

CASE 2578: Application of NEWMONT
for approval of a development plan
for the Loco Hills Waterflood Proj.

Case No.

2578

petition, Transcript,
and Exhibits, Etc.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

*Case
2578*

December 5, 1962

Mr. M. L. Armstrong
Oil Conservation Commission
Drawer DD
Artesia, New Mexico

Dear Moss:

In reviewing our water flood files, I find that we have never notified you of the maximum allowable which may be assigned to Newmont Oil Company's Loco Hills Water Flood Project in the Loco Hills Grayburg No. 4 Sand Unit Area as the project is expanded by stages in accordance with Commission Order No. R-2178-B.

As shown on the attached map, Newmont will expand the project in six stages, the Buffer Zone and Stages I through V. The allowable in the buffer zone may be assigned at capacity. The allowable for the rest of the project will be computed in accordance with Rule 701-E. When all of the wells in Stage I are on active injection, the maximum allowable assignable will be 1694 bpd in addition to the buffer zone allowable. When all of the injection wells in Stage II are on active injection, the maximum allowable will be 2436 bpd. Stage III, 3206 bpd; State IV, 3794 bpd; and Stage V 3920 bpd.

Please let me know if you need anything further on this.

Very truly yours,

DANIEL S. NUTTER
Chief Engineer

DSN/og

C
O
P
Y

JACK M. CAMPBELL
JOHN F. RUSSELL

MAIN OFFICE OGC
1962 JUN 1 AM 8:15

LAW OFFICES OF
CAMPBELL & RUSSELL
SUITE 1010 SECURITY NATIONAL BANK BUILDING
P. O. DRAWER 640
ROSWELL, NEW MEXICO

TELEPHONE 622-4641
AREA CODE 505

May 31, 1962

Mr. A. L. Porter
Secretary-Director
Oil Conservation Commission
Post Office Box 371
Santa Fe, New Mexico

RE: Case No. 2578

Dear Mr. Porter:

It has been brought to our attention that the application in Case No. 2578 pending before the Commission has failed to describe a portion of the acreage in Stage 1. The plat which is attached to the application clearly includes the acreage. The description in Paragraph 3B of the application should include in Township 18 South, Range 30 East, the SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 7.

We will request this amendment to the application at the beginning of the hearing on the case.

Very truly yours,

CAMPBELL & RUSSELL

Jack M. Campbell
Jack M. Campbell

JMC:sah

cc: Newmont Oil Company

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 6/11/62

CASE 275 2578

Hearing Date 9am 6/7/62

DSN @ SF

My recommendations for an order in the above numbered cases are as follows:

Enter an order setting up administrative procedure for Newmont to expand its Rosa Hills Sand Unit Water Flood Project by stages. Applicant shall obtain administrative approval of each well and shall make application in the normal manner for same including data on casing & cementing program with copy to State Engineer Office. The following schedule ~~of~~ shall apply to the various stages:

Interval during which new wells become eligible for completion.	Stage No	Description
From Effective Date of Order No. R-2178 to 12-31-63	Buffer Zone	^{TS RE} 1/2 SW 1/4 36-17-29, W 1/2 1/2 SE 1/4 ^{Sec} 1 and N 1/2 NW 1/4 12-18-29, NW 1/4 7-18-32
1-1-63 to 6-30-63	Stage I	E 1/2 2, NE 1/4 11, 1/2 NW 1/4, SW 1/4, 1/2 SE 1/4 12, 18-29, 1/2 SW 1/4, 1/2 SE 1/4, 1/2 SE 1/4 SE 1/4 7-18-32
7-1-63 to 12-31-63	Stage II	W 1/2 2, W 1/2 11, 1/2 NE 1/4 13-18-29, NW 1/4, W 1/2 NE 1/4, NE 1/4 SW 1/4, 1/2 SE 1/4 18-18-29
1-1-64 to 6-30-64	Stage III	E 1/2 3, E 1/2 10, 1/2 NE 1/4 15-18-29
7-1-64 to 12-31-64	Stage IV	W 1/2 3, W 1/2 10, 1/2 NW 1/4 15-18-29
After 1-1-65	Stage V	E 1/2 SE 1/4 4 1/2 E 1/2 9-18-29

[Signature]

BEFORE THE OIL CONSERVATION COMMISSION

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

CASE No. 2578
Order No. R-2178-B

APPLICATION OF NEWMONT OIL COMPANY
FOR APPROVAL OF A DEVELOPMENT PLAN
FOR THE LOCO HILLS WATERFLOOD PROJ-
ECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 7, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 14th day of June, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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-2178, entered in Case No. 2473 on January 30, 1962, the Commission authorized Newmont Oil Company to institute a waterflood in the Loco Hills Grayburg No. 4 Sand Unit Area in Eddy County, New Mexico. Said order provided that Rule 701-E of the Commission Rules and Regulations governed the determination of the project area and of the project allowable, and established a buffer zone within which wells could be produced at unrestricted rates.

(3) That the applicant seeks approval of a plan of development for the Loco Hills Waterflood Project, Eddy County, New Mexico, which would permit the conversion of wells to water injection by stages.

(4) That an administrative procedure should be established whereby wells may be converted to injection by stages rather than after experiencing substantial response to water injection as required by Rule 701-E (5).

(5) That approval of the subject application will not alter the manner in which allowable would be assigned to the waterflood

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CASE No. 2578
Order No. R-2178-B

project area under the provisions of Rule 701, and will result in certain operating convenience to the applicant.

IT IS THEREFORE ORDERED:

(1) That an administrative procedure is hereby established whereby the applicant, Newmont Oil Company, may convert wells to injection by stages within its Loco Hills Sand Unit Waterflood Project, Eddy County, New Mexico. Five stages hereinafter designated and described are hereby established within which wells may be converted to water injection:

STAGE I

January 1, 1963
to June 30, 1963

E/2 of Section 2, NE/4 and E/2 SE/4 of Section 11, and S/2 NW/4 and S/2 of Section 12, Township 18 South, Range 29 East, and SW/4, W/2 SE/4, and SE/4 SE/4 of Section 7, Township 18 South, Range 30 East.

STAGE II

July 1, 1963
to December 31, 1963

W/2 of Section 2, W/2 of Section 11, and NE/4 of Section 13, Township 18 South, Range 29 East, NW/4, W/2 NE/4, NE/4 SW/4, and E/2 SE/4 of Section 18, Township 18 South, Range 30 East.

STAGE III

January 1, 1964
to June 30, 1964

E/2 of Section 3, E/2 of Section 10, and W/2 NE/4 of Section 15, Township 18 South, Range 29 East.

STAGE IV

July 1, 1964
to December 31, 1964

W/2 of Section 3, W/2 of Section 10, and NW/4 of Section 15, Township 18 South, Range 29 East.

STAGE V

After January 1, 1965

E/2 SE/4 of Section 4 and E/2 of Section 9, Township 18 South, Range 29 East.

(2) That application for administrative approval to convert wells to injection within the above-described stages shall be made in the normal manner under Rule 701-E (5), and shall include data concerning the casing and cementing program in the proposed injection well. A copy of said application shall be furnished to the office of the State Engineer.

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CASE No. 2578
Order No. R-2178-B

(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



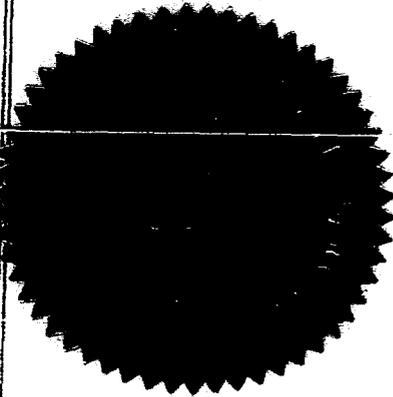
EDWIN L. MECHEM, Chairman



E. S. WALKER, Member



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



esr/

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 7, 1962

EXAMINER HEARING

IN THE MATTER OF:

Application of Newmont Oil Company for approval of a development plan for the Loco Hills Waterflood Project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a plan of development for the Loco Hills Waterflood Project, Eddy County, New Mexico, which would permit the conversion of wells to water injection by stages. The applicant proposes to operate said waterflood project under the terms and conditions of Order No. R-2178 which established a buffer zone in a portion of the project area.

Case 2578

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 2578.

(Whereupon, Newmont's Exhibit No. 1 was marked for identification.)

MR. CAMPBELL: Jack M. Campbell, Campbell & Russell, Roswell, New Mexico, appearing on behalf of the applicant.

MR. MORRIS: Application of Newmont Oil Company for approval of a development plan for the Loco Hills Waterflood Project, Eddy County, New Mexico.

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PHONE 243-6691



MR. CAMPBELL: Mr. Examiner, before proceeding, I would like to ask that the record in Case No. 2472, which is the case in which the unit was authorized, and the record in Case 2473, which is the case in which the original Order No. R-2178 was entered, be incorporated by reference as a part of this case.

MR. NUTTER: Is there objection to the incorporation of the records in Cases 2472 and 2473 into the record of Case 2578? If there's no objection, these records will be incorporated by reference.

MR. CAMPBELL: I would, Mr. Examiner, like to call the attention of the Commission to the fact that in the original application presented to the Commission there was an omission in Section 3-B, or Stage 1, and I have corrected that by a letter to the Commission which I would like to have included as a part of the original application. The acreage, as evidenced upon the plats attached to the original application, is correct, but there was an error omission in the typing.

FRANK DARDEN

called as a witness, having been previously duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. CAMPBELL:

Q Will you state your name, please?

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A Frank Darden.

Q Where do you live? A Fort Worth, Texas.

Q By whom are you employed and in what capacity?

A Newmont Oil Company as Manager of Operations.

Q Have you previously testified before the Commission or its Examiners?

A I have.

MR. CAMPBELL: Are the witness's qualifications acceptable?

MR. NUTTER: Yes, sir.

Q (By Mr. Campbell) Did you also participate in the hearings in Cases No. 2472 and 2473 involving the Loco Hills and Loco Hills Unit?

A I did.

Q Mr. Darden, are you acquainted with this particular application now pending before the Commission in this case?

A Yes, sir.

Q I refer you to what has been identified as Applicant's Exhibit No. 1 and ask you if you will refer to that where necessary and advise the Examiner as to what you are proposing relative to this case?

A We are proposing to develop the West Loco Hills Unit in six stages, including the buffer zone which was granted under the

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Commission's order governing the allowable on this project, with the kick-off date for the buffer zone to be as soon as the unit can be formed and put into operation, with the Stage No. 1 outside the buffer zone being put under development on January 1st, 1963, Stage No. 2 to be put under development July 1st of 1963, Stage No. 3 developed effective January 1st, 1964, Stage No. 4 to be developed July 1st, 1964, and Stage No. 5 to be developed January 1st, 1965. It is believed that by this stage development it will be possible for this unit to be developed under Rule 701, with a minimum of waste.

Q Have you made calculations, Mr. Darden, with regard to the amount of allowable in each stage within the limits of Rule 701-E of the Commission and Order R-2178?

A I have.

Q Will you put those in the record, please?

A We calculate that Stage 1 will earn 1694 barrels per day, and that when Stage 2 is developed, the total unit allowable outside the buffer zone will freeze to 2436 barrels per day; when Stage 3 is developed the unit will earn a total allowable outside the buffer zone of ³²⁰⁶~~326~~ barrels per day; when Stage 4 is developed the unit allowable outside the buffer zone will be increased to 3794 barrels per day; and when development is completed with Stage 5, the unit will have earned a total allowable

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outside the buffer zone of 3920 barrels per day.

Q Do you believe that if you are permitted to develop this project by stages, as you have requested, that the flexibility which results will enable you to operate the project more efficiently and, therefore, recover a greater amount of oil by secondary methods?

A Than what?

Q Than if you were required to develop it on the basis, the strict basis of each well or each tract at a time.

A Yes, I do feel definitely that if we're permitted to develop by stages we will minimize the unbalanced condition which would be caused by developing individual wells.

MR. CAMPBELL: I would like to offer Exhibit No. 1 in evidence in this case. That's all the questions I have at this time.

MR. NUTTER: Newmont's Exhibit No. 1 will be admitted in evidence.

(Whereupon, Newmont's Exhibit No. 1 was admitted in evidence.)

MR. NUTTER: Are there any questions of Mr. Darden?

MR. MORRIS: Yes, sir, I have a question.

MR. NUTTER: Mr. Morris.

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CROSS EXAMINATION

BY MR. MORRIS:

Q Mr. Darden, as I understand your application, the various stages that you have proposed here will substantially allow you to produce the same allowable as you would be allowed to produce under Rule 70i as it pertains to putting on injection wells at the time you receive substantial response, and so forth?

A That's right.

Q And that this proposed plan will merely allow you to project with certainty the exact amount of allowable that you can expect at different points in the future?

A That's right. And in that regard it will considerably aid Newmont, as operator of this unit, in its plan of development and its balancing of the flood by stages by knowing what our allowable will be at a future date.

Q Mr. Darden, let's take a typical stage here. Let's take Stage 1, now, the wells that will be producing wells in Stage 1, will they still be producing oil in substantial quantities at the time you put Stage 4 and Stage 5 into operation?

A Well, they will, yes, they will be producing substantial quantities. But by the time Stage 4, for example, the producing wells in Stage 4 begin responding and start producing any large quantities of oil, why then Stage 1 wells should have declined

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to where we can stay within this allowable without too much difficulty.

Q Would it be your idea of the way that this project will work under your proposal that at the time you might be putting Stage 4 and Stage 5 wells on production, that you might be taking the allowables assigned to wells back in Stage 1 and transferring some of that allowable over here to wells in Stage 4 and 5?

A I'm not sure that I understand your question.

Q In other words, you have got a unitized operation here and you have the free transfer of allowable among wells, would you contemplate transferring the allowables from some of the wells in Stage 1 over to the wells in Stage 4 and Stage 5 at the time you were entitled to put that stage on production?

A No, I don't think we would when we put that stage on production, now it's possible that some time during the life of that unit it would be necessary to transfer some allowables.

Q In other words, if you transferred, let's say all of the allowable from Stage 1 to Stage 4 at the time you were entitled to put Stage 4 on production, it would, in effect, give you capacity allowables in Stage 4, or substantially that, would it not?

A No, I don't think that we are even approaching capacity allowable treatment under this plan. If you mean that in one well

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we might be able to produce what that well will make, that's correct.

Q I'm not really referring to one particular well, I'm referring to all the wells --

A Well, certainly we will not transfer blanket allowable from Stage 1 to Stage 4. I don't anticipate ever doing it that way. Now, there may be an occasional well where it will require a transfer from other parts of the developed area.

Q But you are not proposing by your application here any restriction upon the free transfer of allowables between wells in the different stages, are you? Do you follow me? You are not proposing any restriction on the transfer of allowables from wells in Stage 1 to Stage 4?

A No. I didn't realize that there was any restriction. If there is, I would like to know it. In Rule 701, once you have developed your flood, I thought you had a right to transfer allowables.

Q I'm not intimating that there is.

MR. NUTTER: I would like to clarify one thing, I believe, Mr. Morris, that these stages represent only the areas that the well would be put on injection at a certain date. They don't necessarily reflect the project area at all. The project area for Stage 1, when it's put on injection, would overlap

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into Stage 2. The project area would be calculated and computed in accordance with Rule 701, and there would be free transfer of allowable within the project area.

MR. MORRIS: I see. But the project area, as the flood continues to the west, would at all times include wells, say back in Stage 1, which might be making very little oil at that time?

MR. NUTTER: As long as the injection program is still going on back in Stage 1, the project area, while Stage 2 is being injected, would include the buffer zone, Stage 1, Stage 2, and a portion of Stage 3.

MR. MORRIS: I see.

Q (By Mr. Morris) Mr. Darden, will your proposal have a salutary effect upon the unitization of this entire area?

A I think it will have more than a salutary effect. I think it is essential that in order for the unit to be formed, for the operators concerned to know the basis upon which development can be carried forward. Since Newmont as an operator can recommend this stage development as a method for protecting the unit's interest in this matter, I think it is essential that we have an order which will permit us to develop in this manner.

Q Have any of the holders of interest within the unit area expressed any opposition to this method of development?

A No, sir.

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MR. MORRIS: That's all I have.

BY MR. NUTTER:

Q You said that the buffer zone would be put on injection as soon as the unit is signed, approved and operative. When do you anticipate that will be?

A Well, that's a hard thing to say positively. We are shooting for September the 1st. However, I'm afraid that's going to be optimistic, because it's necessary to get the unit agreement approved as to form by the Roswell office of the United States Geological Survey, and then it must be sent to Washington for approval there. While we're going to do everything in our power to expedite these approvals, it's pretty hard to predict when we will get them. So, it is possible that Stage 1 and the buffer zone might be put on simultaneously, and I hope that we are ready by then.

Q The dates in which wells would be put on would be in the six-months' period starting with the date for each of these stages?

A Yes, sir.

Q Some time within the following six months?

A That's right.

Q But not before that date?

A No. We would not put them on, however, we would

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probably do our planning so that we could put them on early in the six months in which we had approval too.

Q The diagram here does represent, as far as you know at this time, the actual location of the injection wells, the pattern?

A Yes, sir.

MR. NUTTER: Any further questions of Mr. Darden? Mr. Irby.

BY MR. IRBY:

Q I'm not, my memory isn't very good on these two transcripts that were referred to, was the casing program of the injection wells brought out in the order resulting from those two hearings?

A I'm not certain.

MR. MORRIS: Just one moment, I'll look at the order.

Q Maybe with a more direct question I could get the answer. What will be the casing program on these injection wells?

A Well, we will plan to have the same procedure which Newmont has followed in its development of the Loco Hills Flood, and that is, that where we use old wells we will test the casing to be certain that there can be no loss of injection fluid anywhere except into the pay zone. In cases where we find that there might be a casing leak, why we run tubing on a packer to insure

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that water goes only into the Loco Hills sand. On new wells, on our injection wells, we are setting pipe to the top of the Loco Hills sand and cementing with 100 sacks of cement and using scratchers and centralizers to make sure we have no communication behind the pipe to upper horizons.

Q One more question, in the event you inject directly through the casing and you run this test prior to putting the well on injection, is there a provision for periodic tests after that date?

A No, sir. There are no periodic tests. Of course, as a routine matter in our operations we keep a close scrutiny on all injection wells and any radical change in the injection performance of a well indicates that something has happened, and we get on that quickly and run a, usually either run packer tests or in some cases run temperature logs, whatever it is necessary to determine why there would be any change, so that if there should be a casing leak we will find it very shortly and remedy it.

Q Now, there's only one thing bothers me, and that's your use of the word "radical change." I'm not sure that your definition and my definition of radical would be the same. The way I think of it, I don't believe you mean radical.

A Well, let me give you an example.

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Q Good.

A For example, a well has been taking 500 barrels of water per day at 1200 pounds pressure, then we notice the next week that the well has taken 800 barrels or 750 barrels, in a waterflood, normally the trend is for the water injection to decline and any time we have an increase without us having done something to the well, it indicates possibly that the water is going somewhere that it shouldn't go, those are the signs we look for.

Now, for us a radical change would be in the neighborhood of maybe a hundred barrels a day. Of course, it has to be within the accuracy of the meter, and that you also have to check because these positive displacement meters get out of adjustment pretty easily, and that's the first thing we check, and then when we're sure that that is right and it still shows an increase in the injection without us having done anything to the well, why we then go into the well and check it to be certain that it's going the right place.

MR. IRBY: Thank you. That's all I have.

MR. NUTTER: Any further questions? The witness may be excused.

(Witness excused.)

MR. NUTTER: Did you have anything further, Mr. Campbell?

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DOCKET: EXAMINER HEARING - THURSDAY - JUNE 7, 1962

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 Elvis A. Utz, as Alternate Examiner:

CASE 2571:

Application of Randall F. Montgomery for an exception to Order R-111-A, or in the alternative for three unorthodox oil well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks exception to the provisions of Order R-111-A, insofar as it pertains to the re-entry and casing program on five plugged and abandoned wells in the Salt Lake Pool, four of which are located in Section 7, and one of which is located in Section 18, all in Township 20 South, Range 33 East, Lea County, New Mexico. Applicant further seeks permission, as an alternative request, to drill three new wells at unorthodox locations in the Salt Lake Pool as follows:

- (1) Brooks - 7 Well No. 6, to be located 10 feet from the South line and 2310 feet from the East line;
- (2) Brooks - 7 Well No. 7, to be located 330 feet from the South line and 1320 feet from the West line;
- (3) Brooks - 7 Well No. 8, to be located 1320 feet from the South line and 1980 feet from the West line;

all in Section 7, Township 20 South, Range 33 East, Lea County, New Mexico.

CASE 2572:

Application of Tenneco Oil Company for an exception to Rule 21-a of Order No. R-1670, Basin-Dakota Gas Pool, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to commingle the gas production from two wells in the Basin-Dakota Gas Pool located on the H. O. Watson Lease in Section 22, Township 27 North, Range 12 West, San Juan County, New Mexico, as an exception to the provisions of Rule 21-a of the Rules for the prorated gas pools of Northwestern New Mexico, Order No. R-1670. Applicant proposes to install one common tank battery and separating facility and to allocate monthly gas production to each well on the basis of deliverability tests and average flowing tubing pressures.

- CASE 2573:** Application of Phillips Petroleum Company for approval of an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval to locate its Santa Fe Well No. 68 at an unorthodox oil well location in the Vacuum-Abo Pool, 1650 feet from the North line and 1090 feet from the East line of Section 34, Township 17 South, Range 35 East, Lea County, New Mexico.
- CASE 2574:** Application of J. Gregory Merrion and Associates for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order of the Commission force pooling all interests in the Basin-Dakota Pool in the W/2 of Section 35, Township 25 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 2575:** Application of Val R. Reese & Associates, Inc. for the creation of a new oil pool and for special pool rules, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Gallup production in Township 23 North, Range 7 West, Rio Arriba County, New Mexico, and further seeks the adoption of special rules and regulations for said pool similar to the special rules presently governing the Escrito-Gallup Oil Pool which provide for 320-acre gas proration units and 80-acre oil proration units (Order No. R-1793-A).
- CASE 2576:** Application of Sinclair Oil & Gas Company for approval of a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a waterflood project in the Grayburg-Jackson Pool, Eddy County, New Mexico, with the injection of water to be through seven wells located on the H. E. West "A" and "B" leases in Sections 3 and 4, Township 17 South, Range 31 East; applicant proposes to operate the waterflood project under the provisions of Rule 701.
- CASE 2577:** Application of Newmont Oil Company for approval to drill a water injection well, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks permission to drill the State "A" Well No. 3, to be located 1295 feet from the South line and 2615 feet from the East line of Section 36, Township 17 South, Range 29 East, Eddy County, New Mexico, for use as a water injection well in the Loco Hills Pool Waterflood Project.
- CASE 2578:** Application of Newmont Oil Company for approval of a development plan for the Loco Hills Waterflood Project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a plan of development for the Loco Hills Waterflood Project, Eddy County, New Mexico, which would permit

CASE 2578: (Continued)

the conversion of wells to water injection by stages. The applicant proposes to operate said waterflood project under the terms and conditions of Order No. R-2178 which established a buffer zone in a portion of the project area.

CASE 2579:

Application of Neil E. Salsich for approval of a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a waterflood project in the Square Lake Pool with the injection of water into the Grayburg formation of the Square Lake Pool through five wells located in Section 36, Township 16 South, Range 29 East, Eddy County, New Mexico. Applicant requests that the waterflood be governed by Rule 701 except that administrative approval is sought to allow expansion of the waterflood by the conversion of one additional well in Unit H of Section 35 prior to response from water injection.

CASE 2580:

Application of Waterflood Associates, Inc., for approval of a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a waterflood project in the Robinson Pool with the injection of water to be through six wells located in Section 35, Township 16 South, Range 31 East, Eddy County, New Mexico; applicant requests that the waterflood project be governed by Rule 701.

CASE 2581:

Application of Waterflood Associates, Inc. for approval of a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a waterflood project in the Square Lake Pool by the injection of water to be through two wells located in the NE/4 of Section 3, Township 17 South, Range 30 East, Eddy County, New Mexico; applicant requests that the waterflood project be governed by Rule 701.

CASE 2582:

Applicant of Waterflood Associates, Inc., for approval of a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a waterflood project in the Artesia Pool by the injection of water to be through one well located in the W/2 NW/4 of Section 21, Township 18 South, Range 28 East, Eddy County, New Mexico; applicant requests that the waterflood project be governed by Rule 701.

BEFORE THE OIL CONSERVATION COMMISSION

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STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
NEWMONT OIL COMPANY FOR A DEVELOPMENT
PLAN FOR THE DEVELOPMENT OF THE LOCO
HILLS WATERFLOOD PROJECT UNDER THE TERMS
AND CONDITIONS OF COMMISSION ORDER NO. R-2178
BY CONVERTING WELLS TO WATER INJECTION BY
STAGES.

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No. 2578

*Record in
Case 2472 & 2473
also incorporated
into the
record of
Case 2578
by reference*

APPLICATION

COMES NOW Newmont Oil Company, by its attorneys, and
states:

1. It is the operator of the Loco Hills Waterflood Project in Eddy County, New Mexico.
2. By its Order No. R-2178 in Case No. 2473, the Commission defined the project area, created a buffer zone, and provided that, except for said buffer zone, the project would be operated in accordance with the provisions of Rule 701 E of the Commission Rules and Regulations.
3. In order to operate said project area efficiently and remain within the allowable provisions of said Order No. R-2178, Applicant requests:
 - A. The entire buffer zone, as designated by Order No. 2178-A, be placed under waterflood development as soon as the unit can be formed and put into operation.
 - B. On January 1, 1963, waterflood development be expanded to cover the following acreage. This would be designated as Stage I.

*Rec'd
Mailed
5/25/62*

Township 18 South, Range 29 East

Section 2: $E\frac{1}{2}$
Section 11: $NE\frac{1}{4}$, $N\frac{1}{2}SE\frac{1}{4}$
Section 12: $S\frac{1}{2}$, $S\frac{1}{2}NW\frac{1}{4}$

C. Stage II, which could be developed July 1, 1963,
would include:

Township 18 South, Range 29 East

Section 2: $W\frac{1}{2}$
Section 11: $W\frac{1}{2}$
Section 13: $NE\frac{1}{4}$

Township 18 South, Range 30 East

Section 18: All of Section 18 in the unit area

D. Stage III will be developed on January 1, 1964, and
would include the following acreage:

Township 18 South, Range 29 East

Section 3: $E\frac{1}{2}$
Section 10: $E\frac{1}{2}$
Section 15: $W\frac{1}{2}NE\frac{1}{4}$

E. Stage IV can be developed on July 1, 1964, and will
include:

Township 18 South, Range 29 East

Section 3: $W\frac{1}{2}$
Section 10: $W\frac{1}{2}$
Section 15: $NW\frac{1}{4}$

F. Stage V which will complete development of the West
Loco Hills Unit will be permitted on January 1, 1965 and will
include:

Township 18 South, Range 29 East

Section 4: $E\frac{1}{2}SE\frac{1}{4}$
Section 9: $E\frac{1}{2}$

4. By this development plan the West Loco Hills Unit would
earn the following waterflood allowables for the unit area as follows:

On the date of buffer zone development, estimated to be on or about July 1, 1962, - 574 barrels per day (this will apply to the prorated portion of the unit since the buffer zone will enjoy capacity allowable). The total unit allowable outside the buffer zone will increase with development as presented below:

Stage I - January 1, 1963 - 1694 barrels per day
Stage II - July 1, 1963 - 2436 barrels per day
Stage III - January 1, 1964 - 3206 barrels per day
Stage IV - July 1, 1964 - 3794 barrels per day
Stage V - January 1, 1965 - 3920 barrels per day

Applicant attaches a copy of the West Loco Hills Unit development plan with the stages marked.

APPLICANT FURTHER REQUESTS the Commission to publish Notice of Hearing upon this application before an Examiner, or before the Commission, whichever hearing can be had at the earliest date.

DONE at Roswell, New Mexico, this 15th day of May, 1962.

Respectfully submitted,

NEWMONT OIL COMPANY

BY: Jack M Campbell
of Campbell & Russell