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. 11,872
APPLICATION OF ME-TEX OIL & GAS, INC., FOR POOL CONTRACTION, POOL CREATION AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO	ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 6th, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 6th, 1997, 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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I N D E X

November 6th, 1997
Examiner Hearing
CASE NO. 11,872

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E X H I B I T S

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A P P E A R A N C E S

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

* * *

WHEREUPON, the following proceedings were had at 8:46 a.m.:

EXAMINER CATANACH: At this time I'll call Case 11,872, which is the Application of Me-Tex Oil and Gas, Inc., for pool contraction, pool creation and special pool rules, Lea County, New Mexico.

Call for appearances in this case.

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr, Berge and Sheridan. We represent Me-Tex Oil and Gas, Inc., and I have one witness.

EXAMINER CATANACH: Call for additional appearances?

Will the witness please stand to be sworn in?

(Thereupon, the witness was sworn.)

MICHAEL L. PIERCE,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARR:

Q. Will you state your name for the record, please?

A. Michael L. Pierce.

Q. Where do you reside?

A. 7707 Plainfield Drive in Hobbs, New Mexico.

Q. By whom are you employed?

A. I own Peak Consulting Services.

Q. What is the relationship of Peak Consulting Services to Me-Tex?

A. I initiated this prospect several years ago, and this is an ongoing development process.

Q. Are you the geologist that has worked on this prospect?

A. That's correct.

Q. Have you previously testified before this Division and had your credentials as an expert in petroleum geology accepted and made a matter of record?

A. Yes, I have.

Q. Are you familiar with the Application filed in this case on behalf of Me-Tex?

A. Yes, I am.

Q. Are you familiar with the State "H" Well Number 2, which is the subject of this case?

A. Yes, I am.

MR. CARR: Are the witness's qualifications acceptable?

EXAMINER CATANACH: They are.

Q. (By Mr. Carr) Mr. Pierce, would you briefly summarize what Me-Tex seeks in this case?

A. What we want to do is contract the Skaggs-Drinkard Pool, the east half of Section 3, Township 20

South, Range 37 East, and create a new pool for the Drinkard in the northeast half of the northeast quarter in Section 3 --

Q. And the new pool would be the east half of the northeast --

A. That's correct, east half of the northeast quarter.

-- and with a special GOR for this new pool.

Q. And you're seeking a gas-oil ratio of 20,000 to 1?

A. Correct.

Q. What are the current rules which govern the development of the Skaggs-Drinkard Pool?

A. It's 40-acre spacing and 10,000-to-1 gas-oil ratio.

Q. And there was an order creating a special gas-oil ratio in Skaggs-Drinkard; that was Order Number 7020, entered July 2nd, 1982.

Mr. Pierce, let's go to what has been marked as Me-Tex Exhibit Number 1. Would you identify this and review it for Mr. Catanach?

A. This is a structure map, mapped on the Tubb sand in the immediate area. The acreage we're talking about, the State "H" acreage, is highlighted in yellow, with the State "H" Number 2 well with the red arrow adjacent to it.

Q. This tract is actually located in the North Monument-Grayburg-San Andres unit area, is it not?

A. Right, that's part of the -- It lies within the area of the unit.

Q. And it's a fully developed area?

A. Correct, yes, it is.

Q. The yellow-shaded acreage is, in fact, the acreage you propose be included in this new Drinkard reservoir?

A. That's correct.

Q. Let's go to the two wells that have resulted in this Application, and I'd ask you to identify these recent Drinkard completions and then review for the Examiner what has led Me-Tex to seek the creation of a new Drinkard pool.

A. In November of 1996 we drilled the State "H" Number 1 well. This well --

Q. And which of the wells is that?

A. Oh, I'm sorry, this well is in Unit Letter H, in Section 3.

We tested the lower Drinkard in this interval, and that will be apparent when we get to the cross-section, and we obtained a marginal producing well: 20 barrels of oil a day and 20 barrels of water.

We abandoned that zone and moved up to the upper Drinkard where we completed it and made a well,

approximately 90 barrels of oil a day and 300 MCF. Current production is 50 barrels a day and 250 MCF from this well.

Q. The Oil Conservation Division extended the Skaggs-Drinkard Pool to include this well in that pool; is that not correct?

A. Yes, that's correct.

Q. And the well is located, in fact, substantially more than a mile from the Skaggs-Drinkard Pool?

A. The boundaries of the Skaggs-Drinkard Pool were at the section line of Section 10 to the south, so it's three-quarters of a mile.

Q. And there's one well in 10 that caused that --

A. That's right, yeah, there's a well in Unit Letter G in Section 10 that was a Drinkard well. It's subsequently been plugged and abandoned.

Q. And then at the present time you're far in excess of a mile --

A. That's correct.

Q. -- from the production from the Drinkard- --

A. Yes.

Q. -- Skaggs Pool?

A. Right.

Q. All right. Let's go to the State "H" Number 2 well. When was that drilled?

A. We drilled that well in September of this year.

It's a brand-new well. We tested the lower Drinkard in this well, and the well has come in, in excess of 160 barrels a day and greater than 3 million cubic feet of gas a day.

Q. And that is the well indicated on Exhibit 1 by the red arrow?

A. That's correct.

Q. Following the completion of this well did you have meetings with the Oil Conservation Division concerning what to do with it?

A. Yes, I met with Chris Williams and Paul Kautz and had a telephone conversation with Mike Stogner, and this was the route that everyone suggested we do, go to -- make application, go to hearing for special pool rules and a new pool designation.

Q. Why did you map the Tubb formation?

A. The -- Well, one reason, I have greater well control. Not all the wells penetrated the Drinkard, and the Tubb, frankly, is an easier pick. It's easier to follow in subsurface than the Drinkard.

Q. It actually shows also the separation, does it not, of this reservoir from other production to the south and east?

A. Yes, you know, if you start at the north on this structure map, the well in Unit Letter 34, Section 34, you

know, you can see a subsurface elevation on the Tubb sand of minus 2895; and as you go straight south you can see the State "H" Number 2, minus 2759; and go to the State "H" Number 1 well, minus 2831. You can see that we've gone up on the structure and dropped back off on it.

And then if you continue on south to a well in Unit Letter K, 2873, minus 2873, that continues to drop off. And then we move into Section 10 there, we have a Texaco well in Unit Letter C with a subsurface of minus 2820. So we've started coming back up on another structure there, on the Skaggs structure.

Q. Let's go to Me-Tex Exhibit Number 2, your cross-section. Would you review that for Mr. Catanach?

A. Okay. This well -- The cross-section starts in Section 34, an old Sinclair well, and proceeds to a newer -- Have you got your bearings, Mr. Examiner?

EXAMINER CATANACH: (Nods)

THE WITNESS: Okay. The second well on that is a new ARCO well, currently producing from the Tubb. Then it goes to the State "H" Number 2 well in A, Unit A, to the State "H" Number 1 well in Unit H, to a Conoco well that did not penetrate the lower Drinkard in Unit Letter K, and then on to the Texaco well in Section 10, in Unit Letter C.

And essentially that cross-section shows the separate structure also, and I've -- the Tubb sand is

marked along with the top of Drinkard and Abo top on that cross-section. The lower Drinkard is highlighted in yellow.

Q. (By Mr. Carr) Again, this confirms just the separate --

A. Right.

Q. -- structures in which you've completed these wells?

A. That's correct.

Q. Let's go to Exhibit Number 3, your structure map on the lower Drinkard. Would you review that?

A. This is a structure map on top of the lower Drinkard porosity. And like I mentioned, we don't quite have as much well control, but essentially we see a very tight structure similar to what we saw on the Tubb sand. And we're -- You start in Section 34 and move upstructure, reach the peak of the structure and then start dropping off as you go to the south.

Q. Exhibit Number 4, would you turn to that, please? What is this?

A. This is a map showing Drinkard production in the immediate area, colored in blue, the State "H" Number 1 and 2 well in Section 3, a -- I believe a Texaco well in Section 10 that's subsequently plugged and abandoned, and then Drinkard production on the Skaggs feature to the

southeast there.

Q. And again, this shows separation from the production in the Skaggs-Drinkard field?

A. That's correct.

Q. Did you ever measure the bottomhole pressure of the Skaggs "H" -- I'm sorry, the State "H" Number 2 well?

A. Not directly. What -- We had measured surface -- shut-in surface pressure and back-calculated the bottomhole pressure.

Q. And is this calculation reflected on Exhibit Number 5?

A. That's correct.

Q. And when you calculated the bottomhole pressure in the State "H" Number 2 well, what figure did you get?

A. 2621.

Q. And how does this 2621 figure compare to the initial pressure encountered in the Skaggs-Drinkard Pool?

A. The initial pressure for the Skaggs-Drinkard Pool was reported at 2756.

Q. And what does this tell you about the new reservoir?

A. Well, that we have close to what would be considered original reservoir pressure in an area that if we had communication with the Skaggs field, we would believe that the pressure would be much lower than what

we're actually seeing.

So we're not seeing any depletion from the Skaggs Pool, and we believe this is an indication of separation of structure also.

Q. Mr. Pierce, based on this information, is it your opinion that you, in fact, have discovered a separate reservoir in the Drinkard formation?

A. That's correct.

Q. Okay. Let's go to Exhibit Number 6. Would you identify this, please?

A. That is just a tally of actual production from the State "H" Number 2 well since we started production on September 26th, up to November 3rd.

Q. And attached to this is a graph which plots this information --

A. Right, it's just a --

Q. -- in another fashion?

A. Yes, it's a graphical presentation of these production numbers.

Q. What does this show you?

A. On the graph -- We've been testing this well at various chokes for the last month, and you can see the gas production, oil production. On 20/64, the well was fairly stable, in the 160-barrel-a-day range, and gas declining slightly, but, you know it's in the 2.7 to 3.1 million

cubic feet during this time.

On or about the 22nd of October, we opened the well up to 24/64, and the production went up, the oil production went up for a couple days, but it came back down. Gas production did relatively little; it stayed constant.

Then on about, oh, the 28th or so of October, we closed -- shut the choke in to a 10/64. The gas production dropped slightly -- let's see -- to 2150, but the oil production dropped to eight barrels a day. So by shutting in the well or closing in the choke a little bit, we killed the oil production on this almost totally.

Q. What does this tell you?

A. That to comply with the rules -- the pool rules for the Skaggs-Drinkard are a 10,000-to-1 gas-oil ratio -- that we won't produce any oil off this pool.

Q. What general conclusions have you reached from your study of the area?

A. That we have encountered a separate reservoir from the Skaggs-Drinkard Pool, and that to produce the oil in a fashion to drain the reservoir we're going to have to have something in excess of a 10,000-to-1 gas-oil ratio, or we're going to leave a lot of the oil in the ground and never recover it.

Q. And you're requesting a 20,000-to-1 GOR?

A. That's correct.

Q. Would you go to Exhibit Number 7 and review that and explain why you're requesting this particular gas-oil ratio.

A. This is just a gas-oil ratio plot, using the same data that's tabulated, you know, on Exhibit Number 6. And what this is showing is, we have a gas-oil ratio of approximately seventeen, seventeen-fifty to 1, on the average, 17,050 cubic feet of gas per barrel.

Q. Now, you indicated you reviewed this particular Application or proposal with the District Office in Hobbs?

A. That's correct.

Q. Could you identify what has been marked Me-Tex Oil and Gas, Inc., Exhibit Number 8?

A. This is a letter from Paul Kautz, District I geologist. I took these exhibits to Paul and he concurs that we have a separate pool here based on subsurface geology and bottomhole pressure, and he recommended that we might call this the Skaggs-Drinkard North Oil Pool.

But talking with Mr. Stogner yesterday, that pool -- we already have a North Skaggs-Drinkard; it was a gas pool and it's been abolished.

So we're going to have to come up with a different name, perhaps Northwest Skaggs-Drinkard, or something along that line.

Q. Mr. Pierce, is Exhibit Number 9 an affidavit confirming that notice of this Application has been provided in accordance with OCD rules?

A. Yeah. I don't have that one here, Mr. Carr. Yes, sir, that's what it is.

Q. Would you look at the second page of that exhibit? Are those parties listed all the offsetting operators who could be affected by the Application?

A. Yes, sir, they are.

Q. Have you reviewed and discussed this Application with those offsetting operators?

A. Yes, I have contacted all -- Amerada, ARCO, Chevron and Conoco. I hand-delivered a copy of the exhibits to Conoco last week, and I've -- on telephone conversations with Rob Williams and Scott Klein with Amerada Hess and Tony MacLaine with ARCO, and Dave Rittersbach with Chevron.

Q. Have Amerada Hess, ARCO and Conoco each expressed to you the fact that they do not oppose the Application?

A. That's correct.

Q. Is Exhibit Number 10 a copy of a letter from Chevron, in fact, supporting the Application of the 20,000-to-1 GOR?

A. That's correct.

Q. The letter from Chevron requests that the

temporary pool rules be established for a one-year period of time. Does Me-Tex object to having these rules effective for a one-year period, at which time they can provide additional data in support of the requested 20,000-to-1 GOR?

A. No, we don't object to this.

Q. In fact, at the present time ARCO is drilling a well to this new pool; is that --

A. Yes, ARCO is currently drilling a well in Unit Letter P of Section 34.

Q. And in a year we should have additional information upon which we could base a request for permanent rules?

A. That's correct.

Q. In your opinion, will deletion of the subject acreage from the Skaggs-Drinkard Pool and the creation of a new pool comprised of the east of the northeast quarter of Section 3 and the adoption of special rules for that pool, including the 20,000-to-1 GOR, be in the best interest of conservation, the prevention of waste and the protection of correlative rights?

A. Yes, it will.

Q. Were Me-Tex Exhibits 1 through 10 either prepared by you or compiled under your direction?

A. They were.

MR. CARR: Mr. Catanach, at this time we would move the admission into evidence of Me-Tex Exhibits 1 through 10.

EXAMINER CATANACH: Exhibits 1 through 10 will be admitted as evidence.

MR. CARR: That concludes my direct examination of Mr. Pierce.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Pierce, where do ARCO, Chevron and -- is it Amerada Hess?

A. Yes. Amerada Hess -- Let's see, ARCO has the southeast quarter of Section 34, that 160.

Q. That's ARCO?

A. Correct. Amerada Hess adjoins them to the west.

Chevron has the acreage to the northwest in Section 35 and also to the east in Section 2.

Conoco operates the southeast quarter of 3 to the south.

Me-Tex Oil and Gas operates the acreage to the west in Section 3.

Q. Me-Tex has the west half --

A. -- of the northeast quarter, that's correct, and the northeast -- or the north -- the east half of the northeast quarter. We have that 160.

Q. Who's in the west half of Section 3?

A. There's -- It's cut up. Kaiser-Francis operates a Tubb well. They don't have Drinkard rights in that. Those are owned by B.B. Christie and Clark. That's who we got this acreage from in the west half of the northeast quarter. We have a relationship with Mr. Clark and Christie.

Q. And ARCO is currently drilling a well in Section 34?

A. In Unit Letter P, that's correct.

Q. Unit Letter P.

So you've reviewed this data, and Paul Kautz concurs that this is a new -- this should be considered a new pool?

A. Separate pool, yes, sir.

Q. Okay. I'm not going to doubt him.

Do you know what the nature of this new reservoir is? Do you know if it's solution gas or a gas cap, or do you know what the nature of it is?

A. It's been documented that the Skaggs pool is a solution gas, and the porosity -- the producing intervals in this new pool, or proposed new pool, and in the Skaggs pool are very similar, and I would think it was a solution gas reservoir also.

Q. The Number 1 well didn't produce at a high GOR,

did it?

A. No, but if you refer to the cross-section on the Number 1, we tested the lower Drinkard porosity, and we recovered 20 barrels of oil a day and 20 barrels of water and moved up the hole. We're in the -- Whereas in the Number 2 well, we are in the lower Drinkard porosity.

Q. Okay. So these wells aren't producing from the same interval?

A. That's correct, they're not. The State "H" Number 1 is upper Drinkard, State "H" Number 2 is lower Drinkard.

I think essentially that the Number 1 was offstructure enough that we were on the oil-water contact in that lower Drinkard section.

Q. So that well -- The Number 1 was tested in the lower interval?

A. That's correct.

Q. Okay.

A. And that's referred to on the cross-section.

Q. How did you guys determine what the original bottomhole pressure was in the Skaggs-Drinkard Pool?

A. I have a guidebook, the *Roswell Geological Society Guidebook*, 1956 edition.

Q. And that's where you got it from?

A. Yes, sir.

Q. Okay.

A. It's a pool study.

Q. You guys haven't done any PVT data --

A. No, sir.

Q. -- of any kind?

Do you guys plan on doing any of that?

A. It hasn't been mentioned, no, it hasn't.

Q. So your proposed 20,000 to 1 is just based on production tests so far?

A. Correct.

Q. What would the oil allowable be in this pool?

A. 142.

Q. So in your opinion, if you have to choke the well back, you're not going to recover as much oil as you normally would?

A. That's correct.

Q. Do you think, in your opinion, producing at 20,000 to 1, do you anticipate recovering more oil than you would at a lesser GOR?

A. That's correct. I mean, just from the --

Q. Just based on the --

A. -- limited testing that we've been able to do so far, that's correct.

And, you know, our production rate right now, it's not quite 20,000 to 1. It's, you know, more in the

range of between 17,000 and 18,000 to 1.

Q. Now, you've testified about the analogy to the Skaggs Drinkard Pool. Is it -- you don't feel comfortable in -- I mean, do you feel comfortable in, in fact, doubling the GOR that was in effect for the Skaggs-Drinkard Pool?

A. Well, when the Skaggs-Drinkard pool was developed in the early Fifties, there wasn't a market for the gas. Much of that gas was flared. So, you know, they were after the oil.

I don't have a direct analogy on actual production rates from that early -- when the Skaggs was being produced, so I -- you know, it looks like -- I mean, it's very gassy.

I mean, some of the wells have cum'd large amounts of gas in the Skaggs Pool, but a lot of it was flared. So, you know, we really don't have good numbers on that now.

But it does look like if we choke this down, our oil production is going to suffer tremendously.

Q. Did you, in fact, choke that down to what the gas allowable would be for that pool?

A. What we -- We started playing with it, and like I said, we closed it from a 24/64 to a 10/64 --

Q. Uh-huh.

A. -- and that killed the gas, or the oil. It

produced eight barrels that day in a 24-hour testing period. And the gas was twenty-one -- 2200, I believe. 2150.

Q. Are you going to conduct any more production tests, Mr. Pierce, maybe that confirm the data that you might need to make these permanent?

A. Well, there's -- We will have more data, and we certainly can conduct more tests.

Opening the well up, you know, did not affect the ratio much, and closing the well adversely, you know, affected our oil-production rate.

We could certainly play with it some more, but I don't know that it's going to show us much more than what we've seen already.

Q. We should have another well in the next few months drilled --

A. Yes.

Q. -- and completed --

A. -- that's correct.

Q. -- and have some more data on this?

A. Right.

Q. ARCO didn't have any objection to it or concerns?

A. No. I spoke with Tony MacLaine, and we've been sharing data. They expressed no concern.

EXAMINER CATANACH: Okay, I have nothing further.

MR. CARR: Mr. Catanach, Chevron USA Production Company requests that the record reflect their appearance in this matter and their support of temporary rules, including the 20,000-to-1 GOR.

And that concludes our presentation.

EXAMINER CATANACH: Okay, there being nothing further in this case, Case 11,872 will be taken under advisement.

(Thereupon, these proceedings were concluded at 9:16 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11872, heard by me on November 1997.

David R. Catanach, Examiner
Oil 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 November 15th, 1997.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998