

NEW MEXICO OIL CONSERVATION DIVISION  
STATE LAND OFFICE BUILDING  
STATE OF NEW MEXICO  
CASE NO. 10424

IN THE MATTER OF:

The Application of Citation  
Oil & Gas Corporation for  
downhole commingling, McKinley  
County, New Mexico.

BEFORE:

MICHAEL E. STOGNER  
Hearing Examiner  
State Land Office Building  
December 19, 1991

REPORTED BY:

DEBBIE VESTAL  
Certified Shorthand Reporter  
for the State of New Mexico

GINAL

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

FOR THE NEW MEXICO OIL CONSERVATION DIVISION:

ROBERT G. STOVALL, ESQ.  
General Counsel  
State Land Office Building  
Santa Fe, New Mexico 87504

FOR THE APPLICANT:

KELLAHIN, KELLAHIN & AUBREY  
Post Office Box 2265  
Santa Fe, New Mexico 87504-2265  
BY: W. THOMAS KELLAHIN, ESQ.

## I N D E X

	Page Number
Appearances	2
WITNESSES FOR THE APPLICANT:	
1. DAN KELLY	
Examination by Mr. Kellahin	5
Examination by Examiner Stogner	29
Examination by Mr. Stovall	34
Certificate of Reporter	36

## E X H I B I T S

	Page Marked
Exhibit No. 1	15
Exhibit No. 2	15
Exhibit No. 3	19
Exhibit No. 4	20
Exhibit No. 5	22
Exhibit No. 6	23
Exhibit No. 7	24
Exhibit No. 8	25
Exhibit No. 9	26
Exhibit No. 10	27
Exhibit No. 11	28
Exhibit No. 12	28

1                   EXAMINER STOGNER:   Let's call the  
2                   hearing to order for Docket No. 36-91.   Today's  
3                   date, please note, December 19, 1991.   I'm  
4                   Michael E. Stogner, the appointed hearing officer  
5                   for today's cases.

6                   I'll call for the first case today,  
7                   Case No. 10424.

8                   MR. STOVALL:   Application of Citation  
9                   Oil & Gas Corporation for downhole commingling,  
10                  McKinley County, New Mexico.

11                  EXAMINER STOGNER:   Call for  
12                  appearances.

13                  MR. KELLAHIN:   If the Examiner, please,  
14                  I'm Tom Kellahin of the Santa Fe law firm of  
15                  Kellahin, Kellahin & Aubrey, appearing on behalf  
16                  of the applicant, and I have one witness to be  
17                  sworn.

18                  EXAMINER STOGNER:   Are there any other  
19                  appearances in this matter?

20                  Will the witness, please, stand and be  
21                  sworn at this time.

22                                 DAN KELLY  
23                  Having been duly sworn upon his oath, was  
24                  examined and testified as follows:

25                                 EXAMINATION

1 BY MR. KELLAHIN:

2 Q. Mr. Kelly, for the record would you,  
3 please, state your name and occupation.

4 A. My name is Dan Kelly. I'm a petroleum  
5 engineer for Citation Oil & Gas.

6 Q. Where do you reside, sir?

7 A. In Midland, Texas.

8 Q. Have you on prior occasions testified  
9 as a petroleum engineer before the Division?

10 A. No, sir, I haven't.

11 Q. Summarize for us when and where you  
12 obtained your engineering degree.

13 A. I received a bachelor's in science in  
14 petroleum engineering from the Colorado School of  
15 Mines in 1982.

16 Q. Subsequent to graduation summarize for  
17 us your employment experience as an engineer.

18 A. Upon graduation I went to work for  
19 Tenneco Oil Company in Denver, Colorado. I  
20 worked with Tenneco from 1982 through 1988. I  
21 spent the first nine months of 1989 in Los  
22 Angeles as an operations manager for an  
23 independent oil producer.

24 I was hired on with Citation Oil & Gas  
25 in September of 1989 as an area engineer in

1 charge of the Rocky Mountain District. I  
2 currently hold that position.

3 Q. Are you the engineer that is primarily  
4 responsible for preparing the presentation of  
5 Citation for your request to downhole commingle  
6 production in the Hospah?

7 A. Yes, sir, I am.

8 Q. Summarize for us your background and  
9 experience with regards to that property.

10 A. As the area engineer over the Rocky  
11 Mountains, my responsibilities include generating  
12 and implementing all engineering projects in the  
13 South Hospah Field.

14 Q. Based upon that experience, Mr. Kelly,  
15 have you been able to form opinions about the  
16 downhole commingling application and your  
17 company's proposal to commingle production in the  
18 South Hospah Upper Sand Pool with production from  
19 the South Hospah Lower Sand Pool?

20 A. Yes, sir.

21 MR. KELLAHIN: We tender Mr. Kelly as  
22 an expert petroleum engineer.

23 EXAMINER STOGNER: Mr. Kelly is so  
24 qualified.

25 Q. (BY MR. KELLAHIN) Before we go through

1 the actual exhibits that you prepared today, Mr.  
2 Kelly, let me have you give us a general idea of  
3 the background of the basis of why you're seeking  
4 this application.

5 First of all, let's talk about the  
6 Upper Hospah. How many wells are you seeking  
7 approval to downhole commingle production in?

8 A. We currently have 14 active oil  
9 producers in the Upper Hospah.

10 Q. And how many active producers do you  
11 have in the Lower Hospah?

12 A. There are currently 22 active oil  
13 producers.

14 Q. When you look at the Upper and Lower  
15 Hospah, what is the highest current oil producing  
16 rate on a daily basis for both of the pools?

17 A. In the South Hospah Unit, or the Upper,  
18 it's 14 barrels of oil per day out of one well.  
19 That's our maximum. And then 14 barrels of oil  
20 per day out of one well in the Lower also.

21 Q. When you average your production among  
22 the wells in the Upper Hospah, what's your  
23 average daily oil production?

24 A. 2.9 barrels of oil per day per well.

25 Q. And for the Lower Hospah, what's your

1 average on a daily basis?

2 A. Almost six barrels of oil per day per  
3 well.

4 Q. Describe for us the properties. First  
5 of all, let's deal with the Upper Hospah. How  
6 has that production been consolidated for your  
7 operations?

8 A. The Upper Hospah was unitized in 1968  
9 and is completely -- I don't know if I understand  
10 the question. I'm sorry.

11 Q. Well, you've answered my question.  
12 It's a federal unit, is it not?

13 A. Yes, sir, it is a federal unit.

14 Q. When you look at production in the  
15 Lower Hospah, is there a base federal lease for  
16 that production?

17 A. It is a base federal lease, yes, sir.

18 Q. What is the plan of operation that is  
19 currently utilized by your company and was  
20 utilized by your predecessor, Tenneco, in the  
21 operations of the property?

22 A. We currently have separate flow streams  
23 for the oil and commingle the water after it has  
24 been produced and reinject it and distribute it  
25 accordingly.



1           Q.     Are you operating either of the pools  
2 or the wells in the pool under a water-flood or  
3 pressure-maintenance concept?

4           A.     Yes, sir, we sure are. The Upper is a  
5 unitized water-flood and the Lower, being a  
6 lease, is just a pressure-maintenance type of  
7 operation, but it is also water-flood.

8           Q.     Describe for us why you're seeking to  
9 have production commingled then between the Upper  
10 and the Lower Hospah Pools within the federal  
11 lease and this corresponding federal unit.

12          A.     Both of these zones are very marginal  
13 and are rapidly approaching their economic  
14 limit. By downhole commingling these zones, we  
15 feel that we can substantially decrease our  
16 operating expense, thus extending the life of the  
17 fields.

18          Q.     In making your analysis of extending  
19 the productive life of the field, do you have an  
20 estimate for the Examiner of the approximate  
21 percentage of reduction in operating costs if he  
22 approves the downhole commingling for your  
23 project?

24          A.     Yes, sir. I feel that we can decrease  
25 our LOE's in the neighborhood of 16 to 20

1 percent.

2 Q. In terms of extending the project's  
3 life, do you have an estimate of that period of  
4 time?

5 A. Yes, sir. Right now based on the  
6 calculations that we're presenting,  
7 two-and-three-quarter years will be added  
8 additionally to the life of these projects.

9 Q. As part of your analysis, were you also  
10 able to determine and forecast the amount of  
11 additional oil that will be recovered if downhole  
12 commingling is approved?

13 A. Yes, sir. Right now roughly 128,000  
14 barrels of oil can be additionally produced from  
15 this property if this downhole commingling order  
16 is so granted.

17 Q. And correspondingly if it is not  
18 approved, it will shorten the economic life of  
19 your project, you can't reduce your costs, and  
20 there will be approximately 128,000 barrels of  
21 oil left in the reservoir?

22 A. That is correct.

23 Q. When you look at the working interest  
24 ownership --

25 A. Yes, sir.

1           Q.       -- who are the working interest owners  
2       that share in the production from both of the  
3       pools within the area of the application?

4           A.       Citation Oil & Gas retains 100 percent  
5       working interest in the South Hospah lease or  
6       South Hospah Unit in the Upper and also in the  
7       Lower Hospah lease.

8           Q.       And your base leases are federal  
9       leases?

10          A.       Yes, sir.

11          Q.       Do you have any differences in  
12       overriding royalties between the overriding  
13       royalties owners that would participate in  
14       production in the Upper Hospah versus those that  
15       would share in production in the Lower Hospah?

16          A.       We do have a difference in the Upper  
17       from the Lower.

18          Q.       Give us a range of the magnitude of  
19       that difference in overriding royalty ownership.

20          A.       Just a quick breakdown, Citation Oil &  
21       Gas retains 84.6-plus-or-minus percent of the  
22       royalty interest with the Mineral Management  
23       Service having 12.32 percent of the override.  
24       The additional plus-or-minus-3 percent in the  
25       Upper is broken out between six overriding

1 royalty interest owners.

2 In the Lower, Citation retains a  
3 straight 84-and-a-half percent. The Mineral  
4 Management Service has a straight 12-and-a-half  
5 percent, and the 3 percent is divided between  
6 four overriding royalty interest owners.

7 Q. What is the magnitude of that change in  
8 percentage between the two pools?

9 A. I don't know if I understand the  
10 question. I'm sorry.

11 Q. There's a difference in percentage in  
12 ownership between the owners that share in  
13 production in the two pools?

14 A. Yes, sir. It's very varied.

15 Q. What is the total range?

16 A. It's very, very slight, less than .8  
17 percent, or around .8 percent.

18 Q. Have you made a determination as an  
19 engineer about how to allocate the production  
20 between the interest owners in the upper pool  
21 with those owners in the lower pools so that each  
22 interest owner gets its fair and equitable share  
23 of the production as commingled?

24 A. Yes, sir. The allocation formula that  
25 we're presenting today is based on a ratio of

1 remaining economic reserves under the current  
2 operating conditions. These reserves were  
3 calculated using historical decline curves.

4 Q. And you have the production decline  
5 curves in your display package?

6 A. Yes, sir.

7 Q. And you can go through the calculation  
8 for us?

9 A. Yes, sir.

10 Q. Have you shared the proposed allocation  
11 formula with those owners that will be affected  
12 by this order?

13 A. Yes, sir, I sure have. We sent out  
14 notification with waiver letters informing all  
15 interested parties of what we were trying to  
16 take, including the offset operator, and have  
17 received waiver forms back from all but one party  
18 that currently retains .2 percent plus-or-minus  
19 of overriding royalty in the upper formation, and  
20 that would be Santa Fe Energy Resources.

21 Q. Have you been in contact with Santa Fe  
22 Energy Resources to determine if they have any  
23 objection to having their share of production  
24 commingled in this fashion?

25 A. Yes, sir. I have talked to the

1 district or division reservoir engineer for Santa  
2 Fe Energy Resources in Midland, Texas. They were  
3 unaware that they held this override. And their  
4 land department did not have any of the  
5 appropriate files to make a decision whether this  
6 was exactly the amount of override that they  
7 retain in this unit.

8 And based on their inability to  
9 determine their override and substantiating  
10 with their own records, they refused. But the  
11 district engineer told me that it wasn't even  
12 worth the time and the phone call, that he  
13 would sign off on this in a minute if in fact  
14 theirs was .2 percent of the Upper's current  
15 production.

16 Q. His problem was not with the allocation  
17 formula but with the fact that he could not  
18 verify his own ownership of interest in the  
19 project?

20 A. That is correct.

21 Q. Let's go through the exhibits now, Mr.  
22 Kelly, so that Examiner Stogner will understand  
23 the basis for your conclusion. First of all,  
24 let's start with the oversheet. It's simply a  
25 cover sheet to your exhibit. Underneath that

1     what have you done?

2           A.     We've just tried to give you a list of  
3     the exhibits, basically a table of contents.

4           Q.     All right.  Let's turn to Exhibit No.  
5     1.  Would you identify that for me?

6           A.     Yes, sir.  In the South Hospah Unit, or  
7     the Upper Sand Pool, we have listed the wells  
8     that are currently in that unit with the status  
9     active being -- or "Act" standing for active,  
10    "T/A" standing for temporary abandonment in the  
11    second column.

12                   The type of well is either an oil well  
13    or water-injection well, as you can see in the  
14    third column, with the location of the well by  
15    footages in the last column.

16           Q.     Before we go to the second page of  
17    Exhibit 1, let's turn to the first page of  
18    Exhibit 2.  Identify that plat for me.

19           A.     The first page of Exhibit 2 is the  
20    location plat for the South Hospah Unit.

21           Q.     And this will be the upper sand wells?

22           A.     The upper sand wells, yes, sir, that  
23    are listed in the first exhibit on page 1.

24           Q.     When we look at the well summary for  
25    the Upper Sand Pool, do you propose to seek

1 approval from the Examiner for commingling  
2 production in all the wells that are shown on the  
3 Upper Sand Well summary?

4 A. Yes, sir.

5 Q. Let's go then to the second page of  
6 Exhibit 1 and identify that for me.

7 A. The second page contains a list of the  
8 wells in the South Hospah lease or the Lower Sand  
9 Pool.

10 Q. And then correspondingly, when we go to  
11 the second page of Exhibit 2, will we find a plat  
12 by which we can identify then on the plat the  
13 wells shown on page 2 of Exhibit 1?

14 A. Yes, sir.

15 Q. When we compare the list of wells in  
16 the Upper and the Lower Sand, the list is  
17 slightly different, isn't it?

18 A. Yes, sir, it sure is.

19 Q. And that's because certain wells have  
20 yet to be extended into the Lower Pool, and  
21 correspondingly some of the Lower Pool wells have  
22 yet to be perforated in the Upper Pool?

23 A. That's very true.

24 Q. What's is your plan of operation then  
25 for making the commingling operation effective in



1 the field? What are you going to do?

2 A. We would like to selectively perforate  
3 in the upper zone and current lower-producing  
4 wells and likewise selectively deepen, or in some  
5 cases it won't be necessary to deepen, existing  
6 upper producers.

7 Q. What's the purpose in doing that?

8 A. To allow us to minimize the number of  
9 wellbores that we are currently operating in that  
10 unit.

11 Q. Describe for me how that process will  
12 also allow you to effectively manage the water  
13 production that you're managing in the pool now.

14 A. We feel that by minimizing the number  
15 of wells we can, number one, decrease our  
16 operating expense and likewise possibly increase  
17 our oil-water ratio in given wells and allowing  
18 us to shut in some of the more marginal oil  
19 producers in different areas of the zone  
20 therefore allowing us to more selectively cycle  
21 the water and having to lessen the amount of  
22 water we handle everyday, which will virtually  
23 decrease our lease operating expenses  
24 significantly.

25 Q. Give us a quick mental picture of the

1 physical relationship of the pool geologically  
2 between the Upper Pool and the Lower Pool.

3 A. The upper's average depth is 1580 feet  
4 below surface. It's approximately 20 feet  
5 thick. It is separated from the lower zone by  
6 approximately 30, 35 feet with the three- to  
7 four-foot coal member right on top of the lower  
8 zone that is a barrier contiguous throughout the  
9 formation.

10 The lower sandstone is roughly 28 feet  
11 thick, very slight dip to it, and fairly  
12 homogeneous.

13 Q. In the Upper Pool do you get water  
14 production in association with the well?

15 A. Yes, sir.

16 Q. Give us a general range on average of  
17 what your oil production would be to the water  
18 production in the Upper Pool.

ms. 19 ~~oil~~ A. Currently we're making 41 barrels of  
20 ~~water~~ per day in the Upper in association with  
21 3,000 barrels of water per day.

22 Q. When you look at the pool, give us the  
23 general range on average of oil versus water.

24 A. That one is even a little bit less. We  
25 make 132 barrels of oil per day, but we have

1 moved 15,000 barrels of water per day to get  
2 that.

3 Q. All right. And by selectively  
4 deepening or recompleting this combination of  
5 wells, then you hope to improve the management of  
6 this substantial amount of water and  
7 correspondingly improve your oil recovery?

8 A. Yes, sir, that is correct.

9 Q. Okay. Let's go to Exhibit No. 3, Mr.  
10 Kelly, and have you identify that for me,  
11 please.

12 A. Exhibit No. 3 contains for both the  
13 Hospah, South Hospah Unit and the Hospah lease,  
14 Form C-116 from the Oil Conservation Division in  
15 New Mexico, the gas-oil ratio test.

16 MR. STOVALL: Did you assemble the  
17 exhibit book, Mr. Kellahin?

18 MR. KELLAHIN: Yes, sir. And it was  
19 done on purpose just to see if you were paying  
20 attention.

21 Q. (BY MR. KELLAHIN) What's the purpose  
22 of the gas-oil ratio test? Why did you put it in  
23 the exhibit book?

24 A. It was required in Rule 303 for  
25 downhole commingling.

1 Q. If you were to file this  
2 administratively, it's one of the documents?

3 A. Yes, sir, it's one of the documents  
4 they request.

5 Q. These in fact are classified all as oil  
6 wells, are they not?

7 A. That's correct, yes, sir.

8 Q. Turn now to Exhibit 4. This is a  
9 two-part exhibit, is it?

10 A. Yes, sir, it sure is.

11 Q. Explain the first page.

12 A. On the first page we have the decline  
13 curve, the current decline curve for the Upper  
14 Hospah Unit.

15 Q. This is an oil production decline  
16 curve?

17 A. Yes, sir.

18 Q. What does it tell you?

19 A. We've tried to show where our economic  
20 limit is in the upper and how close we are to  
21 attaining that economic limit under current  
22 operating conditions.

23 Q. When you look at the period from 1986  
24 to 87 --

25 A. Yes, sir.

1 Q. -- there is a significant drop in the  
2 oil production rate. What's occurred here?

3 A. That's when oil prices fell so low.  
4 And these wells became uneconomic at that point  
5 and Tenneco shut them in.

6 Q. At what point in the production decline  
7 curve did Citation take over the property?

8 A. In November of 1987.

9 Q. All right. And then you put the  
10 project back on production --

11 A. That's correct.

12 Q. -- and have continued with a decline  
13 from which you have extrapolated the future  
14 performance of the Upper Hospah?

15 A. That's correct.

16 Q. Is this part of the basis upon which  
17 then you have come up with an allocation formula?

18 A. Yes, sir, this is. This basically  
19 illustrates the remaining reserves that we used  
20 in the upper portion in the ratio of allocating  
21 production.

22 Q. Turn to the second page of Exhibit 4.  
23 Identify and describe that for me, please.

24 A. This is the oil decline curve for the  
25 Hospah lease, or the Lower Sand Pool, with a

1 projected decline over the next one-and-a-half  
2 years stating its economic limit based on current  
3 operating conditions.

4 Q. All right. I see the note. It says,  
5 "Projected Economic Limit." That projects an  
6 economic limit out into what point in time?

7 A. I believe that at that point it is  
8 March of 1993.

9 Q. And that will presume no commingling?

10 A. Yes, sir. That does not presume  
11 commingling. These are left on individual basis.

12 Q. Okay. Let's turn to Exhibit 5 now, Mr.  
13 Kelly, and identify that first page of Exhibit  
14 5.

15 A. Exhibit 5 is an estimated producing  
16 bottom. It shows the calculations and how an  
17 estimated bottomhole pressure was tabulated for  
18 the Upper Hospah Unit.

19 Q. And the second page shows the  
20 calculation for the Lower Hospah?

21 A. Yes, sir.

22 Q. What is the datum point upon which  
23 you've averaged the bottomhole pressure?

24 A. We used mid-perf for each one of these  
25 reservoirs primarily because of the low-dipping

1 beds, the low-dipping formations. We did not see  
2 drastic relief.

3 Q. Okay. From an operational perspective  
4 do you see any substantial pressure differential  
5 or any fluid incompatibility or any water problem  
6 that is going to be made worse --

7 A. No, sir.

8 Q. -- if commingling is approved?

9 A. No, sir.

10 Q. Turn now to the right-hand part of the  
11 exhibit package and let's look at the documents  
12 behind tab Exhibit 6. Identify those for me, Mr.  
13 Kelly.

14 A. Exhibit 6 is a letter from our current  
15 treating chemical company that basically states  
16 that there will not be a compatibility problem  
17 with the waters in this zone. And that's  
18 inherent in the fact that these waters are  
19 commingled on the surface and reinjected so each  
20 one of these zones is seeing the same water.

21 And also that there will not be any  
22 emulsion or precipitate problems with the  
23 production or the commingling of the oils.

24 Q. Current operations are the water is  
25 produced from individual wellbores separately but

1     then commingled on the surface and reinjected  
2     back into both pools as part of the water-flood  
3     pressure maintenance project?

4             A.     Yes, sir.

5             Q.     And then the second page starts the  
6     water analysis report?

7             A.     Yes, sir. Just documentation on the  
8     similarities of the water within the different  
9     wellbores.

10            Q.     Turn to Exhibit 7, Mr. Kelly, and  
11     identify this exhibit.

12            A.     Exhibit 7 is just a tabulation of the  
13     assumptions that were made in generating the  
14     current -- under current conditions the economic  
15     limit. The shaded side on the far right column  
16     is the commingled, the assumptions that were used  
17     in the commingled case that shows the extension  
18     of the economic limit based on the lower lease  
19     operating expense.

20            Q.     Are those reservoir engineering  
21     assumptions that you've made based upon an  
22     analysis of the data generated from your project?

23            A.     Yes, sir.

24            Q.     In your opinion are those assumptions a  
25     reliable and accurate basis upon which to make



1 this forecast?

2 A. Yes, sir.

3 Q. Let's go to Exhibit 8, Mr. Kelly.  
4 Identify for us Exhibit 8.

5 A. Exhibit 8 is the allocation formula  
6 that we have submitted for your approval, for the  
7 Oil & Conservation Division's approval, to  
8 allocate production from the Upper and the Lower  
9 Hospah.

10 Q. Summarize for us how you have  
11 determined approximately 20 percent of production  
12 to allocate to the Upper Sand versus  
13 approximately 80 percent to allocate to the Lower  
14 Sand.

15 A. The basic formula that was used was  
16 determining from the decline curves that we've  
17 already seen the current remaining reserves,  
18 which we came up with 20.1 percent remaining  
19 recoverable economic reserves in the Upper  
20 Hospah, with 79.99 percent of the remaining  
21 economic reserves available to us from the  
22 Lower. And from those we've set up a ratio, a  
23 direct ratio, to allocate production with one  
24 single flow stream.

25 Q. In your opinion is that a fair and

1 accurate way based upon current available data  
2 upon which to make allocation of the commingled  
3 production?

4 A. Yes, sir.

5 Q. Let's turn now to Exhibit 9. Identify  
6 this for me.

7 A. Exhibit 9 is a tabulation for the South  
8 Hospah Unit, the Upper Sand, a tabulation of the  
9 royalty interests by member, by each participant.

10 Q. All right. Page 2 of the exhibit is  
11 what?

12 A. It's a current division interest per  
13 tract for the Lower Hospah.

14 Q. All right. And then page 3?

15 A. Page 3 shows for the Upper Hospah the  
16 four different tracts that are referred to in  
17 that table on the first page.

18 Q. And those are the tracts that have been  
19 consolidated under the unit operation for  
20 participation in this production?

21 A. That's correct.

22 Q. And when we deal with the lower pool,  
23 what is the acreage that participates in  
24 production from the lower pool?

25 A. The lower pool is strictly contained

1 within the north half of Section 12 on that plat  
2 and is a federal lease.

3 Q. And so if the Examiner or anyone else  
4 chose to determine what the net change was or the  
5 difference, then you can simply look at a tract,  
6 find the interest owner, and see what share of  
7 production is attributable to that percentage  
8 after you make the allocation of that production?

9 A. That's correct, with the tract factors  
10 being in the top column underneath each tract.

11 Q. Okay. Maybe if you'll turn to Exhibit  
12 10 for me, Mr. Kelly, would you identify and  
13 describe that.

14 A. Exhibit 10 is just our Affidavit of  
15 Mailing that shows who we contacted regarding  
16 this petition.

17 Q. All right. Let's look at the kinds of  
18 information you sent the parties upon which they  
19 could make their choice. After the list of names  
20 and addresses, there is a cover letter dated  
21 November 19?

22 A. Yes, sir.

23 Q. And what was transmitted with the cover  
24 letter? Was there anything transmitted with it?  
25 That's simply the waiver letter, isn't it?

1           A.       That's strictly the waiver letter, and  
2       that was all that was sent to them at that time.

3           Q.       The following day, on November 20, then  
4       there was a summary letter describing what  
5       Citation sought to do with this application?

6           A.       Yes, sir. And this letter was sent to  
7       all the royalty interest owners, including the  
8       Mineral Management Service, which you see a copy  
9       of that letter, the BLM.

10          Q.       And based upon that letter, then, you  
11       have received waivers back from all the interest  
12       owners with the exception of the Santa Fe  
13       interest?

14          A.       Yes, sir, that is correct.

15          Q.       Okay. Mr. Kelly, in your opinion will  
16       the approval of this application be in the best  
17       interests of conservation, the prevention of  
18       waste, and the protection of correlative rights?

19          A.       Yes, sir.

20                   MR. KELLAHIN: That concludes my  
21       examination of Mr. Kelly, Mr. Stogner.

22                   We move the introduction of his  
23       Exhibits 1 through 11. In addition, I have an  
24       Exhibit 12, which is my own Certificate of  
25       Mailing for hearing, in which I have attached the

1 return receipt card showing that we have sent it  
2 out by certified mail.

3 EXAMINER STOGNER: Thank you, Mr.  
4 Kellahin.

5 Is that Exhibit 12?

6 MR. KELLAHIN: I need to find Exhibit  
7 12.

8 EXAMINER STOGNER: Exhibits 1 through  
9 12, if he finds it, will be admitted into  
10 evidence.

11 Mr. Kelly, let me go ahead and ask some  
12 questions and get them out of the way.

13 EXAMINATION

14 BY EXAMINER STOGNER:

15 Q. In looking at Exhibit No. 2, you show  
16 you're in a boundary for the Upper Sand and then  
17 the lease boundary on the Lower Sand. Now, the  
18 ad says that you want to downhole commingle  
19 throughout the whole unit area, but yet I don't  
20 find information on the leases outside the north  
21 half of the 12 which overlies also the unit  
22 area. Is that also to be downhole commingled  
23 outside that north half of Section 12?

24 A. No, sir.

25 Q. Okay. So we're just restricting the

1 commingling to the north half of 12?

2 A. Yes, sir.

3 Q. So when I look at, there again, the  
4 Upper Sands -- I'm sorry, your map of your unit  
5 area, I got a Well 22, a Well No. 58, a Well 21,  
6 and Well 19, those are not to be downhole  
7 commingled; is that correct?

8 A. No, sir, not at this time.

9 Q. Now, the 37-X up there, and it appears  
10 like it's in the northwest quarter --

11 A. Yes, sir.

12 Q. -- is that indeed in the northwest  
13 quarter of the northwest quarter?

14 A. No, sir, it is not. It is not  
15 following Tract 3 of the Upper.

16 Q. Okay. So that is outside?

17 A. Yes, sir.

18 Q. And that's to be downhole commingled?

19 A. Yes, sir.

20 Q. How about the injection wells, are they  
21 currently downhole commingled in both zones, or  
22 do you have an injection well in each interval?

23 A. We have injection wells in each  
24 interval. And if we are sharing wellbores, there  
25 are some injection wells that are dualled, but

1       they are isolated with the packer.

2           Q.       Do you wish to pull those packers and  
3       dually or downhole commingle your injection in  
4       those wells?

5           A.       I would like to have the permission to  
6       do that if the time arose. I don't have any  
7       current plans on that, but yes, sir.

8           Q.       Have you had any correspondence with  
9       the BLM on the allocation formula, other than no  
10      correspondence?

11                  MR. KELLAHIN: We sent the notices;  
12      right?

13          A.       Yes. They have seen the letter, read  
14      the letter -- we have, and they have received it,  
15      we have a return receipt -- of what we proposed.  
16      I have been in contact with Brian Davis in the  
17      Farmington office, who has been relaying back to  
18      Duane Spencer back and forth. And they saw, as  
19      far as I'm aware, they saw no problem with any of  
20      this.

21          Q.       Okay. So they did not at least have  
22      any objection or inform you of any objection to  
23      the allocation formula?

24          A.       No, sir.

25          Q.       Or either the downhole commingling?

1           A.       No, sir.

2           Q.       Are these wells perforated or any of  
3           them openhole completed?

4           A.       To the best of my knowledge, they are  
5           all perforated.

6           Q.       Okay.

7           A.       Now, some wells were deepened into the  
8           lower, and I believe there might be some lowers  
9           that are openhole completed.

10          Q.       Does that coal act as a good buffer  
11          zone in oil pools? I'm not familiar with an  
12          oil-saturated coal zone. Or does that indeed  
13          happen? Or is it so impermeable that water or  
14          oil cannot saturate that coal zone?

15          A.       The information I took that from was an  
16          SP paper submitted by Steve Strewner that  
17          basically summarized the thermal when they tried  
18          to fire-flood in the lower zone. And they proved  
19          at that point that there was a very good barrier,  
20          and they assessed it to that coal streak above  
21          the three-to-four foot -- or the three-foot or  
22          the four-foot thick coal streak above the lower  
23          formation.

24          Q.       This paper that you specifically relate  
25          to, is it related to this project?



1           A.       No, sir, not one bit.  It's just one  
2 piece that I tried to get a little background  
3 on.  My background is not real strong in  
4 reservoirs, so I've just been trying to read as  
5 much as I can to get a feel for these reservoirs.

6           Q.       Was that paper in this area or --

7           A.       Well, I'm sorry.  In 1980-81, Tenneco  
8 submitted a request to the Oil Conservation  
9 Division to initiate a fire-flood project.  And  
10 this paper was a summary of that fire-flood  
11 project in the Lower Hospah Sand.

12          Q.       Do you have a reference to that SPE  
13 paper?

14          A.       Yes, sir.

15                 MR. KELLAHIN:  We'll be happy to give  
16 you a copy of it, Mr. Examiner.

17                 EXAMINER STOGNER:  All right.  We'll  
18 take administrative notice of it.  You can submit  
19 that subsequent to today's hearing.

20                 THE WITNESS:  Okay.

21                 EXAMINER STOGNER:  Are there any other  
22 questions of this witness?

23                 MR. STOVALL:  Let me ask you  
24 something.

25                 (A discussion was held off the record.)

1 Q. (BY EXAMINER STOGNER) Are you  
2 proposing or is Citation proposing any additional  
3 drilling out there in the north half of Section  
4 12?

5 A. No, sir, not at this point.

6 Q. But I suppose the way the application  
7 was worded and what you're asking for would also  
8 include any additional wells to be drilled in  
9 that area --

10 A. Yes, sir.

11 Q. -- to be downhole commingled?

12 A. Yes, sir.

13 MR. STOVALL: Let me ask a question  
14 just because I think I missed something along the  
15 way.

16 EXAMINATION

17 BY MR. STOVALL:

18 Q. On one of your Exhibit 2's, I think  
19 it's the first page of it, in the Upper Sand  
20 Pool --

21 A. Yes, sir.

22 Q. -- there are some wells in the south  
23 half of -- the north half of the south half, and  
24 those are not completed in the lower sand; is  
25 that correct?

1 A. That's correct.

2 Q. Are those the ones you're talking about  
3 going ahead and taking them down?

4 A. No, sir. They would strictly be within  
5 the north half of Section 12.

6 MR. STOVALL: I got confused there  
7 somehow. It was because the other exhibit was  
8 upside down.

9 That's what threw me off, Mr.  
10 Kellahin.

11 EXAMINER STOGNER: If nobody has any  
12 other questions of this witness, he may be  
13 excused.

14 Does anybody else have anything further  
15 in Case No. 10424?

16 If not, this case will be taken under  
17 advisement.

18 (The proceedings were concluded.)  
19  
20  
21

22 I do hereby certify that the foregoing is  
23 a complete record of the proceedings in  
24 the Examiner hearing of Case No. 10424  
25 heard by me on 19 December 19 91.

 Examiner  
Oil Conservation Division

## CERTIFICATE OF REPORTER

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

I, Debbie Vestal, Certified Shorthand Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I caused my notes to be transcribed under my personal supervision; 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 DECEMBER 26,  
1991.

  
\_\_\_\_\_  
DEBBIE VESTAL, RPR  
NEW MEXICO CSR NO. 3