NEW MEXICO OIL CONSERVATION DIVISION

EXAMINER HEARING

SANTA FE, NEW MEXICO

H	earing Date	APRIL 30, 1998 T	ime 8:15 A.M.
	NAME	REPRESENTING	LOCATION
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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. 11,968

APPLICATION OF PETROLEUM DEVELOPMENT CORPORATION FOR A UNIT AGREEMENT, LEA COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examine

April 30th, 1998

Santa Fe, New Mexico Oil Gonsarvano, Division

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, April 30th, 1998, 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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REPORTER'S CERTIFICATE

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EXHIBITS

Applicant's		Identified	Admitted
Exhibit	1	6	12
Exhibit	2	7	12
Exhibit	3	7	12
Exhibit	4	7	12
Exhibit	5	10	12

* * *

APPEARANCES

FOR THE DIVISION:

RAND L. CARROLL Attorney at Law Legal Counsel to the Division 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	8:20 a.m.:
3	EXAMINER CATANACH: At this time we'll call Case
4	11,968.
5	MR. CARROLL: Application of Petroleum
6	Development Corporation for a unit agreement, Lea County,
7	New Mexico.
8	EXAMINER CATANACH: Call for appearances in this
9	case.
10	MR. CARR: May it please the Examiner, my name is
L1	William F. Carr with the Santa Fe law firm Campbell, Carr,
12	Berge and Sheridan. We represent Petroleum Development
L3	Corporation in this case, and I have one witness.
L4	EXAMINER CATANACH: Any additional appearances?
L5	Will the witness please stand and be sworn in at
L6	this time?
L7	(Thereupon, the witness was sworn.)
18	JOHN D. KULLMAN,
L9	the witness herein, after having been first duly sworn upon
20	his oath, was examined and testified as follows:
21	DIRECT EXAMINATION
22	BY MR. CARR:
23	Q. Would you state your name for the record, please?
24	A. I'm John Kullman.
25	Q. Where do you reside?

1 Α. In Midland, Texas. Mr. Kullman, by whom are you employed? 2 Q. I'm self-employed. 3 Α. And what is your profession? 4 Q. 5 I'm a geological consultant. Α. What is your relationship to Petroleum 6 Q. Development Corporation? 7 I've been hired by Petroleum Development 8 Corporation to do the consulting -- as a consultant to do 9 10 the geology on this project. Have you previously testified before this 11 12 Division and one of its Examiners and had your credentials 13 as a petroleum geologist accepted? Α. 14 No. Could you briefly summarize for Mr. Catanach your 15 0. educational background? 16 17 Α. I have a bachelor of arts degree in geology from Augustana College, 1965, and a master of science degree in 18 geology from the University of Iowa, 1968. 19 Since graduating in 1968, for whom have you 20 Q. 21 worked? Α. I've had 30 years of continuous experience as a 22 23 petroleum geologist, with six years with Texaco and 12 years with various independent companies and 12 years as a 24

consulting geologist.

1	Q. Are you familiar with the Application filed in
2	this case on behalf of Petroleum Development Corporation?
3	A. Yes.
4	Q. And are you familiar with the proposed Huber
5	State Unit?
6	MR. CARR: May it please the Examiner, we would
7	tender Mr. Kullman as an expert witness in petroleum
8	geology.
9	EXAMINER CATANACH: Mr. Kullman is so qualified.
10	Q. (By Mr. Carr) Could you briefly state what
11	Petroleum Development seeks with this Application?
12	A. Approval of the Huber State Unit agreement, which
13	is a voluntary exploratory unit containing approximately
14	145.82 acres of state lands in Lea County, New Mexico.
15	Q. Have you prepared certain exhibits for
16	presentation in this case?
17	A. Yes.
18	Q. Let's go to what has been marked for
19	identification as Petroleum Development Corporation Exhibit
20	Number 1. I'd ask you to explain what it is and what it
21	shows.
22	A. It is the unit agreement a state/fee exploratory
23	unit.
24	Q. And is this on the State of New Mexico Land
25	Office form?

- A. Yes.

 Q. All right, let's go to Exhibit Number 2. What is
 this?
 - A. Exhibit 2 is a general lease plat of the proposed unit area. It outlines the tracts for the unit and shows the state lease numbers.
 - Q. Okay, Exhibit Number 3 is also a plat, is it not, Mr. Coleman?
 - A. Yes, it's a plat which is Exhibit A of the unit agreement, and it also shows the various tracts and states the amount of acreage in each tract and in the unit itself.
 - Q. Okay.

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- A. It also shows the location of the well that we propose to re-enter and the -- both the surface-hole location and the bottomhole location.
- Q. Petroleum Development Corporation is planning to re-enter this well and then kick off and directionally drill; is that --
- A. Yes, that's correct.
- 20 Q. -- or horizontally drill?
 - A. Yes.
- Q. Is that portion of the approval process being handled administratively?
 - A. Yes, it is.
- 25 | Q. Is Exhibit Number 4 an ownership breakdown

1 identifying the lands in the unit and identifying the ownership of those properties? 2 Α. Yes, it shows the ownership of each tract in the 3 unit and shows that the state beneficiary institutions are the same, being the common schools. 5 0. And this shows that the lessee of record in each 6 of these cases is EnergyPro, Inc.; is that right? 7 A. That's correct. 8 What is their relationship to Petroleum 9 Q. Development Corporation? 10 EnergyPro developed the prospect or the project A. 11 and has sold it or joined in an agreement with Petroleum 12 Development Corporation to drill the horizontal well. 13 And will Petroleum Development Corporation Q. 14 actually be the operator of the property? 15 Yes, they will. 16 Α. 17 Q. What percentage of the acreage has been voluntarily committed to the unit? 18 Α. One hundred percent. 19 Have you reviewed this proposal with the 20 Commissioner of Public Lands? 21 Our representatives have met with Pete Martinez 22 at the State Land Office, and there's been -- He's 23 indicated there's no problem with this Application. 24

we'd hoped to have the letter of approval today, but we

1 will provide it to the Oil Conservation Division as soon as it is received. 2 MR. CARR: Mr. Examiner, I talked to Mr. Martinez 3 yesterday. He was trying to get it out late yesterday. We 4 should have it later today, and I will deliver a copy to 5 you when we receive it. 6 (By Mr. Carr) Now, Petroleum Development 7 Q. Corporation is requesting to be designated operator of this 8 unit; is that correct? 9 10 A. Yes. Does the unit agreement provide for the periodic 11 0. filing of plans of development? 12 Α. Yes. 13 And will these be filed with the Oil Conservation 14 Q. 15 at the time they're filed with the State Land Office? Α. Yes. 16 And how often are these plans to be filed? 17 The initial plan within six months after 18 Α. completion of a commercial well, and subsequent plans every 19 twelve months thereafter. 20 21 Q. And you're proposing to unitize all formations under this acreage; is that right? 22 Α. Yes 23

24

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Q.

in the re-entry?

What is the primary objective in this unit, and

- 10 The Devonian formation. 1 Α. And what pool will the well be located in? 2 Q. Denton-Devonian South. 3 Α. Are there secondary objectives in this well? 4 Q. The Wolfcamp is considered a secondary objective. 5 A. It has produced just to the north of the unit. 6 7 Q. Let's go to Exhibit Number 5. Would you identify this and review it for Mr. Catanach? 8 Exhibit Number 5 is a Devonian structure map. 9 Α. has been drawn using existing well control and is based on 10 a 3-D seismic interpretation of the area. 11 And what basically does this show? 12 Q. What it shows is a broad flattening at the 13 Α. 14 juncture of the three tracts that we propose to unitize, 15 with a little bit of structural closure, and that indicates to us that the area is not -- probably has not been drained 16 efficiently by the existing well control. 17 And what you intend to do is re-enter the Huber 18 0. 19 State Well Number 1, over on the western side of the unit; 20 is that right? Α. Yes. 21 And then directionally drill in a northeasterly 22 Q.
 - closure.

direction?

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Correct, through this structural flattening and

1	Q. Does this proposal enable Petroleum Development
2	Corporation and EnergyPro to attempt to produce what
3	reserves may be here in the most economical fashion?
4	A. Yes.
5	Q. Can you just generally summarize what your
6	geological study tells you about this formation in this
7	proposal?
8	A. That the Devonian formation has compartmentalized
9	porosity zones and fractures, which a horizontal well into
10	this structural flattening and closure will help to recover
11	reserves that would not be recovered by any of the vertical
12	wells.
13	Q. In fact, this is a feature that should be
14	producible with one wellbore; is that right?
15	A. Yes, that's correct, one well into this area
16	should recover the remaining reserves.
17	Q. And the unitization of this acreage could prevent
18	any possibility of there being requirements for additional
19	wells?
20	A. Yes.
21	Q. How soon does Petroleum Development Corporation
22	plan to spud the well?
23	A. As soon as approvals are received.
24	Q. And do you therefore request that the order in
25	this case be expedited?

1	A. Yes.
2	Q. In your opinion, will approval of this
3	Application be in the best interest of conservation, the
4	prevention of waste and the protection of correlative
5	rights?
6	A. Yes.
7	Q. Were Petroleum Development Corporation Exhibits 1
8	through 5 either prepared by you or compiled under your
9	direction?
10	A. Yes, they were.
11	MR. CARR: Mr. Catanach, at this time we'd move
12	the admission of Petroleum Development Corporation Exhibits
13	1 through 5.
14	EXAMINER CATANACH: Exhibits 1 through 5 will be
15	admitted as evidence.
16	MR. CARR: And that concludes my direct
17	examination of Mr. Kullman.
18	EXAMINATION
19	BY EXAMINER CATANACH:
20	Q. Mr. Kullman, you show on your exhibit that there
21	have been four wells drilled in this unit area?
22	A. Yes.
23	Q. Were those all producing wells in the Devonian?
24	A. Yes, they were.
25	Q. And they've all been plugged and abandoned?

A. Yes. Actually, the Number 1 Huber state well had never produced from the Devonian. That's the one that's shown with the dryhole symbol. But the other three were Devonian producers.

- Q. What was the -- Do you know what the Huber State was?
- A. It drilled to the Devonian. It was -- I'm trying to remember. I think it was drilled in the late Seventies, possibly the early Eighties, which -- The initial wells in the field were drilled in the field were drilled in the early Sixties, and this well, the Huber State well, was drilled.

That was prior to 3-D seismic, and they thought they were in a structurally high position there that would make a good devonian well, but they came -- You can see that it's just on a structural nose that's kind of regional dip, and they drilled -- they tried to complete it in one of the main water-producing zones.

They did not log the well either, so there's no e-logs, but you can tell from the depth of their completion attempt that they were in the main -- or down in the water-producing horizon.

- Q. So it's your intent to drill that well into that structurally high position?
 - A. Yes, to the east.

1 And basically you theorize that there's oil that Q. was not recovered from the three other wells --2 Yes, that's right. Α. 3 -- in that structure? 4 0. The wells were initially drilled by three 5 Α. different companies, and they were -- they produced them at 6 very high rates to try to outproduce the offset producer, 7 and we believe that they prematurely coned or brought water 8 into the production from below, probably coming up various 9 fractures and things, and that this area out here that 10 shows some flattening would not have been drained by that 11 type of production. 12 So you've estimated that these reserves are, in 13 0. fact, present on all three of these quarter sections? 14 15 A. Yes. Quarter-quarter sections. 0. 16 And it's your opinion that one well will 17 efficiently drain the top of that structure? 18 Yes, and everything below it. I mean, we'll keep 19 the horizontal well, of course, near the top of the 20 formation, but... 21 Just out of curiosity, how far is that lateral 22 0. going to extend? Do you know? 23 Approximately 2000 feet. Well, maybe less than 24

A thousand feet might be a closer estimate.

1	Q. Okay. Have you guys estimated how much oil you
2	might recover out of that structure?
3	A. We believe about 300,000 barrels is a reasonable
4	estimate.
5	Q. Okay, the unit agreement has been executed
6	actually by Petroleum Development Corporation, or
7	actually I'm not sure. It looks like Did
8	EnergyPro, in fact, execute the
9	MR. CARR: Yes.
10	THE WITNESS: Yes, Don Pfiester.
11	EXAMINER CATANACH: Okay, I have nothing further
12	of this witness, Mr. Carr. He may be excused.
13	MR. CARR: Mr. Examiner, that concludes our
14	presentation in this case.
15	EXAMINER CATANACH: Okay. There being nothing
16	further in this case, Case 11,968 will be taken under
17	advisement.
18	(Thereupon, these proceedings were concluded at
19	8:36 a.m.)
20	* * *
21	
22	I de hareby desirt the Months the type of it. a comments so that I have a substitution
23	heard by me on April 30 17968.
24	Sund Rlatant, Examiner
25	Off Conservation Division

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 April 30th, 1998.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998