in Case 9309?
                      Here we're attempting to have an unortho-
   dox well drilled at the location in the north half of
   tion 34 an pool that half section and test the Canyon forma-
   tion and Ordovician formation.
                      So you're seeking an unorthodox --
                      Uh-huh.
                       --gas well location 330 feet from
                                                            the
                      Right.
                      -- and 1980 feet from the east lines --
                      Right.
                      -- of Section 34.
```

Uh-huh. Α

1

2

3

4

5

6

And in Case 9321 what is requested? Q

Α It's an unorthodox pooling style (sic) that will pool the north half of Section 34 in a standard 320-acre gas spacing and proration unit; all formations and pools drilled on the 320-acre spacing unit.

So you're seeking compulsory pooling of

-- in that case who have --

-- not agreed to participate in the well.

Mr. Grady, will you refer to what we have submitted as the applicant's Exhibit Number One and orient the Examiner with respect to the location of this proposed

The yellow acreage indicates the acreage that's held by the operating group, Marshall, et al.

We intend to test a well in the northwest

have wells in the south half of Sec-

All of the acreage in there is leased to the Marshall, et al, group, excepting the Texaco Spieght interest, which I have just received an indicated letter from

```
1
        Spieghts that they are sending their leases in,
   the
2
3
                      Okay, let me --
            Q
4
                       -- go ahead. We're attempting to pool
            Α
5
                      northwest quarter of Section 34 and the
   the
        Texaco, the
   Spieght interests, the northeast quarter of Section 34.
7
                       Okay.
                               Before we leave Exhibit Number
            0
8
   One, the proposed well location indicated by the red spot in
   the northwest quarter of the northeast quarter of Section
10
   34, is 330 feet away from that north line, is it not?
11
                      Yes.
            A
12
                            it is crowding acreage of
                        So
                                                             the
13
   applicant and certain other parties as far as shown by this
14
   land map.
15
                      Yes.
16
                      Do you know, based on your experience in
17
   this area, the other parties indicated within the offsetting
18
   acreage to the north, which is being crowded by this
19
   proposed well? Are they participants with Marshall Pipe and
20
   Supply --
21
                      Yes.
            A
22
            0
                      -- in the well you indicated in the south
23
   half --
24
                      Yes.
25
                      -- of Section 27?
            Q
```

		8
1	Α	Common ownership.
2	Q	Okay. Mr. Grady, identify for us what
3	we've submitted as	Exhibit Number Two and tell us what that
4	list is.	
5	A	Exhibit Two, the first page is a
6	breakdown of the m	ineral interest owners in the west half of
7	Section 34.	
8		Pages 2 and 3 are an exhibit of the min-
9	eral owners in the	east half of Section 34.
10	Q	And is this based on your work in the
11	Α	Yes, it is based on my
12	Q	area?
13	λ	work in the area.
14	Ç	And this instrument was prepared by you?
15	A	Yes, uh-huh.
16	Q	Okay. For the Examiner, describe for him
17	and locate for us	on these ownership lists the interests of
18	the parties which	ch are sought to be pooled by this
19	proceeding.	
20	A	In the Section 34 we're attempting to
21	pool Texaco in the	northwest quarter and also Texaco in the
22	northeast quarter.	
23	Q	And Texaco's interest is uniform
24	throughout the north	th half, is it?
25	A	Throughout the whole north half.

```
Ç
                        15.806 --
             0
1
                        Yes.
             A
2
                         -- net acres in each --
             Q
3
             \boldsymbol{A}
                        In each --
                        160?
5
             Α
                        Yes.
6
                        All right.
7
             0
                        No, in each 320 there.
             Λ
8
                        Well, correct, but we're only --
             \mathcal{Q}
9
                        Yeah. Okay, right, right.
10
                        -- pooling the northwest quarter --
             Q
11
                        Right.
12
                        -- in the west half.
13
                        Right, it would be above that. Uh-huh.
14
                        And what other interest is sought to be
             \mathcal{Q}
15
   pooled by this proceeding?
16
                                  the other
                          Okay,
                                                  interests
                                                              we're
17
   attempting to pool is the June Spieght interest, which
18
   18.883 net acres.
19
                         And that interest that we're seeking to
             0
20
   pool is only in the northeast quarter --
21
                        Only in the northeast quarter.
22
             0
                        -- is it not? Your first page of Exhibit
23
   Number Two indicates that the Spieght interest in the
24
25
   northwest quarter is -- or do I have it backwards?
                                                            No, her
```

```
10
1
   interest in the northwest quarter is leased, is it not?
             A
                       Right.
2
             0
                        And so the June Spieght interest in the
3
   other 160 --
5
             Α
                       In the northeast --
             Q
                       -- acres --
7
                       Right, uh-huh.
             \mathcal{A}
                       -- is unleased and that's the subject
8
             Q
9
                       Right.
10
             Α
11
             0
                       -- proceeding.
                       Right.
             A
12
             Q
                        With the exception of Texaco and June
13
   Spieght, are all other interest owners committed by lease or
14
15
   other arrangement --
16
                       They are all committed to lease.
17
                       -- to the proposed well?
             Q
18
             A
                       Everything has, yes.
19
                       Okay. Mr. Grady, refer to the packet we
             Q
20
   have submitted as Exhibit Number Three and briefly tell us
   what it consists of and summarize some of the contacts
21
22
   you've had with Texaco and June Spieght regarding
   drilling of this proposed well.
23
24
                        Packet Three contains copies of
                                                               my
25
   correspondence to Texaco and Spieght interests.
```

```
My first contact with Texaco was made De-
1
   cember the 11th and then two other telephone contacts were
2
   made right after the Christmas holidays.
3
                       The well of January 24th I contacted Lynn
   Ryan in the Denver office and was advised that the entire
5
               been transferred to their -- excuse me,
   matter had
   Ryan, he's in the Denver office and it was transferred to
7
   their Midland office and that they would so advise.
                      Mr. Grady, let me ask you, had you dealt
            0
        Texaco through its Denver office in other trades
10
   this area --
11
            Λ
                      Yes.
12
                      -- prior to this one?
            0
13
                      We leased the acreage in 27 and surroun-
14
            Α
   ding areas from Texaco.
15
                        For the same partners by whom you're em-
16
   ployed now.
17
                       For the same partners, the same indica-
18
   tions, the same everything else, yes.
19
                        And so the offer extended to Texaco
            \mathcal{Q}
                                                               in
20
   your December 11th was based on your recent experience --
21
                       Based on the recent experience.
22
            A
                       -- with Texaco.
23
                       Right. Uh-huh.
24
            Α
25
                       Okay, what, if you know, is the -- is the
            Ω
```

```
1
   current status of Texaco's requested either lease of
2
   acrage or invitation to participate in the drilling of
                                                            this
3
   we11?
                      It is my understanding that they in a re-
5
   cent conversation Texaco advised that they would not be in a
6
   position to decide whether to join in and drill or to farm
7
   out, or what, and they could not reach the decision as of
   this date.
                      Just could not get an answer from manage-
10
   ment --
11
                       Just couldn't get an answer.
            A
12
                      -- as of yet.
            Ò
13
                      Uh-huh.
            A
14
                      All right, what is the current status of
            0
15
   the requested lease covering the June Spieght interest
16
   the northeast quarter of the section?
17
                       I've been advised by the secretary in the
18
   Spieght office that they were going to submit their lease
19
   for payment and it should be received; as of this date
20
   has not been received by our bank.
21
                      We think that they're going to go
22
   and lease but we're not positive.
23
                       You have been informed verbally that
24
25
            A
                       I have been informed by letlter.
```

by this Division?

```
14
1
   ticipated completion costs were actually -- costs actually
2
   incurred in the previous well --
3
            Α
                       Right.
4
                       -- and assumed to be similar to the wells
5
   anticipated to be incurred in this well if the completion
6
   prorgram is --
7
             A
                       Yes.
8
                       -- similar.
             0
9
                       Correct, uh-huh.
10
                      And what are those anticipated completion
             Q
11
   costs again?
12
             Ã
                         The
                               completion costs are
                                                         $249,180
13
   drilling and completing is $123,341; approximately $372,000
14
   completed.
15
                       Okay, and the applicant, Marshall Pipe
16
   and Supply, seeks the issuance of an order, among other
17
    things appointing it as operator of this proposed well, does
18
    it not?
19
                       Correct. Correct.
             Α
20
                        Based on its experience in drilling
             Q.
21
   other wells that you referred to --
22
             A
                       Uh-huh.
23
                       -- in this area, what overhead rates does
24
    the applicant request be imposed by any pooling order issued
25
```

```
1
                        We're estimating the -- we're estimating
2
   them on the previously drilling wells. Overhead on the dril-
   ling rate is $5000 a month; $500 a month completion well
   operating rate.
5
                       The reason Marshall has not agreed to the
6
   -- does not have a contract and operating agreement on this
7
   yet is they have not gotten the entire thing signed by the
   partners.
             Q
                       It does not yet have prepared an operat-
10
   ing agreement --
11
                       Right.
             Α
12
                       -- by the parties voluntarily participat-
             Q
13
   ing --
14
             A
                       Right.
15
                       -- on the north half.
             Q
16
                       Uh-huh.
             Α
17
                       That will be done in the normal course of
             0
18
   business --
19
                       Yes.
             A
20
                       -- and sent to these parties.
             \mathcal{Q}
21
                                  MR. DICKERSON: Mr. Examiner, 1
22
         admission of Exhibits One through Four and I have no
23
   further questions of Mr. Grady.
24
                                  MR.
                                        CATANACH: Exhibits One
25
   through Four will be admitted as evidence.
```

MR. DICKERSON: I'll call Ms.

Leslie Bentz at this time, if you have no questions.

3

6

1

2

CROSS EXAMINATION

BY MR. CATANACH: 5

> I've just got one question. 0

Mr. Grady, what's the association of Dep-

Depco is the operator and -- or Marshall and Supply is the operator and Depco is handling the leasing and acquisition for Marshall, being a little larger.

- And Marshall will be the operator.
- They will be the operator.
- Okay, that's all I have.

being called as a witness and having been previously sworn and remaining under oath, testified as follows, to-wit:

Ms. Bentz, will you state your name, your occupation, and by whom you're employed?

I'm employed as a petroleum geologist by Yates Petroleum Corpora-

21

22

23

24

25

```
tion of Artesia, New Mexico.
1
                                 MR.
                                      DICKERSON:
                                                    Mr. Examiner,
2
   may the record reflect that Ms.
                                      Bentz has previously been
3
   sworn this morning?
4
                                 MR.
                                      CATANACH:
                                                  Let the record
5
   so indicate.
6
                            Bentz, are you familiar with the --
            C^{r}
                       Ms.
7
   or have you undertaken the study of the available geological
8
   data in the area of the proposed well for the purpose of
9
   forming an opinion as to a risk?
10
                       Yes, I have.
11
                       Let me ask you, based on that examination
12
   -- I'm getting out of order, Ms. Bentz, I apologize. Let me
13
   ask you another question.
14
                       Will you refer to what we've submitted as
15
   Exhibit Number Five and with respect to the portion of this
16
   consolidated proceeding dealing with Case 9309 tell us what
17
   you have shown on this map?
18
                                Exhibit Five is a map depicting
                        Okay.
19
```

the subsurface structure on top of the Pre-Penn unconformity. The contour interval is 50 feet. Datum points are noted by circles and the appropriate datum is listed.

Well spots colored in red indicated Ordovician producers. Well spots colored in red and blue indicate dual completions in the Ordovician and the Pennsylvan-

ian Canyon.

 $\label{the dashed dot line marks} \mbox{ the termination}$ of the Mississippian formation.

The structure map shows a north/northeast south/southwest trending horst block, which is fault bounded to the east, west and south. Throw on the bounding faults is probably around 200 feet. Closure into the west fault provides the trapping mechanism.

Porosity and permeability are enhanced in the Ordovician reservoir as erosion has completely stripped away the Mississippian sediments providing an opportunity for the Ordovician dolomite to be exposed subaerially and develop Karst topography.

The overlying Pennsylvanian section provides the source for the hydrocarbons.

No gas/water contact has yet been established in the Ordovician reservoir, but the Stoltenburg No. 1, at a datum of -2788, did not encounter any hydrocarbon shows in a tested interval in the Ordovician formation.

The other main pay, a Pennsylvanian Canyon carbonate porosity zone, tested water in the Stolten-burg No. 1.

The Canyon is also structurally controlled. The structure on the Canyon formation mirrors the Ordovician structure.

```
Can you summarize for us, Ms. Bentz, the necessity for this requested unorthodox location?
```

A Yes. The proposed unorthodox location is the best allowable location in the north half of Section 34 which would enable the borehole to encounter the structure at its highest point possible and not cross the bounding fault.

It is anticipated that structurally high penetration of the Ordovician would enhance earlier and greater recovery of gas reserves.

The well will be drilled through to the Precambrian to ensure that the complete section is tested.

Q Ms. Bentz, was Exhibit Number Five prepared by you?

A Yes, it was.

And in your opinion will the granting of this application be in the interest of conservation, the preventon fo waste, and the protection of correlative rights?

A Yes, it will.

Now with respect to the requested risk penalty to be imposed in any order issued by this Division, Ms. Bentz, based on your examination of this geological data, have you formed an opinion as to an appropriate risk penalty?

Yes, I have.

Q And what factors do you take into consid-

eration for that purpose?

A The first factor would be that this is the lowest penetration of the Ordovician to date with the exception of the Stoltenburg No. 1, which was nonproductive.

Also, in order to penetrate the structure at its highest point, we are very near a major fault to the west. If we have any deviation problems we could possibly cross the fault and penetrate the Ordovician on the downthrown side.

Long term risks could include the economics of the entire area. There is no production to date due to the distance to a pipeline. A pipeline must be constructed.

We believe that the wells will be good producers from production tests, but these tests were only over a short period of time. It will take over a year before we have an estimate on the reserves in the area and see if the whole area is economic.

Based on your study of these factors, have you formed an opinion as to what would be an appropriate risk penalty to be imposed?

A Yes, I have.

Q And what is that risk penalty?

```
I recommend the maximum penalty of 200
            A
1
   percent.
2
                           Bentz, identify briefly for us what
            O
                       Ms.
3
   we have submitted to Mr. Catanach as Exhibits Six and Seven.
4
                       Exhibit Six is an affidavit of mailing in
5
   the matter of the unorthodox well location.
6
                       Attached to it are the certified returns.
7
                      And Exhibit Number Seven?
            \circ
8
                       Exhibit Number Seven is an affidavit of
             Α
9
   mailing for the compulsory pooling. Again, attached to it
10
   are the certified returns.
11
                                 MR.
                                      DICKERSON: Okay, Mr. Exa-
12
   miner, I move admission of the applicant's Exhibits Five,
13
   Six and Seven at this time.
14
                                 MR.
                                      CATANACH:
                                                  Exhibits Five,
15
   Six and Seven will be admitted as evidence.
16
                                 MR.
                                      DICKERSON: And I have no
17
    further questions of this witness.
18
19
                         CROSS EXAMINATION
20
   BY MR. CATANACH:
21
                       Ms. Bentz, tell me a little bit about the
22
    producing capabilities of the Wells Nos. 22 and 27.
23
                        Yes, sir. The discovery well was
24
   Wendell Best in the southeast quarter of 27, completed as an
25
```

Ordovician producer with flow rates over a 24-hour period of 2.8-million cubic feet of gas per day and 2.7 barrels fo condensate per day.

Q The next well drilled was the Stoltenburg, which was the dry hole, and I feel like most of that is structurally related, is low.

The J. T. McGee was the third well drilled and it was completed in the Ordovician for 1.3-million cubic feet of gas per day plus 14.40 barrels of condensate per day.

Then we completed in the Canyon, also, for a rate of 918 MCF gas per day and 3.36 barrels of condensate per day.

The Spieght No. 1, which was just recently completed in the past month and a half, completed in the Ordovician for 587 MCF gas per day, 6 barrels of condensate, and in the Canyon and a Strawn zone it was completed for 1719 MCF gas per day and 14.4 barrels of condensate.

Q Okay, are those the only producing wells in the -- in the general area here?

A Yes it is.

You do have plans at this time to build a pipeline, is that correct?

A Yes. We are working on the right-of-ways.

So these -- these other three wells 0 haven't produced any long term --

No, and due to the high production rate, you don't want to spend four or five days flowing wells and wasting the gas.

Why does your proposed location have to be so close to the north line?

Well, I'm -- as you noticed, this is going to be the lowest penetration to date. From the way that the Ordocivian produced in the Spieght, we recovered some water on the drill stem test and think we would make a well there.

I'm really afraid that we're going to -if we get much lower, that we might encounter a gas/water contact. Also, the structure here, a lot of it is based on seismic and you've got a plus or minus 50 feet in there for error, and if we end up being 50 feet low -- we could be quite a bit lower than the way it's mapped.

So we felt that this was by far the best location in Section 34.

MR. CATANACH: That's all have of the witness at this time. She may be excused.

Is there anything further this case? Case 9309 and Case 9321?

> MR. DICKERSON: Nothing

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further, Mr. Examiner.

MR. CATANACH: If not, they will be taken under advisement.

(Hearing concluded.)

7 8

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.

Sleey W. Boyd CSIZ

Oil Conservation Division, Examiner