

CASE 5033: Appl. of CONTINENTAL  
FOR SPECIAL GOR LIMIT OR IN THE  
ALTERNATIVE - LEASE CASINGHEAD  
GAS ALLOWABLE, LEA COUNTY.

1974  
Aug Will Be  
Order No R-4539-B  
Order No

CASE No.

5033

Application,  
Transcripts,  
Small Exhibits

ETC.

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
August 7, 1974

EXAMINER HEARING

IN THE MATTER OF: )

Case No. 5033 being )  
reopened pursuant to the )  
provisions of Order No. )  
R-4539-A, Bell Lake- )  
Bone Spring Pool, Lea )  
County, New Mexico. )

Case No. 5033

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil  
Conservation Commission:

Thomas Derryberry  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

For the Applicant:

W. Thomas Kellahin, Esq.  
KELLAHIN & FOX  
500 Don Gaspar  
Santa Fe, New Mexico

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386

I N D E X

Page

Victor T. Lyon

Direct Examination by Mr. Kellahin 3

Cross Examination by Mr. Nutter 9

Witness Excused 11

E X H I B I T S

Admitted

Applicant's Exhibits Number One through Three 9

MR. NUTTER: Call Case Number 5033.

MR. DERRYBERRY: Case Number 5033, in the matter of Case Number 5033 being reopened pursuant to the provisions of Order Number R-4539-A, which order established a special gas-oil ratio limitation of five thousand to one for the Bell Lake-Bone Spring Pool, Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin, Kellahin and Fox, Santa Fe, New Mexico, appearing on behalf of the applicant, Continental Oil Company. I have one witness to be sworn.

(THEREUPON, the witness was sworn.)

VICTOR T. LYON

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you please state your name and by whom you are employed and in what capacity?

A My name is Victor T. Lyon and I am employed by Continental Oil Company as Conservation Coordinator in the Hobbs Division office located in Hobbs, New Mexico.

Q Have you previously testified before this Commission or one of its Hearing Examiners and had your qualifications as an expert witness accepted and made a

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386

LYON-DIRECT

Page 4

matter of record?

A. Yes, sir, I have.

Q. Did you appear and testify in behalf of the applicant, Continental Oil Company, in the original Case 5033?

A. Yes, sir, I did.

Q. And are you familiar with the facts surrounding the reopened applicaion by Continental?

A. Yes, sir.

MR. KELLAHIN: If the Examiner please, are the witness's qualifications acceptable?

MR. NUTTER: Yes, they are.

(Mr. Kellahin continuing.) Mr. Lyon, would you please state briefly what Continental Oil Company's position is as regards this application?

A. Yes, sir. Case Number 5033 is the application of the Continental Oil Company for special gas-oil ratio limits for the Bell Lake-Bone Spring Pool.

This original hearing was held approximately one year ago and resulted in the issuance of Order Number R-4539-A, which granted the special gas-oil ratio for a one year period of five thousand cubic feet per barrel.

At the time of the original application, Continental Oil Company had installed compression facilities

LYON-DIRECT

Page.....5.....

to boost the casing head gas production into the sales lines of Trans Western Pipeline Company.

The increased gas-oil ratio limit was requested so that we could provide an adequate load for both of these compressors which were installed at that time.

One of the compressors had been rented and has now been released. The producing rate of gas has declined from approximately one and a quarter million cubic feet per day to about half that volume. The one remaining compressor is handling this load.

We are experiencing some difficulty in keeping the compressor operating because of the intermittent type of production that we are experiencing from Well No. 11. It heads and between heads the compressor goes down because of low load.

But we are producing as much of the gas as we possibly can into Trans Western's lines.

Now, at the time of our hearing a year ago, we were in the process of drilling No. 13-Y in which we were planning to take a bottom hole sample so that we would have an analysis of the reservoir characteristics.

We were unable to complete that well as a commercial producer and consequently we were unable to

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 962-0366

LYON-DIRECT

Page 6

secure this sample. Therefore our plans to produce that sample at this hearing will not be carried out.

Q Would you please refer to what has been marked for identification as Applicant's Exhibit Number One and identify it?

A Exhibit Number One is a plat showing the present participating area by the dotted lines for the Bone Spring formation.

The dashed line covering or outlining the larger area is the Devonian participating area.

The Bone Spring wells are shown circled and these are the same wells which were producing at the time of the hearing a year ago.

Q Please refer to what has been marked as Exhibit Number Two and identify it?

A Exhibit Number Two is a tabulation of well test data taken at various times during the past year on the three producing wells in the reservoir.

You will note that the production is declining from a high in August of '73, of four hundred and thirty-one barrels per day with a gas-oil ratio of two thousand nine hundred and forty to a low in July of 1974 of one hundred and fifty-five barrels per day with a gas-oil ratio of



LYON=DIRECT

three thousand seven hundred and ninety-four.

You will note that the gas-oil ratios are reasonably consistent in there and range approximately from three thousand to four thousand cubic feet per barrel.

Q What conclusions can you draw from this data?

A Well, my conclusion is that the reservoir, gas-oil ratio, solution gas-oil ratio, is in that range of three thousand to four thousand feet per cubic barrel.

Q And this would be in excess of statewide two thousand to one GOR limitation?

A Yes, sir.

Q Please refer to what has been marked as Exhibit Number Three and identify it?

A Exhibit Number Three is a recap of production by month from each of the three wells and a total production for the pool.

We have accumulative production as of January the first, 1973, and then monthly for each of the succeeding months through June of 1974.

The total production from this pool as of July First, 1974, with three hundred and nine thousand eight hundred and thirty-two barrels. You can see again that the production is declining.

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386

LYON-DIRECT

Page.....8.....

Q In your opinion, Mr. Lyon, should the Commission seek to make permanent the special gas-oil limitation ratio of five thousand to one? Do you see the impairment of any producing well?

A Well, the gas-oil ratio limit statewide of two thousand cubic feet per barrel would not at this time impair the producing rates of any of the wells.

I must admit that we do not have any present plans to drill additional wells.

The completion of Well No. 13-Y in the northeast quarter of Section 6 was of course a considerable disappointment. We have drilled an additional well, the W.A. Mattox 19, in Section 19, actually it is in unit D of Section 19, 23 South, 34 East, which is approximately two and half miles north of the current Bone Spring development.

We are evaluating the Bone Spring reservoir to see whether or not additional drilling is justified. So I certainly cannot rule out the possibility of additional completions nor can I at this time rule out the possibility that some of the decline experienced from these wells is mechanical rather than reservoir-caused.

So, whereas a return to the statewide gas-oil ratio of two thousand to one would not be an impairment at

LYON-DIRECT  
-CROSS

CASE 5033

Page 9

this time, next month it may be.

Since the wells have demonstrated a consistent gas-oil ratio above the two thousand to one limit and since this appears to indicate that the reservoir, gas-oil ratio, is greater than two thousand, I think it is appropriate to continue and to make permanent the special gas-oil ratio of five thousand cubic feet per barrel.

It is my recommendation that the Commission do so.

Q Were Exhibits One, Two and Three either prepared by you or compiled under your supervision?

A Yes, sir, they were.

MR. KELLAHIN: We move the admission of Exhibits One, Two and Three.

MR. NUTTER: Continental Exhibits One through Three will be admitted in evidence.

(THEREUPON, Applicant's Exhibits Numbers One, Two and Three were admitted into evidence.)

MR. KELLAHIN: That concludes our direct examination.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lyon, was the No. 3 well the first Bone Spring

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386

LYON-CROSS

Page 10

well completed here?

A. Yes.

Q What were the original conditions in it as far as the GOR is concerned when it was a new well?

A. I don't have that information with me. It was completed some eighteen or nineteen years ago and has been a marginal producer all of this time.

As a matter of fact, our original evaluation of that well was that it probably wouldn't last very long. But for a number of years it seemed to get stronger and stronger and it has been a difficult well to produce. We couldn't pump it effectively and it wouldn't flow effectively.

But because of the fact that it maintained a rather steady producing rate it led us to do this additional development.

Q I was wondering, because your GOR on that well has almost doubled in the last year but it was relatively low in 1973, being only nineteen thirty.

A. Yes, sir, that is true.

Q And you never have had a chance to get a reservoir sample here or a recombined sample under virgin conditions so you don't really know what the solution GOR is or was?

LYON-CROSS

Page 11

A. Yes, sir, that is right. And the production from Well No. 3 has been very erratic over the years. It does not flow continuously. It flows by heads.

If you take a test at a time when the well is heading it will demonstrate a lower GOR than if you start your test in the middle and the tail end of a flow.

So, the gas-oil ratio demonstrated in our tests are not really that consistent.

Q It just depends on when you took the test?

A. That's right.

MR. NUTTER: Are there any further questions of Mr. Lyon? You may be excused.

(THEREUPON, the witness was excused.)

Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone else have anything they wish to offer in Case Number 5033?


We will take the case under advisement.

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

I, SIDNEY F. MORRISH, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

  
SIDNEY F. MORRISH  
Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5033 heard by me on 8/7, 1974.

, Examiner  
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE  
STATE-WIDE DEPOSITION NOTARIES  
225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386

dearnley, meier & associates

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

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

July 25, 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Continental Oil  
Company for a special gas-oil  
ratio limit, or in the  
alternative, a lease casinghead  
gas allowable, Lea County,  
New Mexico.

Case No. 5033

BEFORE: Richard L. Stamets,  
Examiner.

TRANSCRIPT OF HEARING

1 MR. STAMETS: We will call next Case 5033:  
2 Application of Continental Oil Company for a special gas-oil  
3 ratio limit, or in the alternative, a lease casinghead gas  
4 allowable, Lea County, New Mexico.

5 MR. KELLAHIN: Tom Kellahin, of Kellahin and Fox,  
6 Santa Fe, appearing on behalf of the Applicant, Continental  
7 Oil Company. I have one witness to be sworn.

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

10 (No response)

11 \* \* \* \*

12 V. T. LYON,  
13 was called as a witness, and after being duly sworn according  
14 to law, testified as follows:

15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17 Q Would you please state your name, by whom you are employed,  
18 and in what capacity?

19 A V. T. Lyon, and I am employed by Continental Oil Company  
20 as a conservation coordinator in the Hobbs Division  
21 Office, located in Hobbs, New Mexico.

22 Q Mr. Lyon, have you previously testified before the  
23 Commission or one of its hearing examiners and had your  
24 qualifications as an expert made a matter of record?

25 A Yes, I have.



1 MR. KELLAHIN: Are the witness's qualifications  
2 acceptable?

3 MR. STAMETS: They are.

4 Q (By Mr. Kellahin) Will you please state briefly what  
5 Continental is seeking by this application?

6 A This is the application of Continental for an amendment  
7 to Order Number R-4539 to change the limiting gas-oil  
8 ratio for the Bell Lake-Bone Spring Pool to 5,000 cubic  
9 feet per barrel, or in the alternative, for a lease  
10 casinghead gas allowable.

11 Q Will you please refer to what has been marked as  
12 Applicant's Exhibit One, and explain what information it  
13 contains?

14 A Exhibit One is a plat showing the area under discussion.  
15 The dotted line represents the participating area, the  
16 Bell Lake-Bone Spring participating area.

17 The wells which are circled in red are wells which  
18 produce from the Bell Lake-Bone Spring Pool. The  
19 participating area is shown to consist of the South  
20 half of Section 31, the Northwest quarter of Section 6,  
21 and this area crosses the common township line between  
22 Township 23 South and Township 24 South in Range 34  
23 East, Lea County.

24 Q Please locate the wells-- How are the wells in question  
25 identified?

- 1 A Well No. 3 is located in Unit C of Section 6, 24, 34.  
2 Well 11 is located in Unit N, and Well No. 12 is located  
3 in Unit J, both in Section 31, Township 23 South, Range  
4 34 East.
- 5 Q Are there any other wells in the area?
- 6 A There is one additional well which has been drilled for  
7 completion in the Bone Springs Pool, which is 13 "Y"  
8 located in Unit H of Section 6. This well was  
9 unsuccessful for completion as a commercial producer,  
10 and it has been plugged and abandoned.
- 11 Q Will you identify Exhibit Two?
- 12 A Exhibit Two is a list of the most recent tests on the  
13 three wells. Well No. 3 produced 25 barrels of oil  
14 and 8 barrels of water with GOR of 4,560. No. 1 is  
15 163 oil, 56 water. No. 3, 11 oil, 42 water.
- 16 Q What is the current GOR ratio for the pool?
- 17 A The current rules provide a limiting GOR of 2,000 cubic  
18 feet per barrel.
- 19 Q All these wells are in excess of the current GOR ratio?
- 20 A Yes, but they do not produce in excess of the casinghead  
21 gas limit. Only No. 12 does, Well No. 3 here, and it  
22 produces 25 oil, 8 water, 114 gas, with a GOR of 4,560.
- 23 Q How about Well No. 11?
- 24 A Sixty-three oil, 56 water, 316 gas, with a GOR of 5,000  
25 to 1. Well No. 12 produces 411 oil, 42 water, 1,200

1 gas, with a GOR of 2,920.

2 The only market we have for casinghead gas is  
3 into Transwestern's gathering system, which operates  
4 at a pressure of between 900 to 1,000 pounds per square  
5 inch, and the separating pressure on our producing  
6 wells is between 45 and 50 pounds per square inch.  
7 Therefore, it is necessary for us to install and operate  
8 compressors in order to put this gas into the gas  
9 gathering system.

10 Q Are these compressors currently being operated?

11 A Yes, they are. We have two compressors and a tank  
12 battery, and one of the compressors is a rental unit,  
13 which we have rented on a temporary basis in order to  
14 avoid having to shut in the wells. When our sixty-day  
15 notice for flare authorization expired and we completed  
16 Well No. 12, and with the gathering of additional  
17 data, we have found it necessary to continue that unit  
18 in operation. We also have operating a compressor  
19 which we have on a rental purchase plan. The rental  
20 unit has a capacity of about 950 MCF per day, which  
21 has approximately a 1,000 pound discharge. The rental  
22 purchase unit has a capacity of 1,200 MCF per day,  
23 with the same pressure. The rental unit has been  
24 in continuous use for \$7,500 per month in operating cost.  
25 The other unit is considerably less, but we operate

1 the rental purchase unit and Production Operators Inc.  
2 operates the rental unit.

3 We are also getting that unit operated and  
4 maintained by those people for our rental charge.

5 Q What is the necessity for the second compressor?

6 A Well, obviously if you look at Exhibit Two, the 900 MCF  
7 compressor doesn't have the capacity to handle the gas.  
8 But in addition, the gas is not produced at a steady  
9 rate, and there is considerable surging, so we need  
10 this capacity.

11 At the present time, we are able to handle the  
12 gas without any flaring, at least during the time we  
13 have people in the field during the day, we have seen  
14 no flaring. However, if we have to operate at Well  
15 No. 12 on the GOR limit which is presently provided by  
16 the present rules, we can't justify keeping both  
17 compressors there, and consequently, because of the  
18 surging nature of production, we would have to flare  
19 gas just by the simple limitation of our equipment.

20 Q Will approval of this application constitute waste in  
21 any way?

22 A No, I think it will prevent waste in that we will not  
23 have flare gas if this is approved.

24 Q Will approval of this application impair the correlative  
25 rights of others?

1 A No. All of the wells in the pool are included within  
2 the participating unit, and therefore all the interests  
3 are exactly identical, and I see no possibility of  
4 any impairment of correlative rights at all.

5 MR. KELLAHIN: Mr. Examiner, we move for the  
6 introduction of Applicant's Exhibits One and Two.

7 MR. STAMETS: Without objection, they will be  
8 admitted.

9 MR. KELLAHIN: That concludes our direct examination.  
10 (Whereupon Applicant's Exhibits One and Two were  
11 admitted in evidence.)

12 \* \* \* \*

13 CROSS EXAMINATION

14 BY MR. STAMETS:

15 Q Mr. Lyon, what producing mechanism is the Bone Spring  
16 interval here?

17 A So far as we know, we have a depletion type drive here.  
18 We had intended to collect a sample under initial  
19 conditions in Well No. 13 upon its completion, but  
20 we were unsuccessful in making that completion, and  
21 consequently, we do not have representative bottom hole  
22 pressure or a combined example in order to evaluate  
23 the characteristic.

24 We have no information that we have gathered which  
25 would indicate that there would be any detrimental

dearnley, meier &amp; associates

209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6661 • ALBUQUERQUE, NEW MEXICO 87103  
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 effect to the reservoir by the rate we are producing,  
2 either oil or gas.

3 Q Has there been a drop-off in production from both oil  
4 and gas from Wells No. 3 and 11?

5 A They have dropped off in production to some extent.  
6 Number 3, of course, has been producing for some seventeen  
7 years, and it has been producing at about this rate over  
8 most of this time. We have attempted to stimulate it  
9 several times, and apparently have not been successful.  
10 Number 3 has declined from its initial producing rate--  
11 I mean No. 11 has.

12 Q What is the cause for accumulation here? Is it structural  
13 or a stratigraphic trap, or what?

14 A We have it contoured as an elongated anticline, but  
15 our development has been more or less on what we depict  
16 as the crest of the anticline. There's really an awful  
17 lot about that trap that we don't know.

18 Q Is this production from the sand interval or carbonate?

19 A It's lime.

20 Q Do you know what the permeability and porosities are?

21 A They are quite low. This information was introduced  
22 in our application for field rules. The porosity runs  
23 on the order of three percent, and the permeability  
24 is comparably low. But the No. 12 Well appears to  
25 have encountered a fracture system which provides very

- 1 good permeability to that well.
- 2 Q Do you recall whether No. 11's potential was on the
- 3 same order as No. 12's?
- 4 A No, it was something on the order of 100, 115 barrels
- 5 a day initially.
- 6 Q Number 12 is a real bonanza as compared to the rest of
- 7 them?
- 8 A It really is a fine well.
- 9 Q Mr. Lyon, in your opinion, do you think that the higher
- 10 gas-oil ratio limit in here would allow this gas to
- 11 bypass oil and leave oil in the reservoir to any degree?
- 12 A I don't think so. I don't believe that the reservoir
- 13 is rate sensitive.
- 14 Q How would you determine that it was after the higher
- 15 GOR went into effect? What would be the things you
- 16 would be looking for to determine whether this was
- 17 rate sensitive?
- 18 A Well, really until we get a good bottom hole sample
- 19 on the thing and are able to evaluate the crude
- 20 characteristics a little, I would not know how we would
- 21 go about it. We would need to observe the producing
- 22 gas-oil ratios and pressure which we will do, but an
- 23 awful lot depends on that sample.
- 24 Q How old is Well No. 11?
- 25 A Number 11 was completed on the 30th day of November, 1972,

dearnley, meier & 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

1 I believe.

2 Q How about No. 12?

3 A I believe that was completed in February of 1973. I can  
4 give you the exact dates if you want them.

5 Q That's not necessary. That's close enough. Do you  
6 have any indication at this point that you have completely  
7 drilled up this reservoir?

8 A No, we have plans for additional development, and I don't  
9 know for sure when the next well will be drilled, but  
10 I think it will be within the next few months. I believe  
11 that we have at least one, perhaps two, more wells  
12 budgeted for this year.

13 Q If you are successful in another completion, you would  
14 be able to obtain the required sample?

15 A Yes. I believe that the order, if I'm not mistaken,  
16 provided temporary pool rules, and we would certainly  
17 do our best to get enough information to bring to the  
18 Commission at the time those rules are reviewed to  
19 justify either continuing the present rules as we are  
20 proposing them to be amended or to offer rules which  
21 would be consistent with the data we have by that time.

22 Q Has the GOR on the No. 12 Well been increasing, or was  
23 that substantially the completion GOR?

24 A I really don't know. We had been measuring gas down  
25 there, but the test didn't seem to make sense to us,



1 and so we went down and looked at the installation,  
2 and we found we were not actually measuring necessarily  
3 the gas that was produced from the well on the test,  
4 because the hook-up was allowing gas to bypass, and so  
5 when we eliminated this problem, we began to get good  
6 measurement of gas production by each well through the  
7 test system, and this has only been within about the  
8 last sixty days. So I can't tell you really what the  
9 initial ratio was.

10 Q Would it appear at the present time that a limiting  
11 GOR of 3,000 to one would be sufficient to overcome  
12 your problem if the ratio on No. 12 is not increasing?

13 A True. We would like enough flexibility so if it does  
14 increase either by increasing gas or by reduction in  
15 liquid, that we wouldn't have to come to the Commission  
16 asking for additional relief.

17 Q Do you recall offhand at what date the re-hearing will  
18 be on the temporary rules provided by Order R-4539?

19 A I'm sorry, but I do not.

20 Q If this GOR limit was adopted on a temporary basis,  
21 it could be reasonably re-heard at the same time?

22 A Yes.

23 Q If it is not too soon, at least.

24 A Yes.

25 Q If there is any difficulty from that, I think it would

1 be wise to advise the Commission at an early date after  
2 this hearing.

3 A Yes.

4 Q Well No. 4 that you have on here is a producing well,  
5 is that right?

6 A Well No. 4 was drilled and completed in the Devonian,  
7 and during the latter part of June was plugged back  
8 and re-completed in the Atoca.

9 Q Is that where your connection to Transwestern is?

10 A You mean at that well?

11 Q Right.

12 A No. Transwestern's gathering system goes on by No. 4  
13 and up to No. 7, which is six miles to the north. I'm  
14 not sure where the tie-in is, but this is a separate  
15 line that enters the gathering line, it doesn't tie into  
16 the No. 4 connection.

17 Q So you do have several miles of line that this gas goes  
18 through before it enters Transwestern's line?

19 A Oh, no.

20 Q It enters in the immediate vicinity of the Bell Lake Unit?

21 A Yes.

22 MR. STAMETS: Are there any other questions of this  
23 witness?

24 (No response)

25 THE WITNESS: Just a minute, Mr. Examiner. There

dearnley, meier & 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

1 is one thing I would like to request. We would like the  
2 order to be retroactive at least to July 1st, if this is  
3 possible, because No. 12, according to the reported production  
4 which we have reported to the best of our ability, will be  
5 overproduced perhaps to the extent that it might have to  
6 be shut in by the end of July.

7 MR. STAMETS: Is there anything further in this  
8 case?

9 (No response)

10 MR. STAMETS: The witness may be excused.

11 (Witness excused.)

12 MR. STAMETS: Case 5033 will be taken under  
13 advisement.

14 \* \* \* \*

25

dearnley, meier & associates

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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) ss

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

*Richard E. McCormick*  
CERTIFIED SHORTHAND REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings of the hearing of the New Mexico Oil Conservation Commission held on July 25, 1973.  
*Richard E. McCormick*  
New Mexico Oil Conservation Commission

5033  
73

I N D E XWITNESSPAGE

V. T. LYON

Direct Examination by Mr. Kellahin

3

Cross Examination by Mr. Stamets

8

E X H I B I T SEXHIBITADMITTED OFFERED

Applicant's #1 Plat

8

4

Applicant's #2 List of tests

8

5

dearnley, meier &amp; associates

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



## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2988 - SANTA FE  
87501

I. R. TRUJILLO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

August 14, 1973

Mr. Tom Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: CASE NO. 5033  
ORDER NO. R-4539-A  
Applicant:  
Continental Oil Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced  
Commission order recently entered in the subject case.

Very truly yours,

*A. L. Porter, Jr.*

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC           x            
Artesia OCC                     
Aztec OCC                   

Other                                     
                                  

DOCKETED

7-25-74

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. 5033  
Order No. R-4539-A

APPLICATION OF CONTINENTAL OIL  
COMPANY FOR AMENDMENT TO THE SPECIAL  
POOL RULES FOR THE BELL LAKE-BONE  
SPRING POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 25, 1973,  
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 13th 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 by Order No. R-4539 special pool rules were estab-  
lished for the Bell Lake-Bone Springs Pool, Lea County, New Mexico.
- (3) That the applicant, Continental Oil Company, seeks the  
amendment of the special pool rules for the Bell Lake-Bone  
Springs Pool to provide for a limiting gas-oil ratio of 5,000  
cubic feet of gas per barrel of oil produced.
- (4) That the reservoir characteristics of the subject pool  
presently available justify the temporary establishment of a 5,000  
to 1 gas oil ratio limit for said pool.
- (5) That this case should be reopened at an examiner hearing  
in August, 1974, at which time the operators in the subject pool  
should appear and show cause why the limiting gas-oil ratio in  
the Bell Lake-Bone Springs Pool should not revert to 2,000 to 1.
- (6) That the effective date of this order should be  
August 1, 1973.

-2-

Case No. 5033

Order No. R-4539-A

IT IS THEREFORE ORDERED:

(1) That effective August 1, 1973, Rule 7 of the special pool rules of the Bell Lake-Bone Springs Pool is hereby revised to read in its entirety as follows:

RULE 7. That the limiting gas-oil ratio for the Bell Lake-Bone Spring Pool shall be 5,000 cubic feet of gas per barrel of oil produced.

(2) That this case shall be reopened at an examiner hearing in August, 1974, at which time the operators in the subject pool may appear and show cause why the gas-oil ratio in the Bell Lake-Bone Spring Pool should not revert to 2,000 to 1.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



*I. R. Trujillo*  
I. R. TRUJILLO, Chairman

*Alex J. Armijo*  
ALEX J. ARMILLO, Member

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

S E A L

dr/





# OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**  
**P. O. BOX 2088 - SANTA FE**  
**87501**

September 3, 1974

**I. R. TRUJILLO**  
**CHAIRMAN**

**LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER**

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

Mr. Tom Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: CASE NO. 5033  
ORDER NO. R-4539-B  
Applicant:  
Continental Oil Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x  
Artesia OCC \_\_\_\_\_  
Aztec OCC \_\_\_\_\_

Other \_\_\_\_\_

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. 5033  
Order No. R-4539-B

IN THE MATTER OF CASE NO. 5033 BEING  
REOPENED PURSUANT TO THE PROVISIONS  
OF ORDER NO. R-4539-A, WHICH ORDER  
ESTABLISHED A SPECIAL GAS OIL RATIO  
LIMITATION OF 5000 TO 1 FOR THE BELL  
LAKE-BONE SPRING POOL, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 7, 1974,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 3rd day of September, 1974, 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 by Order No. R-4539, Special Pool Rules were  
established for the Bell Lake Bone-Springs Pool, Lea County,  
New Mexico.

(3) That by Order No. R-4539-A, said special pool rules  
were amended to provide for a special gas oil ratio limitation  
of 5,000 to 1.

(4) That pursuant to the provisions of Order No. R-4539-A  
this case was reopened to allow operators in the subject pool  
to appear and show cause why the limiting gas-oil ratio in the  
Bell Lake-Bone Springs Pool should not revert to 2,000 to 1.

(5) That reservoir and production data establish that  
production under the special gas-oil ratio limitation promulgated  
by Order No. R-4539-A has not caused and will not cause waste.

(6) That the Special Rules and Regulations promulgated by  
Order No. R-4539 and amended by Order No. R-4539-A have afforded  
and will afford to the owner of each property in the pool the

-2-  
CASE NO. 5033  
Order No. R-4539-B

opportunity to produce his just and equitable share of the gas in the pool.

(7) That Rule 7 of the Special Rules and Regulations for the Bell Lake-Bone Springs Pool as promulgated by Order No. R-4539-A, which rules provided for a special limiting gas-oil ratio for the subject pool of 5,000 to 1, should be made permanent.

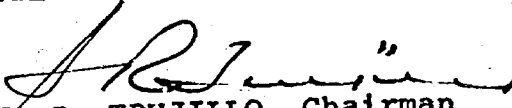
IT IS THEREFORE ORDERED:

(1) That Rule 7 of the Special Rules and Regulations of the Bell Lake-Bone Springs Pool as promulgated by Order No. R-4539-A, is hereby made permanent.

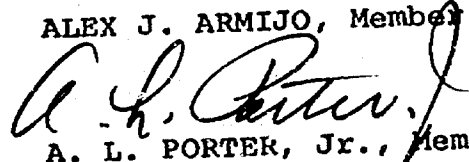
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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 J. ARMIJO, Member

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

SEAL

jr/

Docket No. 22-74

Dockets Nos. 24-74 and 25-74 are tentatively set for hearing on August 21 and September 4. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 7, 1974

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 4749: (Reopened) (Continued from the July 10, 1974, Examiner Hearing)

In the matter of Case No. 4749 being reopened pursuant to the provisions of Order No. R-4338-A, which order continued special rules for the Humble City-Strawn Pool, Lea County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing.

CASE 4946: (Reopened) (Continued from the July 10, 1974, Examiner Hearing)

In the matter of Case No. 4946 being reopened pursuant to the provisions of Order No. R-4581, which order established temporary rules for the Crosby-Fusselman Associated Pool, Lea County, New Mexico. All interested parties may appear and show cause why said rules should not be rescinded.

CASE 5282: (Continued from the July 24, 1974, Examiner Hearing)

Application of Union Texas Petroleum Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat and Langlie-Mattix production in certain of its wells in the Langlie-Jal Unit Area, currently being waterflooded under authority of Commission Order No. R-4051.

CASE 5287: Application of Mobil Oil Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the N/2 of Section 12, Township 21 South, Range 26 East, adjacent to the Burton Flats-Morrow Gas Pool, Eddy County, New Mexico, to form a standard 320-acre unit to be dedicated to applicant's Federal 12 Com Well No. 1 to be drilled at a previously approved unorthodox location 660 feet from the North and East lines of said Section 12. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5288: Application of Merrion & Bayless for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of hydrocarbon production from the top of the Gallup formation at 5434 feet to the base of the Dakota formation at 6570 feet in its Keeling Federal Well No. 1 located in Unit B of Section 20, Township 25 North, Range 8 West, Dufers Point-Dakota Pool, San Juan County, New Mexico.

CASE 5033: (Reopened)

In the matter of Case No. 5033 being reopened pursuant to the provisions of Order No. R-4539-A, which order established a special gas-oil ratio limitation of 5000 to 1 for the Bell Lake-Bone Spring Pool, Lea County, New Mexico. All interested parties may appear and show cause why said pool should not be produced under the standard 2000 to 1 gas-oil ratio limit.

CASE 5289: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit LeRoy Sumruld, American Employers Insurance Co., and all other interested parties to appear and show cause why the LeRoy Sumruld South Roberts SWD Well No. 2 located in Unit M of Section 14, Township 9 South, Range 32 East, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5290: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Western Oil Producers, Inc., U.S. Fidelity & Guaranty Co., and all other interested parties to appear and show cause why the Western Oil Producers State A Well No. 1 located in Unit L of Section 34, Township 13 South, Range 33 East, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5291: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Wil-Mc Oil Corporation, Trinity Universal Insurance Co., and all other interested parties to appear and show cause why the Wil-Mc Oil Corporation New Mexico State Well No. 2 located in Unit K of Section 11, Township 10 South, Range 32 East, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5292: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit El Paso Natural Gas Company, United States Fidelity and Guaranty Co., and all other interested parties to appear and show cause why each of the following wells should not be plugged and abandoned in accordance with a Commission-approved plugging program:

EPNG Ludwick Well No. 11, located in Unit B,  
Section 19, Township 30 North, Range 10 West,  
San Juan County, New Mexico;

Examiner Hearing - Wednesday - August 7, 1974

Docket No. 22-74  
-3-

(Case 5292 continued from Page 2)

EPNG Rincon Unit Well No. 127, located in Unit A,  
Section 28, Township 27 North, Range 6 West,  
Rio Arriba County, New Mexico; and

EPNG Warren A Well No. 2, located in Unit A,  
Section 23, Township 28 North, Range 9 West,  
San Juan County, New Mexico.

CASE 5293: Southeastern nomenclature case calling for the creation and extension  
of certain pools in Chaves, Eddy and Lea Counties, New Mexico.

(a) Create a new pool in Eddy County, New Mexico, classified as an  
oil pool for Delaware production and designated the South Carlsbad-  
Delaware Pool. Further, to assign approximately 22,270 barrels of  
oil discovery allowable to the discovery well, the Hannifin & Cook  
Merland Well No. 1, located in Unit J of Section 24, Township 22 South,  
Range 26 East, NMPM. Said well was completed February 26, 1974. The  
top of the perforations is at 4454 feet. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 26 EAST, NMPM  
Section 24: SE/4

(b) Extend the Antelope Ridge-Morrow Gas Pool in Lea County, New  
Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM  
Section 9: N/2

(c) Extend the Blinebry Oil and Gas Pool in Lea County, New Mexico,  
to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM  
Section 6: SE/4

(d) Extend the East Morton-Wolfcamp Pool in Lea County, New Mexico,  
to include therein:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM  
Section 3: NW/4

(e) Extend the Ranger Lake-Bough Pool in Lea County, New Mexico, to  
include therein:

TOWNSHIP 12 SOUTH, RANGE 34 EAST, NMPM  
Section 26: SW/4

Examiner Hearing - Wednesday - August 7, 1974

Docket No. 22-74

-4-

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

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM  
Section 32: SE/4

(g) Extend the Tres Papalotes-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 34 EAST, NMPM  
Section 5: SE/4

(h) Extend the Vest Ranch-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM  
Section 16: SE/4  
Section 21: NE/4

---

Docket No. 18-74

DOCKET: COMMISSION HEARING - TUESDAY - AUGUST 13, 1974

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

---

- ALLOWABLE: (1) Consideration of the allowable production of gas from seventeen prorated pools in Lea, Eddy, Roosevelt, and Chaves Counties, New Mexico, for September, 1974;
- (2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for September, 1974.

CASE 5264: Application of El Paso Natural Gas Company for the amendment of Order No. R-1670, Blanco Mesaverde Pool, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the pool rules promulgated by Order No. R-1670, as amended, for the Blanco Mesaverde Pool in San Juan and Rio Arriba Counties, New Mexico, to authorize the Secretary-Director of the Commission to approve the drilling of a second well on an existing proration unit without notice and hearing, provided that the second well would be drilled in the quarter section of the unit which does not contain a well, and provided further that in calculating the allowable for a proration unit containing two wells, the deliverability of both wells would be combined for determining the unit's "AD Factor", and the unit allowable could be produced from either or both wells. For purposes of balancing underproduction or overproduction, both wells on a proration unit would be considered as one well; for determining whether a unit would be classified marginal or non-marginal, the production from both wells would be compared with the unit's allowable; and for reporting production, the total unit production for the month would be reported as well as the individual well production.

DOCKET: EXAMINER HEARING -- WEDNESDAY -- JULY 25, 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 5028: Application of Great Basins Petroleum for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Antebellum Unit Area comprising 3840 acres, more or less, of State and Federal lands in Township 23 South, Range 34 East, Lea County, New Mexico.

CASE 5029: Application of Amoco Production Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Old Indian Draw Unit Area comprising 3,128 acres, more or less, of Federal and fee lands in Township 22 South, Range 28 East, Eddy County, New Mexico.

CASE 5030: Application of Yates Drilling Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Artesia Metex Unit Area comprising 2,000 acres, more or less, of State lands in Township 18 South, Ranges 27 and 28 East, Eddy County, New Mexico.

CASE 5031: Application of Yates Drilling Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Artesia Metex Unit Area by the injection of water into the Grayburg formation through 14 wells located in Sections 24, 25, 26, 35, and 36 of Township 18 South, Range 27 East, and Sections 19 and 30 of Township 18 South, Range 28 East, Eddy County, New Mexico.

Applicant further seeks an administrative procedure whereby the locations of said wells can be changed without further notice and hearing.

CASE 5032: Application of Anadarko Production Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Burnham GSA Unit Area by the injection of water into the Grayburg-San Andres formation through six wells in Section 2, Township 17 South, Range 30 East. Square Lake Pool, Eddy County, New Mexico.

CASE 5033: Application of Continental Oil Company for a special gas-oil ratio limit or in the alternative, a lease casinghead gas allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the special pool rules for the Bell Lake-Bone Spring Pool to provide a gas-oil ratio limit of 5000 to 1 or in the alternative to provide for lease casinghead gas allowable in said pool.



- CASE 5034: Application of Mark 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 Red Lake-Pennsylvanian Pool, Eddy County, New Mexico, including a provision for 320-acre drilling and proration units. In the absence of objection, this pool will be placed on 320-acre spacing rather than the present 160-acre spacing.
- CASE 5035: Application of Texaco Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formation in the open-hole interval from 3373 feet to 3731 feet in its B. V. Lynch "A" Fed Well No. 1 and from 3712 feet to 3734 feet in its Well No. 10 located in Units J and C, respectively, Section 34, Township 20 South, Range 34 East, Lynch Yates-Seven Rivers Pool, Lea County, New Mexico.
- CASE 5036: Application of The Wil-Mc Oil Corporation for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the San Andres formation in the perforated interval from 4208 feet to 4282 feet in its Champlin State Well No. 1 located in Unit M of Section 3, Township 8 South, Range 33 East, Chaveroo-San Andres Pool, Chaves County, New Mexico.
- CASE 5037: Application of David Fasken for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying Section 31, Township 20 South, Range 25 East, Indian Basin-Morrow Gas Pool, Eddy County, New Mexico, to be dedicated to a well to be drilled in Unit J of said Section 31. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and up to 200 percent charge for risk involved in drilling said well.
- CASE 5038: Application of Twinlakes Oil Company for a dual completion and salt water disposal exception, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its O'Brien "C" Well No. 3 located in Unit K of Section 1, Township 9 South, Range 28 East, Chaves County, New Mexico, as a dual completion (tubingless) to produce oil from the Twin Lakes-San Andres Pool and gas from an undesignated Cisco gas pool through parallel strings of 2 7/8" casing cemented in a common wellbore. Said well was formerly dually completed for San Andres production and Devonian salt water disposal pursuant to Order No. R-4497. Applicant further seeks the amendment of Order No. R-3636 which authorized, as an exception to Order R-3221, the disposal of Devonian and San Andres water production in unlined surface pits; applicant seeks authority to also dispose of water produced from the aforesaid Cisco gas pool in said pits.

CASE 5039: Southeastern nomenclature case calling for an order for the abolishment and extension of certain pools in Lea County, New Mexico.

(a) Abolish the East Brunson-Granite Wash Pool in Lea County, New Mexico, described as:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

Section 13: W/2

Section 24: W/2 and SE/4

Section 25: NW/4

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM

Section 19: SW/4

(b) Extend the Wantz-Granite Wash Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

Section 13: W/2

Section 24: W/2 and SE/4

Section 25: NW/4

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM

Section 19: SW/4

(c) Abolish the North Lynch Yates-Seven Rivers Pool in Lea County, New Mexico, described as:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM

Section 17: SW/4

Section 18: E/2

Section 19: NE/4

Section 20: NW/4

(d) Extend the Teas Yates-Seven Rivers Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM

Section 17: SW/4

Section 18: E/2, SW/4, and E/2 NW/4

Section 19: NE/4

Section 20: NW/4

(e) Extend the Antelope Ridge-Atoka Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 34 EAST, NMPM

Section 2: N/2

Section 3: N/2

(f) Extend the Eunice-Monument Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM

Section 7: NW/4

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

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM  
Section 12: N/2

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

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM  
Section 35: NW/4

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

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM  
Section 23: E/2 SW/4

TOWNSHIP 10 SOUTH, RANGE 37 EAST, NMPM  
Section 5: NW/4  
Section 6: N/2 and SE/4

- (j) Extend the Triple X-Delaware Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 32 EAST, NMPM  
Section 1: SE/4

- (k) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 35 EAST, NMPM  
Section 17: SW/4  
Section 18: SE/4  
Section 21: NW/4

---

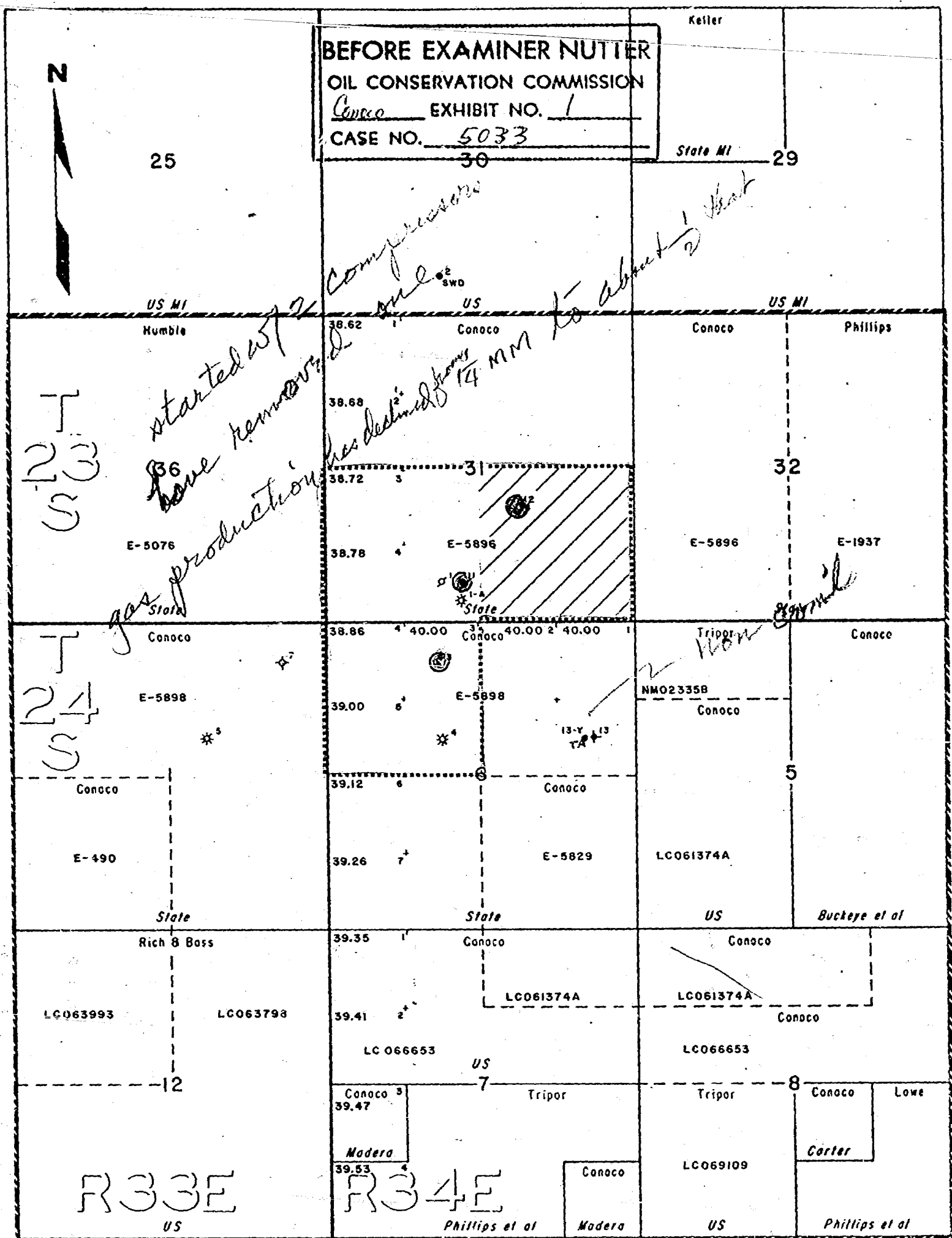
Docket No. 21-73

DOCKET: REGULAR HEARING - TUESDAY - AUGUST 7, 1973

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

CASE 5007: (Continued from the June 28, 1973, Regular Hearing)

Application of Belco Petroleum Corporation for a drilling permit in the Potash-Oil Area, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its proposed Felmont Federal Well No. 1 to test the Morrow formation adjacent to the South Salt Lake-Morrow Gas Pool at a location 660 feet from the North line and 1980 feet from the East line of Section 25, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico, said location being within the boundaries of the Potash-Oil Area as defined by Commission Order No. R-111-A, and having been objected to by the owners of potash leases in the area.



----- BOUNDARY BELL LAKE UNIT  
DEVONIAN PARTICIPATING AREA "A"

..... INITIAL BONE SPRING  
PARTICIPATING AREA

////// PROPOSED FIRST ENLARGEMENT  
OF BONE SPRING PARTICIPATING AREA

⊙ BONE SPRING COMPLETION

**conoco**

PRODUCTION DEPARTMENT HOBBS DIVISION

**BELL LAKE UNIT**  
**LEA COUNTY, NEW MEXICO**

**BONE SPRING PARTICIPATING AREA**  
**EXHIBIT A**

SCALE  
0 1000' 2000'

VTE 1-73 Rev. 6-73

# Bell Lake Bone Spring Pool

## Recap of Well Test Data

<u>Date</u>	<u>Well No.</u>	<u>Oil</u>	<u>Water</u>	<u>Gas</u>	<u>GOR</u>
8-15-73	3	30	10	58	1930
8-14-73	11	50	50	69	1370
8-13-73	12	351	40	1140	3250
		431	100	1267	2940
10-15-73	3	21	6	84	4000
10-30-73	11	36	51	135	3750
10-9-73	12	248	39	950	3830
		305	96	1169	3833
2-3-74	3	31	11	105	3387
2-2-74	11	27	47	85	3148
2-1-74	12	197	59	540	2741
		255	117	730	2863
5-3-74	3	26	11	65	2500
5-2-74	11	25	45	90	3600
5-1-74	12	121	65	490	4050
		172	121	645	3750
7-7-74	3	22	12	79	3591
7-8-74	11	26	39	89	3423
7-6-74	12	107	69	420	3225
		155	120	588	3794

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

Conoco EXHIBIT NO. 2

CASE NO. 5033

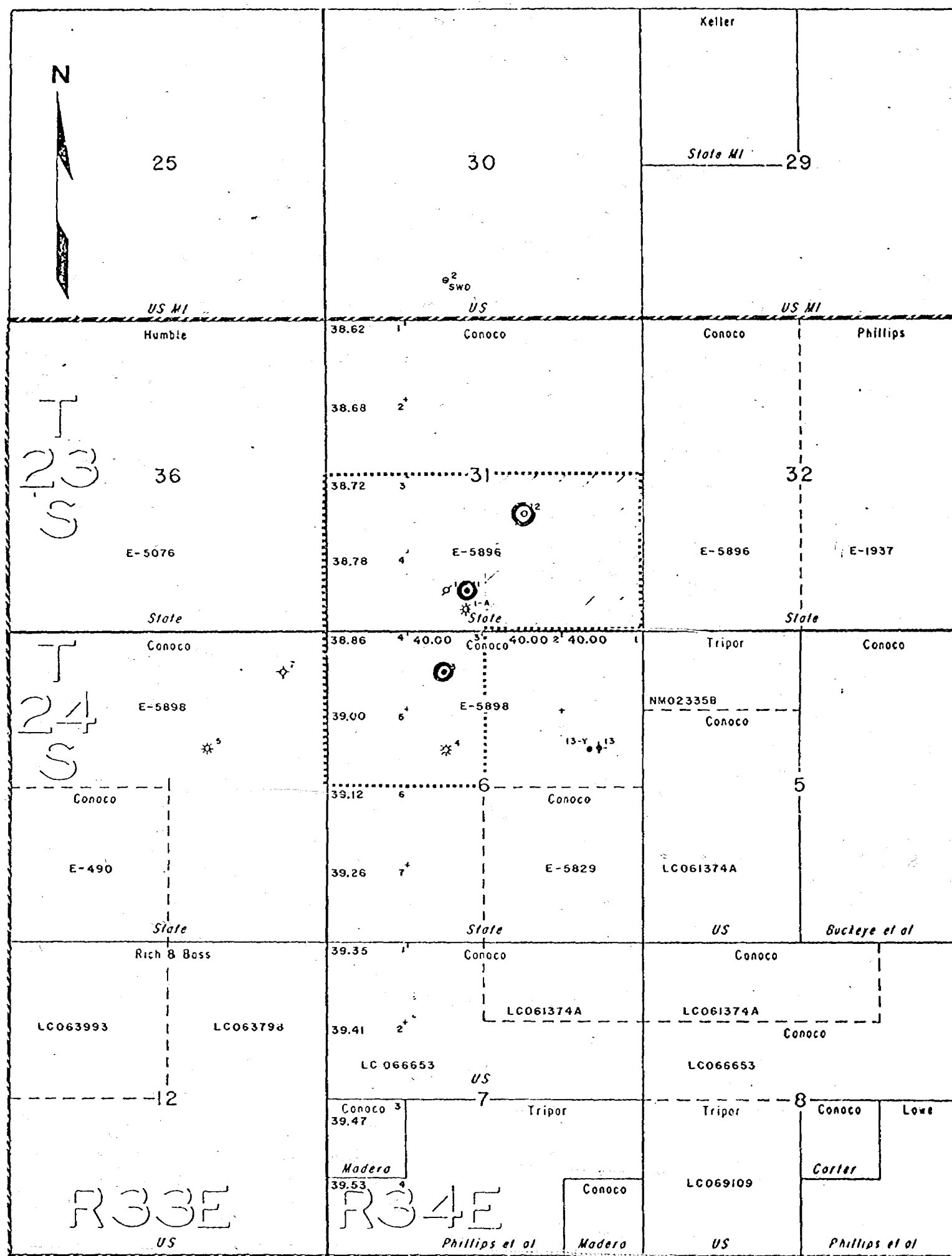
Exhibit No. 2

# Bell Lake Bone Spring Pool

## Recap of Production

	Well No. 3	Well No. 11	Well No. 12	Pool
Cum. to 1-1-73	159,505	7,815	-0-	167,320
January	806	4,562	652	6,020
February	1,019	3,703	4,564	9,286
March	1,031	2,965	6,574	10,570
April	945	2,947	5,057	8,949
May	843	3,584	6,926	11,353
June	498	1,801	11,141	13,440
July	625	1,573	10,268	12,466
August	747	1,245	8,745	10,737
September	421	3,382	6,490	10,293
October	578	798	7,319	8,695
November	360	1,727	4,191	6,278
December	347	606	2,842	3,795
Cum. to 1-1-74	167,725	36,708	74,769	279,202
January	1,057	567	5,359	6,983
February	705	704	3,669	5,078
March	599	623	3,572	4,794
April	1,099	625	3,710	5,434
May	655	640	3,096	4,391
June	582	560	2,708	3,850
Cum. to 7-1-74	172,422	40,427	96,983	309,832

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
*Conservation* EXHIBIT NO. 3  
CASE NO. 5083



----- BOUNDARY BELL LAKE UNIT  
DEVONIAN PARTICIPATING AREA "A"

..... INITIAL BONE SPRING  
PARTICIPATING AREA

////// PROPOSED FIRST ENLARGEMENT  
OF BONE SPRING PARTICIPATING AREA

⊙ BONE SPRING COMPLETION

<b>CONOCO</b>	
PRODUCTION DEPARTMENT	HOBBS DIVISION
BELL LAKE UNIT LEA COUNTY, NEW MEXICO	
BONE SPRING PARTICIPATING AREA	
EXHIBIT 1	

BELL LAKE - BONE SPRING

LATEST TESTS

	WELL	OIL	WATER	GAS	GOR	
17 years old	3	25	8	114	4,560	} less than limit
Nov 72	11	63	56	316	5,000	
Feb 73	12	411	42	1,200	2,920	} prod more than daily gas limit
encountered fracture 6 y's						

470 TUA

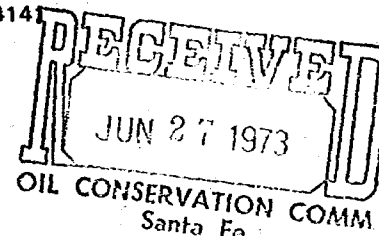
BEFORE EXAMINER STAMETS  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 2  
CASE NO. 5033  
Submitted by Continental Oil Co.  
Hearing Date July 25, 1973





L. P. Thompson  
Division Manager  
Production Department  
Hobbs Division

Western Hemisphere Petroleum Division  
Continental Oil Company  
P.O. Box 460  
1001 North Turner  
Hobbs, New Mexico 88240  
(505) 393-4141



June 26, 1973

New Mexico Oil Conservation Commission - 3 ✓ *Case 5033*  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention Mr. A. L. Porter, Jr.  
Secretary Director

Gentlemen:

Amendment of Order No. R-4539, Bell Lake-Bone Spring Pool Rules

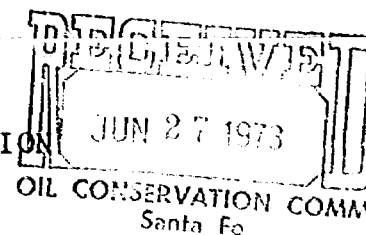
Enclosed, in triplicate, is our application for amendment of the subject pool rules to provide for a limiting gas-oil ratio of 5,000 cubic feet per barrel; or, in the alternative, for a lease casinghead gas allowable. We should appreciate your docketing this matter for the earliest examiner hearing.

Yours very truly,

rw  
Enc  
CC + enc:  
RLA: GAD: JWK:

DOCKET MAILED  
Date 7-13-73

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE  
STATE OF NEW MEXICO



IN THE MATTER OF THE APPLICATION OF  
CONTINENTAL OIL COMPANY FOR AMENDMENT  
OF THE SPECIAL POOL RULES FOR THE BELL  
LAKE-BONE SPRING POOL TO PROVIDE FOR A  
GAS-OIL RATIO LIMIT OF 5,000 CUBIC FEET  
PER BARREL: OR, IN THE ALTERNATIVE, TO  
PROVIDE FOR A LEASE CASINGHEAD GAS ALLOW-  
ABLE IN SAID POOL, LOCATED IN LEA COUNTY,  
NEW MEXICO

*Case 5033*

A P P L I C A T I O N

Continental Oil Company, Applicant, hereby requests the amend-  
ment of the special pool rules contained in Order No. R-4539  
for the Bell Lake-Bone Spring Pool in Lea County, New Mexico  
to provide a gas-oil ratio limit of 5,000 cubic feet per barrel;  
or, in the alternative, to provide for a lease casinghead gas  
allowable in said pool and in support thereof would show:

1. Applicant is the operator of the Bell Lake Unit and is  
the sole working interest owner in the Bell Lake Unit-Bone  
Spring Participating Area.
2. Order No. R-4539 promulgated special pool rules for the  
Bell Lake-Bone Spring Pool which, among other things, pro-  
vided for a limiting gas-oil ratio of 2,000 cubic feet  
per barrel.
3. That the wells in said pool produce at gas-oil ratios in  
excess of 2,000 cubic feet per barrel.
4. That it is necessary for operator to install and operate  
gas compressors in order to sell casinghead gas to the  
existing gas gatherer.
5. That the limiting gas-oil ratio provided in Order No. R-4539  
does not provide sufficient flexibility to operate said  
compressors in an efficient manner.

6. That the amendment of said order to provide for a gas-oil ratio limit of 5,000 cubic feet per barrel; or, in the alternative, to provide for a lease casinghead gas allowable, would eliminate, or substantially reduce, the gas which must be flared in the operation of said gathering system and that this is in the interest of preventing waste without the violation of correlative rights.

Wherefore, Applicant respectfully requests that this matter be set for hearing before the Commission's duly appointed Examiner and that upon hearing, an order be entered amending Order No. R-4539 as described above.

Respectfully submitted,

CONTINENTAL OIL COMPANY



L. P. Thompson

rw

As the matter of case No. 5033 being reopened pursuant to the provisions of Order No. R-4539-A, which order established a special gas oil ratio limitation of 5000 to 1 for the Bell Lake - Bone Springs Pool, Lea County, New Mexico

Case 5033

Order R-4539-B

August 7, 1945

(1) Jurisdiction

(2) That by Order No. R-4539 special pool rules were established for the Bell Lake - Bone Springs Pool, Lea County, New Mexico

(3) That by Order No. R-4539-A, said special pool rules were amended to provide for a special gas oil ratio limitation of 5,000 to 1.

(4) That pursuant to the provisions of Order No. 4539-A this case was reopened to allow operators in the subject pool to appear and show cause why the limiting gas oil ratio in the Bell Lake - Bone Springs Pool should not revert to 2000 to 1.

(5) That reservoir and production data establish that production under the special gas oil ratio limitation promulgated by Order No. R-4539-A has not caused and will not cause waste.

(5) That the Special Rules and Regulations promulgated by Order No. 4539 and amended by Order No. 4539-A have afforded and will afford to the owner of each property in the pool the opportunity to produce her just and equitable share of the gas in the pool.

(6) That RULE 7 of the Special Rules and Regulations for the Bell Lake Bone Springs Pool as promulgated by Order No. 4539-A, which Rule provides for a special limiting gas-oil ratio for the subject pool of 5,000 to 1, should be made permanent.

#### ORDERED:

(1) That Rule 7 of the Special Rules and Regulations of the Bell Lake Bone Springs Pool as promulgated by Order No. R 4539-A, is hereby made permanent.

(2) Jurisdiction

DRAFT.

jr/

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. 5033

Order No. R-4539-B

IN THE MATTER OF CASE NO. 5033 BEING  
REOPENED PURSUANT TO THE PROVISIONS  
OF ORDER NO. R-4539-A, WHICH ORDER  
ESTABLISHED A SPECIAL GAS OIL RATIO  
LIMITATION OF 5000 to 1 FOR THE BELL  
LAKE-BONE SPRING POOL, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 7, 19 74,  
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this        day of September, 1974, 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 by Order No. R-4539 Special Pool rules were established  
for the Bell Lake-Bone Springs Pool, Lea County, New Mexico.

1 -2-

2 CASE NO. 5033

3 Order No. R-4539-B

4 (3) That by Order No. R-4539-A, said special pool rules were  
5 amended to provide for a special gas oil ratio limitation of 5,000  
6 to 1.

7 (4) That pursuant to the provisions of Order No. R-4539-A  
8 this case was reopened to allow operators in the subject pool  
9 to appear and show cause why the limiting gas-oil ratio in the  
10 Bell Lake-Bone Springs Pool should not revert to 2,000 to 1.

11 (5) That reservoir and production data establish that produc-  
12 tion under the special gas-oil ratio limitation promulgated by  
13 Order No. R-4539-A has not caused and will not cause waste.

14 (6) That the Special Rules and Regulations promulgated by  
15 Order No. R-4539 and amended by Order No. R-4539-A have afforded  
16 and will afford to the owner of each property in the pool the  
17 opportunity to produce his just and equitable share of the gas in  
18 the pool.

19 (7) That Rule 7 of the Special Rules and Regulations for the  
20 Bell Lake-Bone Springs Pool as promulgated by Order No. R-4539-A,  
21 which Rules provided for a special limiting as-oil ratio for the  
22 subject pool of 5,000 to 1, should be made permanent.

23 IT IS THEREFORE ORDERED:

24 (1) That Rule 7 of the Special Rules and Regulations of the  
25 Bell Lake-Bone Springs Pool as promulgated by Order No. R-4539-A,  
26 is hereby made permanent.

27 (2) That jurisdiction of this cause is retained for the entry  
28 of such further orders as the Commission may deem necessary.

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

31

32

Draft  
and

(JH)

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. 5033  
Order No. R-4539-A

APPLICATION OF CONTINENTAL OIL COMPANY  
FOR AMENDMENT TO THE SPECIAL POOL RULES  
FOR THE BELL LAKE-BONE SPRING POOL,  
Lea County, New Mexico

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 25, 1973, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 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 by Order No. R-4539 special pool rules were established for the Bell Lakes-Bone Springs Pool, Lea County, New Mexico.

(3) That the applicant, Continental Oil Company, seeks the amendment of the special pool rules for the Bell Lake-Bone Springs Pool to provide for a limiting gas-oil ratio of 5,000 cubic feet of gas per barrel of oil produced.

(4) That the reservoir characteristics of the subject pool presently available justify the temporary establishment of a 5,000 to 1 gas oil ratio limit for said pool.

(5) That this case should be reopened at an examiner hearing in August, 1974, at which time the operators in the subject pool should appear and show cause why the limiting gas-oil ratio in the Bell Lake-Bone Springs Pool should not revert to 2,000 to 1.

(b)

IT IS THEREFORE ORDERED:

*effective August 1, 1973.*

(1) That Rule 7 of the special pool rules of the Bell Lake-Bone Springs Pool is hereby revised to read in its entirety as follows:

RULE 7. That the limiting gas-oil ratio for the Bell Lake-Bone Spring Pool shall be 5,000 cubic feet of gas per barrel of oil

Effective date of this order  
August 1, 1973.  
would be



-2-

Case No. 5033  
Order No. R-4539-A

produced.

(2) That this case shall be reopened at an examiner hearing in August, 1974, at which time the operators in the subject pool may appear and show cause why the gas-oil ratio in the Bell Lake-Bone Spring Pool should not revert to 2,000 to 1.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr. Member & Secretary