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. 13,007
APPLICATION OF YATES PETROLEUM CORPORATION FOR APPROVAL OF A UNIT AGREEMENT, LEA COUNTY, NEW MEXICO	)	

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

February 20th, 2003

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, February 20th, 2003, 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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I N D E X

February 20th, 2003
Examiner Hearing
CASE NO. 13,007

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E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	7	14
Exhibit 2	7	14
Exhibit 3	7	14
Exhibit 4	8	14
Exhibit 5	8	14
Exhibit 6	10	14
Exhibit 7	11	14
Exhibit 8	12	14

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A P P E A R A N C E S

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By: ROBERT J. SUTPHIN

* * *

ALSO PRESENT:

WILLIAM V. JONES, JR.
Petroleum Engineer
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
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* * *

WHEREUPON, the following proceedings were had at 8:20 a.m.:

EXAMINER CATANACH: At this time we'll call Case 13,007, which is the application of Yates Petroleum Corporation for approval of a unit agreement, Lea County, New Mexico.

I'll call for appearances in this case.

MR. SUTPHIN: May it please the Division, my name is Robert Sutphin with Holland and Hart, here on behalf of Yates Petroleum in Case 13,007, and with me I have my assistant, Mr. Bill Carr.

EXAMINER CATANACH: Very good. I'm sorry, I didn't catch your last name, Robert.

MR. SUTPHIN: Sutphin.

EXAMINER CATANACH: Can you spell it for me?

MR. SUTPHIN: Sutphin.

EXAMINER CATANACH: Thank you.

MR. SUTPHIN: Mr. Examiner, I have one witness, which at this time I'd like to ask to take the witness stand.

EXAMINER CATANACH: Okay. Are there any additional appearances in this case?

MR. SUTPHIN: Not that I'm aware of.

EXAMINER CATANACH: Okay, will the witness please stand to be sworn in?

(Thereupon, the witness was sworn.)

JOHN AMIET,

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

DIRECT EXAMINATION

BY MR. SUTPHIN:

Q. Mr. Amiet, would you state your name for the record, please?

A. John Amiet.

Q. Mr. Amiet, where do you reside?

A. Artesia, New Mexico.

Q. By whom are you employed?

A. Yates Petroleum.

Q. And what is your position there with Yates Petroleum?

A. I'm a geologist.

Q. Have you previously testified here before the Oil Conservation Division?

A. Yes, I have.

Q. And at the time of that testimony, were your credentials as an expert in petroleum geology accepted and made a matter of record?

A. Yes, they were.

Q. As you know, we're here on Case 13,007. Are you familiar with the Application filed in this case?

A. Yes, I am.

Q. So are you familiar, then, with the proposed Otis State Exploratory Unit, including the status of the lands in the proposed unit area?

A. Yes, I am.

Q. And have you conducted a geological study of the area that is the subject of this Application?

A. Yes.

Q. And are you prepared to discuss and share the results of that study with the Examiner today?

A. Yes.

MR. SUTPHIN: Mr. Examiner, I'd like to tender Mr. Amiet as an expert in petroleum geology.

EXAMINER CATANACH: Mr. Amiet is so qualified.

MR. SUTPHIN: Thank you.

Q. (By Mr. Sutphin) Mr. Amiet, would you just briefly state what Yates Petroleum Corporation seeks through this Application?

A. Yates is seeking the approval of the Otis State Exploratory Unit agreement. This is a voluntary exploratory unit. It contains approximately 3051 acres of State of New Mexico lands, located in Lea County, New Mexico.

Q. And have you prepared any exhibits for introduction in this case?

A. Yes, I have.

Q. I'd like to reference to you -- Let me pass out the -- I believe you have a set, do you not?

A. Yes, I do.

Q. I reference what has been marked as Yates Exhibit Number 1. I'd like for you to identify, review it and explain what it is and what it shows.

A. This is a copy of the unit agreement. It's based on the state/fee form for an exploratory unit.

Q. I'd now like you to -- So it is indeed based on the state/fee form for an exploratory unit?

A. That's correct.

Q. I'd like to now reference you to Yates Exhibit Number 2.

A. This is a plat. It's Exhibit A to the unit agreement. It reviews the status of the acreage. There are eight State of New Mexico leases in this proposed unit.

Q. And Yates Exhibit Number 2 is -- I believe I should have said Exhibit A to the unit agreement?

A. That's correct.

Q. Now, if you'd turn your attention to Yates Exhibit Number 3 and identify that and briefly review that for us?

A. This is the ownership breakdown, it's Exhibit B to the unit agreement. It shows the ownership of each

lease in the unit agreement. All of these leases are either Yates or David Petroleum leases, so all the working interests are common, and they're all state leases.

Q. And again, is Yates Exhibit Number 3 the same as Exhibit B to the unit agreement?

A. That's correct.

Q. Has all of the acreage involved been committed to this unit?

A. Yes, and this gives Yates effective control over the unit operations.

Q. Has the Commissioner of Public Lands given his preliminary approval to the proposed unit agreement?

A. Yes, Mr. Martinez and his group reviewed and approved this unit agreement, and Yates Exhibit Number 4 is the approval letter from the Commissioner of Public Lands.

Q. And again, that approval letter is Yates Exhibit Number 4; is that correct?

A. That is correct.

Q. Does Yates Petroleum desire to be the designated unit operator of this unit?

A. Yes.

Q. And does the unit agreement provide for that?

A. Yes.

Q. Mr. Amiet, will you identify and review for us Yates Exhibit Number 5, please?

A. This is the AFE for the initial test well. This is a re-entry. The AFE sets out the dryhole and the completed well cost. The completed cost is $851,500. Yates plans to spud this well before June 1st of 2003, when a lease expires on that date if the unit has not been approved and drilling has not begun.

Q. Thank you. Now, does the unit agreement provide for periodic filing plans of development?

A. Yes, it does.

Q. And will these plans be filed with the OCD as well as the State Land Office?

A. Yes.

Q. How often are these plans to be filed?

A. The initial plan is six months after completion of the first unit well, subsequent plans are 12 months thereafter.

Q. And what horizons are being unitized in this Otis State Exploratory Unit?

A. All horizons.

Q. When we discussed just a few moments ago, Yates Exhibit Number 5, we were talking about the initial test well. Now, where is that test well to be drilled?

A. This well is located 660 from the north and east lines of Section 30, Township 15 South, Range 34 East, New Mexico, Lea County.

Q. And is it a re-entry well?

A. Yes, it is a re-entry of an original well drilled by Exxon. It was the New Mexico State "FE" Number 1. Yates plans on deepening this well to a TD of 13,900 feet, into the lower Mississippian formation. The north half of Section 30 will be dedicated to this well.

Q. Thank you. Now, what is the primary objective in this well?

A. The primary objectives will be the lower Atoka and Morrow formations. We will also test, as has been mentioned, the Mississippian. At this time there are no lower Atoka or Morrow penetrations within the unit area.

Q. Are there any secondary objectives in this well?

A. Yes, you're always looking for upper Penn sands and carbonates.

Q. I now would like you to turn your attention to Yates Exhibit Number 6. Identify what it is and review it for the Examiner.

A. This is a structure map on top of the Morrow formation. The unit outline is shown with the solid red border. This is approximately four and three-quarter sections within this unit outline. This shows all the wells within the unit. There are three dry holes within the unit, so there's been no production within this unit area. Also, there are no lower Atoka or Morrow

penetrations within this unit boundary.

So Yates is looking for a new trend. The last well drilled in this area was in 1987 by Exxon, 16 years ago. This Exxon well is a re-entry candidate. It's located in the southern portion of the unit.

The sand channels are shown in blue. These channels are flowing generally from the southeast to the northwest. These channels are Atoka-Morrow sands, gas productive. The source is generally from the southeast or to the west. Two large faults are shown, one on the west side of the map, a large black line, and one on the northern part of the map again, in a solid black line.

Deposition and uplift were occurring pretty much simultaneously during the Atoka-Morrow time. The sand channels shown here are elongate, narrow features, but they can be very prolific, but the areal extent is limited.

Q. Okay. And does Yates believe there is a channel system which crosses the proposed unit area?

A. Yes, based on our mapping we think there is a channel system which crosses this unit boundary, and that will be the target. The green line shows a trace for cross-section A-A' that we'll talk about in a moment.

Q. Well, let's move on. I'd like to ask you to look at Exhibit Number 7, identify that exhibit for us and briefly review it. I believe a moment ago, you referenced

a cross-section.

A. This actually a stratigraphic cross-section, it's mismarked as a structural cross-section hung on the Atoka shale. The sands are shown with yellow highlighting, the lower Atoka and Morrow sands. These are trending towards the Exxon well.

Starting with the Humble well on the east, or on the right side of the cross-section, this well had some good shows and had some good DSTs of several million cubic feet of gas, but the pressures were declining and the well was never produced, it was P-and-A'd.

The next well to the left would be -- It was originally the Chevron well. Yates re-entered this well in late 2002, deepened this well to eleven thousand eight hundred and approximately fifty feet. We are encouraged by what we've seen. Both tests and the logs are encouraging. The well is currently waiting on a pipeline to see if the pressures will hold up.

The next well to the west would be the Exxon re-entry that we're planning on deepening.

Q. Mr. Amiet, I reference Exhibit Number 8. Does this Exhibit Number 8 represent a written summary of your geological presentation?

A. Yes, it does.

Q. I'd like you to refer to this written summary,

Exhibit Number 8, and explain to the Examiner why Yates is proposing to attempt to develop this area under the proposed unit plan.

A. These are expensive, high-risk wells. The re-entering deep in this well will cost $851,500 to complete. The formation of this unit will result in a more reasonable development of these potential reserves. Since there's been no drilling within this unit area in the last 16 years, this pool can be more effectively developed under a unit plan, and a successful well within this unit area will lead to additional drilling in an area where there's been no production.

Q. Mr. Amiet, in your opinion will approval of this Application be in the best interest of conservation, the prevention of waste --

A. Yes.

Q. -- and the protection of correlative rights?

A. Yes, it will.

Q. Were Exhibits 1 through 8 prepared by you or under your direction and supervision?

A. Yes, they were.

Q. And can you testify as to their accuracy?

A. Yes.

MR. SUTPHIN: Mr. Examiner, I'd like to move the admission into evidence of Yates Exhibits 1 through 8.

EXAMINER CATANACH: Exhibits 1 through 8 are admitted.

MR. SUTPHIN: And this concludes my direct examination of Mr. Amiet.

EXAMINATION

BY EXAMINER CATANACH:

A. Mr. Amiet, referring to your Exhibit Number 6, what data did you use to map those particular sand channels?

A. There's not a lot of data. There's two wells that penetrated the Morrow in the lower right corner. They're shown with the red numbers, minus 8937, minus 8892. Those are the only two penetrations on this map. We also have two old seismic lines. They're 12-fold late 1960s seismic. One's going north-south along the east side of the unit area, and one is going east-west through the southern part of Section 8 in the northern part of the unit.

Q. Did that seismic data give you any help in mapping these sands?

A. Yes, it did, that's why the fault in the northern part of the map is located where it is, and the fault on the west side. Yates also has a 3-D that starts about a mile and a half east of this area, so that was also used in interpreting these large fault blocks and the trends.

Also, the two wells up north are Bough producer, Cisco producers, they're generally producing on structural highs, so they also had an influence on how I mapped this area. So there's a structural high to the north where those two wells are, and then you cross a fault into the low area that we're targeting.

Q. The two wells in Section 5 you're referring to?

A. That's correct, the two producers.

Q. And those are producing out of --

A. -- the Cisco, upper Penn.

Q. Did those penetrate the Morrow?

A. No, those were probably 2000 feet above the Morrow.

Q. So none of the wells in the unit were drilled deep enough to penetrate the Morrow?

A. That's correct. That Exxon well just penetrated about 200 feet into the upper Atoka.

Q. What would you see as a potential secondary location in this unit?

A. If that well comes in, I'd like to try to follow the channel up to the north, maybe in Section 20. We've thought about re-entering the Phillips well in Section 17. That has the casing cut off, however, and we might be able to put a workover rig on that and see if we could repair the casing before we'd go back and try to deepen that well.

The well to the north I'm showing on the high side of the fault, but that also has a source that has been lost in the hole, so that well would have to be sidetracked.

But I would probably follow the well north and either re-enter the well in Section 17 or drill a well in the northwest corner of Section 20.

Q. Okay. As far as the Chevron well that you re-entered, that hasn't been completed yet?

A. We have an IP. It IP'd for 2.7 million cubic feet of gas. But again, pressures -- This is in the lower Morrow that has been wet sometimes, and we're a little worried about the pressures too, so we're -- just have to wait. This is currently waiting on a pipeline, but we've had a good test.

Q. And is that what you're calling the Mesa sand; is that right?

A. The Mesa sand is kind of a middle Morrow sand. That is currently not open in the Mesa. We've opened it on the cross-section. The two lower sands that are shown are what is currently open and has been tested. So the Mesa zone has not been tested yet in that well.

Q. So it would be the Austin sand, is what you're referring to?

A. Well, it's between the Mesa and the Austin. It's what I'd call lower Morrow sands.

Q. Okay. Is that sand interval potentially productive in that Humble well?

A. Well, again, that well tested a similar zone -- actually, no, it probably tested a higher zone, from looking at the cross-section. So that zone is not present. The Mesa zone is present in the Humble well. And that's the one that tested initially, I think it was 4 million a day, and the second test, same interval, was 2 million a day, and the third test was less than a million a day. So the pressure was declining pretty fast on that well.

But again, back -- This was an old well drilled in 1953. A lot of time some of these old wells were not drilled with proper fluids, and a lot of times they damaged a formation. So that's really the well that started us moving this direction.

Q. So do you guys have any data on the Atoka at all in this area?

A. Not in the map area, except for the well we completed, the Calfrope Chevron and the Humble Federal, are the only two data points on this map for the Atoka. You have to go about two miles to the east, Yates drilled what's called the New Grass well that has done well. And you have to go about a mile and a half to the south to pick up some penetrations and about a mile to the north. But there are no other lower Atoka or Morrow penetrations on

the map, other than those two.

EXAMINER CATANACH: I guess we don't have any further questions of this witness. Do you have anything further?

MR. SUTPHIN: We have nothing further in this case.

EXAMINER CATANACH: Okay. There being nothing further in this case, Case 13,007 will be taken under advisement.

(Thereupon, these proceedings were concluded at 8:44 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 13007, heard by me on February 20 19 2005.

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 February 20th, 2003.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 16th, 2006