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. 12,938

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

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

October 10th, 2002

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, October 10th, 2002, 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.

* * *

STEVEN T. BRENNER, CCR (505) 989-9317

25

I N D E X

October 10th, 2002 Examiner Hearing CASE NO. 12,938

PAGE

APPEARANCES 3

APPLICANT'S WITNESS:

TIM MILLER (Geologist) Direct Examination by Mr. Carr 4 Examination by Examiner Catanach Examination by Mr. Jones 21

REPORTER'S CERTIFICATE 29

EXHIBITS

Applicant's	Identified	Admitted
Exhibit 1	7	20
Exhibit 2	7	20
Exhibit 3	8	20
Exhibit 4	9	20
Exhibit 5	12	20
Exhibit 6	14	20
Exhibit 7	15	20
Exhibit 8	19	20

STEVEN T. BRENNER, CCR (505) 989-9317

APPEARANCES

FOR THE DIVISION:

DAVID K. BROOKS
Attorney at Law
Energy, Minerals and Natural Resources Department
Assistant General Counsel
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR 110 N. Guadalupe, Suite 1 P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

ALSO PRESENT:

WILLIAM V. JONES, JR.
Petroleum Engineer
New Mexico Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, NM 87505

* * *

1	WHEREUPON, the following proceedings were had at
2	8:26 a.m.:
3	EXAMINER CATANACH: All right, at this time I'll
4	call Case 12,938, the Application of Yates Petroleum
5	Corporation for approval of a unit agreement, Chaves
6	County, New Mexico.
7	Call for appearances.
8	MR. CARR: May it please the Examiner, my name is
9	William F. Carr with the Santa Fe office of Holland and
10	Hart, L.L.P. We represent Yates Petroleum Corporation in
11	this matter, and I have one witness.
12	EXAMINER CATANACH: Any additional appearances?
13	Can we swear in the witness at this time?
14	(Thereupon, the witness was sworn.)
15	TIM MILLER,
16	the witness herein, after having been first duly sworn upon
17	his oath, was examined and testified as follows:
18	DIRECT EXAMINATION
19	BY MR. CARR:
20	Q. Would you state your name for the record, please?
21	A. My name is Tim Miller.
22	Q. Mr. Miller, where do you reside?
23	A. I reside in Carlsbad, New Mexico.
24	Q. By whom are you employed?
25	A. Yates Petroleum Corporation.

1	Q. And what is your position with Yates Petroleum
2	Corporation?
3	A. I'm a geologist.
4	Q. Have you previously testified before the New
5	Mexico Oil Conservation Division?
6	A. Yes, I have.
7	Q. At the time of that testimony were your
8	credentials as an expert witness in petroleum geology
9	accepted and made a matter of record?
10	A. Yes, they were.
11	Q. Are you familiar with the Application filed on
12	behalf of Yates Petroleum Corporation in this case?
13	A. Yes, I am.
14	Q. Are you familiar with the Yates proposed Ten Mile
15	State/Federal Exploratory Unit?
16	A. Yes, I am.
17	Q. Are you familiar with the status of the lands in
18	the area which is affected by this Application?
19	A. Yes, I am.
20	Q. Mr. Miller, have you also made a geological study
21	of the area involved in this case?
22	A. Yes, I have.
23	Q. And are you prepared to share the results of that
24	work with the Examiners?
25	A. Yes, I am.

MR. CARR: Are the witness's qualifications 1 2 acceptable? EXAMINER CATANACH: Mr. Miller is so qualified. 3 (By Mr. Carr) Initially, would you summarize for 4 Q. the Examiner what it is that Yates seeks with this 5 Application? 6 We're seeking approval of the Ten Mile 7 8 State/Federal Exploratory Unit, agreement on voluntary exploratory unit containing approximately 3440 acres of 9 State of New Mexico lands and 600 acres of federal lands, 10 located in Chaves County, New Mexico. 11 Mr. Miller, the difference between the number of Q. 12 acres that you're seeking here today and those set forth in 13 the legal advert for this case, there are approximately 400 14 15 acres. What is the reason for this discrepancy? Because Myco Industries did not want to be 16 unitized. 17 And when we get to the plat of the unit area, you Q. 18 will be able to --19 20 Yes. Α. -- identify those? 21 Q. Yes, I will. 22 Α. You've prepared exhibits for presentation here 23 24 today?

25

Α.

Yes, I have.

- 1 Q. Let's go to what has been marked as Yates Petroleum Corporation Exhibit Number 1, and I'd ask you to 2 identify that for the Examiner. 3 This is the Unit Agreement. 4 Q. Is this agreement based on the state/federal 5 form, agreement for exploratory units? 6 Yes, it is. A. 7 Let's go to what has been marked Yates Exhibit 8 Number 2, and I'd ask you to identify and review this for 9 the Examiner. 10 This is an outline of the proposed Ten Mile Unit. 11 A. 12 It includes -- is in Township 14 South, Range 28 East, in Chaves County, New Mexico, and it includes all of Sections 13 32, 33, 28, 29 and portions of 21 and portions of Section 14 15 20. And if we look at this exhibit, in the 16 Q. northwestern portion of the unit area, there is a lease 17 shown as a Myco Industries lease. Is that the property 18 which is not included in the unit agreement as originally 19 proposed? 20 Yes, it is. 21 Α. And Mr. Frank Yates elected and decided he didn't 22
 - want the acreage included in the unit; is that right?
 - That's right. A.

23

24

25

How many State of New Mexico leases are we Q.

dealing with?

A. We're dealing with -- let's see here, one, two, three, four, five, six, seven -- just looking at the map -- eight, nine, ten of them.

- Q. And how many federal leases are involved?
- A. Federal leases inside the unit are -- Well, one, excluding the 40 in -- that Myco wants out of there.
- Q. Let me ask you to refer to what has been marked as Yates Petroleum Corporation Exhibit Number 3. Would you identify that for me?
- A. Exhibit Number 3 is a breakdown of the sections, and the number of acres in the section and the unit, and the lessees of record and the working interest owners.
 - Q. Does exhibit show each lease in the unit area?
 - A. Yes, it does.
- Q. And it shows the number of acres involved in each lease?
 - A. Yes, it does.
- Q. And it indicates those which are federal and those which are state?
 - A. Yes, it does.
- Q. And it also shows that Tract Number 3 is the federal lease that is not going to be included in the unit --
- 25 A. Yes, it is, that's correct.

1	Q. Let's go to what has been marked as Exhibit
2	Number 4. Would you identify this, please?
3	A. Exhibit Number 4 is the approval letter from the
4	State Land Office, from Mr. Pete Martinez, stating that
5	they they're in favor of they have said their
6	approval for the formation of the unit.
7	Q. And is this preliminary approval Is final
8	approval conditioned upon the designation from the Bureau
9	of Land Management of the unit area as an area that can be
10	successfully developed under the unit plan?
11	A. Yes, it is.
12	Q. What is the status of the efforts to obtain that
13	designation from the Bureau of Land Management?
14	A. I spoke with Armando Lopez last Thursday morning,
15	showed him the outline and the unit agreement, and they
16	verbally said they are fine with it, and we are just
L7	waiting on an approval letter at this time.
L8	Q. When that letter is received, will you submit a
L9	copy to the Oil Conservation Division?
20	A. Yes, we will.
21	Q. Does Yates Petroleum Corporation desire to be
22	designated unit operator?
23	A. Yes, it does.

of the lands in the unit area are owned or operated by

24

25

Q.

 $\mbox{Mr. \sc Miller,}$ when we look at this unit area, most

1 Yates Petroleum Corporation or related entities; is that 2 correct? Yes, it is. 3 Α. 4 What percent of the working interest in the area has been voluntarily committed to this unit plan? 5 98.8 percent. 6 Α. 7 When we go to the unit agreement, does it provide for periodic filing of plans of development with the State 8 Land Office? 9 Yes, it does. 10 Α. Will these plans also be filed with the Oil 11 Conservation Division at the time they are filed with the 12 Land Office? 13 Yes, they will. 14 Α. And how often are these plans to be filed? 15 Q. Basically every six months. 16 Α. 17 Q. And then after that you file annual plans of development? 18 Yes, we do. Α. 19 What horizons are being unitized in this proposed 20 Q. Ten Mile State/Federal Exploratory Unit? 21 It would be the Morrow. 22 Α. What is the location in the unit area -- and you 23 Q. might look at the plat and identify the location of the 24 25 initial test well on the unit area.

1	A. If you look at the land plat, which is Exhibit
2	Number 2, the proposed test well is down in Section 33,
3	1650 from the north and east line.
4	Q. And what acreage will be dedicated to that well?
5	What will be the spacing unit for the well?
6	A. It would be the east half of Section 33.
7	Q. And approximately to what depth will it be
8	drilled?
9	A. 8500 feet.
10	Q. And what is the primary objective in this unit?
11	A. Primary objective is the Morrow formation.
12	Q. And is this well as proposed going to be in an
13	established pool, or will it be a wildcat?
14	A. It will be a wildcat.
15	Q. Are there wells within the unit area that have
16	penetrated the Morrow formation?
17	A. There are two wells that have penetrated the
18	Morrow formation. One well is in Section 32, in the
19	northwest quarter, the old Yates Petroleum Nine Mile State
20	Number 1; and then in the northeastern part of Section 28,
21	Rodman Corporation's Number 1 State.
22	Q. Did either of these wells produce from the
23	Morrow?
24	A. No, they do not.

Are there secondary objectives in the unit area?

25

Q.

A. Yes, there are secondary objectives. The main secondary objective, if the Morrow is not present, would be Atoka.

- Q. Let's go to Exhibit Number 5, the gross isopach of the Morrow clastics, and I'd ask you identify it and explain to Mr. Catanach what this exhibit shows.
- A. Okay, Exhibit Number 5, which is a map as Mr. Carr has said, a gross isopach map from the top of the Morrow clastics to the top of the Austin cycle, this is basically a gross isopach of that interval, and what I basically call it is a thick/thin map.

And as you're looking on the map and you see the outline of the unit in green and the 40 acres in the southwest of the northwest of Section 21 that is out of the unit, this map depicts the gross thickness from top-of-Morrow clastics to Austin cycle that we -- might occur throughout this area. The general trend is basically from the north northwest to the south southeast.

Our proposed location, as you can see, that is 1650 from the northeast in Section 33, we hope to at least have 130 feet or more of this gross section Morrow clastics, top of the Austin cycle. Having a thicker section enables you to have a higher percentage of maybe encountering Morrow sandstones, two or three or four, maybe, in the area.

The wells down toward the lower right-hand corner of the map, there are three wells in Section 3 down there, there's a middle well, you can see that the well to the left -- and when we look at the cross-section later, the names of these wells, and you can see the thickness on the cross-section, what they look like.

The well to left, 76, the middle well is 93 feet, and the well to the right, at the end, there, of A', is 66 feet. This is the thickness, like I stated, from the Morrow clastics to the Austin cycle.

Like I said, the trend is generally north northwest to south southeast. You also see where I have a thin. This is -- Basically you have a thinning of this section. You look at the well in Section 32, it only has 83 feet. If you go northeast of that in Section 28, that well just has a maximum of only 17 feet. So there's very little room for an accumulation, a gross accumulation from the Morrow clastics to the top of the Austin cycle.

And basically, you can think of this as maybe a depositional center for a channel in here, with the deposits of sand. Think of the thins as the ridge or the hill and the thicks as the lows or where you're going to have an accumulation of sandstone.

Q. All right, let's go to Exhibit Number 6, the gross sand map. Would you review that, please?

A. Exhibit Number 6 basically follows along with Exhibit Number 5. Exhibit Number 6 basically gives you the outline of the proposed unit and our proposed location down there in the northeast quarter of Section 33.

This map depicts the Morrow gross sand of gamma-ray units on an e-log of less than 50 gamma-ray units, which means you're looking for clean sands, clean sandstones, and if you have clean sandstones you have a better chance of maybe -- of them being productive. The contour intervals are every ten feet.

Again, as you can see, where we have our proposed location we're hoping to get at least 30 feet or better of sandstones. Now, what this would be, you could possibly maybe have one sandstone that's 30 feet, or you could have three separate sandstones of ten feet apiece.

It generally runs into trends similar to the gross isopach map, north northwest to south southeast, and basically we see where the thick sands are in here. They basically follow in with the thicks on Exhibit 5. And where you have thinner parts of the sands, or say you're out of the channels, you'd be in the thins. That's showed in the thins in Exhibit 5.

- Q. Mr. Miller, were these last two exhibits, 5 and 6, prepared from well control or seismic information?
 - A. Well control.

1 Q. And they each show a trace for a subsequent cross-section? 2 3 Α. Yes, they do. Are you ready to go to the cross-section? 4 0. Yes, I am. 5 A. All right, would you refer to Exhibit 7 and 6 review that? 7 Okay. And probably for -- just to see where the 8 cross-section is going, if you just hold out Exhibit 5, 9 that will help you follow along a little easier. 10 Okay, the cross-section basically goes from the 11 northwest to the southeast. If we start on the left-hand 12 side of the cross-section up there, Meridian Oil's 13 Cannonball Number 1, looking at this, the cross-section, 14 you have the different formations labeled Atoka, top of 15 Morrow clastics, Austin cycle and the Chester formation. 16 The cross-section, just looking at a general 17 overview, the green-colored interval is the Morrow clastics 18 section, which is from the top of the Morrow clastics to 19 the top of the Austin cycle, which -- this is what 20 basically Exhibit 5 is trying to show. 21 If we start at the left, at the Meridian Oil, 22 which on your gross isopach, your Exhibit 5, is up there in 23

the left-hand corner in Section 7, this well has 116 feet

of Morrow clastics to Austin cycle. Unfortunately in this

24

25

well, as far as an example showing where we'd have a thick accumulation of sandstones, this well had basically none, had basically no clean sandstones here.

It does have, as you can see, up in the Atoka, an Atoka sand. This basically -- well, was never put on production.

If you move to the right -- we're basically moving to the east on Exhibit 5 -- you see a very old well, the Honolulu Oil Corporation Malco-Federal Number 1. You can see our interval starting to thin a little to 88 feet. As you can see, there are three sands in here that are colored yellow, the gamma ray is colored yellow on it. That's depicting three sands.

The red-color -- if you want to say upside-down triangle there -- is the symbol for a DST. They actually DST'd 8245 to 8426, and they recovered basically only 150 feet of slightly gas-cut mud.

Moving to the next well, which would be again at your Exhibit 5, moving to the southwest, the Larue and Muncy well in Section 20, we are thinning up a little more to 75 feet, and this basically has a thin Morrow sandstone, around three to four feet thick, with a little porosity, maybe two or three percent. That's what's colored in red, and that's the gas crossover. This basically is a neutron density log.

Moving to the next well, which is the Clements

Energy well, which again is moving to the southwest in

Section 30, again you see we are continuing to thin up to

60 feet. Again, it has a thin Morrow sand of maybe about

four feet, with maybe two feet of porosity hanging in there

around eight percent, and you just have basically a very

thin porosity interval with some slight gas into it.

And the next well, which is Rodman Corporation, as you can see, we're basically thinning up to just 17 feet. There is not enough section for basically any type of what we would consider a sandstone deposition. So basically you have no Morrow sand in this at all.

Moving to the next well, which is the Yates

Petroleum old Nine Mile State Number 1, we start thickening

up again to 83 feet, which on the map in Exhibit 5 is down

in Section 32. It has 88 feet, but again there was no sand

development here.

Now, the next -- our proposed well is where the cross-section goes to, and looking at our thick/thin map, or the gross isopach map, which is Exhibit 5, we are projecting that we have a chance of encountering 130 feet or more of this Morrow-clastics-to-Austin-cycle interval, which hopefully will enable us to maybe have one, two or three sandstones. Possibly you could have a sandstone as on the sandstone map of 30 feet, or you could have possibly

three sandstones of, say, 10 feet each in thickness.

The next well is another old Yates Petroleum well, the Buffalo Valley Number 1 in Section 3. This thins up again, you can see, from our proposed location. We go from 130 feet back up to 76 feet. It does have one thin Morrow sand in it, possibly two to three feet thick, with a little porosity in it and a little gas effect.

The well that probably really demonstrates this is the next well on the cross-section, which is Dominion Exploration and Production Stardust Number 3 in Section 3, and this has 93 feet. And in this gross 93-foot interval, they encountered basically 37 feet of sand, one sandstone. Very clean sand, very good porosity.

The upper half of it, as you can see, you're probably averaging about 12 to 13 to 14 percent. That's what's colored in red, the crossover or the neutron density curves.

The bottom half of it is around 8 to 9 to 10 percent.

This well is basically producing right now, and basically is producing around a half a million a day.

The last well on the cross-section is the Chi
Energy well. It is a dry hole. So we thin from the
Dominion Exploration of 93 feet to Chi Operating's well of
86 feet. They did have two Morrow sandstones in there,

each around six feet. They did run a DST. They recovered some gas, but they decided not to try to produce these wells.

But basically the cross-section gives you an idea of what I'm trying to show on the thick/thin map, and we feel that if we have -- if we encounter a thick section from the top of the Morrow clastics to the Austin cycle, we have a better chance of hopefully encountering a Morrow sand zone, possibly one as thick as the Dominion well, 37 feet thick, or have two or three of variable thickness.

- Q. Mr. Miller, is Exhibit Number 8 a summary of your geologic presentation?
 - A. Yes, it is.

- Q. Referring to this, would you just briefly summarize for the Examiner why Yates is proposing to develop this area under a unit plan.
- A. Well, we're -- Yates Petroleum Corporation is proposing to develop this under a unit plan because basically this is a very rank wildcat area to explore for Morrow sand, and we feel that forming a unit, we would have timely effort to try to develop the area and possibly be in a development scheme that if our proposed -- or the initial well, 1650 from the north and east in Section 33, hits with one thick sand or two to three thinner sands, that you could see we would be developing the trend basically

northwest of this well, trying to stay in the thicker part 1 of the map section. 2 And we believe that, again, 20 foot or better 3 would be -- of sand would be economic to drill these wells 4 for. 5 In your opinion, will approval of this Q. 6 7 Application and development of this acreage under the unit plan be in the best interest of conservation, the 8 prevention of waste and the protection of correlative 9 rights? 10 A. Yes, it will. 11 How soon does Yates plan to -- or hope to drill 12 Q. the initial test well? 13 A. We hope to drill it as soon as possible. 14 15 Q. Do you have leases expiring in this area? Α. Yes, we have two leases that go out December 1st. 16 Were Exhibits 1 through 8 prepared by you or 17 Q. 18 compiled at your direction? 19 A. Yes, they were. MR. CARR: Mr. Examiner, at this time we'd move 20 the admission into evidence of Yates Petroleum Corporation 21 Exhibits 1 through 8. 22 EXAMINER CATANACH: Exhibits 1 through 8 will be 23

MR. CARR: And that concludes my direct

24

25

admitted as evidence.

1	examination of Mr. Miller.
2	EXAMINATION
3	BY EXAMINER CATANACH:
4	Q. Mr. Miller, the last well on the cross-section,
5	did you say that was not producing?
6	A. The Chi are you the Chi Operating?
7	Q. Yes.
8	A. Yes, it's not, it's a dry hole.
9	Q. It's a dry hole. So the only one producing on
10	this cross-section is the Stardust?
11	A. Right.
12	Q. And that had what, 28 feet of sand? Is that
13	right?
14	A. Basically around 37 gross feet.
15	Q. 37 gross.
16	A. Basically, as you see, the blue symbols with the
17	holes, they perforated the whole section of the sand.
18	Q. Uh-huh. Okay, so the Nine Mile well in Section
19	32, you said, didn't have sand development, but you show 14
20	feet on your Exhibit Number 6. Is it just that that didn't
21	have enough sand? Is that what you're
22	A. Yes, that didn't have enough sand.
23	Q. So that was not productive?
24	A. Not productive, right.
25	Q. Okay, the acres in Section 20, that was

1	originally all included in the unit?
2	A. Originally, it was.
3	Q. And a portion of that was taken out because Myco
4	did not
5	A. Right.
6	Q want to participate?
7	A. Yes, it was.
8	Q. Do you know why they didn't or
9	A. Mr. Frank Yates, Jr., just did not want it in the
10	unit.
11	Q. Well, if you're using your 20-foot criteria, that
12	west half of Section 20 wouldn't necessarily be productive
13	anyway; is that your
14	A. Right.
15	Q interpretation?
16	A. Right. And basically felt since it's you
17	know, it's Myco Industries' and it's a different lease, he
18	just did not want to become part of the unit.
19	Q. Okay. Who have you not gotten approval for the
20	unit operations from?
21	A. BLM.
22	Q. Pardon me?
23	A. BLM.
24	Q. No, I mean which interest owners, what interest
25	owners have not approved? Do you know?

1	A. It's all Yates.
2	MR. CARR: Mr. Catanach, there are two interest
3	owners, Myco and Paul Slayton. Those are the only interest
4	owners that are not in, and they are also the interest
5	owners in the acreage in Section 20 that did not want to be
6	included and also owned some interest in the northwest of
7	the southwest of 21. And it is that interest that means
8	that 98 percent-plus of the working interest is committed
9	instead of 100 percent.
10	EXAMINER CATANACH: So being that that interest
11	is not committed, how is that treated, Mr. Carr?
12	MR. CARR: It will be treated just on a lease
13	basis. If it is in a spacing unit dedicated to a well, it
14	won't have its interest proportionately reduced as to a
15	unit share but will share on a lease basis.
16	Q. (By Examiner Catanach) Mr. Miller, you mentioned
17	some secondary targets. Do you want to discuss that a
18	little bit or
19	A. Secondary targets up above the Morrow, you could
20	possibly have Atoka sands.
21	Q. Now, does this unit agreement specifically say
22	the Morrow, or is it all formations?

A. It says Morrow.

23

24

MR. CARR: It says all.

THE WITNESS: It does say all. I thought it was

1 all --EXAMINER CATANACH: All formations. 2 MR. CARR: All formations, yes, sir. 3 EXAMINER CATANACH: So, Mr. Carr, are we 4 excluding that acreage in Section 21 from the unit; is that 5 what we're proposing to do? 6 MR. CARR: Well, the way it works is, it's just a 7 voluntary contract, and everybody within the unit area that 8 commits to the unit plan shares pursuant to the terms and 9 provisions of the unit plan. If an interest owner elects 10 not to participate, then they are not committed to the 11 12 agreement. This isn't like statutory unitization where we 13 14 force them in, and so they elect to not participate. then if a well is drilled, for example, on either the west 15 half or the south half of Section 21, then that tract would 16 just share on a lease but not unitized basis. Just the 17 nature of the voluntary unit. 18 EXAMINER CATANACH: But we've normally included 19 that acreage in the unit; is that --20 MR. CARR: It's not to be treated or carved out 21 of the unit. It's within the unit area. It just doesn't 22 participate under the unit plan. 23 EXAMINER CATANACH: Okay. So the total acreage 24

is 3400 acres?

25

1 MR. CARR: 3440. EXAMINER CATANACH: 3440 would include that 40-2 acre tract? 3 MR. CARR: Yes, it does. It's in, it's just a 4 normal participating tract, and that's why you have 98 5 percent of the working interest committed. That's the 6 7 approximately 2 percent of the total unit area. (By Examiner Catanach) Mr. Miller, when is the Q. 8 test well to be commenced? 9 As soon as possible. But of course we have two 10 leases that go out December 20th -- or December 1st. You 11 can see them if you look at the Exhibit 2. They are the 12 west half of Section 28 and what is all state lease in 13 14 Section 29. EXAMINER CATANACH: Okay. 15 16 EXAMINATION BY MR. JONES: 17 18 Q. Mr. Miller, the Stardust 3 Federal Number 1 --Right. 19 A. -- pretty good development of the Morrow there. 20 And the gamma ray is getting dirtier as you go up in the 21 Morrow, so it's fining upward, portion of the gamma ray --22 Yeah, fining upward, I believe it's --23 Α. What does that mean, the ocean is moving which 24 0.

25

way?

A. Oh, that means finer -- that just means finer grains of -- finer grains of sand, possibly -- maybe the water in the channel is moving a little further to the east of this well, possibly.

- Q. What about -- So you're basically going for a stratigraphic play here, not a structural --
 - A. Right.
 - Q. -- component at all?
- A. Right.

- Q. Okay. And what kind of range of reserves are you looking at?
- A. There are wells that are -- and of course they're not on this, but there's a field called Buffalo Valley south of this about four or five miles. There are wells that have made anywhere from 8 BCF to 4 BCF. So we have possibilities of getting a well, you know, possibly that good. We're looking probably more at 3- or 4-BCF wells in this area.

And frankly, this is -- taking the Morrow up this direction is basically really exploring this direction.

And as you can see from the maps, there's just not too many deep penetrations up through here. There are some wells that have penetrated the Morrow, but again, the way I've mapped it I feel that they just weren't in the heart of the channel to try to encounter productive Morrow sands.

1	Q. So what geologic risk factor would you say for
2	this well? Is it one in four or one in six or what?
3	A. You could probably around one in four, just to
4	give it a number.
5	MR. JONES: That's all of my questions.
6	EXAMINER CATANACH: Mr. Carr, on the letter from
7	the Commissioner of Public Lands, it doesn't cite the
8	acreage. Is that the same acreage that you're proposing
9	today?
10	MR. CARR: Yes, it is. When it was reviewed with
11	the Land Office, the acreage contracted out of the
12	northwest, and that portion of Section 21 was also
13	reviewed.
14	And I believe from conversations yesterday with
15	Mr. Martinez at the Land Office that he discussed this with
16	Mr. Lopez at the BLM.
17	EXAMINER CATANACH: And you'll submit that letter
18	from the BLM?
19	MR. CARR: Yes, we will.
20	EXAMINER CATANACH: Did you have any questions?
21	EXAMINER BROOKS: Under the terms of this unit
22	agreement, there is a well that's drilled in the unit that
23	includes this northwest to the southwest of 21. Would
24	the The uncommitted interests would share in costs and
25	revenues based on their percentage ownership and

1	MR. CARR: Yes.
2	EXAMINER BROOKS: the rest of it would be by
3	the people in the unit in proportion to their ownership in
4	the unit?
5	MR. CARR: Correct.
6	EXAMINER BROOKS: Because Yates owns all the
7	unit, so that wouldn't make any difference in this
8	instance?
9	MR. CARR: That's how
10	EXAMINER BROOKS: Yates and the State?
11	MR. CARR: Yes.
12	EXAMINER BROOKS: Right. Okay, thank you.
13	EXAMINER CATANACH: Anything further, Mr. Carr?
14	MR. CARR: Nothing further.
15	EXAMINER CATANACH: Okay, there being nothing
16	further in this case, Case 12,938 will be taken under
17	advisement.
18	(Thereupon, these proceedings were concluded at
19	8:56 a.m.)
20	* * *
21	I do hereby certify that the foregoing is
22	a complete record of the proceedings in the Examiner hearing of Case No. 1281.
23	heard by me on (19200.
24	Oli Conservation Division
25	

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL October 10th, 2002.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 2002

STEVEN T. BRENNER, CCR (505) 989-9317