STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 12,540

APPLICATION OF PENWELL ENERGY, INC., FOR)
ADOPTION OF SPECIAL POOL RULES, McKINLEY)
COUNTY, NEW MEXICO)

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

JO MOV 30

November 16th, 2000

Santa Fe, New Mexico

FN 10: 50

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, November 16th, 2000, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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APPEARANCES

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APPLICANT'S WITNESS:

BILL PIERCE (Engineer)

Direct Examination by Mr. Carr 4 15

Examination by Examiner Ashley

REPORTER'S CERTIFICATE

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EXHIBITS

Applicant's	Identified	Admitted
Exhibit 1 Exhibit 2 Exhibit 3	8	15 15 15
Exhibit 4 Exhibit 5 Exhibit 6	11	15 15 15

* * *

APPEARANCES

FOR THE DIVISION:

LYN S. HEBERT
Attorney at Law
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2040 South Pacheco
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A. Suite 1 - 110 N. Guadalupe P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

1	WHEREUPON, the following proceedings were had at	
2	3:23 p.m.:	
3	EXAMINER ASHLEY: At this time the Division calls	
4	Case 12,540, Application of Penwell Energy, Inc., for	
5	adoption of special pool rules, McKinley County, New	
6	Mexico.	
7	Call for appearances.	
8	MR. CARR: May it please the Examiner, my name is	
9	William F. Carr with the Santa Fe law firm Campbell, Carr,	
10	Berge and Sheridan. We represent Penwell Energy in this	
11	matter, and I have one witness.	
12	EXAMINER ASHLEY: Additional appearances?	
13	Will the witness please rise to be sworn in?	
14	(Thereupon, the witness was sworn.)	
15	BILL PIERCE,	
16	the witness herein, after having been first duly sworn upon	
17	his oath, was examined and testified as follows:	
18	DIRECT EXAMINATION	
19	BY MR. CARR:	
20	Q. Will you state your name for the record, please?	
21	A. My name is Bill Pierce.	
22	Q. Mr. Pierce, where do you reside?	
23	A. Midland, Texas.	
24	Q. By whom are you employed?	
25	A. Penwell Energy.	

And what is your position with Penwell Energy? Q. 1 Senior petroleum engineer. 2 Α. Have you previously testified before the New 3 Mexico Oil Conservation Division? 4 Yes, I have. 5 Α. At the time of that testimony, were your 6 credentials as an expert witness in petroleum engineering 7 accepted and made a matter of record? 8 9 Α. Yes, they were. Are you familiar with the Application filed on 10 behalf of Penwell Energy, Inc., in this matter? 11 12 Α. Yes, I am. Are you familiar with the development of the 13 14 Entrada formation and the area surrounding the Arena 15 Blanca-Entrada Oil Pool? Yes, I am. 16 Α. Have you made an engineering study of the Entrada 17 formation in the area of interest? 18 19 Α. Yes, I have. 20 And are you prepared to review your work with 0. Examiner Ashley? 21 That is correct. 22 Α. MR. CARR: Are the witness's qualifications 23 acceptable? 24

They are.

EXAMINER ASHLEY:

- Q. (By Mr. Carr) Would you summarize what Penwell seeks in this matter?
- A. We seek adoption of special pool rules for this

 Arena Blanca Pool including provisions of 160-acre well

 spacing and proration units, with wells to be located

 within 660 feet of the outer boundary of the said dedicated

 acreage.
- Q. And so the setback requirement is no closer than 660 to the outer boundary, correct?
 - A. That is correct.

- O. When was the Arena Blanca Oil Pool created?
- A. It was created January the 1st, 1986, by Order Number R-8120.
 - Q. And what are the current pool boundaries?
 - A. Township 20 North, Range 5 West of New Mexico

 Prime Meridian, Section 36, the south half of the northeast

 quarter and the north half of the southeast quarter.
- Q. And what rules govern the development of this pool?
- A. Statewide rules, which include 40-acre oil spacing. The current depth bracket allowable for a 6000-foot Entrada well is 142 barrels. We seek by means of this to go up to 160 acres, which would be a depth bracket allowable of 382 barrels per day production.
 - Q. Are there any wells producing from this pool at

this time?

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- A. At this time there are no producing wells.
- Q. And how many wells have actually produced from this pool?
- A. One well has been produced from this pool, which was the discovery well, the Merrion Oil and Gas Arena Blanca State "36" Number 1 well.
 - Q. And what is the status of that well?
 - A. That well is plugged and abandoned.
- Q. Can you explain to Mr. Ashley why Penwell is seeking the adoption of these special pool rules?
- A. Yes, sir, we're proposing to drill our Torreon Wash "36" State Number 1 well at a previously approved unorthodox location of 2143 feet from the south line and 1223 feet from the east line, which is Unit Letter I of Section 36. This was done by administrative order Number NSL-2503-A, dated October 18th, 2000.
- Q. In your opinion, would this well drain the entire pool?
- A. Yes, sir, we feel it would drain the entire structure.
 - Q. And why is it you need the 160-acre depth bracket allowable?
- A. These wells produce large quantities of water, and to be able to move that type of water and justify the

expense of drilling and producing a well, you'd have to be able to recover your oil at a greater rate than a 40-acre proration allowable allows you to do.

- Q. And will you go into that part of the case in greater detail at a later time?
 - A. Yes, I will.

- Q. Let's go to what has been marked Penwell Exhibit
 Number 1. Identify that for Mr. Ashley.
- A. Exhibit Number 1 is the C-102 which shows the location as staked in Section 36.
- Q. And Exhibit Number 2?
- A. Exhibit Number 2 is the same C-102, with the area that we seek to dedicate the 160 acres outlined on the C-102.
 - Q. If this Application is approved, the 160 acres you propose to dedicate will be a nonstandard proration unit, since it crosses the quarter-section line; is that correct?
 - A. That's correct.
 - Q. And is Penwell prepared to file an administrative application seeking approval of that nonstandard unit as soon as this Application is approved?
 - A. Yes, we are.
 - Q. Who are the affected offsetting operators?
- 25 A. There are none.

- Q. Penwell is the owner of all property in the immediate area?
 - A. That is correct.

- Q. Let's go to Exhibit Number 3, and I'd ask you to identify and review that.
- A. Exhibit Number 3 is a land map that shows the existing lease owners. The yellow and the hached yellow, if you will, is Penwell acreage. The remaining blue is Yates Petroleum. The red in the very southwest corner of the map is a open state section.
- Q. There are certain wells spotted on the exhibit in Section 36. Will you review the status of those wells for Mr. Ashley?
- A. Yes. If you'll start at the top part of Section 36, the white plugged and abandoned well was an Entrada test that was unsuccessful.

As you move down in Section 36 you see a colored-in plugged-and-abandoned symbol with an open symbol showing the original Merrion well which was produced for a while, then plugged and abandoned. Because of the close proximity of our well to that well, the open circle shows our proposed well.

To the lower right hand of that is another plugged-and-abandoned well, which was an Entrada test, which missed the structure.

The remaining well in the dark color at the bottom is a Mancos well that did not penetrate the Entrada. It is currently a water-disposal well.

- Q. Let's go to the Entrada 3-D structure map, and I'd ask you to first orient us as to what areas are covered by this exhibit and then explain the information thereon.
- A. This is Exhibit Number 4, which shows -- It's a time-structure map generated by our 3-D seismic.

 Basically, the black heavy outline is the structure itself. However, the only thing that we consider to be productive is the lighter-colored brown and moving on into the red area, the reason being, this particular Merrion well had a 22-foot oil column.

As we move ours, we expect the oil column to be 25 feet. And based on the open-hole logs of other Entrada pools, the brown and the red would be the only productive intervals of this particular Entrada structure.

- Q. If we look at the map, the white dot in the center, what does that show?
- A. The white dot in the center shows the original Merrion well.
 - Q. And then where is our location?
- A. Due south of it is the red with the black mark, black X, if you will, is the proposed Penwell well.
 - Q. On the left-hand margin we have some numbers

written in, 11,099 and 11,096. What do those indicate?

- A. That's correct, those are some numbers generated in milliseconds from our 3-D seismic, indicating that we will gain an additional three feet of structure by moving from the original Merrion location to our location, we will gain three feet of structure as far as the oil column goes.
- Q. The target in this well is this small dune structure which is shown on the map?
 - A. That is correct.

- Q. And by gaining this slight increase in structural position, you do believe you can make a commercial well; is that right?
 - A. That's correct also.
- Q. Let's go to Exhibit Number 5. What does this show?
- A. Exhibit Number 5 is the same section. We have outlined in heavy green is the section -- the line of Section 36. In the red hached marks are the outline of the 160 acres that we seek to pool for this, showing where our structure lies within the 160 acres that we have asked to be pooled to this well, dedicated to this well.
- Q. Now, you're seeking 160-acre spacing for this single Entrada well; isn't that in essence what we're doing?
- A. That is correct.

1 Q. Has a similar application been recently approved by the Division? 2 Yes, it has. 3 Α. And what was that? Q. 4 That was for Penwell Energy and the Arena Blanca 5 Α. Southeast Pool, which is an identical structure. 6 larger than this one, but it's an identical Entrada 7 8 structure which we dedicated 160 acres to by means of 9 hearing before the OCD. MR. CARR: And the order approving that 10 Application, Mr. Ashley, was Order Number R-11,374, and it 11 was dated May 17 of this year. 12 Q. (By Mr. Carr) Where is the Southeast Arena 13 Blanca-Entrada Pool located in regard to the pool that 14 we're discussing here today? 15 It's approximately three and a half miles Α. 16 southeast of our proposed location. 17 Let's go to Exhibit Number 6, three pages. ο. 18 Identify first what you're intending to show with these and 19 then review the information. 20 Α. Yes, sir. Exhibit Number 6 is production data 21 from existing wells and other existing Entrada pools. 22 first one, if you will, is the Papers Wash-Entrada Field, 23 the Dome Petroleum Navajo 15 Number 4. The reason we

present this is to show how quickly that water encroaches

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and how quickly these wells had to be put on sub pumps to move the required amounts of fluid to make these wells commercial.

The first page of this, as you can see, the first three or four months were quite successful. Then as the oil production dropped off in July and August, necessitating a sub pump being run in, and you can see it was quite successful after a sub pump was installed.

The second page is in the Eagle Mesa-Entrada

Pool, which is approximately seven miles southeast of our

proposed location. The Filon Exploration Navajo 13 C, very

much the same manner. You can see the oil and water

production. The well was then put on a sub pump, which

resulted in better oil production and of course increased

water production.

And the last page is again in the Eagle Mesa

Field, the 14 C well. Again, you can see it was not quite
as successful on sub pump, but t did increase it from rod
pump.

The Papers Wash Field and the Eagle Mesa-Entrada Field, Mr. Examiner, are all 160-acre spacing units in these fields.

- Q. And how does this information relate to your request for 160 acres for the subject pool?
 - A. Because these are dune structures and it has been

shown that typically one well would drain approximately 160 acres, because of the amount of fluid necessary to be moved, drilling more than one well on that would be an unnecessary waste.

- Q. What conclusions have you reached from your study of the area?
- A. We feel that this proposed well will drain the entire structure and that 160-acre spacing will adequately drain the structure and prevent unnecessary drilling.
- Q. Are there any other operators in the pool to whom notice should be provided pursuant to Division Rule 1207?
 - A. No, sir, there are no other operators.
- Q. Are there any existing spacing units in the pool in which there are producing wells?
 - A. No, sir, there are not.

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- Q. In your opinion, will approval of this

 Application be in the best interest of conservation, the

 prevention of waste and the protection of correlative

 rights?
 - A. Yes, sir, it will.
- Q. Were Penwell Exhibits 1 through 6 prepared by you?
 - A. Yes, they were.
- MR. CARR: May it please the Examiner, at this
 time we move the admission into evidence of Penwell

Exhibits 1 through 6. 1 2 EXAMINER ASHLEY: Exhibits 1 through 6 will be 3 admitted into evidence. MR. CARR: And that concludes my direct 4 examination of Mr. Pierce. 5 EXAMINATION 6 7 BY EXAMINER ASHLEY: 0. Mr. Pierce, you said the Papers Wash and the Eagle Mesa Pools are all spaced on 160 acres? 9 10 Α. That is correct. The only producing one of 11 those, Mr. Examiner, the Papers Wash Field no longer 12 produces, but the Eagle Mesa-Entrada field is still 1.3 currently in production. Does the Eagle Mesa have any nonstandard 14 proration units in it? 15 16 Α. To my knowledge, no, sir, it does not. Now, on Exhibit 3 you show a couple of dry 17 0. Entrada wells? 18 19 Α. Yes, that's correct. The white one at the top of 20 Section 36 completely missed the Entrada. The one -- If you see, 893 beside it? 21 22 0. Yes. It penetrated six feet of the Entrada, but it was 23 Α. all water. And this 872 was a Mancos well, which never did 24 25 penetrate the Entrada and is currently a water-disposal

well. 1 What is that 872 there? 2 Q. That's leases -- Well, when we acquired these 3 leases, these were numbers that just assigned to these two 4 5 proration units by the Navajo allotment or something. Okay. And that well is currently a saltwater 6 Q. 7 disposal well in the Mancos formation? That is correct, yes. 8 Okay. Is this well within two miles of an 9 Q. existing Entrada pool? 10 No, sir, it is not. 11 Α. Is this a federal lease? 12 Q. 13 Α. No, sir, it's federal, surface and state minerals 14 in Section 36. 15 Q. Federal, surface and state minerals? 16 Α. That's correct. Is it all one lease? 17 0. It's all one lease, that is correct. At the 18 19 bottom of the land map, Mr. Examiner, is the state lease number also, the very bottom. 20 0. Of Exhibit -- ? 21 22 Α. Exhibit Number 3. 23 0. Exhibit 3. 24 It states Penwell Energy, Torreon Wash at the

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very bottom in the brown --

1	Q. Okay. What about royalty interests in this area?
2	Are they common?
3	A. Yes, they're all common, yes, sir. It's a 640-
4	acre state lease.
5	Q. Okay. What about Section 31? Is that also a
6	state lease?
7	A. No, sir, that is a federal lease. The only state
8	lease on this map is Section 36.
9	Q. Okay.
10	A. Well, I take it back. Section 2 is also an open
11	state section.
12	EXAMINER ASHLEY: I have nothing further. Thank
13	you.
14	MR. CARR: May it please the Examiner, that
15	concludes our presentation in this matter.
16	EXAMINER ASHLEY: Okay, there being nothing
17	further in this matter, Case 12,540 will be taken under
18	advisement.
19	(Thereupon, these proceedings were concluded at
20	3:40 p.m.)
21	* * *
22	
23	to the case certify the first to the second of the process of the
24	the Examiner hearing of Case teo 12540 heard by me pa
25	Mark John, Exercis

Off Conservation Division STEVEN T. BRENNER, CCR (505) 989-9317

CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL November 25th, 2000.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 2002

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

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

CASE NO. 12,540

APPLICATION OF PENWELL ENERGY, INC., FOR)
ADOPTION OF SPECIAL POOL RULES, McKINLEY)
COUNTY, NEW MEXICO)

OFFICIAL EXHIBIT FILE

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

November 16th, 2000

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, November 16th, 2000, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.