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:

APPLICATION OF MARATHON OIL COMPANY FOR SURFACE COMMINGLING, EDDY COUNTY, NEW MEXICO

CASE NO. 12,068

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

November 19th, 1998

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, November 19th, 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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I N D E X

November 19th, 1998
Examiner Hearing
CASE NO. 12,068

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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 DIVISION:

RAND L. CARROLL
Attorney at Law
Legal Counsel to the Division
2040 South Pacheco
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

KELLAHIN & KELLAHIN
117 N. Guadalupe
P.O. Box 2265
Santa Fe, New Mexico 87504-2265
By: W. THOMAS KELLAHIN

ALSO PRESENT:

DAVID R. CATANACH
NMOCD Hearing Examiner

* * *

WHEREUPON, the following proceedings were had at 9:15 a.m.:

EXAMINER ASHLEY: At this time the Division calls Case 12,068.

MR. CARROLL: Application of Marathon Oil Company for surface commingling, Eddy County, New Mexico.

EXAMINER ASHLEY: Call for appearances.

MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of the Santa Fe law firm of Kellahin and Kellahin, appearing on behalf of the Applicant, and I have one witness to be sworn.

EXAMINER ASHLEY: Any other appearances?

Mr. Kellahin?

(Thereupon, the witness was sworn.)

MR. KELLAHIN: Mr. Examiner, we're before you today for some additional approvals on a surface commingling project that Marathon operates.

In the prehearing statement you will have listed before you the various leases that compose the project area. There are nine leases, and in the prehearing statement we've identified or associated the lease with a name, and then we've identified the wells in each spacing unit in terms of what pool they produce from.

This is a centralized tank battery operation, where the liquids are taken to a tank battery on the Buchanan lease.

We have obtained from the Division a series of administrative surface commingling approval orders, and they're found in your file, CTB-467.

This was done on a lease-by-lease basis over a period of time commencing in April of this year, and in the last request we had received approval to commingle the liquid production of the various leases in the Travis-Upper Penn Pool.

We are now at a point in time where we desire to have approval to continue to use the centralized tank battery facilities to consolidate production from multiple reservoirs.

We are about to see the necessity to commingle Wolfcamp from the Travis-Wolfcamp Pool into the system, and we're asking your approval, then, to review the entire project so that you have a global view of what you've seen on a case-by-case basis, and have Mr. Brian Williams explain to you the operation of the facility and to obtain from you approval to add additional wells, additional leases and to commingle this additional production.

So that's where we're headed. His exhibits are shown in front of you and beyond the cover sheet. We'll start with Mr. Williams' displays.

BRYAN WILLIAMS,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. For the record, sir, would you please state your name and occupation?

A. Bryan Williams, production engineer with Marathon Oil Company in Hobbs, New Mexico.

Q. Mr. Williams, as a production engineer has it been your responsibility to obtain from the Division the various regulatory permitting approvals for the use of this centralized tank battery on the Buchanan lease for the project?

A. Yes, sir.

Q. Are you familiar with this production and the construction of the facilities, including the gathering of fluids and gases from these various wells?

A. Yes, sir, I am.

MR. KELLAHIN: We tender Mr. Williams as an expert production engineer.

EXAMINER ASHLEY: Mr. Williams is so qualified.

Q. (By Mr. Kellahin) Mr. Williams, would you turn to Exhibit Number 1 and identify that display for us?

A. Exhibit Number 1 is a plat of the lease --

various leases in question. It's just a lease description.

Q. Let's take a moment and describe for the Examiner how we happen to have 320-acre configurations for these various tracts within the project.

A. All of the leases, we went down to the Morrow, which is a 320 proration unit, and that's how we obtained the 320 lease acreage.

Q. Let's turn to Exhibit Number 2 and identify for the Examiner the color code you've used on this display.

A. On Exhibit Number 2 it shows the current wells, and the various colors depict which zone they are completed in. The red will be the Morrow, Turkey Track North Morrow. The blue will be the Travis-Upper Penn. And the green will be the Travis-Wolfcamp.

Q. Give us a verbal description of what you're doing with this centralized facility.

A. We currently have the multiple-lease single pool, Order CTB-467. We are just simply asking to extend this to a multiple lease, multiple pool, and send all the liquids to the Buchanan central battery for disposition.

Q. What's the advantage of doing that, as opposed to doing this on a lease-by-lease basis?

A. It's economics. The central battery at the Buchanan, built to Marathon's standard, which includes stringent safety and environmental issues, cost $4 million, and we're just simply asking to improve economics by having one system.

Q. If you're required to do this separately without having exceptions to Division Rule 303.A and 309.A, what happens?

A. In particular, if you look at the Wolfcamp completions and then look at building a central battery and a system for solely the Wolfcamp, those completions become uneconomic.

Q. Let's turn to the next display, Exhibit Number 3. Identify and describe that display.

A. Exhibit Number 3 leases [*sic*] well names, but they are grouped by the pool. We have the Travis-Upper Penn and the various wells completed in the Travis-Upper Penn with the production. This shows the October average production for those wells. The next one is the Travis-Wolfcamp Pool, and then at the bottom we have the Turkey Track-North Morrow Pool.

Q. You've arranged this information in a different method, have you not?

A. Correct, if you look at Exhibit Number 4, you can also look at it simply on a lease-by-lease basis, where you have the Crockett lease or the Burns lease.

Q. All right, let's take a moment and do that. If you'll turn to Exhibit 4, we can find, for example, the

Crockett lease. You've got three wells there, and they're all upper Penn oil wells.

A. Correct.

Q. And you can read down the schedule, then, and find by lease name what wells are involved in that lease and from what pool they produce and at what rates?

A. That is correct.

Q. All right, let's turn to Exhibit 5 and have you identify and describe this display.

A. Exhibit 5 depicts the Travis-Upper Penn Pool. The green is the current pool boundary. The -- If you see the dedicated acreage, that shows the 80-acre spacing, proration spacing and the dedicated acreage for each well. The red is the pending additions to the pool, just simply pending addition to the current boundary.

Q. What is your understanding as to what happens with the red-identified acreage in relation to the current pool boundary?

A. We have submitted regulatory forms, the C-102 form, for the dedicated acreage, and we've received back 103s and 104s, approved 103s and 104s, that show they are in the Travis-Upper Penn Pool. It just simply has to be added through hearings to the Travis-Upper Penn, to the existing Travis-Upper Penn.

Q. Let's turn to Exhibit 5A and look at what happens in the Travis-Wolfcamp.

A. The Travis-Wolfcamp, this is a wildcat completion. If you look in Section 34 and the Burns, the red square in the Burns, that was the original Wolfcamp completion. It was a Travis wildcat -- or, excuse me -- yeah a Travis wildcat Wolfcamp.

And then the Mitchusson also has a completion in the Wolfcamp. Since this was a wildcat, there's not an existing pool boundary. Again, on this one we have 102s submitted and approved 103s and 104s, so we're just simply waiting for the development of the Wolfcamp boundaries.

Q. Mr. Williams, this is oil production on statewide 40-acre oil spacing at this point?

A. That is correct, sir.

Q. You're asking permission, then, to commingle with your currently approved Travis-Upper Penn oil production, production from the Wolfcamp into the common facilities?

A. That is correct.

Q. Let's turn to the Morrow, if you'll look at Exhibit 6, let's identify and describe that display.

A. Again, you have your dedicated acreage. It will be the hachmarks in black. The green will be the Turkey Track North-Morrow Pool. The red will be the pending addition to the Turkey Track-Morrow Pool. Again, on that one we have submitted 102s, we have approved 103s and 104s.

It's simply just a matter of hearing to have it added to the Turkey Track-Morrow Pool.

The blue is the North Illinois Camp-Morrow Pool, and the lighter blue is the Illinois Camp-Morrow Pool.

Q. Let's go back to Exhibit 2 now, which gives us the tracts and then the color code per well. When we look at the south half of Section 22, the Garvin lease, that is your North Turkey Track-Morrow gas well?

A. Yes, sir.

Q. How do you currently gather the gas and remove it from the lease, in relationship to the common facilities?

A. The gas is sold on lease.

Q. So there's no commingling of gas with other gases when it leaves the lease?

A. That is correct.

Q. It goes into a sales line, or metering system --

A. That is correct.

Q. -- and then a sales line?

A. That is correct.

Q. Are there any products taken out of the Morrow that are run through the central tank battery facility?

A. No, sir.

Q. Describe for us the arrangement, then -- Let's go to Exhibit 7 and see the arrangements for gathering the liquids and the gases associated with the oil wells for the central tank battery facility.

A. Okay. Your central tank battery -- You'll note in Section 33 the dark square. That is the battery on the Buchanan Number 1 location.

You have -- The green line depicts the Marathon-operated liquid trunk line.

The red line that connects the leases is the ARCO gas line that sends the -- The gas is sold on lease into the ARCO system.

And you have a blue line, which is the on-lease gathering system, to get it to the lease satellite systems.

Q. Are your wells in the Travis-Upper Penn Pool all commercial in that zone alone?

A. No, sir.

Q. What are you trying to do with those wellbores in order to make the total wellbore commercial?

A. We recomplete the wells.

Q. And where do you choose to recomplete them?

A. At current, we have Wolfcamp recompletions.

Q. What is the advantage of adding the Wolfcamp oil production into the common system that's already constructed and exists on the ground?

A. By being able to add into the current system, we're not having to duplicate the expenses for an additional facility system, and again, we'll make the

Wolfcamp completions then economic, and to improve overall oil reserve recovery.

Q. Let's turn to Exhibit 8 and look at the construction of the facility on a lease basis. This is a plat showing the Burns 34 lease facility?

A. That is correct.

Q. Will this be comparable to the system that exists on each of the leases?

A. Yes, sir, all lease satellite systems will be identical to this.

Q. Describe the system.

A. You have a header system where your liquid production will come into the satellite system.

You then have a test vessel, so when you have more than one well you're able to use a monthly test for allocation purposes within the lease.

And then you have a master lease vessel, which -- in both vessels you have -- It's a three-phase separation where you come out and you have an oil meter, a water meter and a gas meter.

And then on the leased vessel, your gas is then sold to the ARCO system. That was depicted on Exhibit 7. And your oil and water are recombined and sent to the Buchanan central battery.

Q. Once the hydrocarbons get to the point of being transported offlease, at that point do you have the capacity to measure all of the volumes associated with that production?

A. Yes, sir. If you look after the lease vessel, you have an oil meter that's calibrated monthly, and it is what allocates your lease production, your oil for your lease production. And then your gas goes directly to the gas sales, so it's not commingled before it's sold.

Q. If you have multiple wells on the same lease, do you have the ability pursuant to Division rules to determine an allocation of that production among pools?

A. Yes, sir, that's what the test vessel will be used for.

Q. Do you also have the ability to measure and allocate production within a lease facility on an individual well basis?

A. Yes, sir. Again, that's the -- The test vessel will be used for that.

Q. Let's turn to see what the central battery facility looks like on the Buchanan lease. If you'll turn to Exhibit 9, identify and describe what occurs there.

A. On Exhibit 9 again you have your various leases coming in through the trunk line system into your header system on the bottom left corner. You then go through the header system into a heater treater which, since your oil and water were recombined at the satellite system, you put it through the heater treater and then reseparate them. The oil goes directly into the stock tanks, and the water goes directly into the water stock tank.

Q. When we look at, for example, the north half of 34 on the Burns lease, you've got a Travis-Upper Penn oil well and you have a Travis-Wolfcamp well. Is there gas production associated with either one of those reservoirs?

A. Yes, with both.

Q. So you have gas production from the Wolfcamp and the upper Penn?

A. That is correct.

Q. You have it from two separate wells on this lease. What do the Division Rules allow you to do with that gas?

A. Again, if we get the approval for -- the exemption for 303, you're able to combine the gas and sell the gas, similar to the oil.

Q. All right. Do you see any reduction in value of the gas hydrocarbons by obtaining approval from the Division to operate in the fashion you want to operate?

A. No, sir, I don't see any reduction in gas value.

Q. Let's look at Exhibit 10, and look at the value components of the various products by pool from the leases and facility and have you describe for us what you've shown on this exhibit.

A. If you look at the top of Exhibit 10, you have your various pools, your Travis-Upper Penn, your Travis-Wolfcamp, and your Turkey-Track North Morrow. You have the API of the oil at 60 degrees, you have the current oil production, you have your water production, and then you have your gas with your BTU value and then your specific gravity and then your current gas production.

The next statement is, "The value of the oil is determined using the Navajo Refining Company New Mexico Intermediate Trucked Gravity Adjustment 'D' schedule. This schedule utilizes a penalty only above 50 degrees API."

And then it states, "...New Mexico Intermediate is any crude oil with a sulfur content of 0.5% by weight or below..." That simply is depicting whether or not the crude oil is sweet or sour. And again, in this case we're getting paid the New Mexico Intermediate, which is a sweet crude.

The next portion is New Mexico Intermediate. The October, 1998, average was $13.

And then you have your penalty schedule. We have a one-cent-per-barrel per .1 API above 50 degrees.

You then have a table that shows noncommingled oil production. You have the value of the oil at current production of the oil and then basically what you'll be paid for that production.

And then you have a commingled oil production which shows the value of the commingled oil production. And in this case, you have no change in value.

Q. Do you see any adverse consequences in terms of pricing of product if the Division approves your continued use of this central battery system facility that you have in operation?

A. No, sir, I do not see an adverse effect on costs, on pricing.

Q. Do you have a system in place that will accurately measure meter and therefore pay each appropriate payee for each lease their entitle share of the products?

A. Yes, sir. Again, after the leased vessels you do have your oil meter, which is calibrated monthly to maintain an accurate measurement.

MR. KELLAHIN: That concludes my examination of Mr. Williams.

We move the introduction of his Exhibits 1 through 10.

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

EXAMINATION

BY EXAMINER ASHLEY:

Q. Mr. Williams, in the Application it states that the North Illinois Camp-Morrow and the Illinois Camp-Morrow were also to be included as part of the commingling. Is that still the case?

A. When the original application went, if you look in your south half of 22, the Garvin well is the only one --

Q. Which exhibit are you looking at?

A. Exhibit 2, excuse me.

Q. Okay, thank you. And -- Okay.

A. The red, the south half, the Morrow --

Q. Uh-huh.

A. -- the Garvin well was the only one that was completed in the Morrow. At the time of the original application, that well was making liquids. At current, it's unable to lift the liquids.

Q. Are there any future plans to explore the Morrow?

A. We do have ongoing development out here, and that's why the additional -- the Illinois Camp Pool was added into that. Again, we're -- It's ongoing development.

Q. You also mentioned that several of the wells were completed in more than one zone, some of the wells in there were completed in more than one zone.

A. We have recompleted wells, yes.

Q. You have recompleted wells --

A. Yes --

Q. -- so they're --

A. -- they're not downhole commingled --

Q. Okay.

A. -- if that's --

Q. Yeah, that --

A. No, we -- Nothing's downhole commingled.

EXAMINER ASHLEY: Okay.

EXAMINATION

BY MR. CATANACH:

Q. Mr. Williams, this is the -- On Exhibit Number 2, this is going to be the standup and commingled area, the acreage in yellow?

A. Again, this is ongoing development, so right now I can see that we potentially could come back and ask for an additional amendment for additional leases.

Q. You do have additional acreage out here that is going to be developed?

A. We're working in that process, yes.

Q. Okay. You mentioned that the tank batteries, they're uneconomic to build for individual leases; is that correct?

A. What I was referring to is, if -- again, if you can go back to the system -- let me find the exhibit -- Exhibit 7. You spend -- Basically, you spend a quarter million dollars for the tank battery on the Buchanan, and then it's about an additional $500,000 for the existing infrastructure to get the liquids to that point. And then -- So you're looking at three-quarters of a million dollars.

It simply improves economics if you're able to utilize that instead of duplicating that.

Q. Well, basically, the only thing you have missing on the other leases is the tanks themselves; is that correct?

A. Yes, sir, which is a quarter million dollars, correct.

Q. So are you saying that it's uneconomic to place additional tank batteries or tanks on the individual leases?

A. Well, it improves economics by being able to utilize the current system.

If you looked at, in particular, like the Mitchusson recompletion, Exhibit Number 4, the Travis-Wolfcamp in it is currently producing five barrels of oil a day. With that production, it would be uneconomic to complete another quarter-million-dollar battery, and therefore lose the reserves out of the Wolfcamp on that lease.

Q. I'm sorry, but that's on the lease that has two wells that are producing in excess of -- over 600 barrels a day; is that correct?

A. No, excuse me, sir, I was talking about the Edward Mitchusson 4 Number 1, Travis-Wolfcamp.

Q. Okay, I'm sorry, I was in the wrong one. The 4 Number 1?

A. Yes, sir. Do you find it?

Q. (Nods)

A. Five barrels a day.

Q. So some of these leases, you conceivably could economically place a tank battery on the lease?

A. Yes, sir. Again, it's just improved economics by being able to use the infrastructure, compared to the lease-by-lease battery system.

Q. Okay. Is there commingling of gas, Mr. Williams?

A. There's commingling of gas. It's sold on lease. Every one of these gases are sold on lease.

Q. It's sold before it leaves the leases?

A. Yes, sir, every one of them are sold on lease, correct.

So the only commingle you have, if you have the -- like, in particular the Burns, where you have the Upper Penn, the Burns Number 1, completion is in the Travis-Upper Penn, the Burns Number 2 is now in the Wolfcamp. So you will have the commingling of those two gases on that lease before it's sold. And you'll use the test vessel to be able to allocate production value between the two pools.

Q. So is that the only instance where commingling of gas is occurring on that lease?

A. At current, yes.

Q. Are you satisfied that the oil is accurately separated and measured prior to leaving the leases?

A. Yes, sir. Again, we are calibrating this monthly to maintain that.

Q. And is there diverse ownership between these leases, Mr. Williams?

A. Yes, sir.

Q. And I presume you have notified all the interest owners?

MR. KELLAHIN: We have, Mr. Catanach, it's Exhibit 11. All the interest owners in each lease are contained within the notice list that was provided out of the Marathon office in Midland. This is Mr. Lowry's affidavit that he did that.

Q. (By Mr. Catanach) Have you guys heard anything back from any of the interest owners, any concerns or objections or --

A. I have not heard any objections. I do have one letter from ARCO supporting the commingling.

Q. Okay. These are all state leases?

A. Correct.
Q. Have you contacted the State Land Office?
A. Yes, sir.
Q. Have they issued an approval for this?
A. Yes, sir.

MR. CATANACH: Can that be provided to us?

MR. KELLAHIN: Yes, sir, I believe they were provided, already contained in your --

THE WITNESS: I have a copy in case --

MR. KELLAHIN: All right. We'll look and make sure your administrative case file already has that. And if you'd like, we'd be happy to put it in this hearing case file. We do have those letters.

EXAMINER ASHLEY: We have no further questions.

The witness may be excused.

MR. KELLAHIN: That's it.

EXAMINER ASHLEY: Okay, if there's nothing further in this matter, Case 12,068 will be taken under advisement.

(Thereupon, these proceedings were concluded at 9:44 a.m.)

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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 23rd, 1998.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002