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. 13,301

APPLICATION OF HEC PETROLEUM, INC., TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE CATCLAW DRAW-MORROW GAS POOL, EDDY COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

RECEIVEL

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

AUG 5 2004

July 22nd, 2004

Santa Fe, New Mexico

Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, July 22nd, 2004, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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APPEARANCES

FOR THE APPLICANT:

JAMES G. BRUCE Attorney at Law P.O. Box 1056 Santa Fe, New Mexico 87504

* * *

WHEREUPON, the following proceedings were had at 1 2 10:32 a.m.: 3 4 5 EXAMINER STOGNER: Case Number 13,301, which is 6 7 the Application of HEC Petroleum, Inc., to amend the 8 special rules and regulations for the Catclaw Draw-Morrow 9 Gas Pool. 10 Call for appearances. MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe, 11 12 representing the Applicant in this amendment of the pool 13 rules. EXAMINER STOGNER: No other appearances. Do you 14 15 have any witnesses? MR. BRUCE: Mr. Examiner, I have two witnesses, 16 17 Mr. Ready and Mr. Krawietz, if the record could reflect that they've been previously sworn and qualified as 18 experts. 19 EXAMINER STOGNER: Both witnesses were previously 20 sworn in one of either two cases today, and the record will 21 22 so reflect. 23 And gentlemen, let me remind you you're still under oath. 24 With that, Mr. Bruce, you may continue. 25

1 ROBERT READY, 2 the witness herein, having been previously duly sworn upon 3 his oath, was examined and testified as follows: 4 DIRECT EXAMINATION BY MR. BRUCE: 5 6 Mr. Ready, could you identify Exhibit 1 for the Q. 7 Examiner? 8 A. Exhibit 1 is a plat outlining the current Catclaw 9 Draw-Morrow Gas Pool and also indicating the wells that 10 have been completed in that pool. EXAMINER STOGNER: And also for the -- I'm sorry, 11 12 also for the record, state your full name. 13 THE WITNESS: I am Robert Ready of Midland, Texas. 14 15 EXAMINER STOGNER: Okay, please continue. 16 THE WITNESS: Again, this is a plat with the bold 17 outline depicting the outline of the Catclaw Draw-Morrow 18 Gas Pool and the wells with the circle indicating the wells 19 that have been completed in that pool. 20 Q. (By Mr. Bruce) Okay. It's kind of cut off at 21 the top, but the pool does include all of Sections 1 and 2 at the north end of this township, does it not? 22 That's correct. 23 Α. 24 Okay. Who are the -- Before I get to that, Q.

there's a dashed outline in there. Is that a unit outline?

That is the Catclaw Draw Unit. HEC Petroleum, 1 Α. 2 Inc., is the operator of that federal unit. Okay, and who are the other operators of wells in 3 Q. the pool? 4 5 The other operators in the pool are Fasken Land Α. 6 and Minerals, Devon Energy, and ChevronTexaco. What are the rules, the current rules, of the 7 Q. 8 Catclaw Draw-Morrow Gas Pool? 9 A. The current rules provide for 640-acre spacing, two wells per section, with no well closer than 1650 feet 10 to the outer boundary of a well unit and no closer than 330 11 feet to a quarter-quarter section line. 12 13 Q. And what rules does HEC seek to institute for the 14 pool? 15 We would retain 640-acre spacing, amend the rules to provide for four wells per section, and that those wells 16 be no closer than 660 feet to a quarter section line and no 17 closer than 10 feet to a quarter quarter section line. 18 19 So again, as in the last hearing, you're seeking 20 to make the pools equivalent to the statewide rules, with 21 the difference being 640-acre spacing? 22 That's correct. Α. 23 Q. Were the operators in the pool notified of this hearing? 24

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Α.

Yes, they were.

1	Q. And have any of the operators objected to this
2	Application?
3	A. No.
4	Q. Have any of them indicated support for the
5	Application?
6	A. Devon has indicated support for our Application.
7	Q. Were Exhibits 1 and 2 prepared by you or under
8	your supervision or compiled from company business records?
9	A. Yes.
10	Q. And in your opinion is the granting of HEC's
11	Application in the interests of conservation and the
12	prevention of waste?
13	A. Yes.
14	MR. BRUCE: Mr. Examiner, I'd move the admission
15	of Exhibits 1 and 2.
16	EXAMINER STOGNER: Exhibits 1 and 2 will be
17	admitted into evidence at this time.
18	Also, Mr. Bruce, do you have reference to the
19	existing order number
20	MR. BRUCE: Yes, sir.
21	EXAMINER STOGNER: for the Catclaw Draw? Is
22	that still under 8170, that you remember?
23	MR. BRUCE: Yes, Mr. Examiner, I Hold on a
24	minute. I think the initial a couple orders. It was
25	initially entered in Case Number 5109, Order Number R-4704,

and there's a notation in the rules that R-4704 was renumbered as R-1670-0, and -- which of course would become part of 8170.

Then, Mr. Examiner, also the pool was prorated.

I know there is an Order R-5188 which suspended

prorationing for a period of one year back in the 1970s. I

believe that the suspension -- I don't know if that's the

current order, but I believe that prorationing is currently

in suspension in this pool, although I was not able to wade

through the 8170 series of orders and find it.

The last prorationing schedule I saw several years ago didn't have it on there, I don't think, but I do not remember. I can double-check my records.

EXAMINER STOGNER: Let's go ahead and go through the hearing. I may call a recess so we can address that issue. Let's go ahead and hear the testimony at this time. We may take a recess so I can at least put that into the record about all the records, especially since R-8170 has been — that order recodified, Order R-1670-0, under the — I guess you might call it the current prorationing scheme, at least the special pool rules for prorated pools is under Order R-8170, and under all of its subparagraphs there is general rules and regulations for prorationing.

But at this point I cannot recollect if the pool is actually unprorated or prorationing was suspended. That

may affect how we proceed afterwards. 1 For the record, Mr. Ready is so qualified, and I 2 will take administrative notice of the previous cases in 3 which Orders Number R-4704, R-1670-0 and R-8170 that deal 4 with the Catclaw Draw-Morrow Gas Pool, I'll take 5 administrative notice of those cases. 6 THE WITNESS: Mr. Examiner, there's one thing I 7 did not point out on the plat that will be discussed later. 8 You'll see in Section 23 and up to the left of that an 9 arrow with a label "Catclaw Draw #18". The well is located 10 in the northwest quarter of Section 23. 11 That's the recent well that we have drilled. 12 **EXAMINER STOGNER:** 13 Okay. THE WITNESS: It's kind of hard to see, there's 14 so much other information on there. 15 16 EXAMINER STOGNER: Yes, there is a lot of 17 information. In fact -- let's see, are you through with 18 the testimony? 19 MR. BRUCE: I'm through with Mr. Ready, if you 20 have any questions, Mr. Examiner. 21 EXAMINER STOGNER: Yeah, I do. 22 **EXAMINATION** BY EXAMINER STOGNER: 23 Q. When did that Catclaw Draw unit -- Do you know 24 the history of it, who originated it and who did HEC buy 25

from? 1 The unit, I believe, was formed by Hanagan 2 Α. Petroleum, Inc. It has variously gone through operation by 3 There may be other intermediate owners that I am 4 not aware of. We acquired it from Hallwood -- or in our 5 acquisition of Hallwood Petroleum, Inc., which is a name 6 7 change to HEC Petroleum, Inc. But Hanagan, I believe, originally formed the unit. And if my recollection is 8 correct, it was in the late 1950s, early 1960s. 9 10 Q. Now, you called attention to that Well Number 18/ Α. Yes. 11 Is that a third well on this unit, or was that a 12 Q. 13 replacement well for a previous well in that Section 23? Α. I'll let the engineer speak to that. I believe 14 15 it was a replacement well. EXAMINER STOGNER: Okay, I have no other 16 17 questions for this witness. You may be excused. 18 THE WITNESS: Thank you. MR. BRUCE: Mr. Examiner, the Catclaw Draw Unit 19 20 was approved by the Division in Case 4476, Order Number R-4081. 21 22 EXAMINER STOGNER: That was the initial 23 discovery? MR. BRUCE: I don't know if it was the -- it 24

was -- That was for approval of the Catclaw Draw Unit

1	agreement, and it was by Hanagan Petroleum.
2	EXAMINER STOGNER: Oh, that was the unit
3	agreement?
4	MR. BRUCE: Yes, sir.
5	EXAMINER STOGNER: Okay, I'm sorry, I was
6	thinking back to pools at this point.
7	Okay, so noted. Thank you, Mr. Bruce.
8	MR. BRUCE: Call Mr. Krawietz to the stand.
9	EXAMINER STOGNER: And for the record, state your
10	full name, and how do you spell your last name again, for
11	the record in this case?
12	MR. KRAWIETZ: It's Ken Krawietz, spelled
13	K-r-a-w-i-e-t-z.
14	EXAMINER STOGNER: Thank you, Mr. Krawietz.
15	Mr. Bruce?
16	<u>KEN KRAWIETZ</u> ,
17	the witness herein, having been previously duly sworn upon
18	his oath, was examined and testified as follows:
19	EXAMINATION
20	BY MR. BRUCE:
21	Q. Mr. Krawietz, would you maybe take Exhibits 3 and
22	4 together, Mr. Krawietz, and just briefly discuss the
23	Morrow geology in and around the Catclaw Draw Pool?
24	A. Okay, Exhibit 3 is a structure map, the Catclaw
25	Draw Unit outlined, operated by HEC shaded in yellow. The

blue line through there indicates the cross-section,

Exhibit 4, north to south, with the northernmost well being in the Springs-Morrow field and the southernmost well being in the Happy Valley-Morrow field.

section is the new well we drilled, Well Number 18. The cross-section was prepared by our geologist in correlating the members of the Morrow noted here as Morrow B and Morrow C. There's also a Morrow A above that, but what we're showing here is that these members exist from the Springs field through the Catclaw Draw field to the Happy Valley field. We don't feel they're the same sands, per se, but the depositional units do exist.

- Q. There are a number of zones perforated in these zones apparently, Mr. Krawietz?
 - A. Yes, there are.

- Q. Okay, so they're not -- unlike the last hearing where most of them -- they had one main producing zone, there appear to be a number of producing zones in this pool?
- A. Yes, that's true.
- Q. Okay. What about the pressure in this pool?
 What is Exhibit 5?
 - A. Exhibit 5 is an exhibit of all wells in this pool, Catclaw Draw-Morrow Pool, and shows the pressure-

versus-time data from each of those wells. These are the
various members I mentioned, Morrow A, B and C. And as to
what zone these pressures are in, it's not demonstrated
here. But what it does demonstrate is the nature of the
Morrow in this area, that all of these sands are not in
direct communication.

- Q. So even 15-plus years after the initial wells were drilled, they're still drilling some wells with initial pressures in it?
 - A. Yes, that's true.
- Q. What about -- and Mr. Reedy did mention the new well, and you mentioned the new well in the northwest quarter of 23. Could you describe -- First of all, is that a replacement well for one of the other two wells on that section?
- A. Yes, it is. The well noted on here, it shows as Number 2, that well is plugged.
- 18 | Q. Okay.

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- A. So yes, this is a replacement well for the north 20 320.
- Q. Okay, so it's a replacement well for the well in the northeast quarter of Section 23?
 - A. Yes, sir.
- Q. Okay. And what did you discover when you completed the Catclaw Draw Unit Number 18 well? Is that

1 | it?

- A. Yes, sir, that's right.
- Q. Yeah, could you describe what zones you completed it in, briefly, and what type of pressure environment you experienced?
- A. When we logged the well, we also ran a number of RFT to obtain pressure and some idea of permeability in various sands in the Morrow. There were probably -- Four of the sands we found to be at virgin pressure. There were probably that many again that were somewhat depleted, indicating some communication. However, there's still very commercial reserves in those sands.
- Q. What were the -- So the initial pressure in this pool is what? Close to 5000?
 - A. Is roughly in the 4500 range, 4600.
- Q. Okay, and what is the initial producing rate of the Number 18 well?
- A. Number 18 is -- the initial sales rate on it was 3 million cubic feet a day.
 - Q. Okay, let's move on to your Exhibit 6. Briefly, what does that represent?
 - A. Exhibit 6 is the sum production of all wells in the Catclaw Draw-Morrow Pool. It shows that current production from the total field is roughly 3.8 million cubic feet a day for the entire field.

1	Q. Excluding the new well?		
2	A. That's true.		
3	Q. Okay. So really with the new well it's closer to		
4	6.5 million a day?		
5	A. Yes, that's true.		
6	Q. Okay. And this pool has produced quite a bit of		
7	gas already, has it not?		
8	A. Yes, it has, per <i>Dwight's</i> PI number 128 BCF.		
9	Q. So based on the new well and the production		
10	history to date of the pool, there are additional reserves		
11	to be recovered by drilling additional infill wells in this		
12	pool?		
13	A. Yes.		
14	Q. And to the best of your knowledge, are any of the		
15	you mentioned the Springs-Morrow, the Happy Valley-		
16	Morrow, and over to the east is, I believe, the Avalon-		
17	Morrow Pool. Are all of those pools spaced on statewide		
18	320 with one well per quarter section?		
19	A. To my knowledge, the Springs and Happy Valley are		
20	statewide. Avalon, I think, has special rules.		
21	Q. What is Exhibit 7?		
22	A. Exhibit 7 is a production plot of our Catclaw		
23	Draw Unit Number 18 of the initial data from July 2nd to		
24	July 19th, indicating initial production of roughly 3		
25	million a day. The last rate was 2.8 million. We've not		

seen a decline in tubing pressure, indicating that we will 1 recover substantial reserves from this well. 2 I don't see any water production. Does the 3 0. Catclaw Draw Pool produce much water? 4 It has not. According to the Dwight's plot, it's Α. 5 producing roughly 90 barrels a day for the entire field, 6 and we've not seen any in this particular well since we got 7 8 it cleaned up. Okay. Were Exhibits 3 through 7 prepared by you 0. 9 or under your supervision or compiled from company business 10 records, Mr. Krawietz? 11 12 Α. Yes. And in your opinion is the granting of this 13 Q. Application in the interests of conservation and the 14 prevention of waste? 15 Α. Yes. 16 17 MR. BRUCE: Mr. Examiner, I'd move the admission of Exhibits 3 through 7. 18 19 EXAMINER STOGNER: Exhibits 3 through 7 will be 20 admitted into evidence. 21 MR. BRUCE: And finally, Mr. Examiner, what's marked Exhibit 8 --22 23 EXAMINER STOGNER: Yes. 24 MR. BRUCE: -- that is from a prior Division 25 Hearing, Case 11,723, which involved the -- if you look in

Section 1, in the southern third of Section 1 there's a 1 2 black square --EXAMINER STOGNER: Okay. 3 MR. BRUCE: -- on the north end of the -- on the 4 5 top of the exhibit. EXAMINER STOGNER: Okay, I've got a red square, 6 7 yes. MR. BRUCE: Or red, okay. Mine -- Okay, a red 8 9 square in the southern third of Section 1. This was a case 10 involving that well, which was -- without going into detail, it also involved an unorthodox location. 11 exhibit was prepared to show which wells in the pool were 12 already at unorthodox locations. Each of the wells with an 13 arrow pointing at it was an unorthodox-location well, and 14 15 this is submitted only to show the fact that there are 16 already a number of wells that are not 1650 feet from the 17 section line. And as a result, we don't think anyone will be adversely affected by changing the well-location rules 18 19 at this point. 20 EXAMINER STOGNER: So noted. Exhibit 8 will be 21 admitted also at this time. 22 Anything else in this matter? 23 MR. BRUCE: No, sir. 24 EXAMINER STOGNER: I think I'm ready to go ahead 25 and take this under advisement. And then just as I have

mentioned, I'll take administrative notice on any previous 1 orders and just take it from there. If once I find 2 something that we may need to address, we may have to 3 That would be the worst-case scenario, is re-open 4 to address prorationing issues, if that needs to be 5 6 addressed. If there's nothing else in Case 13,301, this 7 matter will be taken under advisement. 8 9 And with that, today's hearing is adjourned. (Thereupon, these proceedings were concluded at 10 11 10:35 a.m.) 12 13 14 15 I do hereby carry that the foregoing is complete resort of the proceedings in 16 the Exeminer hearing of Case No. 13301 17 heard by my 9 14/4 22, 2004 .. Employed 18 Oil Conservation Description 19 20 21 22 23 24 25

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 July 24th, 2004.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2006