

CASE 5053:

SOUTHEASTERN NEW MEXICO  
NOMENCLATURE

CASE No.

5053

Application,  
Transcripts,  
Small Exhibits  
ETC.

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
CONFERENCE ROOM, STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO

August 22, 1973

EXAMINER HEARING

IN THE MATTER OF:

Southeast nomenclature case  
calling for the creation,  
extension and contraction of  
certain pools in Eddy and Lea  
Counties, New Mexico.

Case No. 5053

BEFORE: Richard L. Stamets,  
Examiner.

TRANSCRIPT OF HEARING

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1 MR. STAMETS: Call next Case 5053: Southeast  
2 nomenclature case calling for the creation, extension and  
3 contraction of certain pools in Eddy and Lea Counties,  
4 New Mexico.

5 MR. DERRYBERRY: My name is Tom Derryberry, and  
6 I am attorney for the Commission, and I have one witness,  
7 James Kapteina, to be sworn.

8 MR. STAMETS: Are there other appearances in this  
9 case?

10 MR. LINES: Farrell Lines, appearing for Michael  
11 Grace.

12 MR. STAMETS: Will you have a witness, Mr. Lines?

13 MR. LINES: Yes.

14 MR. STAMETS: If he will stand and be sworn at  
15 this time.

16 (Whereupon the witnesses in this case were sworn  
17 en masse.)

18 \* \* \* \*

19 JAMES E. KAPTEINA,  
20 was called as a witness on behalf of the Oil Conservation  
21 Commission, and having been already duly sworn according  
22 to law, testified as follows:

23 DIRECT EXAMINATION

24 BY MR. DERRYBERRY:

25 Q Would you state your name and position, please?

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- 1 A James E. Kapteina, petroleum engineer for the New
- 2 Mexico Oil Conservation Commission.
- 3 Q Are you prepared to make recommendations to the
- 4 Commission concerning the nomenclature of certain pools
- 5 in Eddy and Lea Counties, New Mexico?
- 6 A Yes, I am.
- 7 Q Are your recommendations prepared in the form of an
- 8 exhibit?
- 9 A Yes, they are prepared in the form of Exhibit One,
- 10 paragraphs A through P.
- 11 Q Will you please refer to this exhibit and to the docket
- 12 that has been prepared and distributed at this hearing,
- 13 and point out any substantial differences between the
- 14 two?
- 15 A Yes. There are additions, two additions, to paragraph
- 16 K. The first addition is Township 19 South, Range
- 17 25 East, Section 7, the west half. And Township 19
- 18 South, Range 24 East, Section 12, the south half.
- 19 The remainder of the exhibit is identical to that
- 20 of the docket.
- 21 Q Do you have anything further to add to your testimony?
- 22 A I recommend that the nomenclature be adopted as
- 23 indicated in paragraphs A through P, with the additions
- 24 just described.
- 25 Q Will you introduce your exhibit, please?--

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1 MR. DERRYBERRY: I move for the introduction of  
2 this exhibit, Mr. Examiner.

3 MR. STAMETS: Are there any objections?

4 MR. LINES: Where are they? I haven't seen them  
5 as yet.

6 MR. STAMETS: Off the record.

7 (Whereupon an off the record discussion was held.)

8 (Hearing continues.)

9 MR. STAMETS: Are there any objections to the  
10 admission of this exhibit?

11 MR. LINES: At this time, I would like to only  
12 object, not necessarily to the admission, but to the scope  
13 of the exhibits. I believe that they do not contain enough  
14 to prove the kind of things that he is asking for here.  
15 I don't see anything in the way of maps to show any kind  
16 of fault, or anything concerning the thickness. All I see  
17 is the township number and the section number and the range  
18 number and a green area which indicates one completed well  
19 capable of producing and a discovery well. I see nothing  
20 further in the way of anything concerning the terrain or  
21 any kind of map to indicate the kind of things I presume  
22 he would want to present in establishing a new pool at  
23 this time.

24 MR. STAMETS: Is that a formal objection?

25 MR. LINES: Yes, it is.

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1 MR. STAMETS: To the admission of the exhibit?  
2 MR. LINES: Yes, it is.  
3 MR. STAMETS: The objection will be denied.  
4 (Whereupon OCC Exhibit Number One was admitted in  
5 evidence.)

6 MR. STAMETS: Are there questions of the witness?

7 MR. LINES: Yes.

8 \* \* \* \* \*  
9 CROSS EXAMINATION

10 BY MR. LINES:

11 Q The first thing I am concerned with in your proposed  
12 changes in the nomenclature here which in fact is  
13 creating new pools, could you give me the criteria used  
14 by the Commission in the creation of these new pools?

15 A These two pools are more than a mile in distance from  
16 the other pools producing from the same formation or  
17 the same source of supply.

18 Q This is the only criteria used by the Commission in  
19 establishing a new pool?

20 A Normally this is applied for by the operator on Form  
21 C-123, and submitted to the District Office, and the  
22 District Office then instigates this case and presents  
23 it to the Commission.

24 Q But is the only criteria used by the Commission in  
25 awarding these new nomenclatures just the one mile

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1 distance situation?

2 A Normally, yes.

3 Q Okay. Let me ask you a question then. In retrospect,  
4 my client, Mr. Grace, as you are probably aware of,  
5 made application himself earlier this year for the  
6 creation of at least two new pools on wells which were  
7 more than one mile distant from any other producing  
8 wells, and those applications were denied by the  
9 Commission.

10 I believe you were present at that time. So  
11 obviously in that case, the one mile distance had little  
12 or no bearing at all on the application. So what I  
13 want to know then is what your position is with regard  
14 to your action on one hand as opposed to that action  
15 on the other hand.

16 A I am not familiar with the case you are speaking of,  
17 Mr. Grace's application.

18 Q Going further down, are you familiar with any other  
19 cases that may have come before the Commission on  
20 application for a new pool where the Commission might  
21 have denied the new pool?

22 A I'm familiar-- Well, I'm not. I know of instances  
23 where pools have been dismissed as far as lack of  
24 sufficient study until further studies had been made.

25 Q What do you mean by "lack of sufficient study"?



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1 MR. STAMETS: Just a minute. Mr. Kapteina, would  
2 that be where there were some contested points of view?

3 THE WITNESS: Yes, usually.

4 MR. STAMETS: By persons interested in the pool?

5 THE WITNESS: Right.

6 Q (By Mr. Lines) Well, this is what I want to know. I  
7 asked you earlier what criteria you used, and you said  
8 that the only criteria was whether or not there was  
9 a one-mile distance, and obviously in this case, it  
10 is only the one-mile distance. I am only asking if  
11 there are other criteria used as well, because as you  
12 are aware of, my client applied for the same type of  
13 thing earlier in the year, and met the one-mile  
14 criteria, and was denied his application.

15 MR. STAMETS: This is your statement at this time.  
16 We have nothing in the record on that, and we will certainly  
17 allow you to present this evidence.

18 MR. LINES: I asked him just now if he knew of  
19 other cases, and he said that he did where the Commission  
20 had not allowed them because of a conflict in testimony.  
21 Was the conflict in testimony conflict in the one-mile  
22 distance, or was it conflict in other areas?

23 A I think it was in other areas.

24 Q In other words, you are conceding that in other cases,  
25 people have met the one-mile distance criteria, but

1 still have been denied the application?

2 A That's correct.

3 Q I again ask my question: What criteria do you use, does  
4 the Commission use, in granting these new pools besides  
5 the one-mile distance which you just answered was the  
6 only criteria?

7 A I think what you are wanting to know is the reason the  
8 pools were dismissed. This may have been because of  
9 geological discrepancies.

10 Q In other words, besides the one-mile distance, you also  
11 have geographical standards that must be met as well,  
12 is that correct?

13 A Geological--

14 MR. STAMETS: Mr. Kapteina, possibly I could ask  
15 you a few questions to clarify these points about the  
16 nomenclature procedure.

17 The recommendations for pool extensions originate  
18 in the District Office, is that correct?

19 THE WITNESS: Yes.

20 MR. STAMETS: For the district in which the well  
21 is located?

22 THE WITNESS: Correct.

23 MR. STAMETS: And they make these applications  
24 based on their knowledge of the geological formations, the  
25 geography, the location of wells producing from the same

1 formations in the district, is that correct?

2 THE WITNESS: Yes, sir.

3 MR. STAMETS: They make these recommendations  
4 based on their past experience with similar wells, similar  
5 pools, and similar situations in their district, is that  
6 correct?

7 THE WITNESS: That's correct.

8 MR. STAMETS: There have been conflicts in the  
9 past on regular nomenclature cases, and cases have been  
10 dismissed to allow further study by the concerned operators  
11 in the affected pools, is that correct?

12 THE WITNESS: Yes, sir.

13 MR. STAMETS: Now, does that clarify the situation?

14 MR. LINES: Well, it clarifies that there is more  
15 than one criteria. Now, I would like the witness to tell  
16 me what other kinds of criteria are in fact used by the  
17 Commission, or are considered by the Commission in determining  
18 whether or not there will be the granting of the nomenclature--  
19 or a new field formed.

20 MR. STAMETS: You mean other than those we have  
21 just covered.

22 MR. LINES: Other than the one-mile distance.

23 MR. STAMETS: We just got through going through  
24 a series of three or four questions--

25 MR. LINES: But there was nothing specific.

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1 THE WITNESS: What do you mean nothing specific?  
2 Why don't you be more specific?

3 Q (By Mr. Lines) In this case, all you indicate is there  
4 is one other well within the area, and no other wells  
5 for a mile distance. What other type of geological  
6 criteria have you used in this case to determine whether  
7 or not a new pool should be granted?

8 A It's produced from the Morrow, the formation itself  
9 is known, there is production there, and it is known  
10 that the pool is necessary.

11 Q Why shouldn't it be continued as part of the Morrow pool?

12 A It's four miles away from the Morrow pool in one  
13 instance, and it's four and a half miles in the other  
14 instance.

15 Q Have there been other applications that have come before  
16 the Commission that have been four miles from another  
17 well and that have been denied?

18 A Not to my knowledge.

19 Q Have there been others more than one mile away that  
20 have been denied?

21 A Not to my knowledge.

22 Q You just told me a while ago that there had been.

23 A I said that they were dismissed until a further study  
24 could be made. They may have then been brought up  
25 in subsequent cases and approved.

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- 1 Q Then you do know of other cases where they might have
- 2 been one to four miles away from the existing pool
- 3 and the petition was dismissed by the Commission?
- 4 A That's what I just said.
- 5 Q What criteria might have been used then, other than the
- 6 fact they were four miles away?
- 7 A I have already answered your question. In the first
- 8 place, there may have been a conflict due to a
- 9 geological reason as to what was produced from the
- 10 formations. The only thing that would have been
- 11 contested would be whether or not one geologist says
- 12 it is in the Morrow or in some other formation.
- 13 Q Where do you find this here?
- 14 A I'm not saying it is anywhere. I'm going according
- 15 to the way the man's application might be stated, and
- 16 the way the district decision went.
- 17 Q In this particular case, where in your exhibit does
- 18 the applicant say this comes from?
- 19 A The Morrow formation.
- 20 Q Do you have any evidence of your own that it comes
- 21 from the Morrow formation?
- 22 A What do you mean by that?
- 23 Q Do you have any geological proof or evidence that it
- 24 comes from the Morrow formation?
- 25 A I don't have any proof it does not. Do you?

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1 Q I am asking the questions.

2 A You are the one who is objecting.

3 Q Your testimony was in favor of the application, and I  
4 am asking you what information you are using.

5 MR. CARR: I object to this line of questioning.  
6 If Mr. Grace has some evidence, he can put it on. If not,  
7 they are obviously on a fishing expedition.

8 MR. LINES: I am not on a fishing expedition, Mr.  
9 Commissioner, I really want to know at this stage what the  
10 Commission uses in determining whether there should be a  
11 new pool. I have established that it should be at least  
12 one mile distant from the next pool and that there have to  
13 be certain geological criteria. I guess I really want to  
14 know what kind of geological criteria the Commission uses,  
15 and what other kinds of things the Commission would decide  
16 in determining when a new pool should or should not come  
17 into existence.

18 I think this is more than just a fishing expedition.  
19 My client has land in both of these areas, so he will be  
20 materially affected if the Commission approves this  
21 nomenclature. I feel my client needs to know the exact  
22 criteria used by the Commission in determining when a new  
23 pool should be created.

24 I might ask, Mr. Commissioner, whether you have  
25 any form that you use, or any written guidelines.

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1 MR. STAMETS: Let's go off the record for just  
2 a second here.

3 (Whereupon an off the record discussion was held.)

4 (Hearing continues.)

5 MR. STAMETS: Back on the record.

6 THE WITNESS: I don't think that that is necessary.

7 I think the only thing that is necessary is the fact that  
8 there is a well produced from the formation, and that there  
9 is production, and that it is a mile away from a pool, and  
10 for information purposes, production history and other  
11 history is required by the Commission. That's all that is  
12 necessary.

13 It has been established that there is production,  
14 it has been established that there is a well there, and it  
15 has been established that there is no pool within a mile  
16 of this pool. Therefore, there is no other determining  
17 factors necessary, and the operator has submitted a Form  
18 C-123 asking that the pool be established, and he has  
19 established that there is production, and that's all that  
20 is necessary.

21 This is according to the rules and regulations.

22 MR. LINES: Does the Examiner agree with that?

23 MR. STAMETS: The Examiner is not a witness in  
24 this case. I don't really see any particular benefit by  
25 pursuing this line of questioning at this time. I would

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1 prefer, if you have a witness present, to show why these  
2 pools should not be created, that we hear your witness, and  
3 then we may all wish to recall Mr. Kapteina and go over  
4 these particular points.

5 MR. LINES: Let me ask another question, if I might.

6 Q (By Mr. Lines) I think you indicated, number one, that  
7 you have to have a well more than a mile away, and it  
8 has to be in production. Is the Morris R. Antweil  
9 Randall Well No. 1 in production?

10 A I did not say it had to be in production. I said that  
11 production was there.

12 MR. STAMETS: It had to be capable of producing.

13 Q (By Mr. Lines) What is the capability at the present  
14 time of the Antweil Well?

15 A I am not familiar--

16 MR. STAMETS: This would be reflected in the  
17 Commission records, would it not, Mr. Kapteina?

18 THE WITNESS: Yes, it would.

19 MR. LINES: Do we have that available at the  
20 present time then?

21 MR. STAMETS: It could be made available, yes.

22 MR. LINES: Okay.

23 THE WITNESS: This is the only exhibit I have.

24 Q (By Mr. Lines) My further question is you indicated  
25 that there had to be a well that had some kind of



1 production capacity, and I'm only asking what is the  
2 present production capacity of the Antweil Randall Well?

3 A I am not familiar with it.

4 MR. STAMETS: Does this conclude your cross  
5 examination at this time?

6 MR. LINES: I just asked if he could produce that.

7 MR. STAMETS: And you got no response?

8 THE WITNESS: No, you did not ask that question.  
9 You asked if I knew it, and I said no, I wasn't familiar  
10 with it. The information is available in the Commission  
11 records.

12 Q (By Mr. Lines) Could it be produced at this hearing as  
13 an exhibit?

14 A If you wish to produce it, as an exhibit, that is your  
15 privilege.

16 Q You stated earlier the way things are considered through  
17 the district level, and you said that it had to be  
18 defined or determined that there was a well that had  
19 been drilled, and that there is some kind of production  
20 capability that has been determined for that well in  
21 this case. I will now resume--

22 MR. STAMETS: Mr. Lines, this entire line of  
23 questioning is wasting a tremendous amount of time and adding  
24 a lot to the record that is unnecessary. The Commission  
25 can and will produce any exhibit which you would like to

1 have from the well file and make it available as soon as  
2 we can. Is that satisfactory?

3 MR. LINES: Yes.

4 MR. STAMETS: How soon would you like to have the  
5 information?

6 MR. LINES: Some time before a determination is  
7 made.

8 MR. STAMETS: Do you mean you would just like this  
9 admitted into the record? You don't care if you examine  
10 it at this time?

11 MR. LINES: We would like to examine it and have  
12 it admitted into the record.

13 MR. CARR: Do you intend to call a witness?

14 MR. LINES: Yes, we do. Do you have any idea,  
15 Mr. Carr, when we might get that information?

16 MR. STAMETS: Jim, could you ask Una to pull the  
17 files and to make copies of the 105's and 122's?

18 THE WITNESS: Yes.

19 MR. STAMETS: The witness may be excused. He may  
20 be recalled later.

21 (Witness excused.)

22 MR. STAMETS: Mr. Lines, do you have a witness  
23 to present at this time?

24 MR. LINES: Yes, Mr. Dale Carlson.

25 \* \* \* \*

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1 DALE CARLSON,  
2 was called as a witness, and having been already duly sworn  
3 according to law, testified as follows:  
4 DIRECT EXAMINATION  
5 BY MR. LINES:  
6 Q Would you state your name?  
7 A Dale Carlson.  
8 Q And your occupation?  
9 A Geologist for Mr. Grace.  
10 Q Have you had occasion to work for or with Mr. Grace in  
11 this South Morrow area being discussed here today?  
12 A Yes, I have, for about two year.  
13 Q Have you had occasion to review the situation concerning  
14 the wells in production in these areas?  
15 A Yes, I have.  
16 MR. STAMETS: In the two areas in question?  
17 THE WITNESS: In the South Carlsbad field, yes.  
18 MR. STAMETS: The South Carlsbad field?  
19 THE WITNESS: Yes.  
20 MR. STAMETS: I presume you will show some  
21 relationship between the South Carlsbad field and this area?  
22 MR. LINES: Yes.  
23 Q (By Mr. Lines) Have you had occasion to do any work,  
24 observations or studies in the Happy Valley and  
25 LaHuerta areas?

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1 A Yes, I have.

2 Q Perhaps we ought to take them one at a time. I would  
3 like for you first to indicate to us whether you have  
4 any maps with you today.

5 MR. STAMETS: Mr. Lines, has this witness ever  
6 been accepted as an expert by the Commission?

7 THE WITNESS: Yes, I have testified.

8 MR. STAMETS: Okay.

9 MR. LINES: I'm sorry I failed to ask that.

10 Q (By Mr. Lines) Do you have a map here with you, Mr.  
11 Carlson, that you have prepared-- that you know has  
12 been prepared that would show the oil situation in that  
13 area?

14 A Yes, I do.

15 Q Could you use that map to indicate a little bit to us  
16 concerning your observations in the areas of Happy  
17 Valley and Lahuerta?

18 MR. STAMETS: Will this map be presented as an  
19 exhibit?

20 MR. LINES: Yes, it will.

21 A This is a map showing a series of structure contours--

22 MR. STAMETS: Do you have a copy of that exhibit  
23 for the Examiner?

24 MR. LINES: This is the original, and we will  
25 see that one is provided.

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1 MR. STAMETS: The Examiner needs a copy in order  
2 to follow along. I need one while he is discussing the  
3 situation in order to evaluate his testimony.

4 MR. LINES: I would suggest, Mr. Carlson, that  
5 you come down here by the Commissioner so that he can review  
6 our map with us.

7 MR. CARR: Can I ask one question? Mr. Carlson,  
8 you were asked a question concerning whether this map would  
9 reflect the oil situation in the area.

10 THE WITNESS: It has a bearing on the oil situation.

11 MR. CARR: Is this an oil area?

12 THE WITNESS: It is a gas producing area.

13 MR. LINES: If I said oil, I meant to say gas.

14 Q (By Mr. Lines) I would like you to outline for the  
15 Examiner-- Let's start in the LaHuerta area where the  
16 present wells are.

17 A This well located in Section 28 is the one the Commission  
18 is using in the LaHuerta area. This well in Section  
19 34 is the one being used in the Happy Valley area.

20 Q Do you have reason to believe in either or both of  
21 these areas that there might be some kind of interflow  
22 and connection with the present wells in the present  
23 pool?

24 MR. STAMETS: Which present pool? Would you  
25 clarify that?

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1 Q (By Mr. Lines) The pools these are being taken from.

2 A They are not being taken--

3 Q From the pools they are closest to.

4 A They are closest to the South Carlsbad field, and there

5 is-- I have drawn in here a fault between the two, but

6 there is no direct evidence this is a barrier to

7 communication between these areas and the South Carlsbad

8 field.

9 The exact placement of the fault is not known.

10 It is not known whether the fault actually presents

11 a barrier between this and the South Carlsbad field.

12 Q More specifically, in the Happy Valley area here, do

13 you have reason to believe there might be a flow

14 situation that might go up through this area here

15 (indicating)?

16 A There well could be.

17 Q What kind of studies have you done that might indicate

18 that to you?

19 A The fact that the wells are producing from the same

20 formation, and the fact that this pool has already

21 gone for a considerable distance in this direction.

22 There is no particular reason for drawing a line and

23 saying this does not communicate with this (indicating)

24 at this present stage.

25 There is no information at the present time to

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1 cite in order to support or not support this particular  
2 communication between the two. You can't tell at this  
3 stage, without more wells in between, whether they  
4 connect or not.

5 The same situation would have existed if the  
6 northern wells in the South Carlsbad field had been  
7 drilled and the southern wells had been drilled with  
8 no drilling in between. You would have had a great  
9 deal more than four miles separation between the two,  
10 but still the Commission has declared them all part of  
11 the same field.

12 Q Are there wells in this area more than four miles apart  
13 still considered within the same pool?

14 A Yes.

15 Q Is it your testimony that more study should be made in  
16 the area to determine whether in fact these are  
17 continuous?

18 A I would think so, because a lot of this area up here  
19 is structurally higher than the area down here  
20 (indicating), and the wells down here (indicating)  
21 could well be draining the wells to the south. On  
22 the overall pressure in the field, if there is  
23 communication between the two, they would affect each  
24 other.

25 Q Do you know of any maps, or have you seen any in

1 existence that would indicate conclusively that there  
2 is in fact a complete sealing here that would preclude  
3 any thought or any speculation that there might in  
4 fact be drainage from one field to another?

5 A No, I don't. The final test of this, of course, is  
6 going to be the wells drilled in between which may or  
7 may not prove it is continuous all the way through.  
8 But the wells in between have not yet been drilled.  
9 But at present, I can see no reason for saying there is  
10 no communication between here.

11 MR. LINES: I have no further questions. At this  
12 time, I will move for the introduction of our exhibit.

13 MR. STAMETS: Without objection, Objector's Exhibit  
14 Number One will be admitted in evidence.

15 (Whereupon Grace Exhibit Number One was admitted  
16 in evidence.)

17 MR. STAMETS: Are there questions of this witness?

18 MR. CARR: Yes.

19 \* \* \* \*

20 CROSS EXAMINATION

21 BY MR. CARR:

22 Q You are familiar with Rule 104, I presume, of the  
23 Oil Conservation Commission Rules and Regulations which  
24 stakes out the basic provisions for this type of pool  
25 creation?



1 A In a general way, yes. I have heard them here.

2 Q You heard the discussion this morning earlier in this  
3 proceeding?

4 A Yes.

5 Q Now, you are here representing Mr. Grace who is protesting  
6 the creation of certain pools in Eddy County, New Mexico,  
7 is that correct?

8 A That's correct.

9 Q If you would, please, we would like you to relate your  
10 objection to the rules of the Commission, and explain  
11 what you are bringing to the Commission consistent  
12 with the rules upon which we could consider your  
13 protest.

14 A I am not objecting. I am acting as a witness for the  
15 person who is objecting.

16 Q Then it would be correct to say that you know of no  
17 way the application before the Commission conflicts  
18 with the responsibilities imposed on the Commission  
19 by statute?

20 A Would you run through that again, barefooted and slowly?

21 Q Then you know of no basis that the Commission could  
22 rely on for denying the creation of these new pools?

23 MR. LINES: I object to that. He is asking him  
24 law and policy rather than what he testified to on direct  
25 examination. If he wants to ask questions pertaining to

1 the field and his testimony concerning the map, I have no  
2 objection.

3 MR. CARR: Well, I just find it interesting that  
4 Mr. Carlson is an expert, and yet is unaware of the rules  
5 of the Commission.

6 Q (By Mr. Carr) You stated that--

7 MR. STAMETS: I presume you have withdrawn your  
8 question?

9 MR. CARR: I think the answer is obvious.

10 MR. LINES: I ask that that be withdrawn because  
11 it is argumentative.

12 Q (By Mr. Carr) Did you state that you were aware of  
13 areas in which there are wells more than four miles  
14 apart included within the same pool?

15 A Yes.

16 Q Did you intend to imply that there were no wells closer  
17 or within these wells?

18 A No.

19 Q In other words, there is not an instance, to your  
20 knowledge, where there are wells with nothing in between  
21 that are four miles apart that are included within  
22 the same pool?

23 A Not that I know of at present, no.

24 Q Thank you. You mentioned that there was no way at  
25 the present time, in view of present development, to

- 1 tell whether the areas we are considering placing  
2 in new pools, if these are in communication with the  
3 South Carlsbad Morrow; is that correct?
- 4 A Yes.
- 5 Q Do you have any information which would indicate that  
6 they are in communication?
- 7 A I have no information to indicate that they are or that  
8 they are not.
- 9 Q In other words, you are requesting that this application  
10 be denied until there is further development in the  
11 area, is that correct?
- 12 A I am not requesting anything, I am simply acting as  
13 a witness for Mr. Grace.
- 14 Q But--
- 15 A What I do say is this. That if they are in  
16 communication, it would be logical for them to be  
17 treated as the same unit rather than as separate units,  
18 because one would have a direct bearing on the other.
- 19 Q Are you aware that if communication was approved at  
20 a later date that this would be included in the same  
21 pool?
- 22 A It could be done, yes.
- 23 Q Wouldn't that in effect take care of any possible  
24 communication which was later discovered if there is  
25 such communication?

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1 A If it is done.

2 MR. CARR: I have no further questions.

3 \* \* \* \*

4 CROSS EXAMINATION

5 BY MR. STAMETS:

6 Q Mr. Carlson, how could the creation of these two pools  
7 affect the South Carlsbad pool or Mr. Grace?

8 A Well, he has a number of very good wells in the extreme  
9 north end of the pool, which is the end we are concerned  
10 with. A heavy drain by the wells to the north could  
11 have an adverse effect on his wells, of course, and  
12 could be damaging to him in the long run if the rules  
13 that are used in the northern part are different from  
14 the rules used in the southern part.

15 Q Okay, what you have said here is that heavy drainage,  
16 a high rate of production, from these two pools could  
17 adversely affect Mr. Grace if there was connection  
18 between them and the South Carlsbad field?

19 A That's right.

20 Q What is the productive capacity of the well in each  
21 of these proposed pools?

22 A I don't know what the productive capacity is in these  
23 up here. We asked for this information, but we do  
24 not have it yet.

25 Q In other words, the wells might be very low marginal

1 wells and could in no way affect the pool to the south?

2 A This is true.

3 Q But you don't know that?

4 A I don't know that.

5 Q So part of what you base this on is information which  
6 you just don't know?

7 A Right.

8 Q How far from the pool boundaries of the South Carlsbad  
9 pool would it be safe to locate a new pool, considering  
10 there would be no intervening wells?

11 A How far?

12 Q One mile? Two miles? Six miles? Twenty miles?

13 A It depends so much on the conditions that there is no  
14 way to state this. It depends on the type of  
15 communication. It depends on the configuration of rock,  
16 the structure, the depth. It depends on so many things  
17 it is impossible to state.

18 Q You are telling me that you have no real way of knowing  
19 whether it would be one mile or twenty miles? It  
20 would appear to me in that case that the Commission  
21 would have to utilize its discretion and its expertise  
22 and its experience from years of doing this and  
23 establish the pools as it sees fit, as it appears to  
24 be required.

25 I would say this. I would say that since you

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1 asked that, I think you should use as much information  
2 as possible, as much information as is available, in  
3 making such a decision, and not base the decision  
4 simply on a mile limit.

5 MR. STAMETS: Off the record.

6 (Whereupon an off the record discussion was held.)

7 (Hearing continues.)

8 MR. STAMETS: Back on the record. That's all the  
9 questions I have. Mr. Ramey, do you have any questions?

10 MR. RAMEY: No, I don't have any questions. Mr.  
11 Carr asked the ones I had in mind.

12 (Whereupon an off the record discussion was held.)

13 (Hearing continues.)

14 MR. STAMETS: Let's go back on the record. Mr.  
15 Lines, do you have anything further?

16 MR. LINES: Yes, I have a few more questions for  
17 the witness.

18 \* \* \* \*

19 REDIRECT EXAMINATION

20 BY MR. LINES:

21 Q First of all, Mr. Carlson, the question was asked by  
22 Mr. Carr if there were presently any wells four miles  
23 from other wells with nothing in between that are in  
24 one pool, and you said there were not. However,  
25 everything is building up. Have there been situations

1 in the past where you have had one well more than  
2 four miles from another in the same pool?

3 A Oh, certainly, this has happened lots of times.

4 MR. STAMETS: I am not sure, but I think I may have  
5 missed something in the question.

6 MR. LINES: Mr. Carr asked him earlier-- I asked  
7 him earlier if there were other wells more than four miles  
8 apart in the same pool, and Mr. Carr asked him are there  
9 presently any wells four miles apart in the same pool with  
10 nothing in between. I am only asking whether that situation  
11 has ever existed.

12 THE WITNESS: He is saying before a pool was  
13 established, had there been cases when there were wells  
14 spaced more than four miles apart, and I said yes.

15 MR. STAMETS: Which eventually ended up in the  
16 same pool.

17 THE WITNESS: Yes.

18 Q (By Mr. Lines) I think your testimony was that no matter  
19 what the present production is here, if there is any  
20 production at all here, that the potential for harm  
21 to the wells is here because of the downflow and because  
22 of the proximity to some other wells to the north.

23 A Yes.

24 Q Do you believe that there is potential here for the  
25 Commission to authorize or to undertake to have a

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1 study done before this determination is made as to  
2 the creation of new pools?

3 A I would say yes.

4 Q What kind of things do you think should be done to give  
5 the Commission a more accurate accounting of what  
6 actually is happening in this area so as not to  
7 jeopardize other wells?

8 A I would say there should be a detailed study made of  
9 the individual well pressures and production and anything  
10 that bears on communication between wells.

11 Q Is there also a Catclaw pool up in this area (indicating)?

12 A No, it's over in this area (indicating).

13 Q It's even closer to the Happy Valley than is the South  
14 Carlsbad?

15 A Yes, it is.

16 Q Is there potential danger for damage to the wells there  
17 as well in connection with new wells that might be  
18 drilled in the Happy Valley area?

19 A I would say there is potential, yes.

20 MR. LINES: I don't think I have any further questions.

21 \* \* \* \*

22 RE-CROSS EXAMINATION

23 BY MR. CARR:

24 Q I want to make one thing clear. In your testimony a  
25 moment ago, you stated that you are aware that there



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1 have been wells four miles out of a pool that eventually  
2 ended up in the same pool, is that correct?

3 A True.

4 Q But you have not changed your testimony that you do  
5 not know at the present time of any area that includes  
6 two wells four miles apart with nothing intervening,  
7 is that correct?

8 A I don't know that there is not one, but I do not know  
9 of one.

10 MR. STAMETS: How would the creation of these two  
11 pools adversely affect the Catclaw Draw-Morrow Gas Pool?

12 THE WITNESS: Well, there again, we are talking  
13 about an area here that they are drawing from with these  
14 wells that are structurally higher than some of the wells  
15 in the Catclaw field. In other words, they are downdip  
16 from this (indicating).

17 MR. STAMETS: I repeat, how can it adversely  
18 affect them?

19 THE WITNESS: If these wells (indicating) are drawn  
20 in such a way as to damage the pressure and production  
21 potential from the other wells, they can affect them  
22 adversely if they are in communication.

23 MR. STAMETS: I think the record should show at  
24 this point that the Applicant-- or the major operator in  
25 the Catclaw Draw-Morrow Gas Pool was present at this hearing

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1 today, and has left the hearing room, and has not imparted  
2 any objection to this Examiner in either of these cases.

3 MR. LINES: I think the record should also show  
4 that the testimony was-- that the testimony indicated that  
5 there was complete drainage of the field. In other words,  
6 I believe he indicated that in fact, there was not a formation  
7 barrier, but that there was complete drainage between these  
8 areas.

9 MR. STAMETS: He was only referring to the wells  
10 in the Catclaw Draw-Morrow Gas Pool.

11 MR. LINES: Right.

12 MR. STAMETS: Are there any further questions of  
13 this witness?

14 (No response)

15 MR. STAMETS: The witness may be excused.

16 (Witness excused.)

17 MR. CARR: I would like to recall Mr. Kapteina.

18 \* \* \* \*

19 JAMES E. KAPTEINA,

20 was recalled as a witness on behalf of the Commission, and  
21 having been already duly sworn, testified as follows:

22 DIRECT EXAMINATION

23 BY MR. CARR:

24 Q Mr. Kapteina, you are still under oath.

25 A Yes, sir.

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1 Q As you recall a while ago, questions were raised about  
2 production capabilities on certain wells.

3 A Yes, that question was raised.

4 Q Have you prepared for the Commission certain exhibits  
5 which will indicate that there is at least at present  
6 production capability attributed to these wells?

7 A Yes, sir.

8 Q Would you refer to those exhibits, and state what they  
9 show?

10 A Yes. In paragraph D, the pooling question is the  
11 Superior Oil Company State "Q" Com No. 1 located in  
12 Unit L of Section 34, Township 21 South, Range 26 East,  
13 Eddy County, New Mexico.

14 It is indicated as the discovery well of the  
15 Happy Valley-Morrow Gas Pool. I have copies, Xerox  
16 copies, of the Form C-105 which shows that the well  
17 was drilled through the Morrow formation, and that we  
18 have indicated a test of 1,350 MCF of gas, and also  
19 a drill stem test on the Wolfcamp and the Morrow.

20 I have in paragraph E the Form C-105 of the  
21 discovery well, the Cities Service Oil Company Cawley  
22 A Com No. 1 located in Unit K of Section 28, Township  
23 21 South, Range 27 East, Eddy County, New Mexico.

24 On the Form C-105, the well was drilled through  
25 the Morrow and was capable of producing 1,590 MCF of gas.

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1 Q Mr. Kapteina, do these exhibits, to your satisfaction,  
2 show the productive capability of the said wells?

3 A Yes, I believe they do.

4 Q Mr. Kapteina, are you familiar with anything in the  
5 Rules and Regulations of the Commission which require  
6 a certain amount of production be required, or just  
7 that productive capability be shown?

8 A I believe it is only a productive capability.

9 Q Suppose, Mr. Kapteina, that a well four miles distant  
10 from a pool is declared to be a separate pool, and at  
11 a later date it is established by further development  
12 that there is communication between the two. What  
13 could the Commission do in that situation?

14 A As in past pools, the pools where it is proven that  
15 they are produced from the same common source of supply,  
16 the pools are consolidated by the extention-- or by  
17 the abolishment of one pool and the extension of the  
18 remaining pool.

19 Q In your opinion, does this protect people from being  
20 drained because of communication which originally was  
21 not known?

22 A Yes, I believe it does.

23 MR. CARR: Mr. Examiner, I offer Oil Conservation  
24 Commission Exhibits One and Two.

25 MR. STAMETS: Is there any objection to the

1 admission of these exhibits?

2 MR. LINES: Are you going to introduce Exhibit  
3 Three as well?

4 MR. CARR: These are offered as supplemental  
5 exhibits to Exhibit One. I have no further questions of  
6 Mr. Kapteina.

7 MR. STAMETS: Was there any objection to the  
8 admission of these two supplemental exhibits?

9 MR. LINES: I wanted to ask him a question about  
10 the first one.

11 MR. STAMETS: Before their admission?

12 MR. LINES: Yes.

13 \* \* \* \*

14 CROSS EXAMINATION

15 BY MR. LINES:

16 Q I believe Mr. Carr asked you whether at present there  
17 was production capability, and your answer was that  
18 there was production capability. Is there present  
19 production capability for each of these wells?

20 MR. STAMETS: I don't think there is any difference  
21 between the two. I wish you would explain the difference  
22 between production capability and present production  
23 capability.

24 MR. LINES: He indicated that there was a drill  
25 stem test that provided-- that gave him information for

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1 this, and I would like him to state further whether there  
2 was a four-point test.

3 MR. STAMETS: I think you misunderstood his  
4 testimony. He said there were drill stem tests attached to  
5 the back of this, that production is shown on the front of  
6 the form, and that should be a flow test.

7 MR. LINES: Is it a flow test?

8 MR. STAMETS: Mr. Kapteina, would you look at  
9 the two forms and tell us what they say in relation to flow?

10 THE WITNESS: In paragraph D, it says "Calculated  
11 Twenty-four Hour Rate".

12 MR. STAMETS: What do they show as the calculated  
13 absolute openflow rate?

14 THE WITNESS: Paragraph D, which is the Superior  
15 Oil Company State Q Com No. 1 Well shows a calculated  
16 twenty-four rate of 1,350 MCF. That's calculated from a  
17 four-hour test through an 18/64 inch choke, at which time the  
18 well produced 225 MCF.

19 The Cities Service Oil Company Cawley A Com No. 1,  
20 which pertains to paragraph E, was a one-hour test with a  
21 one-inch choke, which produced 5/10 of a barrel of fluid,  
22 and 1,590 MCF of gas during the one-hour period.

23 MR. LINES: What was that one again?

24 THE WITNESS: Which one?

25 MR. LINES: The last one.

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1 THE WITNESS: One thousand five hundred ninety  
2 MCF of gas.

3 MR. STAMETS: We are getting a lot of questions  
4 that are not getting into the record. If all the questions  
5 will be directed through the attorneys, we will get this  
6 matter cleared up shortly.

7 Q (By Mr. Lines) Did the openflow and structural break  
8 have any bearing at all in the determination as to  
9 the creation of the new pool?

10 A What?

11 Q Did the openflow and structural break have any bearing  
12 on your determination that you would recommend the  
13 creation of a new pool?

14 A I don't follow your question.

15 Q The openflow figure that you have there, and the  
16 structural break figure that you have there--

17 A What structural break? I mentioned nothing about  
18 structural break.

19 Q The structural break mentioned by Mr. Carlson on the  
20 map when he was testifying. Were you here during his  
21 testimony?

22 A No, I wasn't.

23 Q I'm sorry.

24 MR. LINES: I have no further questions.

25 MR. STAMETS: Are there any other questions of the

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1 witness?

2 MR. CARR: I have no further questions.

3 MR. STAMETS: The witness may be excused.

4 (Witness excused.)

5 MR. STAMETS: Do you have an objection to the  
6 exhibits?

7 MR. LINES: No.

8 MR. STAMETS: These exhibits will be admitted into  
9 evidence.

10 (Whereupon the aforementioned OCC supplemental  
11 exhibits were entered in evidence.)

12 MR. STAMETS: Do you have anything further, Mr.  
13 Carr?

14 MR. CARR: I have a statement I would like to make.

15 MR. LINES: And I have a statement that I would  
16 like to make as well.

17 MR. STAMETS: I would like to have the last two  
18 exhibits, and I would just like to ask Mr. Carlson one  
19 question. He does not have to take the stand.

20 Mr. Carlson, the exhibits that I have here before  
21 me indicate a flow rate for the Cities Service Oil Company  
22 Cawley A Com No. 1 of just about 1.5 million cubic feet  
23 of gas per day, and for the Superior Oil Company State Q  
24 Com No. 1, a flow rate of 1.3 million cubic feet of gas  
25 per day. Is this volume more or less than the daily allowable



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1 for a top allowable well in the South Carlsbad field?

2 MR. CARLSON: Less.

3 MR. STAMETS: If these wells produce less than  
4 the top allowable well in the South Carlsbad field, can  
5 there be adverse drainage from the South Carlsbad field to  
6 these wells?

7 MR. CARLSON: Not if they are producing less than  
8 that rate.

9 MR. STAMETS: I have no further questions. All  
10 the witnesses may be excused.

11 Are there any statements in this case?

12 MR. LINES: Yes.

13 MR. STAMETS: Proceed, Mr. Lines.

14 MR. LINES: Your Honor, we would at this time  
15 argue that the burden of proof is on the Commission, after  
16 having received application to prove that there is in fact  
17 a need for the new pool here.

18 Secondly, that the creation of a new pool is not  
19 going to cause potential damage to others already established  
20 in the existing pool that are in proximity to this pool.

21 First of all, there was no evidence presented by  
22 the Commission indicating potential flows, indicating  
23 potential breaks, indicating anything at all concerning the  
24 structure or the substructure of this area.

25 I believe that there is more needed in trying to

1 create something of this significance than the mere exhibit  
2 that was presented here that showed nothing more than a  
3 well being a certain number of miles away from an existing  
4 well in another pool.

5 I believe this is a serious matter, and I believe  
6 there is more than just the one-mile criteria that should  
7 go into this kind of determination.

8 We are asking at this time that the Commission  
9 dismiss this application until more work is done. I believe,  
10 in fairness to my client or any others in the area, that  
11 the Commission, before it makes its decision, should have  
12 all of the material that it can potentially have within  
13 reason before it. I have seen no information at all today  
14 except one mimeographed little sheet showing the mileage.

15 We have attempted to show other variables here,  
16 and other things that show potential damage to my client  
17 and others in the area.

18 Granted, there is some kind of uncertainty as  
19 to actual production from these wells, and perhaps at the  
20 present time, their capacity is not as great as it will be  
21 in a future time. However, because of the pool created,  
22 material damage could be done to the wells of my client.

23 There has been testimony about if communication  
24 is found in the future, the pools could be placed back  
25 together as is provided for in the rules, but I think instead

1 of creating something and having to dissolve it that I  
2 would argue at this time that the Commission would be wise  
3 to be cautious and to make sure that they have all the  
4 information they can get within reason to see what damage  
5 might or might not be done to new wells before new wells  
6 are created.

7 I believe the Commission has not met its burden  
8 of proof. We have shown evidence that there is potential  
9 damage to our client, and the Commission should dismiss  
10 this. I am sure there would be no prejudice to the wells  
11 in the Happy Valley Pool or the LaHuerta Pool if this were  
12 dismissed. If there was going to be some kind of prejudice,  
13 I would say that perhaps this would be in a different  
14 category, but this is not going to prejudice anyone.

15 I think further that as far as Item C is concerned,  
16 there has been no evidence introduced at all in this hearing  
17 that there is any production in the Morrow for the Antweil  
18 Well, and without that information, I feel the Commission  
19 has failed to carry its burden of proof and can create a  
20 new pool.

21 We ask on those grounds that the Commission deny  
22 the application in Section C for Canyon production.

23 Thank you.

24 MR. STAMETS: Mr. Carr?

25 MR. CARR: The Oil Conservation Commission, as we

1 all know, is a creature of statute, and its Rules and  
2 Regulations are carried out under statutory authority.

3 Today we have received recommendations suggesting  
4 that the Oil Commission consider various types of information,  
5 and I think that if you look closely, all of the statutory  
6 pre-conditions have been followed by the Commission in the  
7 consideration of these new pools.

8 It is interesting to note that the evidence  
9 submitted by the representative of Mr. Grace would show  
10 there is a fault in the formation, and their evidence may  
11 tend to show a barrier running through the area which would  
12 show a separation, and which would contradict the argument  
13 for communication.

14 I might further call to the Commission's attention  
15 that whether or not a pool is declared or not, we could  
16 have a wildcat well, and a wildcat well can drain land just  
17 as effectively as a well within a pool.

18 So if it comes to a question of communication,  
19 that can only be answered when there is further development  
20 in the area, and certainly it is not the responsibility of  
21 the Commission to develop the area.

22 Based on the fact that the statutory responsibilities  
23 of the Commission in this particular case have been met,  
24 and that the evidence brought forward shows nothing more  
25 than that their interests miles away might be drained, I

1 would urge the Commission to grant the pools in question.

2 MR. STAMETS: Is there anything further?

3 (No response)

4 MR. STAMETS: Case 5053 will be taken under  
5 advisement. We will also take under advisement the motions  
6 to dismiss paragraphs C, D and E. This may be done by  
7 order, and they may also be continued by order. The hearing  
8 will adjourn until after lunch.

9 (Whereupon the hearing in Case 5053 was concluded.)

10 \* \* \* \*

11  
12 STATE OF NEW MEXICO )  
13 ) ss  
14 COUNTY OF BERNALILLO )

15 I, RICHARD E. McCORMICK, a Certified Shorthand  
16 Reporter, in and for the County of Bernalillo, State of  
17 New Mexico, do hereby certify that the foregoing and attached  
18 Transcript of Hearing before the New Mexico Oil Conservation  
19 Commission was reported by me; and that the same is a true  
20 and correct record of the said proceedings to the best of  
21 my knowledge, skill and ability.

22  
23 I do hereby certify that the foregoing is Richard E. McCormick  
24 a complete record of the proceedings in CERTIFIED SHORTHAND REPORTER  
the Examiner hearing of Case No. 5053,  
heard by me on August 22, 1973.

25 Richard L. Lamm Examiner  
New Mexico Oil Conservation Commission

dearnley, meier &amp; associates

200 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103  
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

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BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 5053  
Order No. R-4622

THE APPLICATION OF THE OIL CONSERVATION  
COMMISSION UPON ITS OWN MOTION FOR AN  
ORDER CREATING, CONTRACTING VERTICAL  
LIMITS, AND EXTENDING HORIZONTAL LIMITS  
OF CERTAIN POOLS IN CHAVES, EDDY, AND  
LEA COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on August 22,  
1973, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 29th day of August, 1973, the Commission,  
a quorum being present, having considered the testimony, the  
record, and the recommendations of the Examiner, and being fully  
advised in the premises,

FINDS:

(1) That due public notice having been given as required  
by law, the Commission has jurisdiction of this cause and the  
subject matter thereof.

(2) That there is need for the creation of a new gas pool  
in Eddy County, New Mexico, for the production of gas from the  
Atoka formation, said pool to bear the designation of Burton  
Flat-Atoka Gas Pool. Said Burton Flat-Atoka Gas Pool was dis-  
covered by the Monsanto Company Miller Federal Well No. 1,  
located in Unit G of Section 3, Township 21 South, Range 27  
East, NMPM. It was completed in the Atoka formation on May 1,  
1973. The top of the perforations is at 10,658 feet.

(3) That there is need for the creation of a new gas pool  
in Eddy County, New Mexico, for the production of gas from the  
Strawn formation, said pool to bear the designation of Burton  
Flat-Strawn Gas Pool. Said Burton Flat-Strawn Gas Pool was  
discovered by the Monsanto Company Burton Flat Deep Unit Well  
No. 3, located in Unit V of Section 3, Township 21 South, Range  
27 East, NMPM. It was completed in the Strawn formation on  
April 16, 1973. The top of the perforations is at 10,208 feet.

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Case No. 5053  
Order No. R-4622

(4) That the proposed creation of a new pool in Section 21, Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico, for the production of gas from the Canyon formation should be dismissed pending further study.

(5) That the proposed creation of a new pool in Section 34, Township 21 South, Range 26 East, NMPM, Eddy County, New Mexico, for the production of gas from the Morrow formation should be dismissed pending further study.

(6) That the proposed creation of a new pool in Section 28, Township 21 South, Range 27 East, NMPM, Eddy County, New Mexico, for the production of gas from the Morrow formation should be dismissed pending further study.

(7) That there is need for the contraction of the vertical limits of the Townsend-Pennsylvanian Pool in Lea County, New Mexico, to include only the Cisco formation due to a completion in Pennsylvanian other than the Cisco zone in the immediate area. Said Townsend-Pennsylvanian Pool shall be redesignated the Townsend-Cisco Pool.

(8) That there is need for certain extensions to the Round Tank-Queen Pool in Chaves County, New Mexico, the East Empire Yates-Seven Rivers Pool, the Parrish Ranch-Upper Pennsylvanian Pool, the Penasco Draw-San Andres-Yeso Pool, the Rock Tank-Lower Morrow Gas Pool, the Shugart Pool, and the Winchester-Morrow Gas Pool, all in Eddy County, New Mexico, the Fowler-Devonian Pool, the Hat Mesa-Morrow Gas Pool, and the Lea-San Andres Pool, all in Lea County, New Mexico.

IT IS THEREFORE ORDERED:

(a) That a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production, is hereby created and designated as the Burton Flat-Atoka Gas Pool, consisting of the following described area:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 3: Lots 1 through 3

(b) That a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production, is hereby created and designated as the Burton Flat-Strawn Gas Pool, consisting of the following described area:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 3: S/2

(c) That the proposed creation of a new pool in Eddy County, New Mexico, classified as a gas pool for Canyon production and



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Case No. 5053

Order No. R-4622

designated as the Carlsbad-Canyon Gas Pool, consisting of the following described area:

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM  
Section 21: S/2

is hereby dismissed.

(d) That the proposed creation of a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Happy Valley-Morrow Gas Pool, consisting of the following described area:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM  
Section 34: W/2

is hereby dismissed.

(e) That the proposed creation of a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the La Huerta-Morrow Gas Pool, consisting of the following described area:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 28: S/2

is hereby dismissed.

(f) That the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 28: NE/4 SE/4

(g) That the Fowler-Devonian Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM  
Section 10: SE/4

(h) That the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM  
Section 1: S/2  
Section 2: All

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Case No. 5053  
Order No. R-4622

(i) That the Lea-San Andres Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
Section 24: SE/4

(j) That the Parrish Ranch-Upper Pennsylvanian Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
Section 13: E/2 SE/4

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 18: N/2 S/2 and SE/4 NE/4

(k) That the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM  
Section 32: W/2

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
Section 12: S/2

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 5: W/2 NW/4 and NE/4 NW/4  
Section 7: W/2

(l) That the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
Section 11: E/2, E/2 SW/4, S/2 SE/4 NW/4  
and NE/4 SE/4 NW/4

(m) That the Round Tank-Queen Pool in Chaves County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM  
Section 36: NE/4

(n) That the Shugart Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
Section 12: SE/4 SE/4  
Section 13: E/2 NE/4

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Case No. 5053  
Order No. R-4622

(o) That the Winchester-Morrow Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM  
Section 34: E/2

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM  
Section 2: N/2

(p) That the vertical limits of the Townsend-Pennsylvanian Pool in Lea County, New Mexico, are hereby contracted to include the Cisco formation only and redesignate said pool the Townsend-Cisco Pool comprising:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
Section 4: SW/4

IT IS FURTHER ORDERED:

(1) That, pursuant to Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, any well which, by virtue of any of the above pool extensions, is subject to pool rules providing for spacing or proration units larger than the one which is presently dedicated thereto, shall have 60 days from the effective date of this order in which to file new Forms C-102 dedicating a standard unit for the pool to said well, or to obtain a non-standard unit approved by the Commission. Pending such compliance, the well shall receive a maximum allowable in the same proportion to a standard allowable for the pool that the acreage dedicated to the well bears to a standard unit for the pool. Failure to file Forms C-102 dedicating a standard unit to the well or to obtain a non-standard unit approved by the Commission within said 60-day period shall subject the well to cancellation of allowable.

(2) That the effective date of this order and all creations, contractions of vertical limits, and extensions of horizontal limits included herein shall be September 1, 1973.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
*V. R. Trujillo*  
V. R. TRUJILLO, Chairman

*John J. Armitage*  
JOHN J. ARMITAGE, Member

*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Member & Secretary

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 22, 1973

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Elvis A. Utz, Alternate Examiner:

CASE 4548: (Reopened) (Continued from the August 9, 1973, Examiner Hearing)

In the matter of Case No. 4548 being reopened pursuant to the provisions of Order No. R-4157, which order established special rules and regulations for the Catclaw Draw-Morrow Gas Pool, Eddy County, New Mexico, including a provision for 640-acre proration units. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing.

CASE 5046: Application of David Fasken for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a gas well at an unorthodox location 660 feet from the South and West lines of Section 7, Township 18 South, Range 26 East, West Atoka-Morrow Gas Pool, Eddy County, New Mexico, to which well the S/2 of said Section 7 would be dedicated.

CASE 5047: Application of Chace Oil Company for the amendment of Order No. R-4555, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the special rules and regulations for the South Lindrith Gallup-Dakota Pool, Rio Arriba County, New Mexico, as promulgated by Order No. R-4555, to provide for the classification of oil wells and gas wells, the assignment of 320-acre units to gas wells, and to provide for approval of unorthodox locations for wells drilled as oil wells but classified as gas wells upon completion.

CASE 5048: Application of Roger C. Hanks for creation of a pool and special rules therefor, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the South Dagger Draw-Upper Pennsylvanian Pool for his Preston Federal Well No. 1 located in Unit L of Section 35, Township 20 South, Range 24 East, Eddy County, New Mexico. Applicant further seeks the promulgation of special rules for said pool, including a provision for 320-acre spacing for all wells in said pool, for the classification of oil wells and gas wells, for a limiting gas-oil ratio of 8,000 to 1, and for the assignment of a depth bracket allowable for oil wells of 267 barrels of oil per day.

CASE 5049: Application of Mobil Oil Corporation for a triple completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the triple completion (conventional) of its Federal "L" Well No. 1 located in Unit N of Section 13, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, to produce gas from the Canyon, Atoka, and Morrow formations through three strings of tubing.

CASE 5050: Application of Read and Stevens, Inc. for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority

(Case 5050 continued from Page 1)

to dispose of produced salt water into the Montoya formation in the perforated interval from 6225 feet to 6245 feet in its Federal "L" Well No. 1, located in Unit B of Section 21, Township 6 South, Range 27 East, Haystack-Cisco Pool, Chaves County, New Mexico.

CASE 5051: Application of Hillin Production Company for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Winchester-Morrow Gas Pool, Eddy County, New Mexico, including a provision for 320-acre spacing and specified well locations.

CASE 5052: Application of Atlantic Richfield Company for a non-standard gas proration unit and simultaneous well dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a non-standard 320-acre gas proration unit comprising the NW/4, E/2 NE/4, SW/4 NE/4, and NE/4 SE/4, of Section 35, Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its J. P. Combest Wells Nos. 1 and 4 located in Units H and E, respectively, of said Section 35.

CASE 5053: Southeast nomenclature case calling for the creation, extension and contraction of certain pools in Eddy and Lea Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Burton Flat-Atoka Gas Pool. The discovery well is the Monsanto Company Miller Federal No. 1 located in Unit G of Section 3, Township 21 South, Range 27 East, NMPM. Said pool described as:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 3: Lots 1 through 8

(b) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Burton Flat-Strawn Gas Pool. The discovery well is the Monsanto Company, Burton Flat Deep Unit No. 3 located in Unit V of Section 3, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 3: S/2

(c) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Canyon production and designated as the Carlsbad-Canyon Gas Pool. The discovery well is the Morris R. Antweil Randall No. 1 located in Unit K of Section 21, Township 22 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM  
Section 21: S/2

(d) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Happy Valley-Morrow

(Case 5053 continued from Page 2)

Gas Pool. The discovery well is The Superior Oil Company State Q Com No. 1 located in Unit L of Section 34, Township 21 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM  
Section 34: W/2

(e) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the LaHuerta-Morrow Gas Pool. The discovery well is the Cities Service Oil Company Cawley A Com No. 1 located in Unit K of Section 28, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 28: S/2

(f) Extend the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 28: NE/4 SE/4

(g) Extend the Fowler-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM  
Section 10: SE/4

(h) Extend the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM  
Section 1: S/2  
Section 2: All

(i) Extend the Lea-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
Section 24: SE/4

(j) Extend the Parrish Ranch-Upper Pennsylvanian Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
Section 13: E/2 SE/4

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 18: N/2 S/2 and SE/4 NE/4

(Case 5053 continued from Page 3)

(k) Extend the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM  
Section 32: W/2

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 5: W/2 NW/4 and NE/4 NW/4

(l) Extend the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
Section 11: E/2, E/2 SW/4, S/2 SE/4 NW/4  
and NE/4 SE/4 NW/4

(m) Extend the Round Tank-Queen Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM  
Section 36: NE/4

(n) Extend the Shugart Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
Section 12: SE/4 SE/4  
Section 13: E/2 NE/4

(o) Extend the Winchester-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM  
Section 34: E/2

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM  
Section 2: N/2

(p) Contract the vertical limits of the Townsend Pennsylvanian Pool in Lea County, New Mexico, to include the Cisco formation only and redesignate said pool the Townsend-Cisco Pool comprising:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
Section 4: SW/4

CASE 4745: (Reopened) (Continued from the August 9, 1973, Examiner Hearing)

In the matter of Case No. 4745 being reopened pursuant to the provisions of Order No. R-4365, which order established special rules and regulations for the Penasco Draw San Andres-Yeso Pool, Eddy County, New Mexico, including a provision for classification of oil wells and gas wells, the spacing thereof, and a limiting gas-oil ratio of 3000 to 1. All interested parties may appear and show cause why said pool rules should remain in effect.

Paragraph C

NO. OF COPIES RECEIVED	5
DISTRIBUTION	
SANTA FE	1
FILE	1
U.S.G.S.	2
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form O-161  
Revised 1-1-55

10. TYPE OF WELL a. TYPE OF COMPLETION OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/> <u>ARTIFICIAL</u> NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>		5a. Indicate Type of Lease State <input type="checkbox"/> Fee <input checked="" type="checkbox"/>	
2. Name of Operator <u>Morris R. Antweil</u>		7. Unit Agreement Name -----	
3. Address of Operator <u>Box 2010, Hobbs, New Mexico 88240</u>		8. Farm or Lease Name <u>RANDALL</u>	
4. Location of Well UNIT LETTER <u>K</u> LOCATED <u>1864</u> FEET FROM THE <u>South</u> LINE AND <u>2005</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>21</u> TWP. <u>22-S</u> RGE. <u>27-E</u> NMPM		9. Well No. <u>1</u>	
15. Date Spudded <u>29 Nov. 71</u>		10. Field and Pool, or Wildcat <u>Canyon-Wildcat</u>	
16. Date T.D. Reached <u>18 Feb 72</u>		12. County <u>Eddy</u>	
17. Date Compl. (Ready to Prod.) <u>1 July 72</u>		18. Elevations (DF, RKB, RT, CR, etc.) <u>3120' GL</u>	
19. Elev. Casinghead <u>3120'</u>		23. Intervals Drilled By <u>11,895'</u>	
20. Total Depth <u>11,895'</u>		24. Producing Interval(s), of this completion -- Top, Bottom, Name <u>9930' - 9947' Canyon Lime</u>	
21. Plug Back T.D. <u>10,100'</u>		25. Was Directional Survey Made <u>Yes</u>	
22. If Multiple Compl., How Many -----		26. Type Electric and Other Logs Run <u>Gamma-Sonic, LL, Compensated Neutron, MIL</u>	
27. Was Well Cored <u>No</u>		28. CASING RECORD (Report all strings set in well)	
29. LINER RECORD		30. TUBING RECORD	
31. Perforation Record (Interval, size and number) <u>9930', 9931', 9933', 9934', 9935', 9936', 9937', 9939', 9941', 9942', 9943', 9945', 9946', 9947', 14-0.33" holes</u>		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL <u>9930' - 9947'</u> AMOUNT AND KIND MATERIAL USED <u>3000 gals. 15% acid</u>	
33. PRODUCTION Date First Production <u>28 June 72</u> Production Method (Flowing, gas lift, pumping -- Size and type pump) <u>Flowing</u> Well Status (Prod. or Shut-in) <u>Producing</u>		34. Disposition of Gas (Sobd, used for fuel, vented, etc.) <u>Sold- Llano, Inc.</u>	
35. List of Attachments <u>Deviation Survey, logs.</u>		36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.	
SIGNED <u>R. M. Williams</u> TITLE <u>Agent</u>		DATE <u>3 August 72</u>	



# INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quadruplicate except on state land, where six copies are required. See Rule 1105.

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

### Southeastern New Mexico

### Northwestern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McClacken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Qtzite
T. Glorieta	T. McKee	T. Base Greenhorn	T. Granite
T. Peddock	T. Ellenburger	T. Dakota	T. Del. Sand 1924
T. Blaine	T. Gr. Wash	T. Morrison	T. Bone Springs-5360
T. Tubb	T. Granite	T. Todillo	T. 3rd. B.S. - 8468
T. Drinkard	T. Delaware Sand	T. Entrada	T. Morrow-11,102
T. Abo	T. Bone Springs	T. Wingate	T. Barnett-11,874
T. Wolfcamp	T.	T. Chinle	T.
T. Penn. 9,563	T.	T. Permian	T.
T. Cisco (Bough C)	T.	T. Penn. "A"	T.

## FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	5360	5360	Sand, Shale, Anhydrite	X			
5360	9563	4203	Lime, Shale, & Sand				
9563	11102	1539	Lime, Shale				
11102	11895	793	Lime, Shale, Sand				
0	288	288	Anhy, Lime, Superior				
288	750	462	Lime, Shale				
750	1610	860	SALT & ANHY. shale				
1610	1924	314	Lime & ANHY.				
1924	5360	3436	anhy, salt shale, sand				
5360	9563	4203	Lime, Shale & Sand				
9563	11102	1539	Lime & shale				
11102	11895	793	Lime, Shale & Sand				

OIL CONSERVATION COMMISSION

BOX 2045

ARTESIA, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE July 1, 1972

This is to notify the Oil Conservation Commission that connection for  
the purchase of gas from the Morris. R. Antweil, Randall  
Operator Lease

1 - K, 21 - 22 - 27, Undesignated, Llano, Inc.  
Well Unit S.T.R. Pool Name of Purchaser

was made on July 1, 1972.

LLANO, INC.  
Purchaser

A. L. Smith  
Representative

Vice Pres. - Operations & Construction  
Title

cc: To operator (Morris R. Antweil, Hobbs, N.M. - Union Oil Company, Midland, Texas)  
Oil Conservation Commission - Santa Fe

NOTE: Verbal permission was given by Bill Gressett to Bob Williams, M. R. Antweil, to  
connect and test well into Llano, Inc. system.

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LAND OFFICE	
TRANSPORTER	OIL <input type="checkbox"/> GAS <input type="checkbox"/>
OPERATOR	
PRORATION OFFICE	

NEW MEXICO OIL CONSERVATION COMMISSION  
REQUEST FOR ALLOWABLE  
AND  
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104  
Supersedes Old C-104 and C-110  
Effective 1-1-65

RECEIVED

AUG 8 1972

I. OPERATOR

Operator: Morris R. Antweil ✓

Address: Box 2010, Hobbs, New Mexico 88240

Reason(s) for filing (Check proper box):

New Well ☒ Change in Transporter of: Oil ☐ Dry Gas ☐ Condensate ☐

Recompletion ☐ Change in Ownership ☐ Other (Please explain): Supplement to C-104 Filed 30 June 72

If change of ownership give name and address of previous owner:

II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, including Formation	Kind of Lease	Lease No.
<u>Randall</u>	<u>1</u>	<u>Canyon-Wildcat</u>	<u>State, Federal or Fee</u> <u>Fee</u>	<u>---</u>
Location				
Unit Letter	<u>K</u>	<u>1864</u> Feet From The <u>South</u> Line and <u>2005</u> Feet From The <u>West</u>		
Line of Section	<u>21</u>	Township <u>22-S</u> Range <u>27-E</u> , NMPM, <u>Eddy</u> County		

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<u>The Permian Corporation</u>	<u>Box 1183, Houston, Texas 77001</u>
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
<u>Llano, Inc.</u>	<u>Box 1320 Hobbs, New Mexico 88240</u>
If well produces oil or liquids, give location of tanks.	Unit Sec. Twp. Rge. Is gas actually connected? When
	<u>K 21 22S 27E Yes 1 July 72</u>

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Depth	Diff. Restv.
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.					
<u>29-Nov. 71</u>	<u>1 Jul. 72</u>	<u>11,895'</u>	<u>10,100'</u>					
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth					
<u>3120' GL</u>	<u>Canyon</u>	<u>9930'</u>	<u>9806'</u>					
Perforations	Depth Casing Shoe							
<u>9930' - 9947' (14 holes)</u>	<u>10,413'</u>							
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT					
<u>17-1/2"</u>	<u>13-3/8"</u>	<u>375'</u>	<u>375 sz.</u>					
			<u>1200 sz.</u>					

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**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

Form O-100  
Revised 1-1-65

5. State ☐ Fee ☒ XX  
6. State Oil & Gas License No.

PR 301073

10. TYPE OF WELL a. TYPE OF COMPLETION OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER <input type="checkbox"/> NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>				7. Unit Agreement Name	
2. Name of Operator Cities Service Oil Company				8. Form or Lease Name Cawley A. Com.	
3. Address of Operator Box 4906 - Midland, Texas 79701				9. Well No. 1	
4. Location of Well				10. Field and Pool, or Wildcat Wildcat-Morrow	
UNIT LETTER <u>K</u> LOCATED <u>1980</u> FEET FROM THE <u>South</u> <u>LINE AND</u> <u>1980</u> FEET FROM <u>West</u>				12. County Eddy	
15. Date Spudded 12-20-72		16. Date T.D. Reached 3-7-73		17. Date Compl. (Ready to Prod.) 4-20-73	
18. Elevations (DF, RKB, RT, CR, etc.) 3193' DF		19. Elev. Casinghead 3180		20. Total Depth 11,613	
21. Plug Back T.D. 11,325		22. If Multiple Compl., How Many -		23. Intervals Drilled By 0-TD 11,613'	
24. Producing Interval(s), of this completion - Top, Bottom, Name 11,202-11,306 - Morrow				25. Was Directional Survey Made No	
26. Type Electric and Other Logs Run Dual Laterolog, Microlaterolog-Micro-Log, Compensated Sonic-Gamma Ray, Neutron-Form, Density-Deviation Test				27. Was Well Cased No	
28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	480	17-1/2"	500 sacks	
9-5/8"	32.3# & 36#	3299	12-1/4"	1750 sacks	
7"	23# & 26#	8992	8-3/4"	1100 sacks	
29. LINER RECORD			30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	PACKER SET
5"	8602	11613	325		11006
31. Perforation Record (Interval, size and number) 2 - 0.21" & 0.41"			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.		
holes each @ 11,202; 11,203; 11,204; 11,209; 11,213; 11,216; 11,242; 11,244; 11,245; 11,246; 11,247; 11,282; 11,284; 11,286; 11,292; 11,293; 11,301; 11,302; 11,304; and 11,306'.			DEPTH INTERVAL 11202-11306		
			AMOUNT AND KIND MATERIAL USED 500 gals. 15% HCl+15% Isopropyl alcohol 2500 gals. Super Mud acid+15% Isopropyl alcohol.		
33. PRODUCTION					
Date First Production 3-26-73		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing			Well Status (Prod. or Shut-in) Shut in
Date of Test 4-20-73	Hours Tested 1 hr.	Choke Size 1"	Prodn. For Test Period 0.5	Oil - Bbl. 1590 MCFD	Gas - MCF 1.0
Flow Tubing Press. 315#	Casing Pressure -	Calculated 24-Hour Rate Dist. 12	Gas - MCF CAOF 1590	Water - Bbl. 24	XX Gravity - API (Corr.) Dist. 45.4
34. Disposition of Gas (Sold, used for fuel, vented, etc.) Well is shut in					Test Witnessed By Brad Bennett
35. List of Attachments Deviation Test.					
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.					
SIGNED <u>E. J. ...</u>		TITLE <u>Region Operation Manager</u>		DATE <u>April 26, 1973</u>	

**INSTRUCTIONS**

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in triplicate except on state land, where six copies are required. See Rule 1105.

**SECTION OF STATE**

Southeastern New Mexico

T. Ojo Alamo \_\_\_\_\_  
T. Kirtland-Fruitland \_\_\_\_\_  
T. Pictured Cliffs \_\_\_\_\_  
T. Cliff House \_\_\_\_\_  
T. Menefee \_\_\_\_\_  
T. Point Lookout \_\_\_\_\_  
T. Mancos \_\_\_\_\_  
T. Gallup \_\_\_\_\_  
Base Greenhorn \_\_\_\_\_  
T. Dakota \_\_\_\_\_  
T. Morrison \_\_\_\_\_  
T. Todilto \_\_\_\_\_  
T. Entrada \_\_\_\_\_  
T. Wingate \_\_\_\_\_  
T. Chinle \_\_\_\_\_  
T. Permian \_\_\_\_\_  
T. Penn. "A" \_\_\_\_\_

T. Penn. "B" \_\_\_\_\_  
T. Penn. "C" \_\_\_\_\_  
T. Penn. "D" \_\_\_\_\_  
T. Leadville \_\_\_\_\_  
T. Madison \_\_\_\_\_  
T. Elbert \_\_\_\_\_  
T. McCracken \_\_\_\_\_  
T. Ignacio Qizte \_\_\_\_\_  
T. Granite \_\_\_\_\_  
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FORMATION RECORD (Attach additional sheets if necessary)

FORMATION RECORD (Attach additional sheets if necessary)				I. Chester			
From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	480	480	Surface Rock & Red Bed	9323	9345	22	Shale
480	1090	610	Anhydrite & Salt	9345	9574	229	Shale & Lime
1090	1190	100	Salt & Anhydrite	9574	9600	26	Shale
1190	1250	60	Anhydrite & Salt	9600	9795	195	Lime & Shale
1250	1876	626	Anhydrite	9795	9837	42	Shale
1876	3300	1424	No returns	9837	9924	87	Lime, Shale & Chert
3300	3435	135	Dolomite, Salt & Sand	9924	10172	248	Lime & Shale
3435	3710	275	Anhydrite & Lime	10172	10242	70	Lime
3710	5278	1568	Lime	10242	10324	82	Lime & Shale
5278	6242	964	Lime & Shale	10324	10409	85	Lime
6242	6353	111	Lime	10409	10910	501	Lime & Shale
6353	6590	237	Lime & Shale	10910	10985	75	Lime, Shale & Chert
6590	6751	161	Lime	10985	11103	118	Lime & Shale
6751	6904	153	Lime & Shale	11103	11230	127	Lime, Shale & Sand
6904	7035	131	Lime	11230	11590	360	Sand & Shale
7035	7174	139	Shale & Lime	11590	11613	23	Sand, Lime & Shale
7174	7837	663	Lime				T.D. 11,613'
7837	8080	243	Lime & Shale				
8080	8350	270	Lime, Shale & Chert				
8350	8674	324	Lime & Shale				
8674	9083	409	Lime				
9083	9178	95	Lime & Shale				
9178	9231	53	Shale				
9231	9259	28	Lime & Shale				
9259	9282	23	Shale				
9282	9323	41	Shale & Lime				

Cities Service Oil Company #1 Cawley A

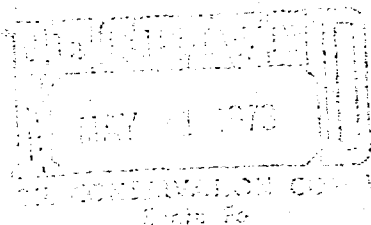
DST #1 3299-3435 (Delaware) 3/4" BC, 1/4" TC tool open for 15 mins. preflow w/good continuous blow. SI for 90 mins. ISIP. Tool open 1 hr. Gas to surf. in 45 mins. TSTM. Rec. 30' oil + 900' black brackish sul. wtr. Grav. of oil 37.8 deg. IHP 1613#, IFP 314#, FFP 356#, 90 min. ISIP 1592#, 90 min. FSIP 1213#, FHP 1550#, BHT 90 deg. F.

DST #2 10,216-10,320 (Strawn Lime) 3/4" BC, 1/4" TC, 800' WB tool open for 15 min. Preflow w/fair blow increasing to good blow in 15 min. SI for 90 min. ISIP. Tool open 2 hrs. Gas to surf. in 90 min. @ 35 MCF decreasing to TSTM in 30 min. Rev. out 800' WB + 4000 gas cut mud. IMCP 5480#, 90 min. ISIP 3572#, 2 hr. IFP 790#, 2 hr. FFP 1046#, 2 hr. FSIP 4484#, FMCP 5437, BHT 180 deg. F.

DST #3 11,194-11,291 (Morrow Sand) 3/4" BC, 1500' WB tool open for 14 min. preflow w/good-strong blow, WB to surf. in 6 min. Gas to surf. in 8 min. FP 250# on 3/4" choke @ end of preflow. SI for 90 min. ISIP. Tool open 90 min. After 3 min. FTP 200# on 1/2" choke. Cleaned to pits 45 min. Switched thru separator for 10 min. @ 4.2 MMCFD, FTP 550#, 1/2" choke. Cleaned to pits for 20 min. Switched thru separator for last 15 min. @ 4.8 MMCFD, FTP 800#, 1/2" choke. SI 90 min. Opened circ. sub and reversed out w/150 bbls. mud until well stable. Press. recorded in top chamber @ 11,177'. IMCP 5852# preflow FP 1213-1426#, 90 min. ISIP 4797#, FP 936-1553# 90 min. FSIP 4712#, FMCP 5789#, BHT 195 deg. F. Rec'd. in test chamber 4.5 CF gas @ 3100# no fluid.

DST #4 11,330-11,387 (Morrow Sand) 3/4" BC, 1500' WB tool open for 15 min. preflow w/very weak blow for 5 min. SI for 90 min. ISIP. Tool open 1 hr. Rec. 1500' WB + 1474' sli. gas cut mud. IMCP 5852#-6000#, preflow FP 787#-877#, 90 min. ISIP 1532#-1617#, 60 min. IFP 851#-921#, 60 min. FFP 936#-1013#, 90 min. FSIP 1575#-1639#, FMCP 5852#-6000#, BHT 174 deg. F. Top gauge @ 11,326 - bottom gauge @ 11,383. Rec'd. in sample chamber 1.6 CF gas, 2200 cc drlg. mud @ 651#.

DST #5 11,362-11,506 (Morrow Sand) 3/4" BC, 1600' WB tool open for 15 min. preflow w/strong blow in 1-1/2 min. - 10# in 15 min. Attempted to SI tool for ISIP. Tool would not close. Gas to surf. in 25 min. w/110# on blow hose. Picked up tool to neutral position. Closed tool for 120 min. ISIP. Tool open for 60 min. Opened surf. valve - had 500#, declined to 22# in 10 min. on 1/2" choke to weak blow in 20 min. then increased to 1/2# in 30 min. and 3/4# in 60 min. Rotated tool to determine if tool was open. Surf. press. increased to 100# on 3/4" choke in 30 min. w/WB to surf. in 30 min. Flowed WB & gas to pits for 40 min. @ 200# on 1/2" choke. Flowed thru separator 20 min. @ 1523 MMCFD w/240# on 3/4" choke. Tool open for 90 min. on 2nd flow period. Opened circulating sub and reversed out 1824' wtr. and gas cut drlg. mud. IMCP 5979#-6082#, preflow FP 979#-1056#, 90 min. ISIP tool did close, 90 min. IFP 1234#-1298#, 90 min. FFP 1064#-1083#, 150 min. FSIP 4585#-4674#, FMCP 5894#-5900#, BHT 190 deg. F. Top gauge @ 11,355' - bott. gauge @ 11,502'. Rec'd. in sample chamber 8.123 CF gas, no fluid @ 2300#.



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# NEW MEXICO OIL CONSERVATION COMMISSION WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Form C-105  
Revised 1-1-65

JUN 25 1973

5.1. Indicate Type of Lease	State <input checked="" type="checkbox"/> <input type="checkbox"/>
5. State Oil & Gas Lease No.	K-3200

10. TYPE OF WELL	OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/>
11. TYPE OF COMPLETION	NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER <input type="checkbox"/>
2. Name of Operator	The Superior Oil Company
3. Address of Operator	P. O. Box 1900, Midland, Texas 79701
4. Location of Well	LOCATED 2235 FEET FROM THE South LINE AND 660 FEET FROM

7. Unit Agreement Name	
8. Form or Lease Name	State "Q" Com
9. Well No.	1
10. Field and Pool, or Wildcat	Morrow - Wildcat
12. County	Eddy

13. Date Spudded	14. Date T.D. Reached	15. Date Compl. (Ready to Prod.)	16. Elevations (DF, RKB, RT, GR, etc.)	17. Elev. Casinghead
2-28-73	5-20-73	6-6-73	RKB: 3312', GR: 3293'	3293'
18. Total Depth	19. Plug Back T.D.	20. If Multiple Compl., How Many	21. Intervals Drilled By	22. Cable Tools
11,476'	11,370'		0-11,476'	
23. Producing Interval(s), of this completion - Top, Bottom, Name				24. Was Directional Survey Made
Top: 11,078' Bottom: 11,244' Morrow Zone				No

25. Type Electric and Other Logs Run	26. Was Well Cored
Schlumberger Dipmeter, Gamma Ray-Neutron-Density, Dual Laterolog & Micro	No

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	425'	17-1/2"	475 sx - cmt to surf.	None
9-5/8"	36#	2,582'	12-1/4"	1600 sx - cmt to surf.	None
7"	23#	8,500'	8-1/2"	260 sx - top cmt @ 6450'	None
			6-1/4" to TD 11,476'		

LINER RECORD				TUBING RECORD		
SIZE	TOP	BOTTOM	BACKS CEMENT	SIZE	DEPTH SET	PACKER SET
5"	8,270'	11,476'	495	2-7/8"	10,998'	10,998'

27. Performance Record (Interval, size and number)	28. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.						
Morrow Zone: 11,171'-11,180', 11,112'-11,116', 11,122'-11,130', 11,228'-11,234', 11,232'-11,244' & 11,086'-11,091' w/2 jets/ft (total of 74 holes) I.D. of holes 0.33"	<table border="1"> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> <tr> <td>11,171'-11,180'</td> <td>2000 gallons of 7-1/2% acid w/no break.</td> </tr> <tr> <td>11,036'-11,244'</td> <td>4000 gallons of 7-1/2% acid.</td> </tr> </table>	DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	11,171'-11,180'	2000 gallons of 7-1/2% acid w/no break.	11,036'-11,244'	4000 gallons of 7-1/2% acid.
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED						
11,171'-11,180'	2000 gallons of 7-1/2% acid w/no break.						
11,036'-11,244'	4000 gallons of 7-1/2% acid.						

PRODUCTION							
Date First Production	Production Method (Flowing, gas lift, pumping - Size and type pump)	Well Status (Prod. or Shut-in)					
6-7-73	Flowing	Shut-in					
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
6-8-73	4	18/64"		None	225	None	Gas well
Flow Tubing Press.	Casing Pressure	Calculated 24-Hr Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
700	0-2kr		None	1,350	None		

29. Disposition of Gas (Solid, used for fuel, vented, etc.)	Test Witnessed By
Vented during clean up and above test	Terry Clay

30. List of Attachments
2 sets logs and DST data

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED <i>T. D. Clay</i>	T. D. Clay	TITLE Petroleum Engineer	DATE 6-18-73
--------------------------	------------	--------------------------	--------------

# INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 59 through 64 shall be reported for each zone. This form is to be filed in quadruplicate except on state land, where six copies are required. See Rule 1105.

## INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

### Southeastern New Mexico

### Northwestern New Mexico

T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt	T. Strawn 9921	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt	T. Atoka 10478	T. Pictured Cliffs	T. Penn. "D"
T. Yates	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Qtzite
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinberry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Granite	T. Todilto	T.
T. Drinkard	T. Delaware Sand 2330	T. Entrada	T.
T. Abo	T. Bone Springs 4751	T. Wingate	T.
T. Wolfcamp 5149	T. Morrow 10920	T. Chinle	T.
T. Penn.	T.	T. Permian	T.
T. Cisco (Bough "C")	T.	T. Penn. "A"	T.

## FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	425	425	Gravel & ls	10628	10708	80	Limestone & shale
425	525	100	Ls & gravel	10708	10759	51	Limestone
525	1482	957	Sand & dolomite	10759	10803	49	Limestone, chert & shale
1482	2582	1100	Sand, Ls & dolo	10803	10850	42	Chert & shale
2582	4370	1788	Sand & shale	10850	10935	85	Limestone
4370	5295	925	Ls & shale	10935	10977	42	Sand
5295	5912	617	Limestone	10977	11026	49	Limestone
5912	6075	163	Sand, shale & ls	11026	11083	57	Limestone & shale
6075	6245	170	Shale	11083	11127	44	Sand & shale
6245	7298	1053	Limestone & shale	11127	11151	24	Sand
7298	7725	427	Ls, shale & sand	11151	11223	72	Shale
7725	8085	360	Limestone	11223	11325	102	Sand
8085	8440	355	Sand & limestone	11325	11378	53	Limestone, sand & shale
8440	8520	80	Limestone	11378	11403	25	Limestone & sand
8520	8665	145	Shale & limestone	11403	11418	15	Shale, limestone & pyrite
8665	8800	135	Shale	11418	11476	58	Shale, limestone & sand
8800	9320	520	Shale & limestone				
9320	9682	362	Shale				
9682	9750	68	Limestone & shale				
9750	9887	137	Shale				
9887	9981	94	Limestone				
9981	10030	49	Limestone & shale				
10030	10233	203	Limestone				
10233	10335	97	Limestone & shale				
10335	10410	75	Sand & shale				
10410	10471	61	Limestone				
10471	10545	74	Limestone & shale				
10545	10628	83	Limestone				



THE SUPERIOR OIL COMPANY

STATE "Q" COM #1  
2235' FSL & 660' FWL  
SECTION 34, T-21-S, R-26-E  
WILDCAT - MORROW  
EDDY COUNTY, NEW MEXICO

DRILL STEM TESTS

- 4-7-73 DST NO. 1 8865'-8960', WOLFCAMP  
5/8" bottom choke, 1000' fresh water cushion. Set pkr @ 8865'.  
Opened tool at 2:30 a.m. w/weak blow for 10 min pre-flow. Closed  
in 1 hour. Opened tool for 2 hour test on 1/4" choke incr to  
3/4" choke after 30 mins. Gas to surface in 1-1/4 hours w/max  
TP 24 psi on 3/4" choke decr to 2 psi TP at end of test. Final  
gas flow estimate at 100 MCFPD. Closed in at 5:40 a.m. for 3 hour  
FSIP. POH and rec 1000' water cushion plus 350' heavily gas cut mud  
and condensate. Sample chamber recovered 3.7 cu ft gas and 1400 cc  
condensate. 1 hour ISIP 3666, FP 460-507, 3 hour FSIP 3780, HP 4488  
in & 4465 out, press charts showed zone very tight.
- 4-22-73 DST NO. 2 10,024'-10,095'  
HOWCO tester on 3-1/2" DP, 1000' 10.2# SW cushion, 5/8" BHC, pkr  
at 10,024'. Tool open @ 1:35 p.m., 4-21-73 for 15 min pre-flow,  
weak blow of air increasing to good blow in 15 mins. Took 1 hour  
ISIP. Opened tool for 85 mins test @ 2:50 p.m.. Had gas to surface  
in 5 min, w/max 33 psi surface press on 1/4" choke after 30 mins.  
Changed to 3/4" choke & press bled to 0# after tool opened total  
1 hour. Maximum gas flow rate 150 MCF/day. Packer failed after  
tool had been open 65 mins. Shut tool in after 85 mins & attempted to  
take 1 hour FSIP. Pulled pkrs loose. Started POH & found 9245' of  
fluid in DP. Reversed out 8745', slightly gas cut drlg fluid & 1000'  
water cushion. Finished POH. IHP 5362#, 1 hour ISIP 4382 psi, 65 min  
flow press 397 psi - 507 psi. Final shut in press no good. BHT 165° F.  
Recovered from sample chamber 0.1 cu ft gas @ 60 psi & 1850 cc drlg fluid.
- 5-10-73 DST NO. 3 11,020'-11,151'  
HOWCO tester 5/8" bottom choke, 1000' salt water cushion. Set pkrs  
@ 11,016' & 11,020'. Tried to open tool @ 6:00 a.m. this morning,  
would not open. Now POH to check tool & rerun.
- 5-11-73 DST NO 3-A 11,015'-11,151'  
HOWCO Tester 1000' 10.2# salt water cushion, 5/8" bottom choke, pkrs  
@ 11,010' and 11,015'. Opened tool at 8:00 p.m. w/weak blow for 15 mins  
pre-flow. Shut-in for 1 hour ISIP. Opened at 9:15 p.m. for 1-1/4 hour  
test, weak to strong blow thruout. Shut-in for 1-1/2 hour FSIP. POH.  
Recovered 1000' salt water cushion, 1500' drlg fluid & 380' 9.6# formation  
water. 1 hour ISIP 4523 psi, FP 612 - 1137 psi, 1-1/2 hour FSIP 4346 psi,  
HP 6021 in and 5977 out, BHT 162° F.

#### NEW POOLS

- a) It is recommended that a new gas pool be created and designated as the BURTON FLAT-ATOKA GAS Pool.

Vertical limits to be the Atoka formation and the horizontal limits should be as follows: As shown in Paragraph (a), Exhibit I

Discovery well was Monsanto Company - Miller Federal #1 located in Unit G Section 3 Township 21S Range 27E and was completed on May 1, 1973. Top of perforations is at 10,658 feet.

- b) It is recommended that a new gas pool be created and designated as the BURTON FLAT-STRAWN GAS Pool.

Vertical limits to be the Strawn formation and the horizontal limits should be as follows: As shown in Paragraph (b), Exhibit I

Discovery well was Monsanto Company - Burton Flat Deep Unit #3 located in Unit V Section 3 Township 21S Range 27E and was completed on April 16, 1973. Top of perforations is at 10,208 feet.

- c) It is recommended that a new gas pool be created and designated as the CARLSBAD-CANYON GAS Pool.

Vertical limits to be the Canyon formation and the horizontal limits should be as follows: As shown in Paragraph (c), Exhibit I

Discovery well was Morris R. Antweil - Randall #1 located in Unit K Section 21 Township 22S Range 27E and was completed on July 3, 1972. Top of perforations is at 9930 feet.

NEW POOLS

d) It is recommended that a new gas pool be created and designated as the HAPPY VALLEY-MORROW GAS Pool.

Vertical limits to be the Morrow formation and the horizontal limits should be as follows: As shown in Paragraph (d), Exhibit I

Discovery well was The Superior Oil Company - State Q Com. #1 located in Unit L Section 34 Township 21S Range 26E and was completed on June 8, 1973. Top of perforations is at 11,086 feet.

e) It is recommended that a new gas pool be created and designated as the LAHUERTA-MORROW GAS Pool.

Vertical limits to be the Morrow formation and the horizontal limits should be as follows: As shown in Paragraph (e), Exhibit I

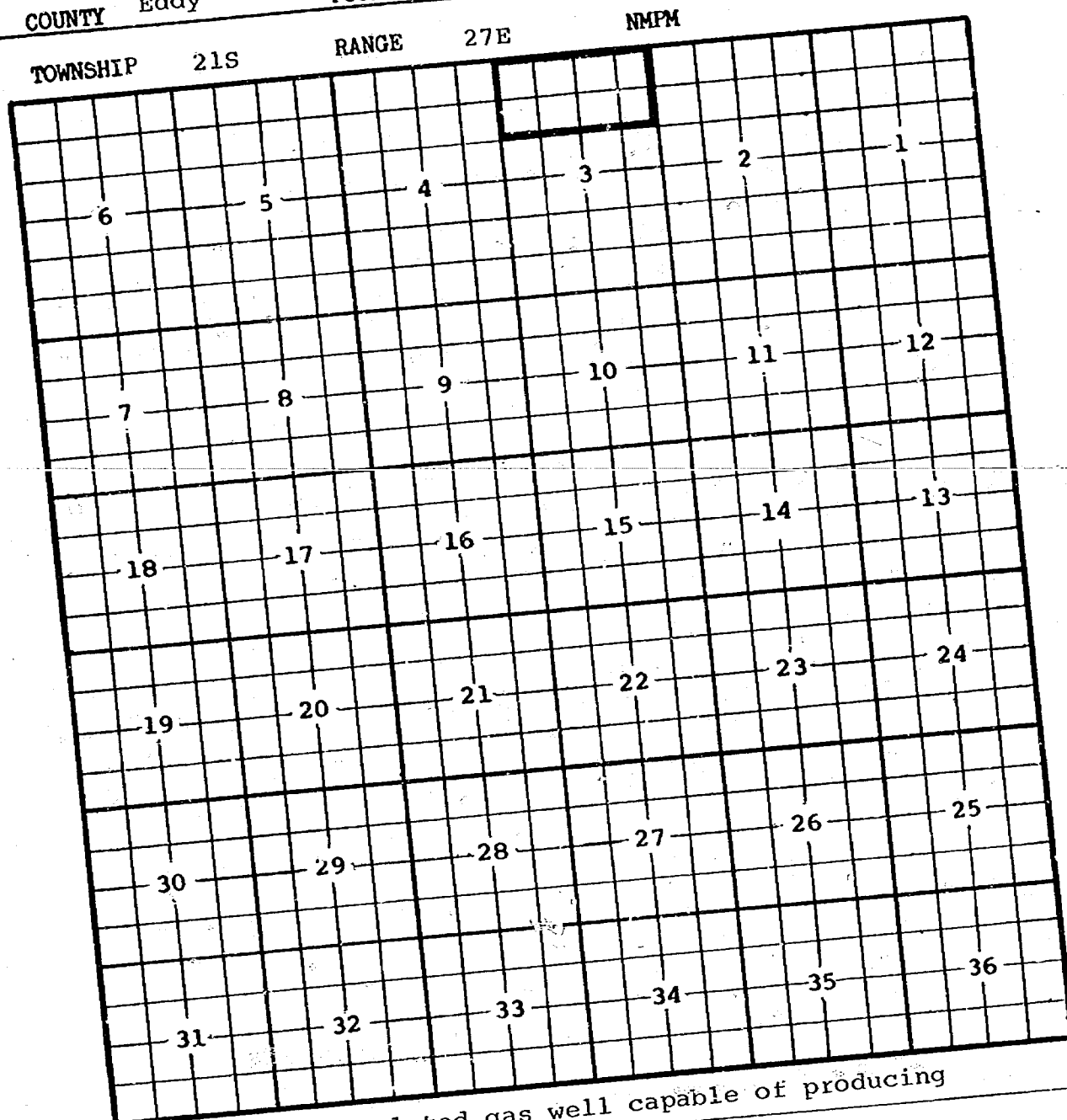
Discovery well was Cities Service Oil Company - Cawley A Com. #1 located in Unit K Section 28 Township 21S Range 27E and was completed on April 20, 1973. Top of perforations is at 11,202 feet.

It is recommended that a new \_\_\_\_\_ pool be created and designated as the \_\_\_\_\_ Pool.

Vertical limits to be the \_\_\_\_\_ formation and the horizontal limits should be as follows: \_\_\_\_\_

Discovery well was \_\_\_\_\_ located in Unit \_\_\_\_\_ Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ and was completed on \_\_\_\_\_ Top of perforations is at \_\_\_\_\_ feet.

CASE 5053: (a) CREATION OF A NEW GAS POOL  
COUNTY Eddy POOL Burton Flat-Atoka Gas



Purpose: One completed gas well capable of producing

Discovery well: Monsanto Co. Miller Federal #1-G, Sec. 3  
T-21S, R-27E, completed 5-1-73 through Atoka Perforations from  
10,658-668'

Proposed pool boundary outlined in green

Sec. 3: Lots 1 through 8

CASE 5053: (b) CREATION OF A NEW GAS POOL

COUNTY Eddy

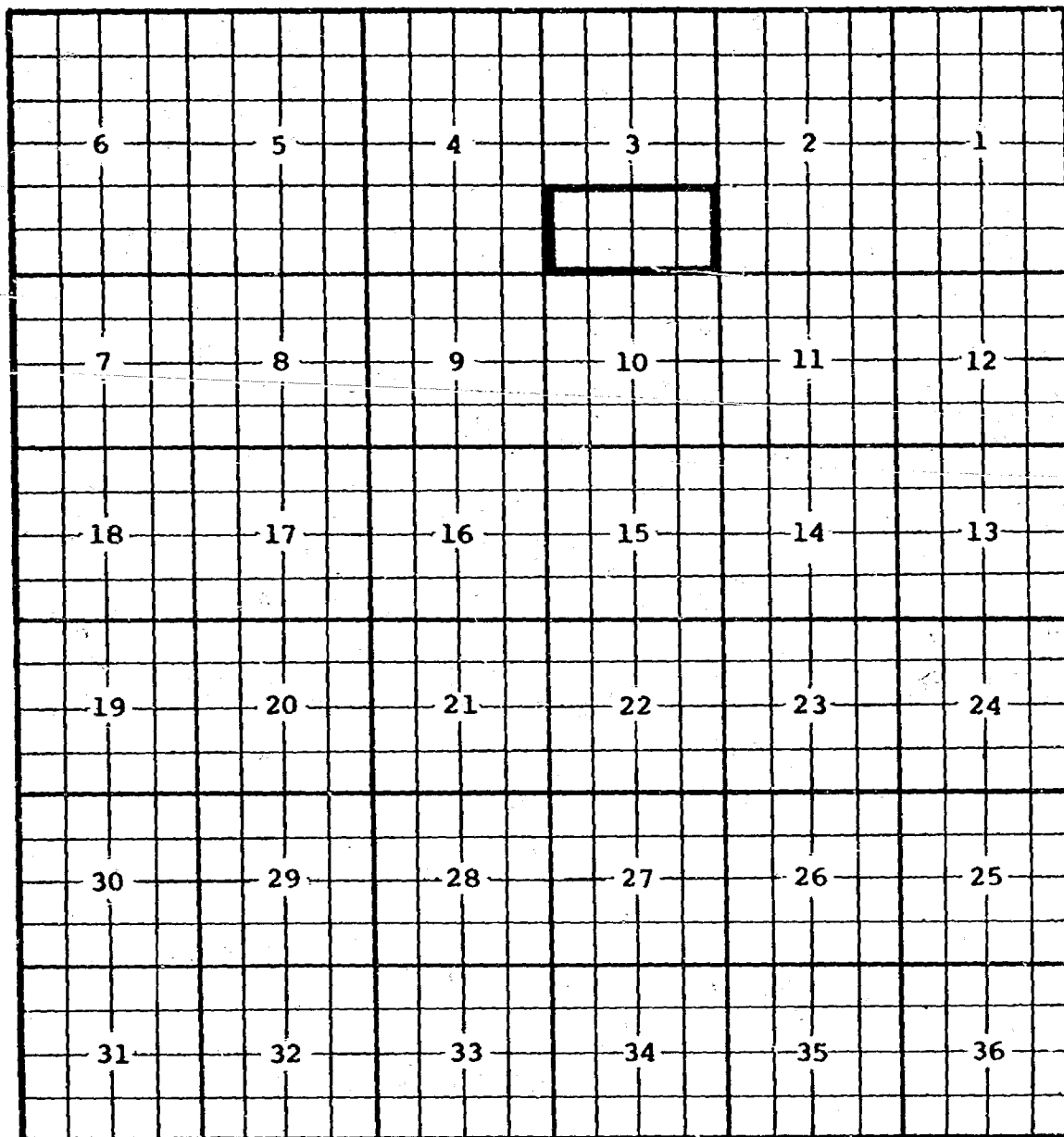
POOL Burton Flat-Strawn Gas

TOWNSHIP 21S

RANGE

27E

NMPM



Purpose: One Completed gas well capable of producing

Discovery well: Monsanto Co. Burton Flat Deep Unit  
#3-V, Sec. 3-, T-21S, R-27E, completed 4-16-73 through  
Strawn perforations from 10,208-250'

Proposed pool boundary outlined in green

Sec. 3: S/2

CASE 5053: (c) CREATION OF A NEW GAS POOL

COUNTY Eddy POOL Carlsbad-Canyon Gas

TOWNSHIP 22S RANGE 27E NMFM

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Purpose: One completed gas well capable of producing

Discovery well: Morris R. Antweil Randall #1-K

Sec. 21, T-22S, R-27E, completed 7-3-72 through Canyon perforations from 9930-47'.

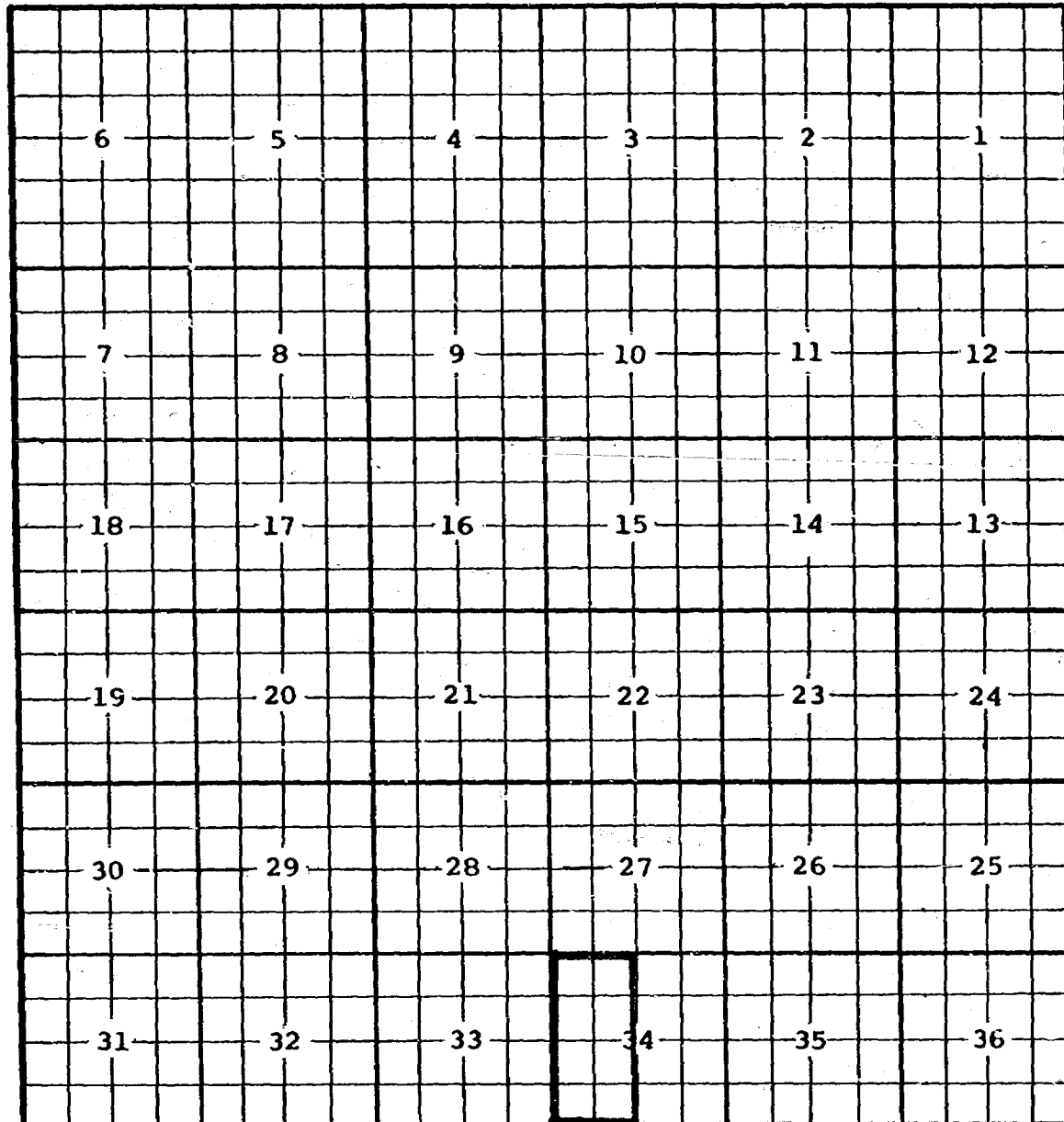
Proposed pool boundary outlined in green

Sec. 21: S/2

CASE 5053: (d) CREATION OF A NEW GAS POOL

COUNTY Eddy POOL Happy Valley - Morrow Gas

TOWNSHIP 21S RANGE 26E NMPM



Purpose: One completed gas well capable of producing

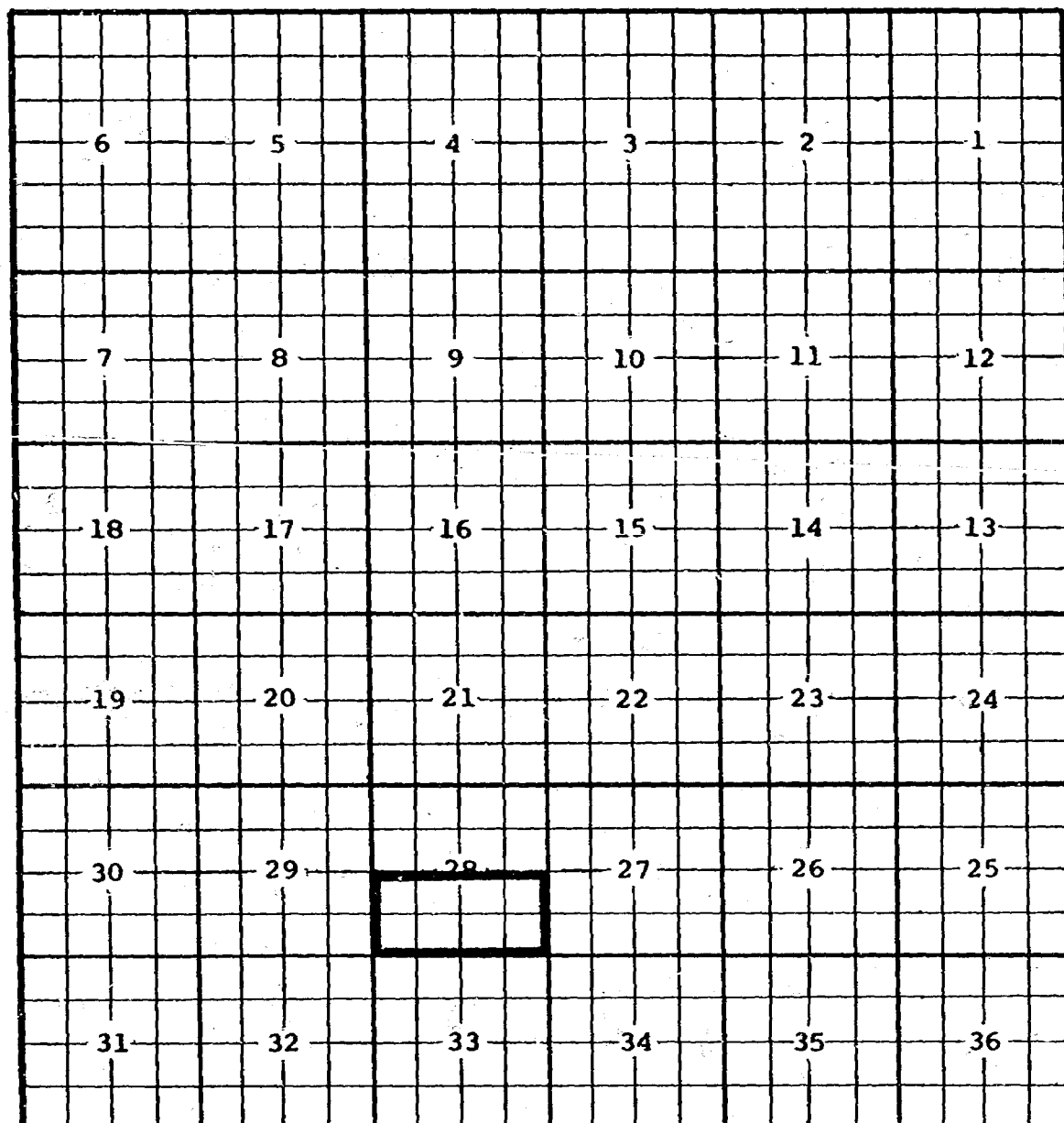
Discovery well: The Superior Oil Co. State Q Com. #1-L  
Sec. 34, T-21S, R-26E, completed 6-8-73 through Morrow  
perforations from 11,086-244'

Proposed pool boundary outlined in green

Sec. 34: W/2

CASE 5053: (e) CREATION OF A NEW GAS POOL  
COUNTY Eddy POOL La Huerta-Morrow Gas

TOWNSHIP 21S RANGE 27E NMPM



Purpose: One completed gas well capable of producing

Discovery well: Cities Service Oil Co. Cawley A Com. #1-K  
Sec. 28, T-21S, R-27E, completed 4-20-73 through Morrow  
perforations from 11,202-306'

Proposed pool boundary outlined in green  
Sec. 28: S/2



CASE 5053: (f) EXTENSION OF AN EXISTING OIL POOL

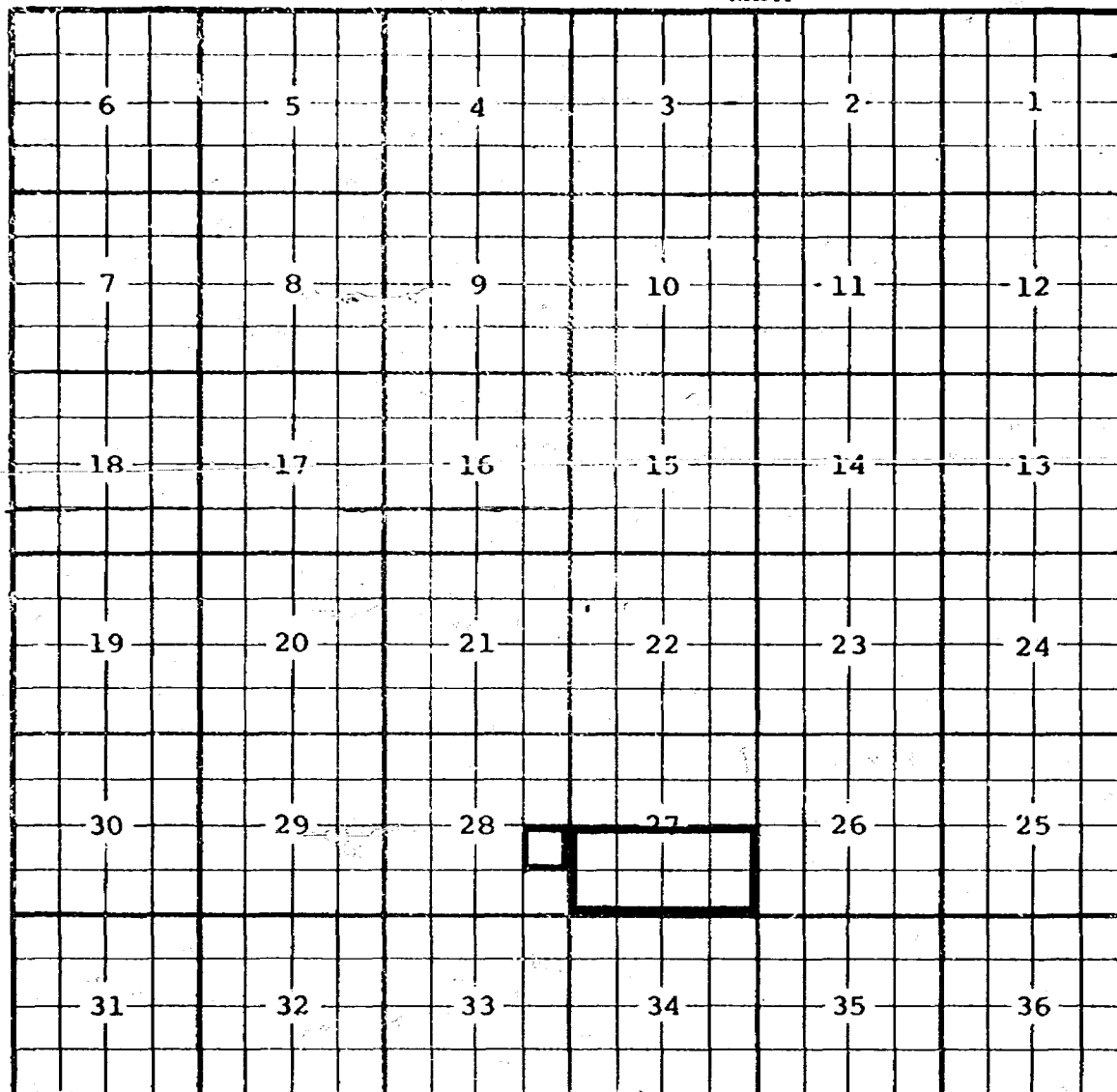
COUNTY Eddy

POOL East Empire Yates-Seven Rivers

TOWNSHIP 17S

RANGE 28E

NMPM



Purpose: One completed oil well capable of producing

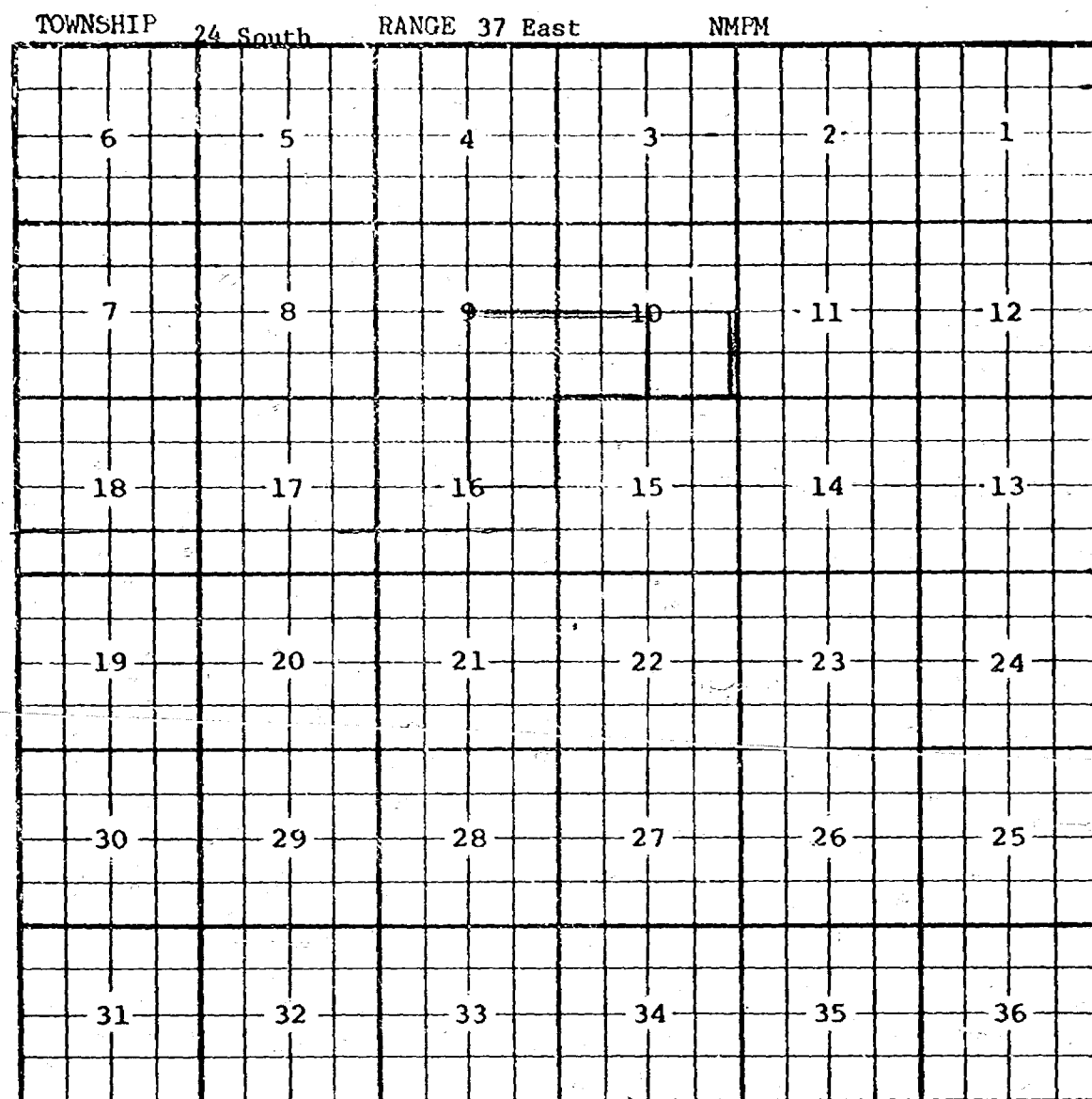
Operator	Lease	# & Ut.	S.T.R.	Comp.	Form.	TOP
John R. Gray	Pan Am State	2-I	28-17-28	5-2-73	SR	757

Pool boundary outlined in red

Proposed extension outlined in green

Sec. 28: NE/4 SE/4

CASE 5053: (g) EXTENSION OF AN EXISTING OIL POOL  
COUNTY LEA POOL FOWLER-DEVONIAN



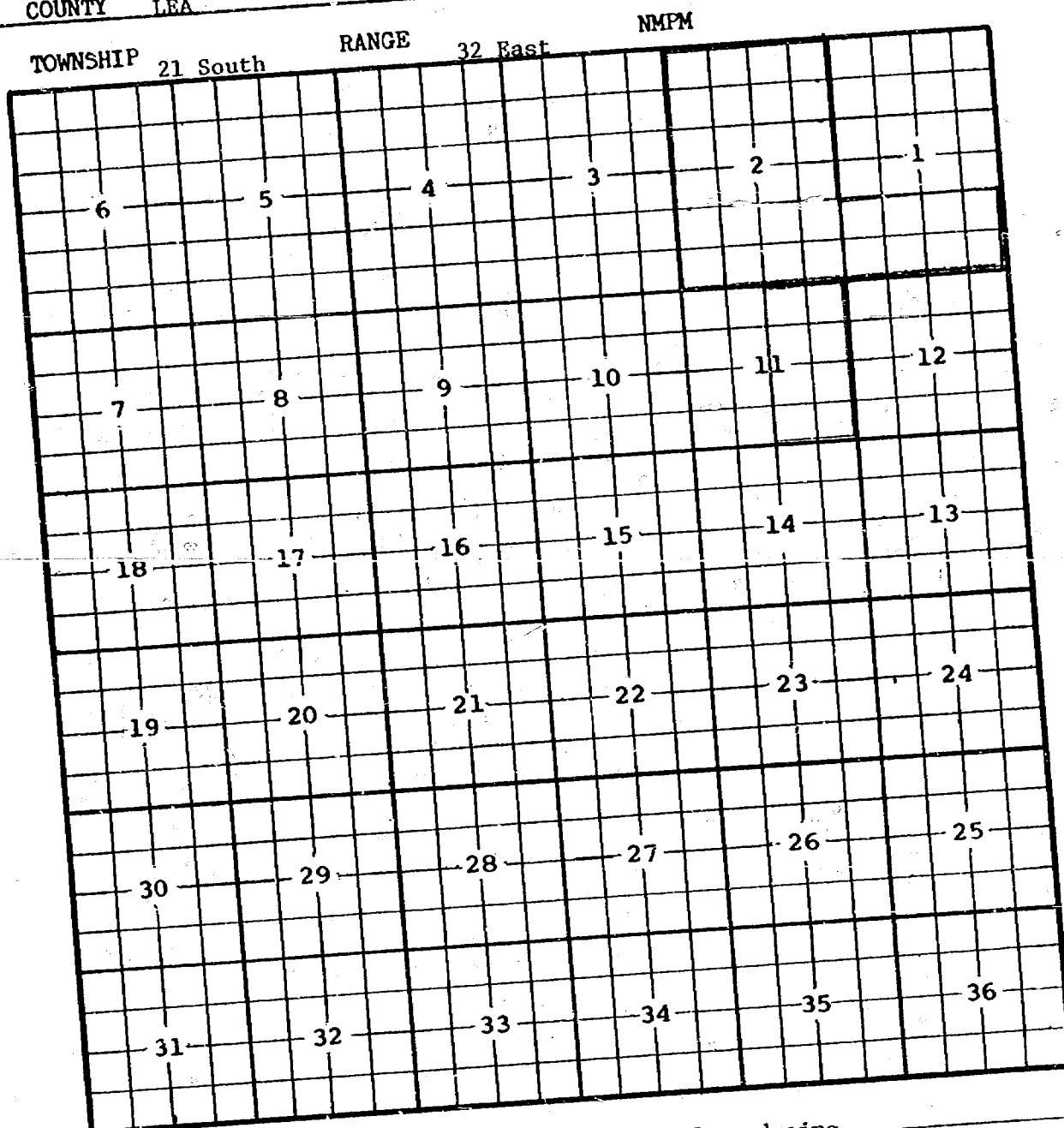
PURPOSE: One completed oil well capable of producing.

CONTINENTAL OIL COMPANY - Mattix #2 in Unit J of Section 10-24-37. Completed in Devonian on July 3, 1973. Top of Perforations 7406'.

Pool boundary colored in red.

Proposed pool extension colored in green. SECTION 10: SE/4

CASE 5053: (h) EXTENSION OF AN EXISTING GAS POOL.  
COUNTY LEA POOL HAT MESA-MORROW GAS



PURPOSE: Two completed gas wells capable of producing.  
KIMBALL PRODUCTION COMPANY - Federal One #1 in Unit V of Section 1-21-32.  
Completed in Morrow on June 9, 1973. Top of Perforations 13,791'.  
AMINI OIL COMPANY - Pubco Federal #1 in Unit L of Section 2-21-32. Com-  
pleted in Morrow on June 16, 1973. Top of Perforations 13,968'.  
Pool boundary colored in red.  
Proposed pool extensions colored in green. SECTION 1: S/2  
SECTION 2: A11

CASE 5053: (1) EXTENSION OF AN EXISTING OIL POOL

COUNTY LEA POOL LEA-SAN ANDRES

TOWNSHIP	19 South	RANGE	34 East	NMPM	
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

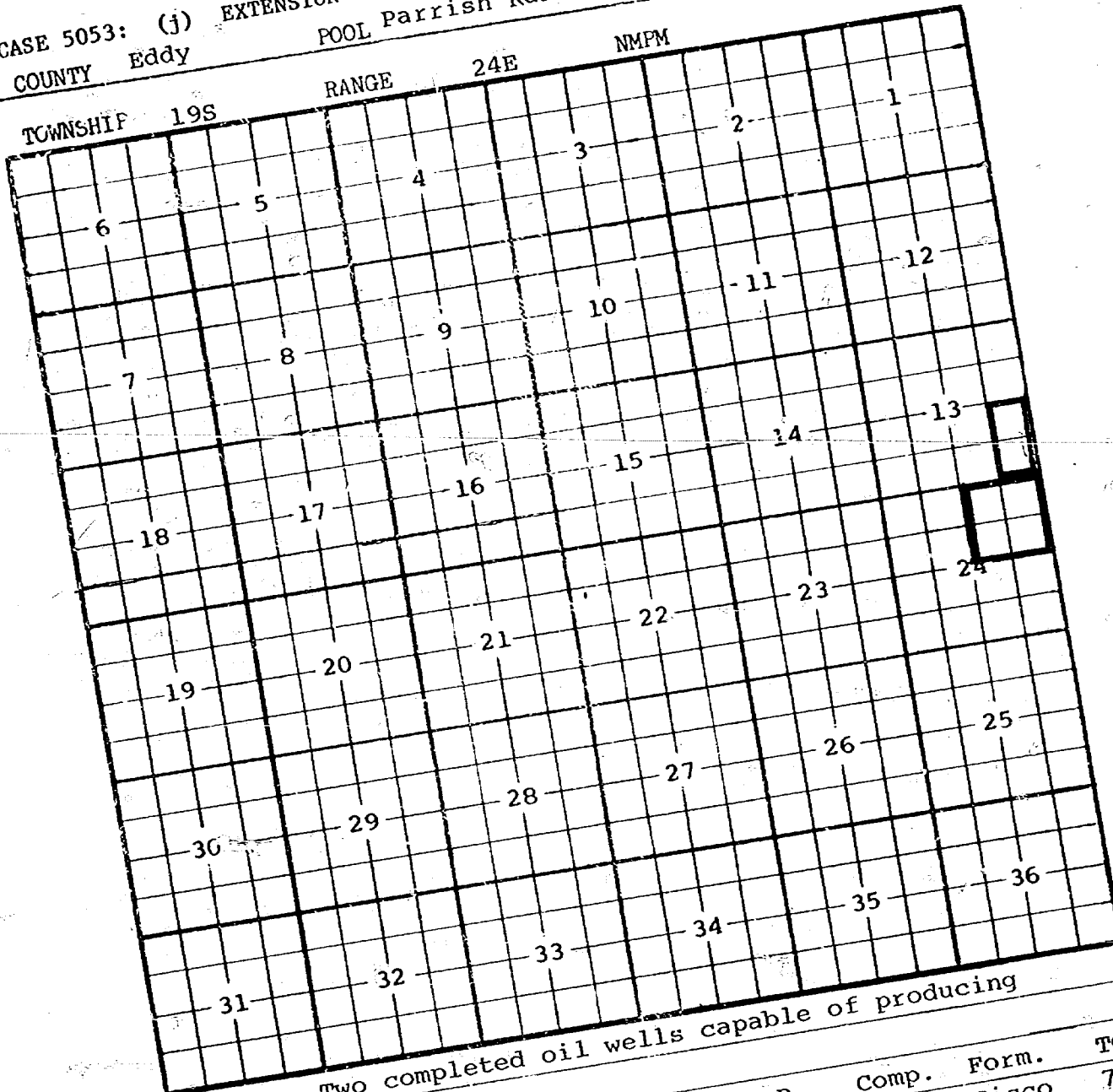
PURPOSE: One completed oil well capable of producing.

THE SUPERIOR OIL COMPANY - Government "G" #1 in Unit 0 of Section 24-19-34. Completed in San Andres on June 27, 1973. Top of Perforations 5870'.

Pool boundary colored in red.

Proposed pool extension colored in green. SECTION 24: SE/4

CASE 5053: (j) EXTENSION OF AN EXISTING OIL POOL (Continued on next page)  
COUNTY Eddy POOL Parrish Ranch-Upper Pennsylvanian



Purpose: Two completed oil wells capable of producing

Operator	Lease	# & Ut.	S.T.R.	Comp.	Form.	TOP
Roger C Hanks	Barbara Fed	1-H	18-19-25	8-11-71	Cisco	7732
"	"	2-K	18-19-25	6-23-73	Cisco	7864

Pool boundary outlined in red

Proposed extension outlined in green

Sec. 13: E/2 SE/4

CASE 5053: (j)	EXTENSION OF AN EXISTING OIL POOL (Continued)
COUNTY Eddy	POOL Parrish Ranch-Upper Pennsylvanian
RANGE	25E NMPM

CASE 5053: (3)  
COUNTY Eddy

TOWNSHIP 19S RANGE 25E NMPM

The map is a 6x6 grid of sections, numbered 1 to 36. The sections are arranged in rows and columns. Section 18, located in the third row from the top and second column from the left, is highlighted with a thick black border. The grid is labeled with 'TOWNSHIP 19S', 'RANGE 25E', and 'NMPM' at the top. The sections are numbered as follows:

Section	Section	Section	Section	Section	Section
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

As stated on page one of this exhibit

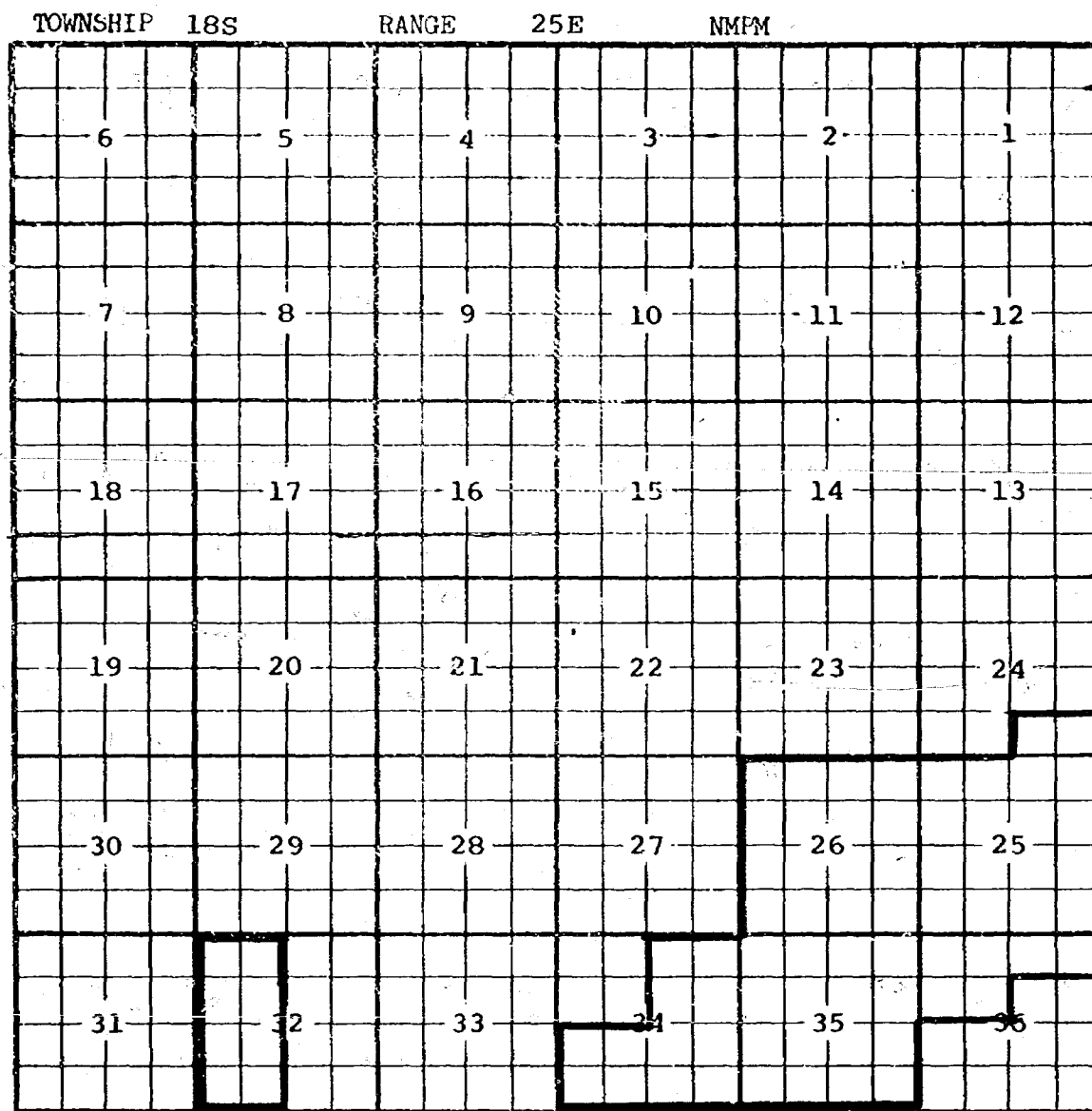
[illegible]

Proposed extension outlined in green

Sec. 18: N/2 S/2; SE/4 NE/4

CASE 5053: (k) EXTENSION OF AN EXISTING OIL POOL (Continued on next page)

COUNTY Eddy POOL Penasco Draw-San Andres-Yeso



Purpose: Two completed gas wells capable of producing

Operator	Lease	# & Ut.	S.T.R.	Comp.	Form.	TOP
Yates Petr Corp	Federal AB	Com 1-M	32-18-25	3-4-73	SA	1049
"	"	CM "	1-M	12-19-24	5-3-73	SA-Yeso 1021

Pool boundary outlined in red

Proposed extension outlined in green

Sec. 32: W/2

CASE 5053: (k) EXTENSION OF AN EXISTING OIL POOL (Continued)  
COUNTY Eddy POOL Penasco Draw-San Andres-Yeso

TOWNSHIP		19S	RANGE		24E	NMPM		
6		5	4		3	2		1
7		8	9		10	11		12
18		17	16		15	14		13
19		20	21		22	23		24
30		29	28		27	26		25
31		32	33		34	35		36

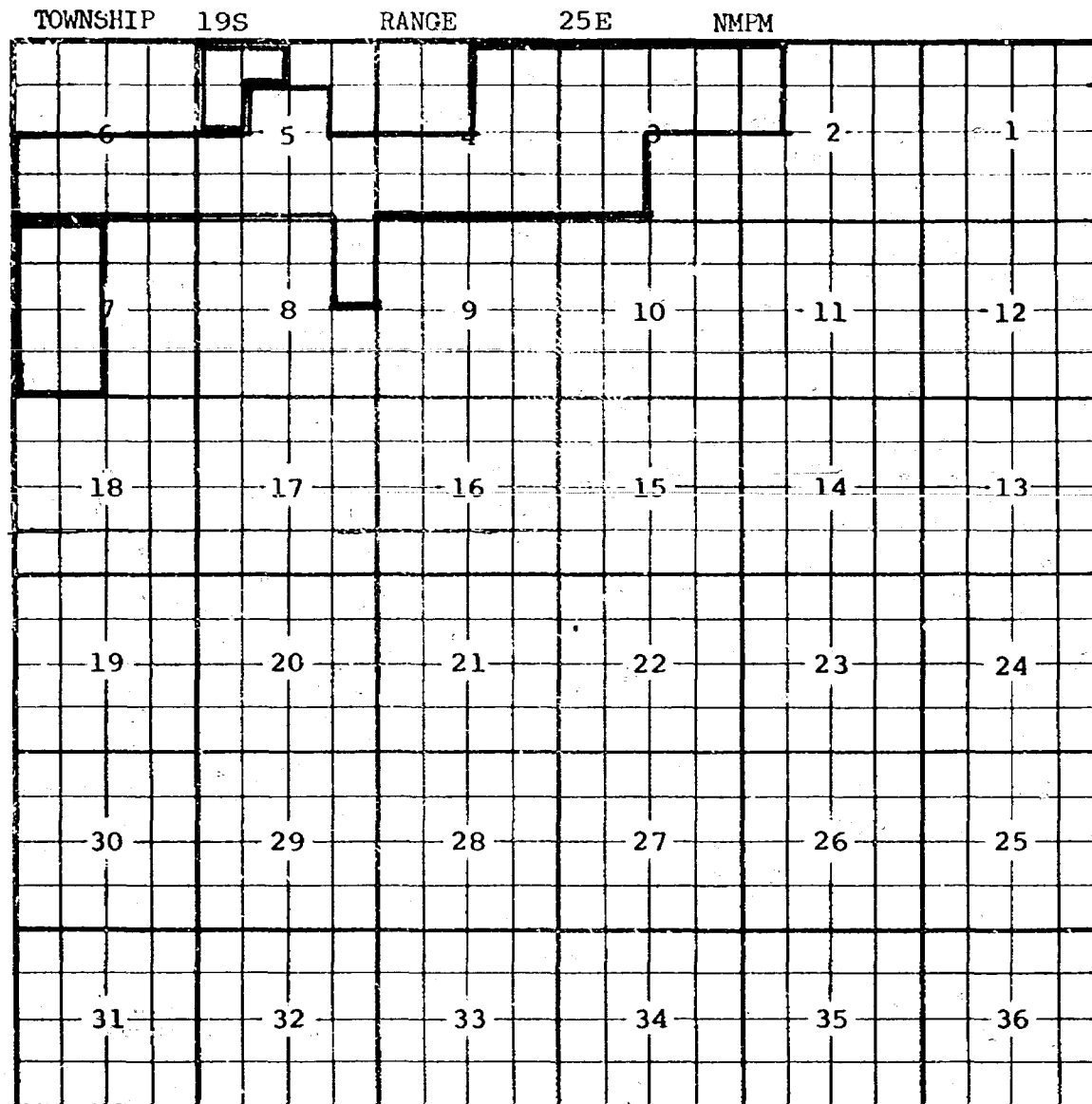
Purpose: As stated on page one of this exhibit

ADDITION: Proposed extension outlined in green  
Sec. 12: S/2



CASE 5053: (k) EXTENSION OF AN EXISTING OIL POOL (Continued on next page)

COUNTY Eddy POOL Penasco Draw-San Andres-Yeso



Purpose: As stated on page one of this exhibit

Pool boundary outlined in red

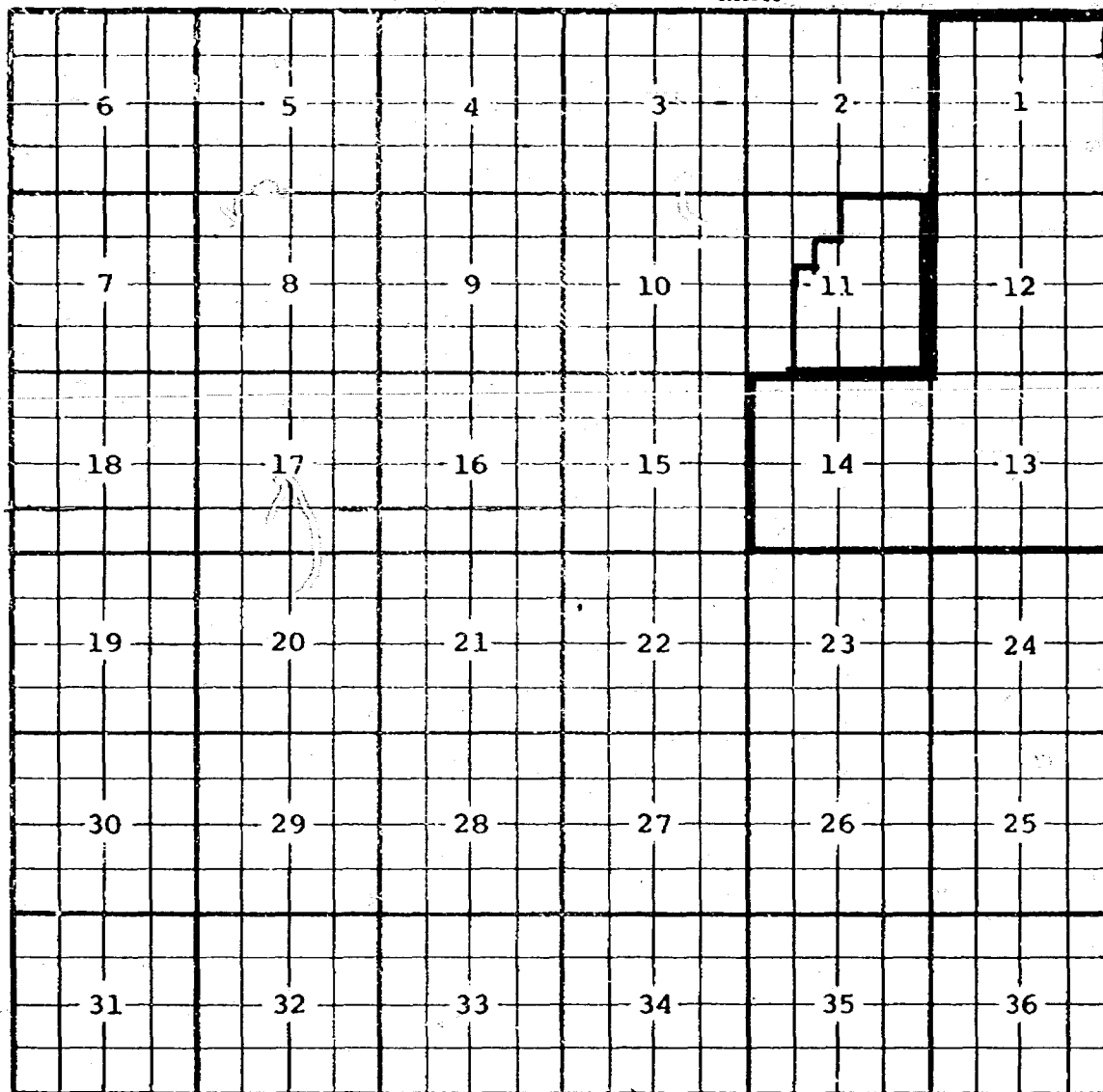
Proposed extension outlined in green

Sec. 5: W/2 NW/4 & NE/4 NW/4

Addition Sec. 7: W/2

CASE 5053: (1) EXTENSION OF AN EXISTING GAS POOL  
COUNTY Eddy POOL Rock Tank Lower-Morrow Gas

TOWNSHIP 23S RANGE 24E NMPM



Purpose: One completed gas well capable of producing  
Operator Lease # & Ut. S.T.R. Comp. Form. TOP  
Adobe Oil Co Smith Fed 2-P 11-23-24 4-15-73 Lower Morr 10,185

Pool boundary outlined in red

Proposed extension outlined in green

Sec. 11: E/2, E/2 SW/4, S/2 SE/4 NW/4 & NE/4 SE/4 NW/4

CASE 5053: (m) EXTENSION OF AN EXISTING OIL POOL

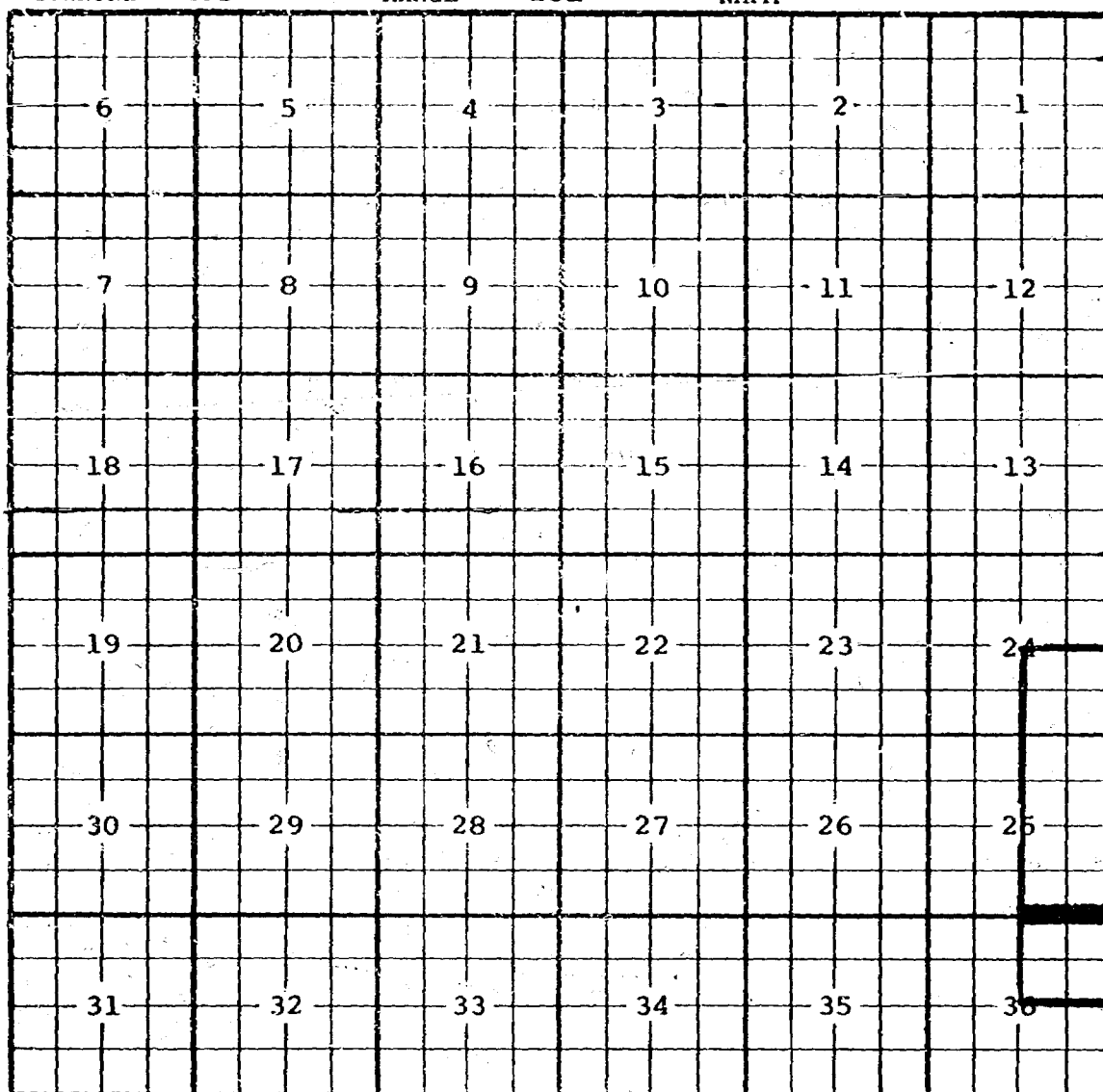
COUNTY Chaves POOL Round Tank-Queen

TOWNSHIP 15S

RANGE

28E

NMPM



Purpose: One completed gas well capable of producing

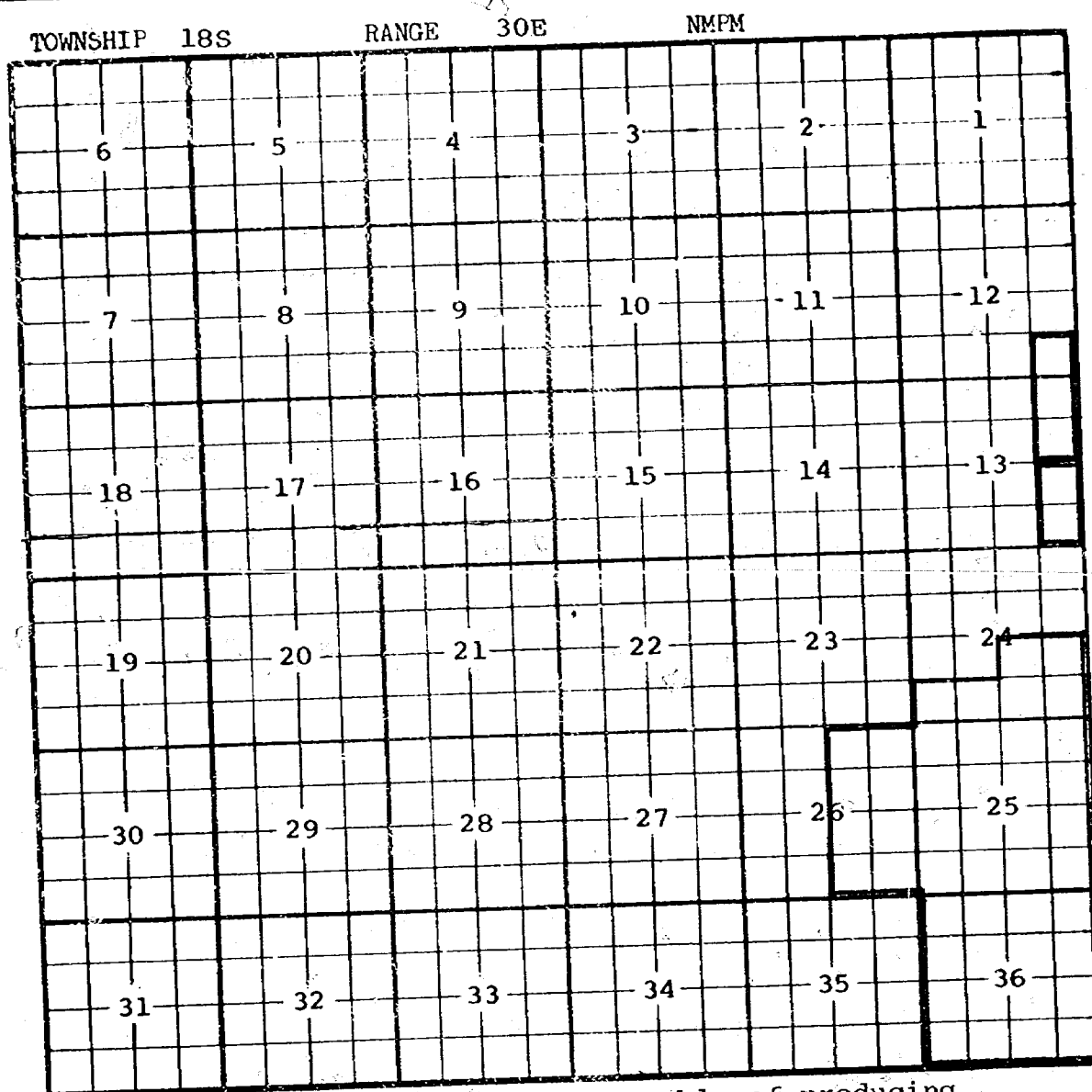
Operator	Lease	# & Ut.	S.T.R.	Comp.	Form	TOP
Elk Oil Co	Amoco State	1-A	36-15-28	3-20-73	Queen	1416

Pool boundary outlined in red

Proposed extension outlined in green

Sec. 36: NE/4

CASE 5053: (n) EXTENSION OF AN EXISTING OIL POOL  
COUNTY Eddy POOL Shugart



Purpose: One completed oil well capable of producing

Operator	Lease	# & Ut.	S.T.R.	Comp.	Form.	TOP
Franklin Aston & Fair Inc.	Yates B	1-P	12-18-30	4-4-73	Grayburg	3512

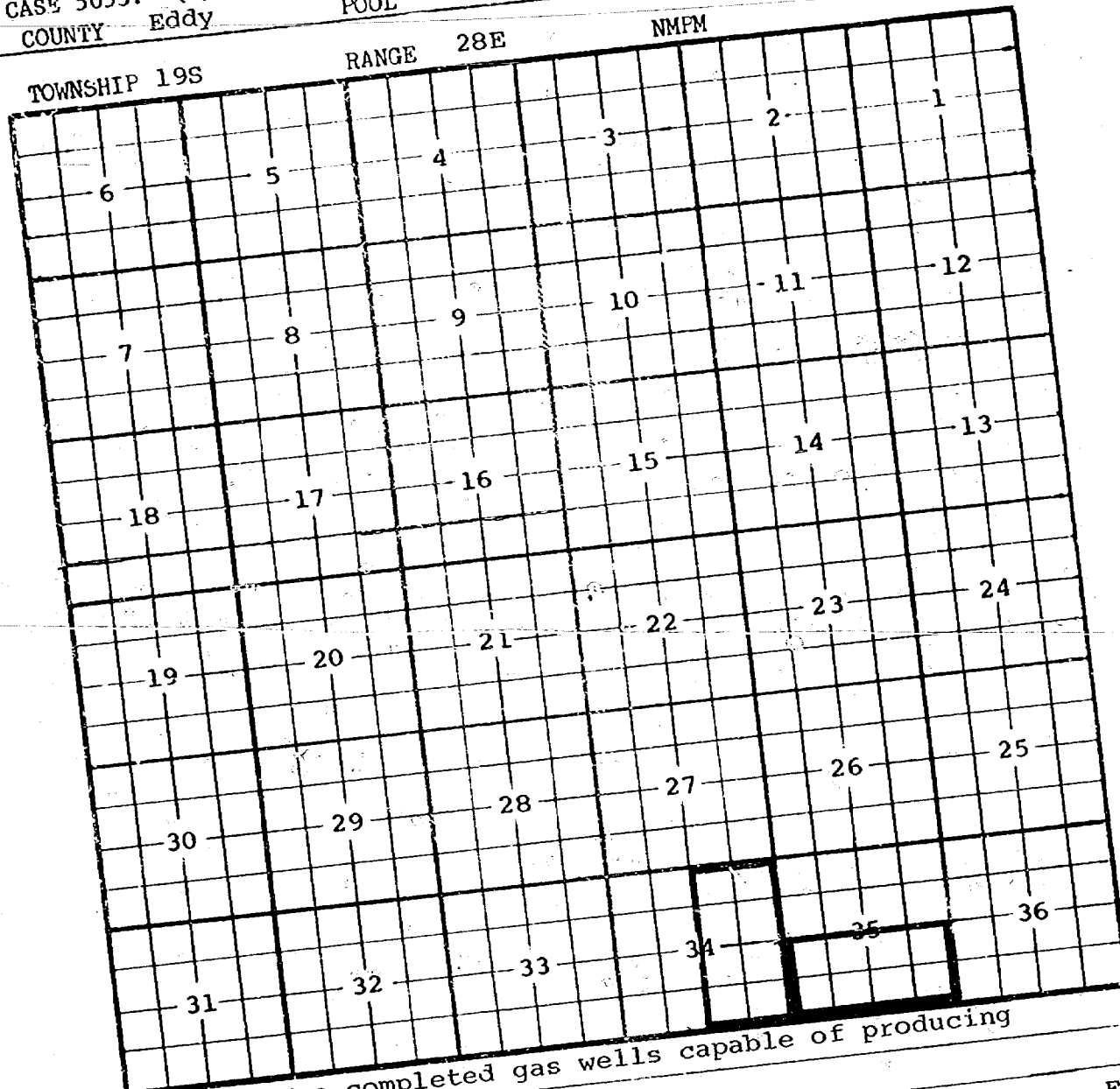
Pool boundary outlined in red

Proposed extension outlined in green

Sec. 13: E/2 NE/4

Sec. 12: SE/4 SE/4

CASE 5053: (o) EXTENSION OF AN EXISTING GAS POOL (Continued on next page)  
COUNTY Eddy POOL Winchester-Morrow Gas



Purpose: Two completed gas wells capable of producing

Operator	Lease	# & Ut. S.T.R.	Comp.	Form	TOP
Dorchester Expl. Inc.	DWU Fed	1-J	34-19-28	5-4-73 Morrow	11030
Hillin Prod. Co.	JCW State Com.	1-C	2-20-28	4-19-73 Morrow	11038

Pool boundary outlined in red

Proposed extension outlined in green

Sec. 34: E/2

CASE 5053: (o) EXTENSION OF AN EXISTING GAS POOL (Continued)  
COUNTY Eddy POOL Winchester-Morrow Gas

TOWNSHIP	20S	RANGE	28E	NMPM
6	5	4	3	2
7	8	9	10	11
18	17	16	15	14
19	20	21	22	23
30	29	28	27	26
31	32	33	34	35
				36

Purpose: As stated on page one of this exhibit

Proposed extension outlined in green

Sec. 2: N/2

CASE 5053: (p) CONTRACTION OF VERTICAL LIMITS AND REDESIGNATION OF AN EXISTING OIL POOL

COUNTY LEA

POOL

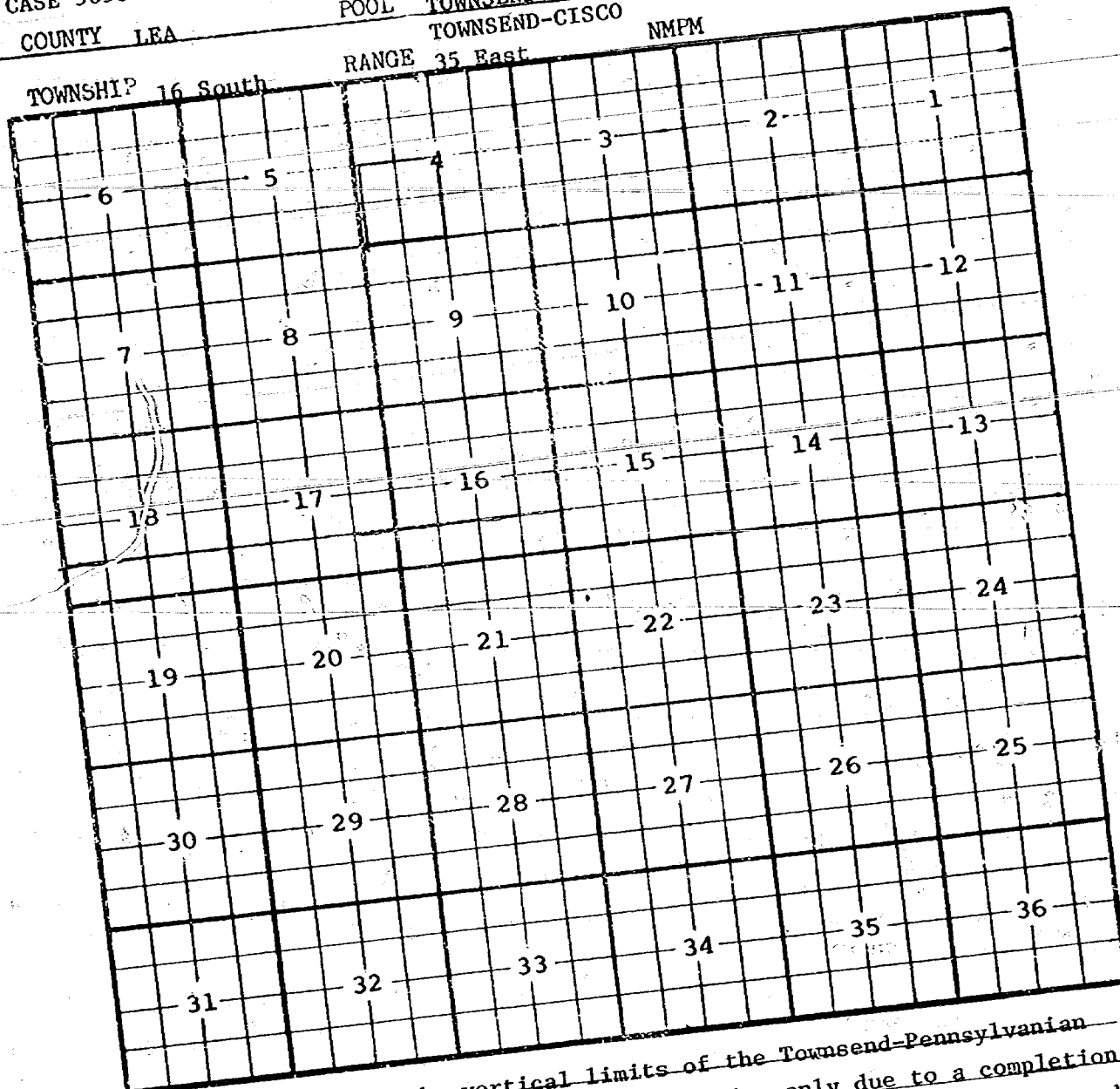
TOWNSEND-PENNSYLVANIAN

RANGE

35 East

NMPM

TOWNSHIP 16 South



PURPOSE: Contract the vertical limits of the Townsend-Pennsylvanian Pool to include the Cisco formation only due to a completion in Pennsylvanian other than Cisco in the immediate area, and redesignate said pool the Townsend-Cisco Pool.

Pool boundary colored in red. SECTION 4: SW/4

The vertical limits are the Cisco formation from 11,619 feet to 11,963 feet as found on Type Log - Ralph E. & J. C. Williamson Herrod State #1-U in Section 4-16-35.

(l) Extend the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
Section 11: E/2, E/2 SW/4, S/2 SE/4 NW/4  
and NE/4 SE/4 NW/4

(m) Extend the Round Tank-Queen Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM  
Section 36: NE/4

(n) Extend the Shugart Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
Section 12: SE/4 SE/4  
Section 13: E/2 NE/4

(o) Extend the Winchester-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM  
Section 34: E/2

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM  
Section 2: N/2

(p) Contract the vertical limits of the Townsend Pennsylvanian Pool in Lea County, New Mexico, to include the Cisco formation only and redesignate said pool the Townsend-Cisco Pool comprising:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
Section 4: SW/4

S/2 of said Section 7 would be dedicated.

CASE 5047: Application of Chace Oil Company for the amendment of Order No. R-4555, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the special rules and regulations for the South Lindrith Gallup-Dakota Pool, Rio Arriba County, New Mexico, as promulgated by Order No. R-4555, to provide for the classification of oil wells and gas wells, the assignment of 320-acre units to gas wells, and to provide for approval of unorthodox locations for wells drilled as oil wells but classified as gas wells upon completion.

CASE 5048: Application of Roger C. Hanks for creation of a pool and special rules therefor, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the South Dagger Draw-Upper Pennsylvanian Pool for his Preston Federal Well No. 1 located in Unit L of Section 35, Township 20 South, Range 24 East, Eddy County, New Mexico. Applicant further seeks the promulgation of special rules for said pool, including a provision for 320-acre spacing for all wells in said pool, for the classification of oil wells and gas wells, for a limiting gas-oil ratio of 8,000 to 1, and for the assignment of a depth bracket allowable for oil wells of 267 barrels of oil per day.

CASE 5049: Application of Mobil Oil Corporation for a triple completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the triple completion (conventional) of its Federal "LL" Well No. 1 located in Unit N of Section 13, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, to produce gas from the Canyon, Atoka, and Morrow formations through three strings of tubing.

CASE 5050: Application of Read and Stevens, Inc. for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority



Com No. 1 located in Unit A of Section 20, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 28: S/2

(f) Extend the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 28: NE/4 SE/4

(g) Extend the Fowler-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM  
Section 10: SE/4

(h) Extend the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM  
Section 1: S/2  
Section 2: All

(i) Extend the Lea-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
Section 24: SE/4

(j) Extend the Parrish Ranch-Upper Pennsylvanian Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
Section 13: E/2 SE/4

CASE 5053: Southeast nomenclature case calling for the creation, extension and contraction of certain pools in Eddy and Lea Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Burton Flat-Atoka Gas Pool. The discovery well is the Monsanto Company Miller Federal No. 1 located in Unit G of Section 3, Township 21 South, Range 27 East, NMPM. Said pool described as:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 3: Lots 1 through 8

(b) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Burton Flat-Strawn Gas Pool. The discovery well is the Monsanto Company, Burton Flat Deep Unit No. 3 located in Unit V of Section 3, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 3: S/2

(c) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Canyon production and designated as the Carlsbad-Canyon Gas Pool. The discovery well is the Morris R. Antweil Randall No. 1 located in Unit K of Section 21, Township 22 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM  
Section 21: S/2

(d) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Happy Valley-Morrow

63 921 (k) Extend the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM  
Section 32: W/2

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 5: W/2 NW/4 and NE/4 NW/4

SECTION 7: W/2

ADDITION-----  
(Case 5053 continued from Page 3)

(k) Extend the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM  
Section 32: W/2

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 5: W/2 NW/4 and NE/4 NW/4

(l) Extend the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
Section 11: E/2, E/2 SW/4, S/2 SE/4 NW/4  
and NE/4 SE/4 NW/4

(m) Extend the Round Tank-Queen Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM  
Section 36: NE/4

(n) Extend the Shugart Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
Section 12: SE/4 SE/4  
Section 13: E/2 NE/4

(o) Extend the Winchester-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM  
Section 34: E/2

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM  
Section 2: N/2

(p) Contract the vertical limits of the Townsend Pennsylvanian Pool in Lea County, New Mexico, to include the Cisco formation only and redesignate said pool the Townsend-Cisco Pool comprising:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
Section 4: SW/4

CASE 4745: (Reopened) (Continued from the August 9, 1973, Examiner Hearing)

In the matter of Case No. 4745 being reopened pursuant to the provisions of Order No. R-4363, which order established special rules and regulations for the Penasco Draw San Andres-Yeso Pool, Eddy County, New Mexico, including a provision for classification of oil wells and gas wells, the spacing thereof, and a limiting gas-oil ratio of 3000 to 1. All interested parties are hereby notified and shall appear and be heard at the hearing.

Com No. 1 located in Unit L of Section 34, Township 21 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM  
Section 34: W/2

(e) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the LaHuerta-Morrow Gas Pool. The discovery well is the Cities Service Oil Company Cawley A

Com No. 1 located in Unit L of Section 34, Township 21 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM  
Section 34: W/2

(e) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the LaHuerta-Morrow Gas Pool. The discovery well is the Cities Service Oil Company Cawley A Com No. 1 located in Unit K of Section 28, Township 21 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 28: S/2

(f) Extend the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 28: NE/4 SE/4

(g) Extend the Fowler-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM  
Section 10: SE/4

(h) Extend the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM  
Section 1: S/2  
Section 2: All

(i) Extend the Lea-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
Section 24: SE/4

(j) Extend the Parrish Ranch-Upper Pennsylvanian Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
Section 13: E/2 SE/4

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
Section 18: N/2 S/2 and SE/4 NE/4

ADDITION-----TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
SECTION 12: S/2

NOMENCLATURE ADVERTISEMENT FOR AUGUST, 1973  
CASE 6053

In the matter of the application of the Oil Conservation Commission of New Mexico upon its own motion for an order for the creation of new pools in Eddy County, New Mexico, and the extension of certain existing pools in Chaves, Eddy, and Lea Counties, New Mexico, and giving notice to all persons and parties interested in the subject matter thereof to appear and show cause why such creations and extensions should not be made.

a) CREATE A new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Burton Flat-Atoka Gas Pool. The discovery well is ~~the~~ Monsanto Company, Miller Federal No. 1 located in Unit G of Section 3, Township 21 South, Range 27 East, NMPM. Said pool described as:

✓ TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
SECTION 3: Lots 1 through 8

b) CREATE A new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Burton Flat-Strawn Gas Pool. The discovery well is ~~the~~ Monsanto Company, Burton Flat Deep Unit No. 3 located in Unit V of Section 3, Township 21 South, Range 27 East, NMPM. Said pool ~~described as~~ *would comprise:*

✓ TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
SECTION 3: S/2

c) CREATE A new pool in Eddy County, New Mexico, classified as a gas pool for Canyon production and designated as the Carlsbad-Canyon Gas Pool. The discovery well is ~~the~~ Morris R. Antweil, Randall No. 1 located in Unit K of Section 21, Township 22 South, Range 27 East, NMPM. Said pool ~~described as~~ *would comprise:*

✓ TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM  
SECTION 21: S/2

d) CREATE A new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Happy Valley-Morrow Gas Pool. The discovery well is The Superior Oil Company, State Q Com No. 1 located in Unit L of Section 34, Township 21 South, Range 26 East, NMPM. Said pool ~~described as~~ *would comprise:*

✓ TOWNSHIP 21 SOUTH, RANGE 26 EAST, NMPM  
SECTION 34: W/2

e) CREATE A new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the LaHuerta-Morrow Gas Pool. The discovery well is Cities Service Oil Company, Cawley A Com No. 1 located in Unit K of Section 28, Township 21 South, Range 27 East, NMPM. Said pool ~~described as~~ *would comprise:*

✓ TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
SECTION 28: S/2

f) EXTEND the East Empire Yates-Seven Rivers Pool in Eddy County, New Mexico, to include therein:

✓ TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
SECTION 28: NE/4 SE/4

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Nomenclature August, 1973

g) EXTEND the Fowler-Devonian Pool in Lea County, New Mexico, to include therein:

✓ TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM  
SECTION 10: SE/4

h) EXTEND the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, to include therein:

✓ TOWNSHIP 34 SOUTH, RANGE 32 EAST, NMPM  
SECTION 1: S/2  
SECTION 2: All

i) EXTEND the Lea-San Andres Pool in Lea County, New Mexico, to include therein:

✓ TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
SECTION 24: SE/4

j) EXTEND the Parrish Ranch-Upper Pennsylvanian Pool in Eddy County, New Mexico, to include therein:

✓ TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
SECTION 13: E/2 SE/4

✓ TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
SECTION 18: N/2 S/2 and SE/4 NE/4

k) EXTEND the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, to include therein:

✓ TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM  
SECTION 32: W/2

✓ TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
SECTION 5: W/2 NW/4 and NE/4 NW/4

l) EXTEND the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, to include therein:

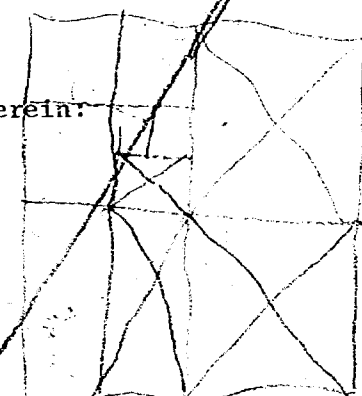
✓ TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
SECTION 11: E/2, E/2 SW/4, S/2 SE/4 NW/4  
and NE/4 SE/4 NW/4

m) EXTEND the Round Tank-Queen Pool in Eddy County, New Mexico, to include therein:

✓ TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM  
SECTION 36: NE/4

n) EXTEND the Shugart Pool in Eddy County, New Mexico, to include therein:

✓ TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
SECTION 12: SE/4 SE/4  
SECTION 13: E/2 NE/4



Nomenclature August, 1973

o) EXTEND the Winchester-Morrow Gas Pool in Eddy County, New Mexico. to include therein:

✓ TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM  
SECTION 34: E/2

✓ TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM  
SECTION 2: N/2

(p) Contract the settled limits of the Townsend Pennsylvania Pool in Red County, New Mexico, to include the Cisco formation only and redesignate the said pool the Townsend-Cisco Pool comprising:

Township 16 South Range 35 East, NMPM  
Section 4: SW/4

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 5053  
ORDER NO. R- 4622-

THE APPLICATION OF THE OIL CONSERVATION  
COMMISSION UPON ITS OWN MOTION FOR AN  
ORDER CREATING, CONTRACTING VERTICAL  
LIMITS, AND EXTENDING HORIZONTAL LIMITS  
OF CERTAIN POOLS IN CHAVES, EDDY, AND  
LEA COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:00 a.m. on August 22, 1973, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this day of August, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

✓(2) That there is need for the creation of a new gas pool in Eddy County, New Mexico, for the production of gas from the Atoka formation, said pool to bear the designation of Burton Flat-Atoka Gas Pool. Said Burton Flat-Atoka Gas Pool was discovered by the Monsanto Company Miller Federal Well No. 1, located in Unit G of Section 3, Township 21 South, Range 27 East, NMPM. It was completed in the Atoka formation on May 1, 1973. The top of the perforations is at 10,658 feet.

✓(3) That there is need for the creation of a new gas pool in Eddy County, New Mexico, for the production of gas from the Strawn formation, said pool to bear the designation of Burton Flat-Strawn Gas Pool. Said Burton Flat-Strawn Gas Pool was discovered by the Monsanto Company Burton Flat Deep Unit Well No. 3, located in Unit V of Section 3, Township 21 South, Range 27 East, NMPM. It was completed in the Strawn formation on April 16, 1973. The top of the perforations is at 10,208 feet.

(4) That the proposed creation of a new pool in Section 21, Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico, for the production of gas from the Canyon formation should be dismissed, pending further study.

(5) That the proposed creation of a new pool in Section 34, Township 21 South, Range 26 East, NMPM, Eddy County, New Mexico, for the production of gas from the Morrow formation should be dismissed, pending further study.

(6) That the proposed creation of a new pool in Section 28, Township 21 South, Range 27 East, NMPM, Eddy County, New Mexico, for the production of gas from the Morrow formation should be dismissed, pending further study.

(7) That there is need for the contraction of the vertical limits of the Townsend-Pennsylvanian Pool in Lea County, New Mexico, to include only the Cisco formation due to a completion in Pennsylvanian other than the Cisco zone in the immediate area. Said Townsend-Pennsylvanian Pool shall be redesignated the Townsend-Cisco Pool.

(8) That there is need for certain extensions to the Round Tank-Queen Pool in Chaves County, New Mexico, the East Empire Yates-Seven Rivers Pool, the Parrish Ranch-Upper Pennsylvanian Pool, the Penasco Draw-San Andres-Yeso Pool, the Rock Tank-Lower Morrow Gas Pool, the Shugart Pool, and the Winchester-Morrow Gas Pool, all in Eddy County, New Mexico, the Fowler-Devonian Pool, the Hat Mesa-Morrow Gas Pool, and the Lea-San Andres Pool, all in Lea County, New Mexico.

IT IS THEREFORE ORDERED:

(a) That a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production, is hereby created and designated as the Burton Flat-Atoka Gas Pool, consisting of the following described area:

✓ TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
SECTION 3: Lots 1 through 8

(b) That a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production, is hereby created and designated as the Burton Flat-Strawn Gas Pool, consisting of the following described area:

✓ TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
SECTION 3: S/2

~~(c) That the proposed creation of a new pool in Eddy County, New Mexico, classified as a gas pool for Canyon production and designated as the Carlsbad-Canyon Gas Pool, consisting of the following described area:~~

~~Township 22 South, Range 27 East, NMPM  
Section 21: S/2~~

~~is hereby dismissed.~~

~~(d) That the proposed creation of a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Happy Valley-Morrow Gas Pool, consisting of the following described area:~~

~~Township 21 South, Range 26 East, NMPM  
Section 34: W/2~~

~~is hereby dismissed~~

~~(e) That the proposed creation of a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the La Huerta-Morrow Gas Pool, consisting of the following described area:~~

~~Township 21 South, Range 27 East, NMPM  
Section 28: S/2~~

~~is hereby dismissed~~

✓ TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM  
SECTION 10: SE/4

(h) That the Hat Mesa-Morrow Gas Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM  
SECTION 1: S/2  
SECTION 2: All



(i) That the Lea-San Andres Pool in Lea County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
SECTION 24: SE/4

(j) That the Parrish Ranch-Upper Pennsylvanian Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
SECTION 13: E/2 SE/4

✓ TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
SECTION 18: N/2 S/2 and SE/4 NE/4

(k) That the Penasco Draw San Andres-Yeso Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM  
SECTION 32: W/2

✓ TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
SECTION 12: S/2

✓ TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM  
SECTION 5: W/2 NW/4 and NE/4 NW/4  
SECTION 7: W/2

(l) That the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
SECTION 11: E/2, E/2 SW/4, S/2 SE/4 NW/4  
and NE/4 SE/4 NW/4

(m) That the Round Tank-Queen Pool in Chaves County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM  
SECTION 36: NE/4

(n) That the Shugart Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
SECTION 12: SE/4 SE/4  
SECTION 13: E/2 NE/4

(o) That the Winchester-Morrow Gas Pool in Eddy County, New Mexico, as heretofore classified, defined, and described, is hereby extended to include therein:

✓ TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM  
SECTION 34: E/2

✓ TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM  
SECTION 2: N/2

(p) That the vertical limits of the Townsend-Pennsylvanian Pool in Lea County, New Mexico, are hereby contracted to include the Cisco formation only and redesignate said pool the Townsend-Cisco Pool comprising:

✓ TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM  
SECTION 4: SW/4

IT IS FURTHER ORDERED:

(1) That, pursuant to Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, any well which, by virtue of any of the above pool extensions, is subject to pool rules providing for spacing or proration units larger than the one which is presently dedicated thereto, shall have 60 days from the effective date of this order in which to file new Forms C-102 dedicating a standard unit for the pool to said well, or to obtain a non-standard unit approved by the Commission. Pending such compliance, the well shall receive a maximum allowable in the same proportion to a standard allowable for the pool that the acreage dedicated to the well bears to a standard unit for the pool. Failure to file Forms C-102 dedicating a standard unit to the well or to obtain a non-standard unit approved by the Commission within said 60-day period shall subject the well to cancellation of allowable.

(2) That the effective date of this order and all creations, contractions of vertical limits, and extensions of horizontal limits included herein shall be September 1, 1973.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

S E A L