

# NEW MEXICO OIL CONSERVATION DIVISION

**Examiner Hearing  
Santa Fe, New Mexico  
April 15, 1999 -- 8:15 A.M.**

Name	Representing	Location
W Kellohin	Kellohin + Kellohin	Santa Fe
Paul Seely	Universal Resources	Denver
Dennis Beccue	Universal Resources	Denver
John Qualls	Chi Energy	Midland
Curt Anderson	Chi Energy	Midland
JAY GABBARD	LOUIS DREYFUS NAT GAS	OKLAHOMA CITY
ALAN McNALLY	" "	"
Gray Kiehn	Gray Kiehn	Midland, Tx
Charles Wolle	Texas	Midland, Tx
James Bruce	-	SF
William St. James	Campbell, Can, Engr & Architects	Santa Fe
Lu Scarborough	ARCO	Midland
JEFF Robinson	ARCO Permian	Midland
DAN SNOW	SNOW OIL & GAS INC.	ANDREWS TX
George Scott	Ridgeway Oil Corp	ROSWELL NM

Tom Linney  
Rod Adams

SFER  
SFER

Midland  
Midland

STATE OF NEW MEXICO  
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
 OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY	)	
THE OIL CONSERVATION COMMISSION FOR THE	)	
PURPOSE OF CONSIDERING:	)	CASE NO. 12,161
	)	
APPLICATION OF RIDGEWAY ARIZONA OIL	)	
CORPORATION FOR A UNIT AGREEMENT,	)	ORIGINAL
CATRON COUNTY, NEW MEXICO	)	
	)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSION HEARING

BEFORE: LORI WROTENBERY, CHAIRMAN  
 JAMI BAILEY, COMMISSIONER  
 ROBERT LEE, COMMISSIONER

August 12th, 1999

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, LORI WROTENBERY, Chairman, on Thursday, August 12th, 1999, 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.

\* \* \*

## I N D E X

August 12th, 1999  
 Commission Hearing  
 CASE NO. 12,161

## PAGE

## STATEMENTS

By Mr. Bruce

3

By Mr. Carr

5

## REPORTER'S CERTIFICATE

8

\* \* \*

## A P P E A R A N C E S

## FOR THE COMMISSION:

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Deputy General Counsel

Energy, Minerals and Natural Resources Department

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Santa Fe, New Mexico 87505

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## FOR GARY L. KIEHNE:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A.

Suite 1 - 110 N. Guadalupe

P.O. Box 2208

Santa Fe, New Mexico 87504-2208

By: WILLIAM F. CARR

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   9:16 a.m.:

3           CHAIRMAN WROTENBERY: The next case is Case  
4   12,161. This is a *de novo* hearing on the Application of  
5   Ridgeway Arizona Oil Corporation for a unit agreement in  
6   Catron County, New Mexico. This Application is being heard  
7   *de novo* on the application of Gary L. Kiehne, I guess is  
8   how you pronounce his name, and I understand we have some  
9   brief comments from the parties on this particular case  
10  this morning?

11           MR. BRUCE: Yes, Madame Chair, my name is Jim  
12  Bruce of Santa Fe. I'm representing the Applicant,  
13  Ridgeway Arizona Oil Corporation.

14           MR. CARR: May it please the Commission, my name  
15  is William F. Carr with the Santa Fe law firm Campbell,  
16  Carr, Berge and Sheridan. We represent Gary L. Kiehne.

17           MR. BRUCE: Madame Chair, Ridgeway Arizona -- I  
18  just have a brief statement to make about this case, and I  
19  think it can then be taken under advisement.

20           Ridgeway Arizona Oil Corporation is the primary  
21  lessee of a carbon dioxide reservoir which covers  
22  approximately a quarter million acres of land straddling  
23  the Arizona/New Mexico border.

24           Ridgeway has sought to unitize this land and  
25  really desired, or desires, to form a single unit but was

1     impeded in this effort by the slowness of the Arizona State  
2     Land Department. As a result, Ridgeway proceeded to form a  
3     New Mexico unit. However, when it began that process it  
4     was initially requested by the Bureau of Land Management to  
5     include certain Arizona federal lands in the unit, certain  
6     contiguous Arizona federal lands. Ridgeway did so, and the  
7     current Application before you reflects that effort.

8             However, the Arizona BLM has now changed its mind  
9     and requests that the Arizona federal lands not be included  
10    with New Mexico lands in a unit.

11            As a result, Ridgeway requests that the Order  
12    issued by the Division be amended to cover New Mexico lands  
13    only and that the Commission approve the Cottonwood Canyon  
14    unit area as so amended.

15            The only change to the exhibits presented to the  
16    Hearing Examiner will be the land plat and lease  
17    descriptions, which were attached to the unit agreement, in  
18    order to excise the Arizona lands. These are not  
19    completely ready yet, so at this time I would request that  
20    you incorporate the record from the Division and that the  
21    record be held open for approximately ten days so that I  
22    may submit the revised exhibits, and that the Commission  
23    then take this matter under advisement and approve a solely  
24    New Mexico unit.

25            Thank you.

1 CHAIRMAN WROTENBERY: Thank you.

2 Mr. Carr?

3 MR. CARR: May it please the Commission, at the  
4 time of the Examiner hearing, Mr. Kiehne appeared and  
5 opposed the inclusion of Arizona acreage in the New Mexico  
6 unit. If the unit is now formed to include -- to actually  
7 break the reservoir on the Arizona/New Mexico line, as Mr.  
8 Bruce has proposed, Mr. Kiehne no longer has an objection  
9 to it.

10 CHAIRMAN WROTENBERY: Thank you, Mr. Carr.

11 Okay, I just want to make sure I understand Mr.  
12 Bruce. We'll be getting some additional materials --

13 MR. BRUCE: That will --

14 CHAIRMAN WROTENBERY: -- within the next ten days  
15 that will amend the unit agreement to exclude the --

16 MR. BRUCE: -- Arizona lands --

17 CHAIRMAN WROTENBERY: -- Arizona lands.

18 MR. BRUCE: -- and will contain only New Mexico  
19 state, federal and fee lands.

20 CHAIRMAN WROTENBERY: Okay. And at that point --  
21 Does this need to come back to the Commission, or is this  
22 something that we can handle at the Division level at that  
23 point, amend the unit agreement?

24 MS. HEBERT: It's on *de novo* to the Commission,  
25 so you could even -- you could either withdraw your *de novo*

1 request and have it amended at the Division level --

2 MR. BRUCE: Well, it's Bill's *de novo* request.

3 MR. CARR: If the unit is formed at the boundary  
4 of the state line, we have no objection. We would withdraw  
5 our request for *de novo* hearing if that will facilitate it.  
6 We just don't want to waive our right if all of a sudden we  
7 have a unit which doesn't break right on the --

8 CHAIRMAN WROTENBERY: I understand, okay. So if  
9 we get those materials excluding the Arizona properties,  
10 then I think at that point we could probably dismiss the *de*  
11 *novo* Application and then --

12 MR. CARR: And when I get --

13 CHAIRMAN WROTENBERY: -- amend the order at the  
14 Division level, and get it done within a matter of a couple  
15 weeks, probably.

16 MR. CARR: And when I receive a proposal with the  
17 new boundary, I'll be happy to immediately withdraw the *de*  
18 *novo* Application.

19 CHAIRMAN WROTENBERY: Thank you. Thank you very  
20 much.

21 Mr. Bruce -- Oh, I'm sorry.

22 COMMISSIONER BAILEY: Do you intend to get  
23 preliminary approval from the State Land Office --

24 MR. BRUCE: Yes, we do.

25 COMMISSIONER BAILEY: -- before you go to the



1 Division --

2 MR. BRUCE: Yes, we do.

3 COMMISSIONER BAILEY: -- the Oil Conservation  
4 Division?

5 MR. BRUCE: We have been, or -- Don Riggs of  
6 Ridgeway, Arizona, has been in contact with Pete Martinez  
7 of the State Land Office. I will send over a letter today.

8 COMMISSIONER BAILEY: Thank you.

9 CHAIRMAN WROTENBERY: Thank you, I apologize.

10 Yeah, all of our orders are -- yeah, they're to  
11 reflect that need.

12 Okay, thank you.

13 (Thereupon, these proceedings were concluded at  
14 9:21 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 Commission 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 August 22nd, 1999.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 2002

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. 12,161

APPLICATION OF RIDGEWAY ARIZONA OIL )  
CORPORATION FOR A UNIT AGREEMENT, )  
CATRON COUNTY, NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

April 15, 1999

Santa Fe, New Mexico

OIL CONSERVATION DIV.  
99 APR 29 AM 8:35

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, April 15th, 1999, 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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April 15th, 1999  
 Examiner Hearing  
 CASE NO. 12,161

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\* \* \*

## A P P E A R A N C E S

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Santa Fe, New Mexico 87504-2208  
By: WILLIAM F. CARR

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 9:35 a.m.:

3 EXAMINER STOGNER: This hearing will come to  
4 order again. I'll call now Case Number 12,161.

5 MR. CARROLL: Application of Ridgeway Arizona Oil  
6 Corporation for a unit agreement, Catron County, New  
7 Mexico.

8 EXAMINER STOGNER: Call for appearances.

9 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe  
10 representing the Applicant. I have two witnesses to be  
11 sworn.

12 EXAMINER STOGNER: Any other appearances?

13 MR. CARR: May it please the Examiner, my name is  
14 William F. Carr with the Santa Fe law firm Campbell, Carr,  
15 Berge and Sheridan. We represent Gary Kiehne in this  
16 matter, and I do not have a witness.

17 EXAMINER STOGNER: Will the witnesses please  
18 stand to be sworn in?

19 (Thereupon, the witnesses were sworn.)

20 EXAMINER STOGNER: Gentlemen, are there need for  
21 opening remarks?

22 MR. CARROLL: We've got a motion.

23 EXAMINER STOGNER: There is a motion, I  
24 understand.

25 MR. CARR: May it please the Examiner, we filed a

1 motion seeking a six-week continuance to afford Mr. Kiehne  
2 additional time to prepare. By virtue of the fact that  
3 we're all here, it seems to me that it is probably  
4 appropriate to go forward with the hearing. If in the  
5 course of the testimony it appears that there is a need to  
6 request a further continuance, we would reserve the right  
7 to do so at the end of the hearing. But at this point in  
8 time it seems to me with everyone here we should go  
9 forward.

10 MR. BRUCE: I don't have a need for an opening  
11 statement, Mr. Examiner.

12 MR. CARR: Nor do I.

13 EXAMINER STOGNER: Mr. Bruce?

14 JOHN M. RICHARDSON,  
15 the witness herein, after having been first duly sworn upon  
16 his oath, was examined and testified as follows:

17 DIRECT EXAMINATION

18 BY MR. BRUCE:

19 Q. Will you please state your name and where you  
20 reside for the Examiner?

21 A. My name is John Michael Richardson, and I reside  
22 in Stanley, New Mexico.

23 Q. And what is your occupation?

24 A. I'm an independent petroleum landman.

25 Q. What is your relationship to the Applicant?



1           A.    I'm a contract landman for Ridgeway Arizona Oil  
2 Corporation.

3           Q.    Have you previously testified before the  
4 Division?

5           A.    No, I have not.

6           Q.    Would you describe your educational and  
7 employment history for the Examiner?

8           A.    I attended the College of the Ozarks in Point  
9 Lookout, Missouri, for three and a half years, where I was  
10 an agribusiness major. I've had about 22 years' experience  
11 as an independent landman, and I became a certified landman  
12 in July of 1986.

13          Q.    Are you familiar with the land matters involved  
14 in this Application?

15          A.    Yes, I am.

16          Q.    And in fact, have you done the vast bulk of the  
17 land work for Ridgeway Arizona Oil Corporation on this  
18 particular project?

19          A.    Yes, I have.

20               MR. BRUCE: Mr. Examiner, I'd tender Mr.  
21 Richardson as an expert petroleum landman.

22               EXAMINER STOGNER: Any objection?

23               MR. CARR: No objection.

24               EXAMINER STOGNER: Mr. Richardson is so  
25 qualified.

1 Q. (By Mr. Bruce) Briefly, Mr. Richardson, what  
2 does the Applicant seek in this case?

3 A. Ridgeway Arizona is looking for approval of an  
4 exploratory unit that encompasses 109,309.33 acres of  
5 state, federal and fee lands, situated in Catron County,  
6 New Mexico, and Apache County, Arizona.

7 Q. What is Exhibit 1?

8 A. Exhibit 1 is the unit agreement for the  
9 development of the Cottonwood Canyon Carbon Dioxide Gas  
10 Unit.

11 Q. What forms were used as the basis of this  
12 agreement?

13 A. We used exploratory forms used by the  
14 Commissioner of Public Lands. We had one provision that  
15 was taken from the Bravo Dome CO<sub>2</sub> unit agreement.

16 Q. And what provision was from the Bravo Dome  
17 agreement?

18 A. That would be under Section 15, I think it is.  
19 That concerns the delay rentals. As this project is in a  
20 pretty remote area with no available in-place pipelines, it  
21 will be several years before we start production, or they  
22 start selling gas. And because of this, the rentals will  
23 be increased every year until the sales of gas begin.

24 Q. Was this provision included at the request of the  
25 New Mexico Land Commissioner?

1           A.    Yes, sir, it was.

2           Q.    And how will production be allocated under this  
3 agreement?

4           A.    As in the exploratory unit agreements, it will be  
5 solely on an acreage basis. It will be an undivided unit,  
6 where each tract will participate in production from the  
7 date of the first sale of gas, and each tract --  
8 participation will be based on each tract's acreage divided  
9 by the total number of acres of the unit.

10          Q.    There won't be any participating areas in this  
11 unit?

12          A.    No, sir, there will not.

13          Q.    Okay.

14                And does this agreement provide for a contraction  
15 of the unit also?

16          A.    Yes, sir, I think it's Section 2 (e) provides for  
17 the contraction of the unit, and the participation will be  
18 recalculated after the contraction.

19          Q.    Are there any other special provisions in this  
20 agreement?

21          A.    I think it is Section 14 that provides for the  
22 use of carbon dioxide within the State of New Mexico, and  
23 that was included at the Commissioners' request also.

24          Q.    Okay. What substances are being unitized under  
25 this agreement?

1           A.    This agreement provides primarily for the  
2           unitization of the CO<sub>2</sub>, but it also includes other  
3           substances that are produced in association with carbon  
4           dioxide.

5           Q.    Are all formations unitized?

6           A.    Yes, so long as they produce unitized substances.

7           Q.    Okay. Briefly, what is Exhibit 2?

8           A.    Exhibit 2 is a legal description of the unit  
9           area.

10          Q.    Okay. Now, referring back to the unit agreement  
11          itself, Exhibit 1, what is Exhibit A to the unit agreement?

12          A.    Exhibit A to the unit agreement is the unit plat.  
13          It shows the unit area

14          Q.    Now, this land -- the land is located primarily  
15          in New Mexico, but some in Arizona. Why does the unit  
16          include lands in Arizona?

17          A.    The -- Initially, the structure that this unit is  
18          based on encompasses lands on both sides of the state line,  
19          in Arizona and New Mexico, and if memory serves, I think  
20          there's approximately 155,000 acres that we consider  
21          productive but are not within the proposed unit.

22          Q.    And those 155,000 acres are in Arizona?

23          A.    The State of Arizona.

24          Q.    Now, let's stop for a moment and maybe discuss a  
25          little bit of the project's background. Could please give

1 the Examiner a brief history of the proposed unit area?

2 A. Ridgeway started acquiring leases back in April  
3 of 1994. To date they have drilled 11 wells in Arizona and  
4 six wells in New Mexico, at the approximate cost of \$26  
5 million. The play was initially an oil play, but they  
6 discovered CO<sub>2</sub> instead.

7 That being the case, finding gas instead of oil,  
8 with no available pipelines in place, Ridgeway wanted to go  
9 ahead and unitize this area, and they felt that unitization  
10 was necessary to form a block of acreage big enough to  
11 support the construction of a \$300-million pipeline and an  
12 \$85-million gas processing plant.

13 Q. Okay. Now, you mentioned the \$26 million figure  
14 that's been expended to date. That includes all costs  
15 related to the unit, doesn't it?

16 A. It's my understanding that it covers the  
17 environmental impact study, lease cost, rentals, drilling  
18 costs, contract labor, any and all of it.

19 Q. Okay. Did Ridgeway initially seek to form one  
20 unit covering all lands within this structure located in  
21 both states?

22 A. Yes, sir, they did. And I think we have as  
23 Exhibits 3A and 3B that are submitted, in the packets,  
24 there are letters to the BLM and the Commissioner  
25 requesting approval of that.

1 Q. And that was done almost a year ago, wasn't it?

2 A. That is correct.

3 Q. Okay. And at that time, the proposed unit  
4 covered what? About 300,000 acres?

5 A. I think it was 314,000-plus, if memory serves.

6 Q. Okay. What happened to the proposal to unitize  
7 all of the lands in both states under one unit?

8 A. The proposal was submitted to the State of  
9 Arizona, Commissioner of Public Lands. They actually --  
10 The State of Arizona actually has approximately 122,000  
11 state trust lands within that initial unit. We had several  
12 meetings with those folks. They met with the BLM and the  
13 Commissioner of Public Lands in New Mexico. And although  
14 we made a formal proposal to them, we never heard back from  
15 them on that proposal.

16 We met in -- I think it was January of this year,  
17 this last meeting that we had, and the State of Arizona  
18 told us that they would not consider a single unit that  
19 included State of Arizona lands.

20 Q. What is the status of an Arizona unit at this  
21 point?

22 A. I have no idea.

23 Q. Still haven't heard anything back from them  
24 formally?

25 A. No, sir, not formally.

1 Q. What happened after the January meeting?

2 A. We were approached by Mr. Paul Buff with the  
3 Arizona BLM, and he requested that -- we were considering a  
4 two-state unit -- that we would include all of the Arizona  
5 federal lands within that unit, as well as the New Mexico.

6 And after we got that request, we met with Pete  
7 Martinez with the Commissioner's Office here in New Mexico,  
8 and Armando Lopez with the New Mexico BLM, and this  
9 proposal is a result of that meeting.

10 Q. Okay. Now, referring back to the unit agreement,  
11 what are Exhibits B and C to the unit agreement?

12 A. Exhibit B is a list that shows the tracts, the  
13 leases and the owners of all the tracts in the proposed  
14 unit. And Exhibit C shows the interest of each one of  
15 those tracts in the proposed unit.

16 Q. What percentage of the land in the unit is  
17 federal, state and fee?

18 A. I think the fee is pretty close to 1.4 percent.  
19 The state lands -- New Mexico state lands are, I think,  
20 17.4. And the federal lands are 81.2 percent.

21 Q. Okay, of the 81.2 percent federal lands, how is  
22 that split between Arizona and New Mexico?

23 A. I think 17.5 percent are Arizona federal lands,  
24 and 63.7 percent is New Mexico federal lands.

25 Q. Now, has Exhibit 1, this proposal we're here for

1 today, been submitted to the BLM and to the New Mexico Land  
2 Commissioner for preliminary approval?

3 A. Yes, it has.

4 Q. And has Ridgeway been informed by Armando Lopez  
5 of the BLM that we will be getting what they call a letter  
6 of designation shortly?

7 A. Yes, I got voice mail from him two days ago  
8 saying that they would have that filed before this meeting.

9 Q. Okay, but we haven't seen it?

10 A. No, we have not.

11 Q. Will you file that with the Oil Conservation  
12 Division as soon as we get it?

13 A. Yes.

14 Q. And similarly, has Ridgeway been informed by Pete  
15 Martinez of the State Land Office that as soon as the BLM  
16 gives its preliminary approval he will give the preliminary  
17 approval for the State of New Mexico?

18 A. Yes, we have.

19 Q. Okay, and again, will that letter be submitted to  
20 the Oil Conservation Division as soon as we receive it?

21 A. Yes, sir, it will.

22 Q. What are the working interests in the unit? And  
23 I refer you to Exhibit 4.

24 A. Okay, the working interest owners and percentages  
25 in this unit, Ridgeway Arizona Oil Corporation owns



1 approximately 93.74955 percent. Gary L. Kiehne, 4.7669  
2 percent -- Do you want me to go down the list?

3 Q. Yeah, the rest are pretty small interest  
4 owners --

5 A. Yes, they are.

6 Q. -- are they not?

7 In particular, the United States is listed as a  
8 working interest owner. Could you explain the reason for  
9 that?

10 A. There's a federal tract that the BLM would not  
11 lease to us, because it's the site of an aviation  
12 navigational facility, and they are prevented from leasing  
13 that.

14 Q. Okay. And the other working interest owners you  
15 list are fee owners; is that -- No, are they fee owners?  
16 Excuse me?

17 A. They are with the exception of the Blanco  
18 Company, who owns, I think, 318.68 acres of the federal  
19 lease, if memory serves me correctly.

20 Q. And Gary Kiehne is a working interest owner under  
21 federal leases also; is that --

22 A. That is correct.

23 Q. Okay. Have the working interest owners in the  
24 unit, other than the BLM, been offered the chance to join  
25 in the unit?

1           A.    Yes, they have. Submitted as Exhibit 5 shows the  
2 letters that I sent to the working interest owners. These  
3 included ratification and joinder, a geological report, a  
4 unit agreement and a joint operating agreement.

5           Q.    Have you received any signed ratifications?

6           A.    Only from Ridgeway.

7           Q.    From the working interest owner?

8           A.    That is correct.

9           Q.    Has Gary Kiehne been aware of Ridgeway's attempts  
10 to unitize the acreage in New Mexico and Arizona?

11          A.    Yes, sir, they were aware of our initial proposal  
12 and have attended several meetings with the Ridgeway people  
13 and the Arizona folks.

14          Q.    And the BLM has been present at some of these  
15 meetings also?

16          A.    That is correct. Maybe not all of them, but some  
17 of them. I haven't been present at all of these meetings.

18          Q.    What is Exhibit 6?

19          A.    Exhibit 6 is an AAPL Form 610-1982 Model Form  
20 Operating Agreement that has some revisions to it.

21          Q.    And this is what Ridgeway proposes to be the  
22 operating agreement in the event other working interest  
23 owners join in the unit?

24          A.    That is correct.

25          Q.    Have the fee royalty owners and the overriding

1 royalty owners been offered the chance to join in the unit?

2 A. Yes, sir, they have. Exhibit 7 is a stack of  
3 those letters that I sent to the royalty owners and  
4 override royalty interest owners.

5 Q. Okay. And have any of these fee royalty owners  
6 or overriding royalty owners elected to ratify the unit?

7 A. Yes, Mr. George Scott, the only overriding  
8 interest owner, has ratified the unit, as well as Gregoria  
9 Orona, Charles Orona and a Joaquin Orona.

10 Q. Okay. And is Exhibit 8A a package of the  
11 ratifications, including -- it includes ratified and -- I  
12 mean, excuse me, executed and unexecuted?

13 A. Yes, it does.

14 Q. And what is Exhibit 8B?

15 A. 8B is a tally of those ratifications that have  
16 been received by my office to date.

17 Q. Okay, counting what's been received to date, what  
18 percentage -- separately, what percentage of the working  
19 interest and what percentage of the royalty and overriding  
20 royalty ownership has agreed to the unit, assuming we get  
21 the BLM and State Land Office approval?

22 A. The working interest ownership is at 93.74955  
23 percent. The royalty interest, if you include the BLM and  
24 the state lands, is at 99.989405. And the overriding  
25 royalty interest is 100 percent.

1 Q. Is this a voluntary unit?

2 A. Yes, sir, it is. No one can be forced to join.

3 Q. Okay. Now, you did mention these certain  
4 percentages. Are these percentages sufficient to obtain  
5 final approval of the unit from the BLM and the  
6 Commissioner?

7 A. It is my understanding that they are.

8 Q. And were all private interest owners notified of  
9 the date of this hearing?

10 A. That is correct.

11 Q. And is Exhibit 9 a package of your notice letters  
12 to the various private interest owners?

13 A. Yes, sir, that is correct.

14 Q. In your opinion, is the granting of this  
15 Application in the interests of conservation and the  
16 prevention of waste?

17 A. Yes, it is.

18 Q. And were Exhibits 1 through 9 prepared by you,  
19 under your direction, or compiled from company business  
20 records?

21 A. Yes, they were.

22 MR. BRUCE: Mr. Examiner, I'd move the admission  
23 of Ridgeway's Exhibits 1 through 9.

24 EXAMINER STOGNER: Exhibits 1 --

25 MR. CARR: No objection.

1 EXAMINER STOGNER: I'm sorry, any objection?

2 MR. CARR: No objection.

3 EXAMINER STOGNER: Exhibits 1 through 9 will be  
4 admitted into evidence.

5 Before I let Mr. Carr cross-examine -- Do you  
6 have one more?

7 MR. BRUCE: I have one final question that I  
8 forgot to ask, Mr. Examiner.

9 Q. (By Mr. Bruce) Mr. Richardson, you saw a letter  
10 this morning from Mike Rice of the Arizona State Land --

11 A. Yes, sir.

12 Q. -- Department, expressing some concerns about  
13 having Arizona State trust land included in this unit?

14 A. Yes.

15 Q. Is there any Arizona State trust land included in  
16 this proposed unit?

17 A. No, sir, there is not.

18 MR. BRUCE: Okay, thank you, Mr. Examiner.

19 EXAMINER STOGNER: Before I allow cross-  
20 examination, I need one thing because I heard something, I  
21 want to make sure I got it right.

22 Whenever you asked something about was this a  
23 voluntary unit, your response was, nobody can be force-  
24 pooled?

25 THE WITNESS: Nobody can be forced to participate

1 in this unit.

2 EXAMINER STOGNER: Okay, that's all I have.

3 Okay, Mr. Carr, your witness.

4 CROSS-EXAMINATION

5 BY MR. CARR:

6 Q. Mr. Richardson --

7 A. Yes, sir.

8 Q. -- I believe you testified that the Arizona unit  
9 would contain approximately 155,000 acres.

10 A. That is -- That's not all State of Arizona lands,  
11 but that is 155,000 acres that was included in the larger  
12 unit, and if you take what we are proposing the Cottonwood  
13 Canyon Unit to be and subtract that from the large unit,  
14 that's how I arrived at the 155,000.

15 Q. That's an approximate size, what that unit would  
16 be?

17 A. Yes, sir.

18 Q. My question, then, is, how many acres are going  
19 to be in this unit, the New Mexico unit, or the unit we're  
20 discussing today?

21 A. 109,309.33 acres, if memory serves me correct.

22 Q. Okay. If I understood your testimony, you  
23 indicated that the BLM wanted all the federal land included  
24 in the unit we're discussing today?

25 A. Yes, sir, they discussed all the federal land

1 that was contiguous.

2 Q. And that's my question. There are additional  
3 federal lands that will be included in the Arizona unit,  
4 but they're not contiguous with the federal tracts in the  
5 unit we're discussing at this time?

6 A. That is correct. That was the call of Mr.  
7 Armando Lopez.

8 Q. What substances are being unitized, other than  
9 carbon dioxide? Would helium be included, do you know?

10 A. Yes, sir, it would be. We don't --

11 Q. Is helium covered by federal leases?

12 A. No, sir, it is not.

13 Q. But you're intending to unitize that?

14 A. Yes, we have made application to the BLM in  
15 Amarillo, and they are waiting on our EIS to give us  
16 final -- approval of their final word.

17 Q. When did you meet with the Commissioner of Public  
18 Lands? Do you know what date that was?

19 A. We had several meetings. I'd have to go back and  
20 look on my calendar.

21 Q. How recently have you talked to -- met with Pete  
22 Martinez and the Land Commissioner's staff concerning this  
23 particular unit proposal?

24 A. We met with Pete probably about two or three  
25 weeks ago. He had some revisions that he needed made. We

1 had some errors in some of our documents that we submitted,  
2 and we brought those to him.

3 Q. And the boundaries that we're discussing for the  
4 unit here today were reviewed with him at that time?

5 A. Yes, in fact, what I submitted to him was a  
6 structure map that was revised.

7 Q. Is that Mr. Scott's structure map?

8 A. That is correct.

9 Q. When was this particular boundary, this division  
10 of the reservoir, decided upon by Ridgeway?

11 A. It was in a meeting subsequent to the January,  
12 1999, meeting where Mr. Paul Buff had requested that we  
13 form this unit in this manner.

14 Q. If I look at the boundary -- and I can pursue  
15 this with Mr. Scott if it's appropriate, but the outer  
16 boundary of the unit has got a geological basis; is that  
17 correct?

18 A. That is correct.

19 Q. But the division down the center, in close  
20 proximity to the state line, is really based on ownership  
21 questions; is that not right?

22 A. Well, we were instructed by the State of Arizona  
23 and Mr. Kiehne to cut it off at the state line because they  
24 were under the impression that there was no CO<sub>2</sub> in New  
25 Mexico.



1 Q. And the state line -- You did that with the  
2 exception of federal tracts that you have put in at the  
3 request of the BLM?

4 A. That is correct.

5 Q. But there isn't a geological basis. The state  
6 line is the real reason you've divided it approximately  
7 where you have?

8 A. Yes, that's -- We were instructed to do that.

9 Q. Now, your responsibility was providing notice to  
10 affected interest owners of this particular Application; is  
11 that correct?

12 A. Yes, sir.

13 Q. You sent a letter to Mr. Kiehne dated March 26th,  
14 1999, and you transmitted with that letter copies of the  
15 Application and some plats and the unit agreement?

16 A. Yes, sir, I did.

17 Q. Are you familiar with the unit agreement?

18 A. Yes, sir.

19 Q. In this letter you stated, Ridgeway's records  
20 show that you are an interest owner in the proposed unit.  
21 Joinder in the unit is voluntary, and thus approval of the  
22 unit by the Division will not affect your interest.

23 Is it your understanding that approval of this  
24 unit cannot affect Mr. Kiehne's interest?

25 A. Could you state that again?

1           Q.    Your letter states that this Division's approval  
2 of the unit by the Division will not affect Mr. Kiehne's  
3 interest.  Could you explain that statement to me?

4           A.    Well, it's strictly voluntary.  If Mr. Kiehne  
5 wanted to participate in the unit, he could do so.  But if  
6 he decided not to and the unit was still approved, he could  
7 develop his lands by himself, on his own free will.

8           Q.    If Mr. Kiehne -- If this is approved and Mr.  
9 Kiehne owns some tracts right on the New Mexico-Arizona  
10 border --

11          A.    Yes, sir.

12          Q.    -- his choices are either to join this unit or  
13 develop his lands; is that right?

14          A.    That is my understanding.

15          Q.    And if he agreed with the State of Arizona that  
16 there was no CO<sub>2</sub> in New Mexico, his choice would be not to  
17 put his lands in the Arizona unit, but he has to go with  
18 the New Mexico unit; isn't that the choice you're giving  
19 him?

20          A.    He does not have to participate in the unit.  I  
21 mean, it's a voluntary unit.

22          Q.    If this is once approved --

23          A.    Yes, sir.

24          Q.    -- could he then participate in the Arizona unit?

25          A.    I think Mr. Bruce, when he answered, allowed him

1 the option to do that. Did you not, Mr. Bruce?

2 Q. My question is, once this unit boundary is  
3 established here --

4 A. Yes, sir.

5 Q. Isn't Mr. Kiehne's option to join this unit or go  
6 it alone?

7 A. Yes, sir.

8 Q. And once these boundaries are approved, he would  
9 not have an option to put his acreage on the Arizona border  
10 and commit it to the Arizona unit; isn't that right?

11 A. That is my understanding, yes, sir.

12 Q. And if he agreed with the State of Arizona that  
13 there is nothing on the New Mexico side, his tracts get  
14 thrown in with the acreage that they don't think is  
15 productive; isn't that right? I mean, he has one choice,  
16 go with the New Mexico unit, correct?

17 A. That is my understanding, yes, sir.

18 Q. And if there's nothing over there on a straight  
19 acreage basis, he gets his share of nothing; isn't that  
20 right? If that's true?

21 A. Well, if that's true.

22 Q. Okay. And if it's true that there's CO<sub>2</sub> on the  
23 Arizona side and he has some under his tract, with a  
24 straight-acreage allocation in this boundary he doesn't get  
25 to share in the CO<sub>2</sub> that's in the reservoir on the Arizona

1 side; isn't that right?

2 A. Unless he develops his tracts independently.

3 Q. Why did you decide you were going to form a unit,  
4 instead of just developing it on an individual tract basis,  
5 since it seems like you're the only one who's ratified this  
6 unit?

7 A. Well, we did it simply because we wanted to  
8 assemble a block of acreage that would support the reserves  
9 for the construction of the pipeline and the gas-processing  
10 plant.

11 Q. And you've got a lot of costs up front you have  
12 to be able to justify when the reserves behind it fade out;  
13 isn't that fair to say?

14 A. Yes, sir.

15 Q. Now, if Mr. Kiehne was to go it alone, would he  
16 have to construct his own dehydration facility?

17 A. Well, that was brought up in the meeting. You  
18 know, if that's what he wants to do, he can do that. If he  
19 wanted to contract with Ridgeway to handle his gas, he  
20 could do that also.

21 Q. Would Ridgeway commit here and now to take his  
22 gas and gather it and treat it?

23 A. I cannot answer that, Mr. Carr.

24 Q. So you might and you might not?

25 A. That's not left up to me. I'm just a contract

1 landman.

2 Q. If Ridgeway decided not to do that, Mr. Kiehne  
3 would have property that he could develop on his own, but  
4 he couldn't economically do anything with it; isn't that  
5 fair to say?

6 A. That would be fair to say.

7 Q. So this is -- if you're left -- If you owned  
8 these properties and you were left in a situation where  
9 your choice was to either commit it to a unit which looks  
10 marginally productive, drill it on your own and not be able  
11 to afford to do anything with it, wouldn't you think this  
12 unit plan would affect that interest?

13 A. Well, I don't know. I can't get in Mr. Kiehne's  
14 mind. I mean --

15 Q. If you owned a tract on the Arizona border, on a  
16 stand-alone basis, and if you were going to drill a well on  
17 it, you had to also build a processing facility and a  
18 gathering line, you would agree with me that would affect  
19 your economics and your decision to go forward, if you were  
20 the one --

21 A. Yes, sir.

22 Q. -- isn't that correct? And that was one interest  
23 -- one option you had. And the other was to have it put by  
24 someone else with a bunch of marginally productive land,  
25 you wouldn't have a very good set of options, would you?

1           A.   Well, that's assuming that they were marginally  
2     productive.

3           Q.   But if that's what you believe, wouldn't you  
4     think that would affect your interest?

5           A.   Well, I guess you would have to make that  
6     assumption, but I'm sure Mr. Kiehne was aware of that  
7     before he got into this.

8           Q.   Isn't -- Was aware of what?

9           A.   Aware of the economics and how all this works.

10          Q.   Was he aware you were going to divide it this way  
11     before he got into this?

12          A.   Well, we did this at his instruction.

13          Q.   You put these Arizona tracts in the New Mexico  
14     unit at his instruction?

15          A.   No.

16          Q.   Is that your testimony?

17          A.   No, we went with a two-unit scenario instead of a  
18     large-unit scenario because of his insistence and the State  
19     of Arizona's. The Arizona BLM insisted that we put his  
20     land in this unit.

21          Q.   But Mr. Kiehne was not aware when he was  
22     advocating two units, that you were aware of, that his  
23     acreage was going to put his Arizona acreage into a New  
24     Mexico unit; isn't that right? He couldn't have --

25          A.   Well, I wasn't either.

1 Q. When we look at the tracts on the New Mexico-  
2 Arizona border and we start coming down these, down the  
3 center, we go to F-09, who -- Does Mr. Kiehne own anything  
4 in that one, do you know?

5 A. I would have to look at the exhibits, really, to  
6 see. F-09, yes, sir, that's a federal lease that Mr.  
7 Kiehne owns.

8 Q. Okay, what about F-08?

9 A. Yes, sir, that's a federal lease that Mr. Kiehne  
10 owns.

11 Q. So along the state line you put Mr. Kiehne's  
12 leases in the New Mexico unit; is that right?

13 A. Yes, sir.

14 Q. Where is the heart of this reservoir? Do you  
15 know, or should I pursue this with Mr. Scott?

16 A. It would probably be better if you pursued that  
17 with Mr. Scott.

18 Q. Do you know where you're initially going to  
19 develop the reservoir?

20 A. No, sir, I don't.

21 Q. Do you know where a treating or a processing  
22 facility might be located?

23 A. I have an idea where one or two sites are being  
24 considered, but that is not left up to me.

25 Q. Okay, the two that you know about, are either of

1     them in New Mexico?

2             A.     One of them is, yes, sir.

3             Q.     Do you know what the timing would be on that?

4             A.     No, sir, I don't.

5             Q.     Does Mr. Scott know that?

6             A.     I don't know. You'd have to ask Mr. Scott.

7             Q.     If we go to the unit agreement that's your

8     Exhibit Number 1, go to page 10 --

9             A.     Yes, sir.

10            Q.     -- the provision on royalty settlement, it talks  
11     about being able to take in-kind. That is a provision that  
12     only applies to royalty owners; is that right?

13            A.     I'd have to read it again, Mr. Carr.

14            Q.     I guess my question -- Do you know if a working  
15     interest owners could take his share of unit proceeds in-  
16     kind?

17                    Mr. Richardson, if you don't know, I'm not trying  
18     to make you --

19            A.     Well, I'll have to answer I'm not certain.

20            Q.     If we go to page 11 of this agreement, it talks  
21     about how -- the paragraph before subparagraph (a) on page  
22     11, it talks about the parties recognizing that it's the  
23     responsibility of the working interest owners to place  
24     carbon dioxide in a marketable condition, free of costs to  
25     the royalty owners. And then it goes on in paragraph (a)



1 and talks about market value at the unit boundary.

2 A. Uh-huh.

3 Q. So before you pay royalty, is it my understanding  
4 that Ridgeway and the working interest owners will pay for  
5 dehydration and gathering and compression and those kinds  
6 of charges?

7 A. That's my understanding, yes, sir.

8 Q. Okay. If we go over to page 19, it talks about  
9 non-joinder and subsequent joinder. Are you familiar with  
10 that paragraph?

11 A. Vaguely, yes, sir.

12 Q. If I read this, is it true that if a working  
13 interest owner doesn't commit the tract to the unit, then  
14 the royalty interest is not in the unit; is that correct?

15 A. That is my understanding, yes, sir.

16 Q. So if Mr. Kiehne wouldn't commit the Tracts F-08  
17 and F-09 to the unit, the federal government wouldn't get  
18 any royalty off his tracts; is that how this works?

19 A. That is my understanding, if it weren't permitted  
20 and he didn't develop them on his own.

21 Q. Do you know if -- I guess the Arizona unit is  
22 going to be production-allocated on a straight acreage  
23 basis as well?

24 A. Mr. Carr, I couldn't answer that. We talked to  
25 the State of Arizona about a straight acreage-basis and a

1 participating area. They were not happy with the  
2 participating area. So I couldn't tell you with any degree  
3 of certainty where the State of Arizona is going to go.

4 Q. Do you have any idea what the time frame is on  
5 the Arizona unit?

6 A. No, sir, I do not.

7 MR. CARR: That's all I have. Thank you.

8 EXAMINER STOGNER: Thank you, Mr. Carr.

9 Mr. Bruce?

10 MR. BRUCE: A couple of follow-up questions I  
11 want to clarify.

12 REDIRECT EXAMINATION

13 BY MR. BRUCE:

14 Q. Mr. Richardson, after the January, 1999, meeting  
15 over in Phoenix with the Arizona Land Commissioner and  
16 Armando Lopez of the BLM and Mr. Kiehne, Ridgeway came back  
17 and was going to form solely a New Mexico unit; is that  
18 correct?

19 A. That is correct.

20 Q. And it was the Arizona BLM that requested that to  
21 the extent possible federal lands in Arizona be included  
22 with the New Mexico unit?

23 A. That is correct.

24 Q. Now, if -- Follow-up question. If the CO<sub>2</sub>  
25 magically disappears at the Arizona-New Mexico State Line,

1 this unit agreement provides for unit contraction, does it  
2 not?

3 A. Yes, it does.

4 Q. Lands that are not productive after a period of  
5 five or ten years, depending on what happens, would be  
6 automatically contracted from the unit?

7 A. That is correct. I think that's Section 2 (e).

8 Q. Okay. So that would affect future working  
9 interest ownership in the unit, would it not?

10 A. Yes, it would.

11 Q. And royalty interest ownership?

12 A. That is correct.

13 Q. And this unit may well not even produce anything  
14 for three to five years from now; is that correct?

15 A. That is correct.

16 Q. During which time there would be additional  
17 ongoing development, so by that five-year time period there  
18 would be a good idea of what lands are productive in the  
19 unit?

20 A. Yes, sir.

21 Q. Another purpose for unitization, Mr. Richardson,  
22 is it not, is to avoid the lease expirations that are  
23 upcoming on a number of leases in this area?

24 A. That is correct.

25 Q. Unitizing them would reserve the leases and allow

1 orderly development of the unit?

2 A. That is correct.

3 Q. Now, Mr. Carr asked you a question about certain  
4 deductions, processing deductions.

5 At least with respect to the federal leases,  
6 there are limitations in the federal regulations on what  
7 can be deducted before royalties are determined; is that  
8 correct?

9 A. That's correct.

10 Q. So regardless of what the unit agreement may say,  
11 there are also the superseding federal regulations?

12 A. Yes, sir.

13 Q. Has Gary Kiehne drilled any wells on his acreage?

14 A. Not to my knowledge, no, sir.

15 MR. BRUCE: Okay. I have one final clarification  
16 point for Mr. Carr. The taking of production in-kind is in  
17 Article VI.C of the unit operating agreement.

18 And then I don't know if we need to address it  
19 now, Mr. Examiner. Any question about a processing  
20 agreement with Ridgeway could be addressed by Don Riggs, an  
21 officer of Ridgeway Arizona who is here today.

22 That's all I have, Mr. Examiner.

23 EXAMINATION

24 BY MR. CARROLL:

25 Q. I know you stated this earlier. What are the

1 costs, your estimated costs of building the pipeline and  
2 the processing plant?

3 A. I am told that the cost of the pipeline is  
4 estimated at \$300 million at \$85 million.

5 Q. And that pipeline will go where?

6 A. I am not sure at this point.

7 Ridgeway has been in negotiations with several  
8 people.

9 You might talk to Mr. Riggs further about that.

10 Q. And the Arizona unit, that's 155,000 acres?

11 A. That was 155,000 acres additional to the 109,000.

12 Q. Right.

13 A. Yes, sir.

14 Q. And how is that split, ownership?

15 A. I didn't bring that with me. I might be able to  
16 find it in my --

17 Q. Well, can you just estimate?

18 A. -- in the briefcase. The majority of it was  
19 state lands, federal lands and fee lands, in that order.

20 Q. But it includes all three?

21 A. Yes, it does.

22 Q. And then what Arizona agency is going to approve  
23 that unit agreement?

24 A. I assume it would be the Arizona OCD, or the  
25 Geological Survey, as they call it.

1 Q. Do you know what the procedures are for approving  
2 the unit agreement over there before their Commission?

3 A. No, I don't. The Arizona folks are very vague  
4 about a lot of things, simply because they haven't had a  
5 lot of experience in doing this type of stuff.

6 Q. Right. Do you know what the lease expiration  
7 dates are for the F-09 and F-08 leases?

8 A. Yes, sir, it should be on Exhibit B, if I can  
9 find Exhibit B. F-09 and F-08. F-08 would expire 12-31-  
10 2007, and F-09 would expire 12-31-2007.

11 Q. Are those the only leases owned by Kiehne?

12 A. No, sir. The F-07 is owned by Mr. Gary Kiehne,  
13 the F-05 is owned by Mr. Gary Kiehne, and I think those are  
14 it. F-09, F-08, F-07 and F-05. Oh, excuse me, F-03.

15 Q. And where are the 7, 5 and 3 located?

16 A. Pardon me?

17 Q. Where are the leases 07, 05 and 03 located?

18 A. Okay, 07 is located up in the northern part. Can  
19 you see it? Sections 34, 35?

20 Q. Yeah.

21 A. Okay, Section 5 -- or F-05 is right north of  
22 that.

23 Q. Okay. And F-03 is even north of that?

24 A. Yes, sir, that is correct.

25 MR. CARROLL: That's all I have.

## EXAMINATION

BY EXAMINER STOGNER:

Q. And what was the reason that the federal lands that are being included today were included, and not the others that will be in the Arizona unit?

A. Because they were closely related or contiguous. The rest of the federal lands were very much further away from the unit -- proposed unit boundaries.

Q. Okay, now, when you say "contiguous", contiguous in what way?

A. Where they touch, where they touch portions of other lands that we have under lease.

Q. On the lease or the unit?

A. Beg pardon, Mr. Stogner?

Q. Are they contiguous within the lease or within the proposed unit?

A. Within the proposed unit.

Q. Okay. How much private acreage over in Arizona is being included today?

A. 160 acres.

Q. Okay. Can you tell me about -- that agreement has been reached with the royalty interest on that?

A. Yes, sir it has.

Q. Why don't you give a little more detail on that?

A. That land belonged to Santa Fe Energy -- or,

1     excuse me, Santa Fe Railroad. There was an option  
2     agreement signed with Santa Fe Energy. Santa Fe Energy  
3     sold those rights to Bridge Petroleum, Bridge sold those  
4     rights to Pioneer. We have got a signed agreement with  
5     Pioneer covering that tract and about 20,000 other acres.

6             Q. They sold all of that private acreage, all  
7     interests have agreed to it?

8             A. Yes. Under the agreement, we have the right to  
9     unitize that acreage.

10            Q. But the Santa Fe Railroad has committed its  
11     royalty interest to this unit?

12            A. Well, we deal with Pioneer; we don't deal with  
13     Santa Fe Railroad. It's a sublease of a sublease and the  
14     sale of the rights under the sublease.

15            Q. So do you feel that the royalty interest has been  
16     signed to this unit?

17            A. Yes, sir, I do. We have got a signed agreement.

18            Q. If you take a look at some of those federal  
19     tracts, they aren't contiguous to other federal tracts but  
20     they are contiguous inside the unit with most of that  
21     private land designated as P-01; is that correct?

22            A. That is correct.

23            Q. Let's take a look at F-15. That's the closed  
24     federal acreage; is that correct?

25            A. Yes, sir, that is correct.



1           Q.    Okay, and that looks like -- for the record, it's  
2 over there in Section 14 and 23 of Township 12 North, Range  
3 30 East in Arizona. Let's take a look, in particular, at  
4 Section 23. What can you tell me about the northwest  
5 quarter, northwest quarter? What tract does that belong  
6 to?

7           A.    I think that is under F-06, Mr. Stogner, or F- --  
8 It's covered by one of the other federal leases. I'd have  
9 to look and see which one it is. Yes, under F-06, Mr.  
10 Stogner.

11          Q.    F-06, okay.

12          A.    Yes, sir.

13          Q.    Now, that particular piece of property, is that  
14 actually -- It's probably semantics, but does that belong  
15 to the FAA, or does the BLM have any designee or any  
16 authority over that acreage?

17          A.    It is handled by the BLM, and it's got a  
18 stipulation on it that it is not to be leased.

19          Q.    Okay, let's turn our attention now over to New  
20 Mexico, on the private acreage over in the New Mexico side.

21                Of the private acreage, what percentage of the  
22 royalty interests have signed to join this unit?

23          A.    We have got ratifications from Charles Orona,  
24 Joaquin Orona and Gregorio Orona, and we have a verbal  
25 confirmation from Carma Nell Zumwalt -- all of these -- All

1 of the leases that Ridgeway took were on a 342 form, and it  
2 does give us the right to pool and unitize.

3 Q. Okay, when I look at P-05, P-06 and P-07 --

4 A. Yes, sir.

5 Q. -- who owns the basic royalties on those  
6 acreages?

7 A. Robert T. Hooper and Mary T. Hooper, a husband  
8 and wife. They are not interested in joining, they are not  
9 interested in signing the lease, they are not interested in  
10 participating, it is too small for them to even fool with,  
11 is their words. Nellie Summers and Billie Jean Gillespie  
12 were unleased interests, but there is a lease in the mail,  
13 and they have agreed to sign their lease.

14 Q. Okay. Now, it's my understanding that you don't  
15 have a preliminary -- Okay, now, let's go back to the  
16 federal. Let me make sure that the --

17 A. Yes, sir.

18 Q. -- I've got this straight. Which BLM district  
19 office is handling the federal acreage? Are there two or  
20 just one?

21 A. Just one. Armando Lopez with the Roswell office  
22 is handling all of the federal acreage in this proposed  
23 unit.

24 Q. Now, is it your understanding that this Arizona  
25 property wouldn't normally be handled like that, or was it

1 an agreement within the BLM offices to allow for this?

2 A. It was an agreement within the BLM offices, as  
3 the Roswell office had a lot of experience in dealing with  
4 oil and gas, and the Phoenix office had little or none.

5 Q. And this is -- In fact, the New Mexico district  
6 falls into the Socorro district, does it not?

7 A. Yes, it does.

8 Q. And I guess they made arrangement for the Roswell  
9 BLM office to help?

10 A. Yes, sir, they felt that they didn't have enough  
11 experience to adequately handle it either.

12 Q. And this is not unusual?

13 A. No, sir, it's my understanding it is not.

14 Q. The preliminary approvals, you have no copies  
15 from the BLM Office or the New Mexico State Land Office --

16 A. No, sir, we do not.

17 Q. -- to this at this time?

18 A. But we have talked with -- left a message to Pete  
19 Martinez, and he is supposed to fax that to this OCD number  
20 as soon as he gets the message.

21 FURTHER EXAMINATION

22 BY MR. CARROLL:

23 Q. You said there was some federal acreage included  
24 in the other unit, the 155,000-acre unit?

25 A. Yes, sir.

1 Q. Does Kiehne own any of the federal leases in that  
2 unit?

3 A. He owns the majority of them, yes, sir.

4 Q. And do you know what the approximate percentage  
5 of the federal leases in that unit are, what the federal  
6 is?

7 A. I don't have that off the top of my head. I can  
8 get it for you, but I can't do it right now.

9 MR. BRUCE: It's less than 10 percent, isn't it,  
10 Mr. Richardson?

11 THE WITNESS: I think that's correct, but...

12 MR. CARROLL: That's all I have.

13 EXAMINER STOGNER: Any other questions?

14 MR. CARR: Just a follow-up.

15 FURTHER EXAMINATION

16 BY MR. CARR:

17 Q. Do you know what BLM office will be administering  
18 the federal lands in the Arizona unit? Will that also be  
19 New Mexico?

20 A. It is my understanding that all of the Soccoro  
21 and Santa Fe -- I mean, Soccoro and Phoenix have given that  
22 to the Roswell office.

23 MR. CARR: That's all, thank you.

24 EXAMINER STOGNER: Any other questions of this  
25 witness?

1 MR. BRUCE: I do have one question.

2 FURTHER EXAMINATION

3 BY MR. BRUCE:

4 Q. Looking at this unit outline again, Mr.  
5 Richardson, the lands in Arizona up to the north, at one  
6 point Gary had essentially proposed unitizing that block of  
7 lands, hadn't he?

8 A. Yes, he did, as well as some stuff to the south.

9 Q. He was proposing to form, what, about a 6000-,  
10 7000-acre unit, up where this northern area was, wasn't he?

11 A. I think that's correct, yes, sir.

12 MR. BRUCE: Okay.

13 FURTHER EXAMINATION

14 BY MR. CARR:

15 Q. And could you tell me why he decided not to go  
16 forward with that?

17 A. I talked to a fellow I think by the name of Clift  
18 in his office, and I told him that we had already started a  
19 unitization process to include everything and that we  
20 wanted to see that through before we made a decision on the  
21 smaller acreage, or a smaller proposed unit, excuse me.

22 MR. CARR: That's all I have. Thank you.

23 EXAMINER STOGNER: You may be excused at this  
24 time.

25 MR. BRUCE: Call Mr. Scott to the stand.

1                   GEORGE L. SCOTT, JR.,  
2     the witness herein, after having been first duly sworn upon  
3     his oath, was examined and testified as follows:

4                   DIRECT EXAMINATION

5     BY MR. BRUCE:

6           Q.     Would you please state your name and city of  
7     residence for the record?

8           A.     George L. Scott, Jr., Roswell, New Mexico.

9           Q.     What is your occupation?

10          A.     Geologist.

11          Q.     What is your relationship to the Applicant in  
12     this case?

13          A.     Consultant.

14          Q.     Have you previously testified before the Division  
15     as a geologist?

16          A.     Yes.

17          Q.     And were your credentials as an expert petroleum  
18     geologist accepted as a matter of record?

19          A.     They have been.

20          Q.     And are you familiar with the geology pertaining  
21     to this Application and to this reservoir?

22          A.     Yes.

23                 MR. BRUCE: Mr. Examiner, I tender Mr. Scott as  
24     an expert petroleum geologist.

25                 EXAMINER STOGNER: Any objection?

1 MR. CARR: No objection.

2 EXAMINER STOGNER: Mr. Scott is so qualified.

3 Q. (By Mr. Bruce) Mr. Scott, we've got a number of  
4 exhibits here. Maybe just start with the first one,  
5 Exhibit 10. Could you identify that for the Examiner?  
6 Tell him what zones are really the main zones of interest  
7 in this reservoir.

8 A. Okay, Exhibit 10 is a stratigraphic chart showing  
9 the surface and subsurface rocks in the area. The rocks  
10 that we're mainly concerned with are Permian in age, and  
11 they are subdivided into San Andres, Glorieta, Yeso and Abo  
12 formations. Now, the CO<sub>2</sub> that we find is confined to the  
13 Yeso and Abo formations. There is some CO<sub>2</sub> in the water  
14 that is found in the Glorieta and the San Andres, but  
15 that's not an objective here.

16 The Yeso formation of the Permian is subdivided  
17 into the Fort Apache member and the Amos Wash member. And  
18 the Abo, down in the basin of the Abo, has a unit we're  
19 referring to as the Riggs member, which is CO<sub>2</sub>-productive  
20 over a big part of the structure.

21 The Amos Wash is the principal pay zone over this  
22 large structure. The next principal pay zone would be the  
23 Fort Apache, which is a dolomite. The Amos Wash is  
24 predominantly a very fine-grained sand, and the Riggs  
25 member is a siltstone/sandstone highly fractured reservoir.

1 I might add, there is also some CO<sub>2</sub> coming out of  
2 the Precambrian, from fractures in the Precambrian granites  
3 in some of the wells in the area. Not in the New Mexico  
4 side so far, but across the line a short distance in  
5 Arizona, we've actually seen some CO<sub>2</sub> coming out of  
6 fractures in the Precambrian.

7 Q. Okay, Mr. Scott, could you maybe just go through  
8 your next three exhibits, 11, 12 and 13 kind of together.  
9 Could you identify those for the Examiner and tell him what  
10 they show?

11 A. Exhibit 11 is a structure map contoured on top of  
12 the Amos Wash formation, the principal pay section, and I  
13 think you can see that the northern and northeastern edge  
14 of the unit outline pretty well follows the strike of the  
15 structural contour lines.

16 And also shown on this map is the larger  
17 anticlinal structure that accounts for the CO<sub>2</sub> accumulation  
18 in both Arizona and New Mexico. It's a very large  
19 structure, faulted on the west side. That fault may be a  
20 partial seal to migration on the west side.

21 We know from drilling the wells in New Mexico  
22 that they've behaved, as far as CO<sub>2</sub> shows and everything,  
23 they've behaved very similar to the wells drilled on the  
24 Arizona side. Structurewise, these wells over there are  
25 running roughly about the same structurally as some of the



1 New Mexico wells.

2 Now, that's the map on the Amos Wash formation.

3 Exhibit 12, structure map on top of the Fort  
4 Apache, which is very similar to the Amos Wash, since it's  
5 only about 80 to 100 feet higher than the Amos Wash. It's  
6 very similar structurally.

7 And as with the Amos Wash, we are not certain  
8 about gas-water contacts. On the Amos Wash, we think the  
9 gas-water contacts are going to be around -- between that  
10 4700- and 4800-foot contour line. However, on something  
11 this big, I think it would be unusual that we will have a  
12 rigid gas-water contact over the entire structure. We  
13 expect that that will vary some. Also, we don't know  
14 whether there's a tilt to this gas-water relationship or  
15 not. There may well turn out to be a tilt to it.

16 The third contour map is the top -- that's  
17 Exhibit 13 -- is contoured on top of the Riggs member of  
18 the Abo formation, and this is a section 100, 200 feet  
19 thick, roughly, right above the top of the Precambrian.

20 Q. Mr. Scott, do these maps, together with the wells  
21 that have been drilled delineating the boundaries of the  
22 reservoir, support the outline of this proposed unit?

23 A. Yes, they do, as far as the northern and eastern  
24 sides of the unit, yes.

25 Q. And these same maps would also be used to define

1 the outline of an Arizona unit, would they not?

2 A. Yes, they would.

3 Q. Okay. Do you have anything further on these  
4 maps, Mr. Scott?

5 A. No, we might refer back to them when we talk  
6 about the cross-section here.

7 Q. Okay. Well, why don't we move on to that Exhibit  
8 14? Could you identify that for the Examiner?

9 A. Yes, this is a north-south cross-section, cross-  
10 section A-B, and the line, route, of that cross-section is  
11 shown on all three maps, A to B. And the left-hand side of  
12 the cross-section would represent the northern -- is the  
13 north end of it.

14 And this is -- First, the scale is 2 1/2 inches  
15 to 100 feet. And it shows the -- starting over to the left  
16 it shows the Yeso formation and the Abo formation, and then  
17 the subdivisions in the Fort Apache and the Amos Wash. And  
18 down at the bottom of the Abo, the Riggs member.

19 And we have subdivided the Amos Wash into four  
20 zones, four pay zones, 1, 2, 3 and 4. We also refer to  
21 Zone 4 as the Raven zone.

22 Above the Fort Apache there are water-bearing  
23 sands in the upper part of the Yeso, and we have made an  
24 effort to drill to the top of the Fort Apache and set the  
25 casing in the top of the Fort Apache to prevent water

1 coming in while we were drilling with air.

2 The Fort Apache has anhydrite in the very top of  
3 it, which is probably the seal that retards a lot of the  
4 upward migration of the CO<sub>2</sub>. We know that CO<sub>2</sub> is moving  
5 upward into these Yeso sands and into the Glorieta, but by  
6 and large those anhydrites are our seal.

7 Now, the pay zone in the Fort Apache is dolomite,  
8 and you can see on the density and neutron curves where  
9 that curve kicks back to the left, that's all porous. The  
10 porosities get as high as 25, 26 percent in that Fort  
11 Apache dolomite. Typically, though, it's down around 14,  
12 15 percent. We count everything above 8 percent as pay in  
13 the Fort Apache.

14 Now, moving down into the Amos Wash, we found  
15 that when we were drilling over in the Arizona side and  
16 coring, did a lot of coring, that the sands, very fine-  
17 grain but very clean sands in the Amos Wash, would  
18 frequently wash out on us, and we would only get partial  
19 recoveries. And I think we see the same thing happening  
20 here, in these first two wells on the cross-section, where  
21 we have extensive washouts in those porous sands.

22 In both of those wells -- actually, in all four  
23 wells shown on the cross-section here, we encountered  
24 strong CO<sub>2</sub> blows, as we went into the Fort Apache and the  
25 Amos Wash, and also down in the Riggs zone as well.

1           As you move over to the right side of the -- The  
2   last two wells on the right-hand side of the cross-section,  
3   you get a little better look at reservoirs there, because  
4   they're not washed out, it didn't affect the density curve  
5   as much.

6           Q.   Now, these wells, Mr. Scott, have not been  
7   completed yet, have they?

8           A.   No, they haven't been formally completed.

9           Q.   And what does -- There's a simple reason for  
10   that, isn't there?

11          A.   Well, the reason is that Ridgeway undertook to do  
12   a lot of expensive testing and evaluation of the Riggs  
13   zone, the bottom section here, before coming on up the  
14   hole. And when you're drilling with air, sometimes you get  
15   some confusing results when you drill through water zones.  
16   And we think now, that probably there's some stringers here  
17   in the middle of this upper Abo section that are carrying  
18   water. We noted sometimes as we got on down toward the  
19   Riggs zone and towards the Precambrian, we would start  
20   picking up some water in the return air stream. And so  
21   Ridgeway has made quite an effort to evaluate this zone.  
22   This zone has higher bottomhole pressures too, than the  
23   Amos Wash and the Fort Apache.

24          Q.   And at this point, to complete all these wells  
25   would involve a substantial amount of money, would it not?

1           A.    Yes, yes, there was really no need -- We know  
2   these are pay zones up here, because of the way the CO<sub>2</sub> --  
3   Some of these wells were virtually out of control for  
4   periods of time because of the way the CO<sub>2</sub> was blowing. It  
5   never did blow out completely, they were under control.  
6   But it was serious.

7           Q.    They wouldn't catch fire, of course?

8           A.    No, CO<sub>2</sub> doesn't burn.

9           Q.    Is there any doubt in your mind that there's CO<sub>2</sub>  
10  on the New Mexico side of the state line?

11          A.    Well, as you can see down here, in the comments  
12  down here, I commented about the percent of CO<sub>2</sub> in the  
13  return air stream while we were drilling with air, 45  
14  percent, even up to 75 percent on trip gas. That's a lot  
15  of CO<sub>2</sub>. And I -- There are notations on the mud log like,  
16  CO<sub>2</sub> blew the line in two, things like that. And we'd  
17  already drilled the wells in Arizona before we moved over  
18  here, and we had some experience to go on in evaluating the  
19  shows.

20                No, in my mind there's no doubt about it. You  
21  know, when you're drilling with air and you're drill into  
22  CO<sub>2</sub>, you know it, yeah.

23          Q.    Okay. Is Exhibit 15 simply a summary of the  
24  geologic -- or a geologic report that was submitted with  
25  the preliminary approval request to the BLM and the State

1 Land Office?

2 A. Yes, it is.

3 Q. And it summarizes what you know about the  
4 geology in this area?

5 A. Yes, it's primarily a geological discussion.

6 Q. Mr. Scott, in your opinion is the granting of  
7 this Application in the interests of conservation and the  
8 prevention of waste?

9 A. Yes, it is.

10 Q. And were Exhibits 10 through 15 prepared by you  
11 or under your direction?

12 A. They were.

13 MR. BRUCE: Mr. Examiner I would move the  
14 admission of Exhibits 10 through 15.

15 EXAMINER STOGNER: Exhibits 10 through 15 will be  
16 admitted into evidence, if there are no objections.

17 MR. CARR: No objection.

18 EXAMINER STOGNER: Thank you, Mr. Bruce.

19 Mr. Carr?

20 CROSS-EXAMINATION

21 BY MR. CARR:

22 Q. Mr. Scott, you have three structure maps, you've  
23 presented three structure maps --

24 A. Yes.

25 Q. -- of various members?

1           Could you just initially explain to me the  
2           significance of the structure in this area? Is it  
3           important?

4           A.    Yes.

5           Q.    And why?

6           A.    The gas is -- has accumulated as a result of a  
7           faulted anticlinal structure. It's a structural trap. And  
8           then the contours close and the -- Perhaps it's a bit more  
9           complicated than that when you get over on the west side  
10          where that faulting occurs. But for all practical purposes  
11          this is a large structural trap.

12          Q.    When did you first become involved with this  
13          effort?

14          A.    With this area?

15          Q.    Yes.

16          A.    1995, 1996, somewhere in that time frame. I  
17          remember it fairly well, because I had bypass surgery right  
18          about the time I started looking at it.

19          Q.    I remember that.

20                Is it your mapping that was actually used to  
21          define the boundaries for this unit?

22          A.    Yes.

23          Q.    And also the Arizona unit?

24          A.    Yes. Initially another geologist did some of the  
25          initial work for Ridgeway before I got involved. He did a

1 very fine job, I might -- in my opinion.

2 Q. Is there another geological consultant involved  
3 at this time?

4 A. No.

5 Q. Do you have an interest in the unit?

6 A. Yes.

7 Q. An override?

8 A. Yes.

9 Q. Do you have an interest in Ridgeway, or are you  
10 just a consultant?

11 A. I own no stock in Ridgeway Oil Company. No, my  
12 interest is in the -- as a consultant and also as an  
13 overriding royalty owner.

14 Q. Do you have an override in the Arizona portion of  
15 this reservoir as well?

16 A. Yes.

17 Q. Were you involved at the time the initial  
18 drilling took place in the unit area?

19 A. I was not involved when the first two wells were  
20 drilled, and I have been subsequent to the first two wells.

21 Q. I understood your testimony to be that you first  
22 drilled on the Arizona side; is that right?

23 A. Yes.

24 Q. And why was that?

25 A. Well, their initial well was up there in 12



1 North, 29 East, Section 15.

2 Q. And on this structure map where approximately --  
3 Is that at the crest of the structure?

4 A. It's on the northward -- north plunge of the  
5 anticlinal structure.

6 Q. Right.

7 A. It's southeast of St. Johns about eight or nine  
8 miles there.

9 Q. Why was the drilling first conducted on the  
10 Arizona side?

11 A. I am not sure of all of the reasons. There was a  
12 little surface anticlinal bump right there that I think  
13 they focused on. It turns out -- Well, I say bump. It's  
14 an anticlinal feature there on the surface, surface  
15 geology.

16 As it turns out, we think that's just a small  
17 wrinkle on a very much bigger structure. But that was what  
18 drew them to that location.

19 And then following that, they moved about four  
20 miles south and drilled a well in Section 3 of 11 North, 29  
21 East. And subsequent to that -- My involvement is  
22 subsequent to that.

23 Q. Okay. When were the wells on the New Mexico side  
24 drilled?

25 A. Let me think. It was after all of the Arizona

1 drilling.

2 Q. And isn't that because the most prospective part  
3 of this reservoir is on the Arizona side of the line?

4 A. No, I don't think we could make a statement like  
5 that.

6 Q. Why didn't --

7 A. Certainly not until these wells in the New Mexico  
8 side have been completed, we actually think there's  
9 probably more net pay in the wells -- the first two wells  
10 on the cross-section here, where those sands are washed  
11 out. Structurewise, they're well up above any gas-water  
12 contacts, and we had really exemplary blows of CO<sub>2</sub> as we  
13 went through those zones.

14 So I couldn't conclude -- Also --

15 Q. You don't see a positive relationship between  
16 being structurally high to having a better prospect?

17 A. No, as a matter of fact, some of the higher  
18 structural wells have a much poorer Amos Wash section. The  
19 well on the --

20 Q. Have you tested those?

21 A. Yes.

22 Q. And have you produced -- You're not producing any  
23 of them?

24 A. Well, they're shut in.

25 Q. Were you involved in discussions with the Arizona

1 Land Board when they were saying they did not believe there  
2 were reserves on the New Mexico side?

3 A. I never heard anybody say that, that there were  
4 no reserves on the New Mexico side.

5 Q. What you have now, though, isn't it fair to say,  
6 is a unit that has the lowest structural portion, or a  
7 substantial part of the lowest structural portion of the  
8 Arizona acreage thrown into the New Mexico unit?

9 A. Well, that's -- I'm going to have to give you  
10 kind of a complicated answer to that, Bill.

11 Q. But my question is fairly simple.

12 A. All right.

13 Q. You do have the lowest structure -- The acreage,  
14 the northern portion of this reservoir that you plan to  
15 unitize in Arizona, is lower structurally than what you're  
16 going to put in the Arizona unit; isn't that true?

17 A. Well, there is other acreage on the Arizona side  
18 that will be just as low as that --

19 Q. But isn't --

20 A. -- and Bill, as you come around your contour  
21 lines into the New Mexico side, we'll be throwing acreage  
22 in the New Mexico side in that's much higher structurally  
23 than the acreage in New Mexico we're talking about.

24 Q. The structural high is centered in Arizona, is it  
25 not?

1           A.    A part of it, yes. But I want to tell you --

2           Q.    Is the highest point in this unit in Arizona?

3           A.    Yes, it is.

4           Q.    All right.

5           A.    It is, so far.

6           Q.    And is the lower edge that goes around the  
7 eastern and northern boundary, are there -- Is that  
8 boundary determined by your gas-water contact as you see  
9 it?

10          A.    Well, first of all, we have not pinned all these  
11 gas-water contacts down good. We do know that even in the  
12 dryhole there in 2 North, 21 West, there's potentially some  
13 pay in Amos Wash -- in the Fort Apache, in that well. And  
14 we think the Fort Apache and Amos Wash will be productive  
15 over in all of that acreage above the 4700-foot contour  
16 line. So there can be -- Also, when you're talking about  
17 reserves, you've got to look at your stratigraphy. As you  
18 move southwest across this big anticline, you lose  
19 reservoir quality in the Amos Wash. So you can't just look  
20 at a structure map and make all your judgments about  
21 reserves based on structure.

22          Q.    And you didn't drill these wells initially based  
23 just on the structure map; is that right?

24          A.    Well, we didn't have all of this structural  
25 control to go on. We projected trends and did the best we

1 could.

2 Q. And you drilled first in --

3 A. Oh, Bill --

4 Q. You drilled first in Arizona?

5 A. Bill, let me add something to that, though.

6 There are many Glorieta water wells that have been drilled  
7 in the Arizona side, and we were able to use that  
8 structural control to give us a fair idea about what was at  
9 depth. So --

10 Q. Is it unreasonable for me to think that if you're  
11 trying to determine what kind of a reservoir you have here,  
12 that you would drill your wells first where you think  
13 you've got your best chance of encountering CO<sub>2</sub>?

14 A. Yeah, I think that's normally -- that's the  
15 logical --

16 Q. And you drilled your wells first, based on all  
17 the data you had available to you, in Arizona, right?

18 A. Well, I wouldn't say that that was the entire  
19 reason.

20 Q. But that's --

21 A. We were moving -- We were moving outward from  
22 some of the early development and moving toward New Mexico,  
23 Bill.

24 Q. My question was -- maybe you didn't understand it  
25 -- which state did you drill in first?

1           A.    Arizona.

2           Q.    Okay.  Now, where are the processing facilities  
3 proposed at this time?  Do you know?

4           A.    I think you'd need to maybe discuss that with Mr.  
5 Riggs.  Basically --

6                   MR. BRUCE:  If you don't know -- If you don't  
7 know, George, just say you don't know.

8                   THE WITNESS:  Okay.  Well, I don't know for sure.

9           Q.    (By Mr. Carr)  Do you know of any processing  
10 facility being projected in New Mexico?

11          A.    No, I don't.

12          Q.    Now, what you're proposing are two units that  
13 divide one reservoir, correct?

14          A.    Yes.

15          Q.    And when you divide a reservoir, one side will,  
16 in all probability, ultimately be determined to be better  
17 than the other; isn't that fair to say?

18          A.    I don't know that that's -- would be a fair  
19 statement, Bill.

20          Q.    You think they'll probably both be comparable  
21 from day one to the end?

22          A.    Well, as I state in this little write-up here --  
23 I believe I stated that I figured that one-third to one-  
24 half of the total reserves could be in Catron County.  And  
25 I say -- I make that statement because we simply do need a

1 lot more wells before you can get super-definitive in your  
2 reserve estimating.

3 Q. So is it fair to say we don't know if that Catron  
4 County unit will be comparable to the Arizona unit at this  
5 time?

6 A. Well, you're talking about trillions of cubic  
7 feet of gas, and that's a lot of gas, and -- It could be,  
8 it could be comparable.

9 Q. And it might not be? We don't know?

10 A. Yeah, I can't see around the other side of that  
11 hill, Bill, exactly.

12 Q. Okay, and you're going to provide a detailed  
13 reservoir -- or reserve estimate at a later date?

14 A. Say that again, Bill, I didn't catch that.

15 Q. I'll read this paragraph.

16 A. Yeah.

17 Q. It says, Detailed reserve estimates will be  
18 furnished in the unit, geological and engineering report  
19 which will be submitted at a later date to the OCD,  
20 correct?

21 A. Yeah, we were --

22 Q. And that's because we don't know now, do we?

23 A. We don't have all the final answers.

24 Q. And we don't know if there's a third on the  
25 Catron County side or not?

1           A.    Bill, I might add, a detailed reservoir  
2 engineering study has been made, but it's a confidential  
3 study.

4           Q.    And based on your confidential study, you're  
5 going to testify that there are a third of the reserves in  
6 Catron County?

7           A.    I would expect there to be a third of the total  
8 reserves, yes, sir.

9           Q.    But you can't show that study to me?

10          A.    No, no, not until about another hundred wells are  
11 drilled.

12          Q.    Do you have any idea when you're going to put  
13 together an Arizona unit?

14          A.    I would have to defer that, I think, to the  
15 landman, Mr. John Michael Richardson.

16          Q.    Do you know -- and tell me if you don't -- do you  
17 plan to start drilling and completing wells in New Mexico  
18 anytime soon?

19          A.    That's a command decision by Ridgeway. I would  
20 anticipate yes, but that's up their management, Bill.

21          Q.    You don't know when, exactly?

22          A.    And I -- Certainly not before a unit is approved.

23          Q.    If I look at the mapping, if it's fair to say  
24 that the outside -- the boundaries of this general feature  
25 were determined based on geology, correct?



1           A.    That is correct.  We did have some seismic  
2 information, Bill.

3           Q.    Do you have seismic shoot over the entire area --

4           A.    No.

5           Q.    -- or just portions of it?

6           A.    No.

7           Q.    Over the north?

8           A.    We have an east-west line and a north-south line.

9           Q.    The division of this reservoir has been  
10 accomplished, though basically on ownership -- on an  
11 ownership basis; isn't that right?

12          A.    Say again, Bill.

13          Q.    You've divided the unit as you have -- or the  
14 reservoir, as you have, not based on geological  
15 considerations but on ownership considerations?

16          A.    When you say "reservoir" now, are you talking  
17 about the rock section, or are you talking about the  
18 surface land?

19          Q.    I'm talking about what you've -- You've got an  
20 outside boundary --

21          A.    Oh, okay.

22          Q.    -- determined by geology --

23          A.    Yeah.

24          Q.    -- but you cut it in portions, not based on  
25 geological considerations but on ownership considerations;

1 isn't that right?

2 A. Well, and other considerations like, you know,  
3 Arizona didn't want to join in one big unit, so the state  
4 line was -- you know.

5 Q. And that's what they own, right? Over on the  
6 other side of the line?

7 A. That's right.

8 Q. So you divided it based on ownership?

9 A. Yeah.

10 Q. Is your ownership common across the entire area,  
11 Mr. Scott, your royalty, your override?

12 A. Yes.

13 Q. So where it's divided doesn't make any difference  
14 to you?

15 A. No, it does not.

16 MR. CARR: Okay, that's all I have. Thank you.

17 EXAMINER STOGNER: Mr. Bruce?

18 MR. BRUCE: Just one final point of  
19 clarification.

20 REDIRECT EXAMINATION

21 BY MR. BRUCE:

22 Q. What you're saying, Mr. Scott, is that although  
23 this is a structural trap, that's not the sole factor  
24 involved in determining whether a well will be good or bad?

25 A. No, the stratigraphy, the facies changes, these

1 other geological considerations are important too. And we  
2 don't know what the source of this CO<sub>2</sub> is. Probably came  
3 up through deep fractures in the Precambrian granite, and  
4 it may have migrated preferentially into a part of the  
5 reservoir better than elsewhere. So there are some other  
6 things that we don't have answers for.

7 MR. BRUCE: That's all I have.

8 EXAMINATION

9 BY EXAMINER STOGNER:

10 Q. Mr. Scott, does this fault over on the -- over to  
11 the west, does that extend down into the Precambrian? The  
12 fault?

13 A. Oh, the fault, yes, yes. In some of the  
14 literature, this is regarded as a left lateral shear, with  
15 the northeast side moving north with respect to the west  
16 side. And I really suspect that is the case. But to do it  
17 and represent that way here would be unnecessary and  
18 impractical. It's just an up-or-down fault, as far as  
19 we're concerned here.

20 Q. Would this fault be the -- also the source of the  
21 CO<sub>2</sub>? Would it be more likely if it is coming up to the  
22 Precambrian into the fault, or would it be somewhere else?

23 A. That's interesting. It might well be. It  
24 certainly could have. As you notice there, that well --  
25 There's a well west of the fault -- it's as high as 4880

1 feet above sea level on the Amos Wash, yet we think that  
2 well is wet. I think the way the stratigraphy is developed  
3 in the Amos Wash also influences the migration of the CO<sub>2</sub>,  
4 and it influences the position of the gas-water contact in  
5 the Amos Wash.

6 Q. Does the western boundary of that western -- or  
7 proposed western Arizona unit, would it follow that fault,  
8 or does it extend to the west?

9 A. We originally proposed that it follow that fault  
10 very closely. Now, the -- We have a lot more control on  
11 that fault than just the wells that you see here. There  
12 are many Glorieta water wells in that area, and the fault  
13 comes right on to the surface, and you can really pin this  
14 fault down by the Glorieta water wells.

15 EXAMINER STOGNER: Any other questions of this  
16 witness?

17 MR. BRUCE: I have no questions of this witness.  
18 I would like to call to the stand Mr. Riggs. Mr. Carr has  
19 asked a couple of things. Mr. Riggs is an officer of  
20 Ridgeway, and perhaps --

21 EXAMINER STOGNER: Are there any other questions  
22 of Mr. Scott at this time? You may be excused.

23 MR. BRUCE: Mr. Riggs is not sworn in, and I'm  
24 not having him testify as an expert, Mr. Examiner.

25 (Thereupon, the witness was sworn.)

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DON RIGGS,

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

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Riggs, would you state your name and city of residence?

A. Don Riggs, St. Johns, Arizona.

Q. Who do you work for?

A. Ridgeway Arizona Oil Corporation.

Q. What is your position with Ridgeway?

A. Vice president of operations.

Q. Have you been with Ridgeway since, in essence, the start of this project?

A. I came on in July of 1995.

Q. And the project started what? In 1994?

A. Yes.

Q. Just a couple of questions. Regarding a processing plant, potential processing plant, have locations been looked at in both states?

A. Yes.

Q. Both in New Mexico and Arizona?

A. Yes.

Q. Would Ridgeway build that, or could a third party build it?

1           A.    Very possible a third party could build the  
2    plant.

3           Q.    And if that's the case, Ridgeway would have to  
4    enter into a contract with that third party?

5           A.    Yes.

6           Q.    If Ridgeway owns the plant, is Ridgeway willing  
7    to enter into a reasonable contract allowing Mr. Kiehne to  
8    process his CO<sub>2</sub>?

9           A.    Yes.

10          Q.    And finally, Mr. Riggs, Mr. Carr was asking Mr.  
11   Scott about the order of drilling wells. Could you comment  
12   on why wells are drilled later in New Mexico than in  
13   Arizona?

14          A.    In early 1994, Ridgeway Petroleum, the parent  
15   company, leased 20,000 acres, plus or minus, in Arizona  
16   looking for an oil show that had been purported in a well  
17   that was drilled by somebody. CO<sub>2</sub> was discovered.

18                A year later, this stepout that George referred  
19   to, 3-1, was drilled and more CO<sub>2</sub> was encountered. At that  
20   time I was working as a consultant, and then they brought  
21   me on board and formed the company, and Mr. Scott got  
22   involved.

23                And on the recommendations of George, you know,  
24   we leased some more land and, you know, I think -- I can't  
25   specifically say, but we probably went through six or seven

1 different leasing periods.

2 And after the well 1-16 was drilled on the east  
3 extremity, then Mr. Richardson was contacted to nominate  
4 land in New Mexico.

5 This thing grew as you drilled, because you had  
6 no idea how big it was. I mean, 200,000 acres seemed like  
7 a heck of a project to start with, and that's how the wells  
8 were -- progressed and --

9 Q. So it looks like drilling started int he  
10 northwest and kind of progressed down toward the southeast?

11 A. Right, that's correct.

12 Q. And the New Mexico leases were purchased later  
13 than the Arizona leases for that reason?

14 A. Oh, yeah, as much as two years later, right. As  
15 much as two years later.

16 Q. What was the maximum amount of acreage that  
17 Ridgeway had leased at one point?

18 A. I want to say at one time, roughly 550,000 acres.

19 Q. And the drilling has delineated this proposed  
20 unit in the -- or let's say the old reservoir, and so it's  
21 been contracted since then?

22 A. Right.

23 MR. BRUCE: That's all I have, Mr. Examiner.

24 EXAMINER STOGNER: Thank you, Mr. Bruce.

25 Mr. Carr?

## CROSS-EXAMINATION

BY MR. CARR:

Q. Mr. Riggs, do you know where the processing facilities are proposed to be located?

A. Yes, sir. There is a possibility that they could be built at Tucson Electric, and there's also a possibility that they could be built in New Mexico.

Q. The Tucson Electric Plant is going forward at this time, is it not?

A. I don't know what you mean, Bill.

Q. Well, didn't yesterday Ridgeway Petroleum Corporation announce that it signed a 20-year contract with a company called FLO-CO<sub>2</sub>, Inc., of Odessa?

A. FLO-CO<sub>2</sub>, yes.

Q. Right, and that part of the arrangement was that FLO-CO<sub>2</sub> would build a liquid CO<sub>2</sub> plant within the company's St. Johns CO<sub>2</sub>-helium field on the Arizona portion of the properties leased and adjacent to the Tucson Electric Plant?

A. Yes, sir.

Q. And that was announced yesterday by your company?

A. Right.

Q. And that's the first plant?

A. No, sir, that's FLO-CO<sub>2</sub>'s plant.

Q. Okay, but is there a plant that's going to be



1 processing this CO<sub>2</sub> prior to that one?

2 A. I'm not under- -- Prior to this plant?

3 Q. Do you have other CO<sub>2</sub> sources in Arizona?

4 A. No.

5 Q. So the plant that is going to be developed, built  
6 by FLO-CO<sub>2</sub> is intended to process CO<sub>2</sub> from this unit, isn't  
7 it?

8 A. Yes, they are to buy CO<sub>2</sub> from Ridgeway.

9 Q. And that plant is going to be located in the  
10 Arizona portion of these properties, isn't that right?

11 A. Probably so, but that's up to them. We have  
12 nothing to do with that.

13 Q. And they've announced it's going to be next to  
14 the Tucson Electric Plant. Isn't, in fact, that's what  
15 Ridgeway was telling people some time ago, is where the  
16 plant would be?

17 A. That's where we've always indicated it, because  
18 of the infrastructure that is in place there.

19 Q. The announcement yesterday said that plant is to  
20 be operational within 12 months. Do you have any  
21 information on that?

22 A. No.

23 Q. To be processing your CO<sub>2</sub>, you're going to have  
24 to drill a bunch a wells in a hurry, in the next 12 months;  
25 isn't that right?

1 A. No, sir.

2 Q. You don't -- you have -- you can deliver --

3 A. That's a very small plant. The liquid CO<sub>2</sub>  
4 business is a small consumer.

5 Q. All right, and so you can make those deliveries  
6 with what you've got?

7 A. For a hundred tons a day, yes, sir.

8 MR. CARR: Okay. That's all, thank you.

9 THE WITNESS: Uh-huh.

10 EXAMINER STOGNER: Any other questions?

11 MR. BRUCE: I have nothing further in this case,  
12 Mr. Examiner.

13 EXAMINER STOGNER: Is there anything further?

14 MR. CARR: I have a closing, brief.

15 EXAMINER STOGNER: Okay, Mr. Carr, you may go  
16 first.

17 MR. CARR: May it please the Examiner, Ridgeway  
18 is before you seeking approval of a voluntary unit for the  
19 production of carbon dioxide. As you evaluate this unit, I  
20 think it's important for you to realize that your  
21 jurisdiction is based on the prevention of waste and the  
22 protection of correlative rights. And when you talk about  
23 correlative rights, that is defined by statute as the  
24 opportunity for each interest owner in a pool to produce  
25 its just and fair share of the reserves in the pool.

1           And so when you look at this proposal, I think  
2           you must weigh it in the context of the impact it will have  
3           on correlative rights.

4           Now, the outer boundary of this unit clearly was  
5           formed based on geological considerations. But the  
6           reservoir, the CO<sub>2</sub> supply, has been divided into two parts,  
7           not based on geology but based on ownership. And what has  
8           happened is, ownership here is controlling over geological  
9           considerations. And the last time we had a unit where the  
10          boundaries were gerrymandered based on ownership instead of  
11          technical considerations, we had the West Lovington-Strawn  
12          Unit. And we're still trying to work our way through the  
13          problems that, in fact, spring from that.

14          Here we have a New Mexico unit, but they have  
15          included in the New Mexico unit a plume of federal acreage  
16          which extends into Arizona, which is low structurally,  
17          which is on the boundary of the unit. And if that acreage  
18          proves out not to be as valuable as the acreage in the top  
19          of the structure, the area where they first develop, the  
20          area where they're going to be first delivering CO<sub>2</sub>, if it  
21          proves not to be as valuable, then the interests that are  
22          in New Mexico will be diluted by having marginally  
23          productive acreage from Arizona included in that acreage.

24          You've got a straight acreage allocation, and if  
25          you have a better portion of the reservoir. But like Mr.

1 Kiehne, if your acreage is then forced into a unit where  
2 the prospect is less encouraging, your correlative rights,  
3 your opportunity to produce is, in fact, impaired. And the  
4 option is, go out and drill your own well. Go out and  
5 drill your own well and incur those costs outside the unit  
6 plan, a plan which everyone agreed was the efficient and  
7 appropriate way to go out and develop these reserves.

8 We think at this time the State of New Mexico's  
9 Oil Conservation Division shouldn't have its lunch served  
10 to it by the BLM. They want to put some of their federal  
11 lands in this unit, but nowhere near all, and they want to  
12 tell you what the unit boundary is going to be.

13 It seems to me that what the appropriate response  
14 would be, would be to simply deny the Application and tell  
15 them to come forward with a unit that is based on technical  
16 considerations, based on how CO<sub>2</sub> can be produced, instead  
17 of who owns what. Because when you do that, you will be  
18 acting to protect correlative rights. And if you don't,  
19 you will not.

20 EXAMINER STOGNER: Thank you, Mr. Carr.

21 Mr. Bruce?

22 MR. BRUCE: Mr. Examiner, this has nothing to do  
23 with correlative rights. Mr. Carr again correctly cites  
24 the definition of correlative rights, which is the  
25 opportunity to produce your equitable share of reserves in

1 the reservoir. Nothing in this proposal will deny Mr.  
2 Kiehne the right to go out and drill on his property,  
3 period. This is not a correlative-rights issue.

4 Was this formed on land reasons? Of course it  
5 was. But Mr. Kiehne's problem isn't with Ridgeway, it's  
6 with the BLM. The federal government came to us and said,  
7 Ridgeway, form the unit in this fashion. Period. End of  
8 story.

9 The State Land Office looked at and said, It's  
10 fine with us. This unit is 80-percent federal land, over  
11 15 percent state land. We have to get their approval in  
12 order to unitize. We are just following along with their  
13 procedures. There's no question that all of these lands  
14 are in the reservoir.

15 As a matter of fact, if you look at Mr. Scott's  
16 structural maps, a lot of Ridgeway's acreage in the  
17 southern part of this unit looks to be structurally higher  
18 and better than Mr. Kiehne's acreage. Who's being harmed,  
19 if structure is the sole factor? It's Ridgeway. But  
20 they're willing to go forward with it.

21 This is a voluntary unit, and no one can be  
22 forced into the unit. The unitization will not affect Mr.  
23 Kiehne's rights, because he need not join into the unit.  
24 If he wants to drill and produce, he can enter into a  
25 contract with whoever is processing gas in this area. The

1 problem is, Mr. Kiehne doesn't want to go spend any money  
2 to drill any wells. That's it in a nutshell.

3 This unit deserves approval, and we ask that the  
4 Division approve this unit.

5 EXAMINER STOGNER: Anything further in this  
6 matter?

7 With that, then Case Number 12,161, I believe it  
8 is, will be taken under advisement.

9 (Thereupon, these proceedings were concluded at  
10 11:12 a.m.)

11 \* \* \*

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15  
16 I do hereby certify that the foregoing is  
17 a complete record of the proceedings in  
the Examiner hearing of Case No. 12161,  
18 heard by me on 15 April 1999.  
19 Michael B. Stogner, Examiner  
Off Conservation Division  
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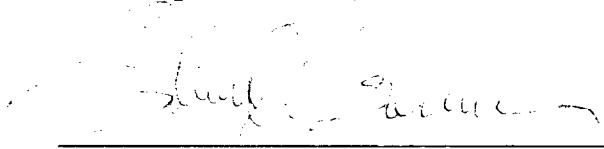
## CERTIFICATE OF REPORTER

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 17th, 1999.

  
\_\_\_\_\_  
STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 2002