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. 13037
ORDER NO. R-11941

APPLICATION OF YATES PETROLEUM CORPORATION FOR APPROVAL OF A UNIT AGREEMENT, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 27, 2003, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 22nd day of April, 2003, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Yates Petroleum Corporation, seeks approval of the BiPlane Federal State Exploratory Unit Agreement for all oil and gas in any and all formations underlying the following described 2,170.72 acres, more or less, of State, federal, and fee lands in Chaves County, New Mexico:

TOWNSHIP 6 SOUTH, RANGE 27 EAST, NMPM

Section 3:	Lots 3 and 4 (W/2)
Section 4:	All
Section 9:	All
Section 10:	W/2
Section 15:	W/2
Section 16:	All

(3) Both Section 3 and Section 4, Township 6 South, Range 27 East, NMPM, are survey correction sections and are much smaller than normal.

(4) No interested party appeared at the hearing or otherwise objected to the proposed unit.

(5) The applicant testified that 100 percent of the working interest has ratified the proposed unit agreement.

(6) The primary drilling target is the Wolfcamp Spear interval with analogous production in the Foor Ranch-Wolfcamp Gas Pool.

(7) Approval of the proposed unit agreement should promote the prevention of waste and protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED THAT:

(1) Pursuant to the application of Yates Petroleum Corporation, the BiPlane Federal State Exploratory Unit Agreement for all oil and gas in any and all formations underlying the following described 2,170.72 acres, more or less, of State, federal, and fee lands in Chaves County, New Mexico:

TOWNSHIP 6 SOUTH, RANGE 27 EAST, NMPM

Section 3:	Lots 3 and 4 (W/2)
Section 4:	All
Section 9:	All
Section 10:	W/2
Section 15:	W/2
Section 16:	All

(2) The plan contained in the unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided however, notwithstanding any of the provisions contained in the unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty or obligation that is now, or may hereafter be, vested in the Division to supervise and control operations for the unit and production of oil and gas therefrom.

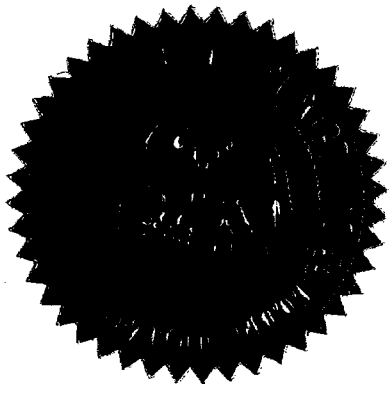
(3) The unit operator shall file with the Division an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any other party, or expansion or contraction of the unit area, the unit operator shall file with the Division, within 30 days, copies of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) All plans of: (i) development and operation; (ii) creation, expansion or contraction of participating areas; or (iii) expansion or contraction of the unit area shall be submitted to the Director for approval.

(5) This order shall become effective upon the approval of the unit agreement by the United States Bureau of Land Management and the New Mexico State Land Office. This order shall terminate upon the termination of the unit agreement. The last unit operator shall notify the Division immediately in writing of such termination.

(6) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery

LORI WROTENBERY
Director

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. 13,037
APPLICATION OF YATES PETROLEUM CORPORATION FOR APPROVAL OF A UNIT AGREEMENT, CHAVES COUNTY, NEW MEXICO	)	

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

March 27th, 2003

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, March 27th, 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.

* * *

I N D E X

March 27th, 2003
Examiner Hearing
CASE NO. 13,037

	PAGE
APPEARANCES	3
APPLICANT'S WITNESSES:	
CHARLES E. MORAN (Landman)	
Direct Examination by Mr. Carr	4
Examination by Examiner Jones	10
Examination by Mr. Brooks	13
Further Examination by Examiner Jones	14
TIM MILLER (Geologist)	
Direct Examination by Mr. Carr	15
Examination by Examiner Jones	26
REPORTER'S CERTIFICATE	31

* * *

E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	6	10
Exhibit 2	6	10
Exhibit 3	7	10
Exhibit 4	8	10
Exhibit 5	8	10
Exhibit 6	16	26
Exhibit 7	18	26
Exhibit 8	23	26
Exhibit 9	25	26

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A P P E A R A N C E S

FOR THE DIVISION:

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By: WILLIAM F. CARR

* * *

WHEREUPON, the following proceedings were had at 10:01 a.m.:

EXAMINER JONES: Okay, let's go back on the record, and at this time we'll call Case 13,037, Application of Yates Petroleum Corporation for approval of a unit agreement in Chaves County, New Mexico.

Call for appearances.

MR. CARR: May it please the Examiners, my name is William F. Carr with the Santa Fe office of Holland and Hart, L.L.P. We represent Yates Petroleum Corporation in this matter, and I have two witnesses.

EXAMINER JONES: Any other appearances?

Will the witnesses please stand to be sworn in?

(Thereupon, the witnesses were sworn.)

EXAMINER JONES: Mr. Carr?

CHARLES E. MORAN,

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

DIRECT EXAMINATION

BY MR. CARR:

Q. Please state your name for the record.

A. My name is Charles Moran, and I reside in Artesia, New Mexico.

Q. Mr. Moran, by whom are you employed?

A. Yates Petroleum Corporation as a landman.

Q. Have you previously testified before this Division?

A. Yes, I have.

Q. And were your credentials as an expert in petroleum land matters accepted and made a matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Yates Petroleum Corporation?

A. Yes, I am familiar with the Application.

Q. And are you familiar with the proposed Biplane Federal State Federal State Exploratory Unit, including the status of the lands in the proposed unit area?

A. Yes, I am.

MR. CARR: We tender Mr. Moran as an expert in petroleum land matters.

EXAMINER JONES: Mr. Moran is so tendered.

Q. (By Mr. Carr) Would you initially summarize for the Examiners what it is that Yates seeks with this Application?

A. Yates Petroleum Corporation is seeking approval of a federal state exploratory unit in Chaves County, New Mexico, in Township 6 South, 27 East, Sections 3, Lots 3 and 4, all of Section 4, consisting of Lots 1, 2, 3 and 4, Section 9 all, Section 10 the west half, Section 15 the

west half, and all of Section 16. That is lands composed of five federal leases, two state leases and four fee leases.

Q. Approximately how many acres are in the unit area?

A. There are approximately 2170 acres in the unit area.

Q. Have you prepared exhibits for presentation here today?

A. Yes, I have.

Q. Would you identify what has been marked as Yates Petroleum Corporation Exhibit Number 1?

A. Exhibit Number 1 is the standard unit agreement for a federal/state exploratory unit, as presented to the Land Commissioner and the BLM for approval.

Q. Let's go to what has been marked Exhibit 2. Would you identify and review that?

A. Exhibit 2 is the land plat of the area in Chaves County, New Mexico, and it identifies the separate tracts within the proposed unit boundaries, setting out the ownership being federal acreage identified in white, State land identified by horizontal slash, and the fee land identified by vertical slash.

Q. And this is the same plat that's attached to the unit agreement as Exhibit A; isn't that right?

A. Yes.

Q. Let's go to Exhibit Number 3. This is the ownership breakdown. Review the information on this for the Examiner.

A. Exhibit Number 3 is Exhibit B to the proposed unit agreement, as presented to the BLM and the State Land Office. It identifies by tract number the specific leases to be included within the proposed unit boundary. It sets forth the legal description, the number of acres, the serial number, the expiration date of the leases, the basic royalty and ownership percentage, the lessees of record, any overriding royalty interests, and the working interest of the leasehold.

Q. What percent of the working interest is committed to this proposed unit?

A. Currently Yates Petroleum Corporation, Yates Drilling Company, Abo Petroleum Corporation, MYCO Industries, Inc., all own all the leasehold within the unit, and they're all here, all proposing to put forth the acreage in the unit.

Q. So you have a 100-percent commitment --

A. Yes, we --

Q. -- to this --

A. -- have 100 percent, although we have not verified the fee owners will let us commit their acreage

yet.

Q. What about the lease expiration dates in the unit area?

A. If you will note, on Tracts 1, 2, 3 and 4 we have an expiration date of 5-31-03. When we were putting this unit together to develop the area, previous plans fell apart and we ran into a time frame, and we're trying to -- Well, we've run into a time bind, and this unit is going to help us explore the area in a prudent manner without having to get out on each one of the separate leases.

Q. Have you reviewed the proposed unit and unit agreement with the Commissioner of Public Lands?

A. Yes, I have.

Q. And what is Exhibit 4?

A. Exhibit 4 is the approval -- the preliminary approval letter from the Commissioner of Public Lands setting forth their approval of the unit as we presented to them.

Q. Have you reviewed this proposal with the Bureau of Land Management?

A. Yes, we have, that's Exhibit 5, represents the preliminary approval we received from the Bureau of Land Management just this week, with regards to the unit.

Q. And they have designated this as an area logically suited for development under a unit plan; is that

correct?

A. They have, for the Wolfcamp formation.

Q. And have they assigned a number to the unit?

A. The unit was assigned number NMNM109680X.

Q. Does Yates Petroleum Corporation seek to be designated operator of the unit?

A. Yes, we do.

Q. Does this agreement provide for the periodic filing of plans of development?

A. Yes, it initially requires that we submit updated plans within six months after the first well and then on a yearly basis thereafter.

Q. And these will be filed with the OCD as well as the Land Office and the BLM?

A. They will be filed with the OCD, the State Land Office and the Bureau of Land Management.

Q. What horizons are we proposing to unitize in this proposed Biplane Federal State Exploratory unit?

A. The primary objective out here is the Wolfcamp formation but we have some secondary targets, that being the Siluro-Devonian and the Strawn and the Cisco.

Q. And you're attempting to unitize all horizons?

A. We will attempt to unitize all horizons.

Q. Will Yates call a geological witness to review the geological portion of this case?

A. Yes, we will.

Q. Mr. Moran, were Exhibits 1 through 5 either prepared by you or compiled under your direction?

A. Yes, they were.

MR. CARR: At this time, may it please the Examiner, we would move the admission into evidence of Yates Exhibits 1 through 5.

EXAMINER JONES: Exhibits 1 through 5 should be admitted to evidence.

MR. CARR: And that concludes my examination of Mr. Moran.

EXAMINATION

BY EXAMINER JONES:

Q. Mr. Moran, what is the number you said that they assigned this --

A. If you will look in Exhibit Number 5, second paragraph --

Q. Okay, there it is.

A. -- it's NMNM109680X.

Q. -- -680X?

A. Yes, it's in the letter dated March 21st from the Bureau of Land Management, second paragraph, fourth line.

Q. Okay. Can you briefly summarize what this letter says, just for me?

A. This letter is in the process of obtaining Bureau

of Land Management approval of an exploratory unit. You're going to make a preliminary presentation to them --

Q. Okay.

A. -- and then you submit what your proposed plans are. This letter is an approval. They did request two changes to the unit agreement. That's what they're referencing in Sections 9 and 11. We are agreeing to make those changes as they've requested, and those changes will be incorporated in the final unit agreement submittal for their approval.

Q. Okay. And this same way with the State Land Office, then, this is kind of a preliminary --

A. Yes, it's preliminary approval so we can proceed with getting all ratifications and all parties to join the unit.

Q. Okay. You mentioned the fee working interest owners haven't signed?

A. No, no, Yates Petroleum Corporation, MYCO, Abo and Yates Drilling own the working interest --

Q. -- 100 percent?

A. -- 100 percent. But we need to invite the royalty owners, the fee mineral owners, to whether to commit their leases to the unit. We have not been able to do that yet because I did not have the BLM approval that the unit was going to proceed ahead.

Q. Okay, and once you get that approval, then you go to --

A. Yes --

Q. -- the letter?

A. -- right.

Q. But then you're under a deadline of --

A. I've got leases expiring May 31st.

Q. May 31st, okay. And -- But if we get this out in time, you can go ahead and --

A. Yes, I can proceed --

Q. -- get a rig out there?

A. -- ahead. And they -- the feds will decide the paying -- wells in paying quantities; is that --

A. After the well is drilled, we will determine what information is available to determine if the well is capable of production in either paying quantities or commercial quantities, to whether the well meets the requirements of a unit.

Q. Oh, okay. And then it will become a unit, and you will save the leases?

A. Well, no, we -- By obtaining unit approval prior to the lease expiration, we can get out there and drill the one well and hold all the leases within the unit with that well.

Q. Okay. And you said there were six --

A. Initially the plan requires that we submit evidence in the first six months after we get the initial well drilled, and then on an annual basis thereafter, to the State Land Office, the OCD and the Bureau of Land Management.

EXAMINER JONES: Okay, that's -- Mr. Brooks?

EXAMINATION

BY MR. BROOKS:

Q. As I understand the way these things work -- correct me if I'm wrong, but once the unit is approved by the BLM and approved by SLO and approved by us, it becomes a unit. And you drill a well, that's a unit well, it holds all the leases in the unit at the moment, correct?

A. Yes, at the moment --

Q. And then --

A. -- pending the termination of the commercial production.

Q. Right. And commercial production is different from production in paying quantities, because you can have a well that would produce in paying quantities under the state-law, commonlaw definition, that would not be deemed a commercial well under the federal regulations for an exploratory unit?

A. But that well will work to meet your unit obligations for drilling a well --

Q. For the moment?

A. For the moment, and will allow you to go commence a second well if necessary.

Q. Yeah. And if it doesn't go into a participating area at some point in time, then that drillblock will be contracted out of the unit at some point, right?

A. It would go to production on a lease basis.

Q. But any area that would be held by the unit production that's then contracted out of the unit, you have two years after it's contracted out to establish production to keep that lease in force, if I remember right?

A. That's if the unit is terminated.

Q. Oh, okay. There's some grace period for acreages contracted out, is there not?

A. On the contraction of a unit, a lease that is contracted out of a unit, you will get an additional two-year period added to the lease term if it's within the last year of its life or past its primary term.

MR. BROOKS: Okay, thank you.

FURTHER EXAMINATION

BY EXAMINER JONES:

Q. Mr. Moran, one more question. The lease -- Sections 3 and 4, this is just a partial section you're trying to put in the unit?

A. Those are correction sections --

Q. Okay.

A. -- they represent the full section.

Q. Okay, great. Good.

A. Yeah, my memory is that each one of those sections is a little over 160 acres each, and it's just a correction section.

EXAMINER JONES: Okay, that concludes my questioning of Mr. Moran. Thank you very much.

MR. CARR: Mr. Examiner, at this time we'd call Tim Miller, and I would request that the record reflect that Mr. Miller testified in the previous case, that his credentials as an expert in petroleum geology have been accepted, and he remains under oath.

EXAMINER JONES: That sounds acceptable.

TIM MILLER,

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

DIRECT EXAMINATION

BY MR. CARR:

Q. Mr. Miller, are you familiar with the proposed Biplane Federal State Exploratory Unit?

A. Yes, I am.

Q. Have you made a geological study of the area which is the subject of this unitization effort?

A. Yes, I have.

Q. Are you prepared to share the results of that work with the Examiners?

A. Yes, I am.

Q. Let's go to what has been marked as Exhibit 6. And I'd like you, as you go into this, to first explain what the primary objective is in this unit area.

A. Okay, what you're looking at in Exhibit 6 is the structure map on top of this Wolfcamp pay zone, and this is the primary objective. We call it a Wolfcamp-Spear zone, and I will relate that later in my testimony, because we basically have found tremendous amounts of gas production out of this Wolfcamp zone in the Four Ranch area, which is about 25 to 30 miles southwest of this area.

So what you're looking at here in Exhibit 6, once again, is a structure map on top of this pay zone. And the unit outline, as you can see, is in -- depends, I guess, if you're color-blind or not, you have trouble distinguishing -- That looks pink to me, my draft people said it was red, so... Anyway, that outlines the unit.

Our proposed well, which is the Biplane Unit Number 1, is in the northeast quarter of Section 16. It is 660 from the north and east line.

The reason why we are placing this well here, we have learned from our previous production in this Wolfcamp zone that the better porosity is developed more on the

flanks, lower down the structure. If you try to place the well on the crest of the structure you'll have the carbonate zone, the limestone zone, but you will lose your porosity. It seems the porosity develops better down the flanks of these structures, and that is why we are positioning the Biplane Unit Number 1 well in the northeast quarter of that section. It is slightly downdip from the crest of the structure.

And as you will see on a cross-section later, there's those two old oil wells in the northwest quarter of 15 that produce from a deeper formation, basically the Siluro-Devonian. We feel that since we will take this well all the way to the basement we could have some secondary objectives there, and we would be slightly updip to those wells.

Basically, this shows the structure, two separate structures. We are on a small anticline in the unit area. And then down to the south, which is obviously out of the unit area, is another small structure that could possibly be tested sometime in the future by itself.

Q. Mr. Miller, this exhibit shows a number of wells. Has the particular Wolfcamp zone that we're interested in here, the Wolfcamp-Spear zone, ever been tested in the unit area?

A. No, this particular zone that is our primary

objective has never been tested in the area.

Q. You're going to be drilling the initial test well to approximately what depth?

A. We are going to drill it to 6600 feet.

Q. And what is the approximate cost of a well to this depth?

A. The cost of a well to this depth is around $650,000.

Q. And it's your objective to get this unit approved and the well commenced prior to the May 31 expiration date?

A. Yes, it is.

Q. Let's go to what has been marked Exhibit Number 7, the A-A' cross-section. I'd ask you to first explain the line of cross-section, then review the information on the exhibit.

A. Okay, if you use you structure map more as an index to which way the cross-section is running you'll be a little more orientated on how it stands.

Once again, it's a cross-section from A-A'. Technically I guess you could it runs generally from the north to the south, but basically this is a combination north-to-south and west-to-east cross-section, just to give you an idea on the structure in here, how it is and how we think it will affect where we're proposing our location. Again, it's hung on a minus 1350 subsea datum.

If you look on the cross-section starting up at the north, at the Blackrock Oil Company well, the Bates McIntyre Number 1, you'll see we have labeled the Wolfcamp-Spear zone. That is our primary objective out there.

And all these logs -- except for, I think, one log on the cross-section which we'll get to in a -- which is the McClellan Pearl State Number 1 -- are sonic logs. Most of these wells were drilled in the 1960s and 1970s, and some in the late 1950s, basically for -- determine porosity. All they ran was your sonic log.

Now, as you can see on the Wolfcamp-Spear zone, where there is porosity, or what we believe is porosity in the sonic log, that's colored in red.

And as you just glance at it from left to right on the cross-section, just quickly going through the wells, you can see the Blackrock Oil Company's well has porosity in there, and basically that's calculated around 7 or 8 percent.

The Jack McClellan well, which is the second well on the cross-section, again it has some porosity in it.

The next McClellan well has a little porosity.

We are hoping where our proposed location, our Biplane Unit is, we will have similar porosity, maybe even better.

And as you can see, we're going updip. If you

look at the McClellan Oil Corporation's Pearl State Number 1, this again is near -- we think a little higher on structure than where our Biplane Unit is, and this is not a sonic log, this is a neutron density log, which is used a lot to show gas crossover. Once again, there is basically no porosity in this interval.

As you go further updip the old Shenandoah Oil Corporation New Mexico State Number 1, that once again is more on the crest of the structure knob. That has a little porosity in it.

And then the last well, which you go back to the east, is the old Read and Stevens State 16 Number 1. It has very little porosity in it either.

Basically what this cross-section is showing, that if you stay on the flanks of the structure you have a better chance of developing porosity. And since back then most of these wells, they did not have a neutron density tool, the only way you're going to really know if -- in our experience, if this zone is productive, you have to run the neutron density to see if you have gas in it. We're mainly hoping that we're in for gas in this zone.

None of these wells were ever tested in it, and it's from our experience as we're drilling through this Wolfcamp-Spear zone, normally we usually drill with a somewhat heavy mud, usually around 10-pound mud.

And the reason why we do that, we have to keep the Abo -- keep it under control uphole. Red shale, if you get it wet a lot, if you leave -- the water loss goes up, it will start sloughing in on you, and if you just -- do not have heavy enough mud around -- between 9-1/2 to 10-pound mud, you'll start losing the hole. Otherwise you'll be -- basically lose the hole or not able to log it.

And what I'm getting at there is, when you drill through these zones, the mudlogger on location will see a slight increase in gas, because what we've found so far, these are not real high-pressured zones. If you're running 10-pound mud, they do not give up that much gas. And when I say gas on a mud log, a poor to medium show would be around 20 to 30 units. But in the case of this zone that is a good show for this well, and we have just learned that through experience.

Like I said, this zone was never tested in the area, and as you can see just by the cross-section, it is virtually almost in -- it has porosity almost in every well except for the McClellan Pearl State and the Shenandoah well, which we think are -- is more on top of the structure.

Now, what this cross-section also depicts, there are some deeper zones downhole. The Blackrock oil well, or the Blackrock Oil Company's Bates McIntyre well, they

tested and tried to produce out of the Cisco where you see the perfs in it, and they ran several DSTs.

Just to sum it up, they did get some pretty good gas out of one of the DSTs in the Cisco, basically 3.2 million. They tried to produce these.

They initially potentialed it for 350,000 and 20 barrels of water, but when they put it on production they basically got about 1 1/2 million cubic feet of gas and just basically plugged it.

There are some other tests in the well. They've tested some Strawn sands, they tested some Mississippian, and they did get some gas and oil on those.

The two other deeper wells, the Jack McClellan Bar J Federals 2 and 1, these wells initially were drilled through the Siluro-Devonian, the deepest pay zone out here, and the Bar J Federal Number 2 had accumulated 1600 barrels of oil, no gas, and 12,000 barrels of water.

The best well out there was the McClellan Bar J Federal Number 1. They drilled down into the Siluro-Devonian, perf'ed it, and they accumulated 34,000 barrels of oil and 3.6 million cubic feet of gas and, as you can see, 323,000 barrels of water. It made a lot of water. That is another reason why we think that we need to be a little further updip, but not right on the crest, to basically get the primary formation, which is the Wolfcamp-

Spear, but also be updip and maybe be out of the water better to -- if we do have some pay zones in the Siluro-Devonian.

And you also see that the Pearl State, the McClellan Pearl State, the next -- the last -- next to the last wells on the cross-section, the Shenandoah Oil, we think these are upfaulted block down from basement up through the low -- the fault runs up through the lower part of the Wolfcamp. And basically these are higher in the Siluro-Devonian, but basically they were nonproductive, and we think this is just because of an upfaulted block and the productive oil is on the downthrown side in McClellan's two Bar J Federals, Number 1 and 2.

And so as you can see, we -- the primary objectives are the Wolfcamp-Spear zone, but there are possibilities you could have pay zones in the Cisco, the Strawn and the Siluro-Devonian. And basically that is a compilation of what this cross-section is showing.

Q. Mr. Miller, is Exhibit Number 8 a neutron density log section?

A. Yes.

Q. And where is the Aurora "AUR" State Number 1?

A. Okay, the -- Yates Petroleum's Aurora State Number 1, this is the Wolfcamp-Spear-productive zone that I have alluded to. This is in the Four Ranch field, which is

about 25 to 30 miles southwest of us.

What I've done here, this is an example, like Mr. Carr said, of a neutron density log showing the Wolfcamp-Spear zone, which is highlighted in blue. What is colored in red is the neutron density crossover. The solid line, again, is the density curve, and is reading right at 13 percent. The neutron is down at 2 percent.

And also you can see if you look to the left where the gamma-ray is, where we have the best wells out of this zone and have -- it seems to be the better porosity, it is a hot limestone. You can see the gamma-ray go to the right.

What we normally run in our logging programs, we run an NGT tool, which takes out the uranium in the rock and just does the potassium. And what it shows is, since the uranium is knocked out, that this is -- a lot of people would think that is probably a shale because the gamma-ray is going off-scale. It is not, it's just a hot lime. And we have found that the porosity -- this has several -- vuggy porosity, and it is leached, and we think at one time that it was maybe just at water table or below and you had groundwaters flowing through it that opened up the permeability.

But we think that on the cross-section this Wolfcamp-Spear zone, that you have seen -- most of the

wells have porosity, but until we actually drill our new well and go in and run this neutron density curve, that's about the only way we can tell that the Wolfcamp-Spear zone possibly could have hydrocarbons in it and mainly gas.

Q. In this Aurora well, how good a well was it?

A. Yeah, the Aurora well is the best well we've found to date for the Wolfcamp-Spear. It has made 1.9 BCF since July of 2000, and basically this is through January, this year production.

Q. Is Yates Exhibit Number 9 a written summary of your geological presentation?

A. Yes, it is.

Q. Would you refer to this summary and then review for the Examiners why it is that Yates is attempting to develop this area under a unit plan?

A. Okay, the geological summary basically is a -- states where the unit is located. And once again, on the structure map that is the unit outline.

And we are planning to propose the Biplane Unit Number 1 in the northeast quarter, which is 660 from the north and east of Section 16, to initially target the primary pay zone, which would be the Wolfcamp-Spear zone, which would open up a new pay interval in this township.

And also we think that positioning where it is, as I have stated before, we feel that you lose porosity on

the crest of the structure. Down on the flanks of the structure you gain better porosity, better development. And it also helps us that we are a little higher structurally if we encounter any hydrocarbons down in the Siluro-Devonian.

Q. Will developing this property under a unit plan enable Yates to, after drilling the first well, engage in the type of stepout development that's dictated by the information you acquire in the reservoir?

A. Yes, it will.

Q. In your opinion, will approval of the Application and development of this area under a unit plan be in the best interests of conservation, the prevention of waste and the protection of correlative rights?

A. Yes, it will.

Q. Were Yates Exhibits 6 through 9 prepared by you?

A. Yes, they were.

MR. CARR: At this time, may it please the Examiners, we would move the admission into evidence of Yates Petroleum Corporation Exhibits 6 through 9.

EXAMINER JONES: Exhibits 6 through 9 are so admitted.

EXAMINATION

BY EXAMINER JONES:

Q. Mr. Miller, the -- so are you going to case off

the Abo, then, and drill out with more pressure?

A. No, we'll just do our normal drilling operation up there. I don't know if I actually understand the question, but --

Q. Well, you said the Abo needed to be 10-something-pound mud.

A. We just are able to control it better running in the range of 9-1/2 to 10-pound mud, and keep it from basically caving in on you. Because obviously that happens while you're drilling, and the mudlogger can normally tell that. He's getting red shale samples all the way down the hole.

When it comes time to log, a lot of times you can't get the logging tools downhole because of all the Abo shale. So we found that if you keep the mud weight around 10 pounds, you can keep the Abo under control.

Q. Okay, and what's your dryhole cost, or just -- you said something about $650,000 --

A. Overall completion cost would be $650,000.

Q. Okay.

A. Dryhole is probably more in the range of around $450,000.

Q. Okay, this well, this analogy well, 1.9 BCF for --

A. Yes.

Q. -- six feet of pay --

A. Yes, yes --

Q. -- six or seven feet?

A. -- it's really amazing.

Q. So --

A. This was an old field that -- including us, we had bypassed the zone. This well offset an old well location half a -- about a quarter mile to the east.

We came uphole after it was producing out of the Siluro-Devonian, decided to hit this because it had this characteristic on the neutron density log. It had a mudlog show.

It initially did -- that's the old Spear Number 3 -- initially did just over 2 million a day. So we decided to offset it and we got a very -- as you can see.

Q. So it was necessary to offset it to --

A. -- to prove it, to see if it actually --

Q. Oh, okay.

A. -- is the best in the area, right.

Q. But in this unit area you're going to go ahead and drill another well, just so you can get better logs and...

A. Right, right.

Q. You can't run a -- oh, a TDT or something through this -- some kind of a cased-hole porosity tool that will

kind of tell you a little more about the porosity?

A. Well, we have tried to run cased-hole tools in some of our brand-new holes we've drilled because, like I've said before, we've lost the -- basically, we can't get normal-sized, you know, regular open-hole logs, and we have just -- are never satisfied with the data. It just doesn't -- in our opinion, it just doesn't tell you what a regular open-hole log will tell you.

Q. Okay.

A. You just getter information with open-hole logs.

Q. And you've got the mudlog along with it.

A. And you -- of course, yes, you have the mudlog along with it.

Q. Now, you've probably already said. How deep are you going to drill?

A. We're going to drill down to around 6600 feet.

Q. But is the unit -- the unit will be covering all depths; is that right?

A. Yes.

EXAMINER JONES: Okay, that was -- Let's see here. That was all my questions.

MR. BROOKS: No questions.

EXAMINER JONES: Thanks.

MR. CARR: That concludes our presentation of this case.

EXAMINER JONES: Okay. With that, Case 13,037 will be taken under advisement.

(Thereupon, these proceedings were concluded at 10:36 a.m.)

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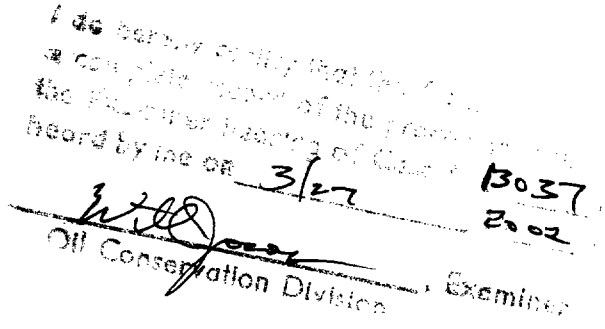

CERTIFICATE OF REPORTER

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 4th, 2003.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 16th, 2006