

CASE 3983: Application of NEWMONT
OIL CO. FOR A WATERFLOOD EXPANSION
AND UNORTHODOX WELL LOCATIONS.

Case Number

3983

Application

Transcripts.

Small Exhibits

ETC.

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

December 2, 1968

EXAMINER HEARING

IN THE MATTER OF:)

Application of Newmont Oil)
Company for a waterflood)
expansion and unorthodox)
well locations, Eddy)
County, New Mexico.)

Case No. 3983

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We will call next Case No. 3983.

MR. HATCH: Case 3983, application of Newmont Oil Company for a waterflood expansion and unorthodox well location, Eddy County, New Mexico.

MR. LOSEE: A. J. Losee, Artesia, New Mexico, appearing for the applicant. I have one witness, Mr. Leadbetter.

(Witness sworn.)

(Whereupon, Applicant's Exhibits Numbers 1 through 3C, inclusive, were marked for identification.)

HERMAN LEADBETTER

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

DIRECT EXAMINATION

BY MR. LOSEE:

Q State your name, please.

A Herman Leadbetter.

Q Where do you live?

A Artesia, New Mexico.

Q What is your occupation?

A Division Superintendent, Newmont Oil Company.

Q Have you previously testified before the Commission and had your qualifications accepted?

A Yes.

Q Would you explain in brief, general terms the nature of this application?

A This case is for three unorthodox water injection wells, and one unorthodox producing well, in the West Loco Hills Unit, waterflood project.

Q Mr. Leadbetter, please refer to what has been marked as Exhibit 1, being a map of the West Loco Hills area, and explain what is shown by this map.

A The locations of these wells requested in the application, Wells No. 43-3, 19-B-6, 8-B-6.

Q Those are the three water injection wells?

A Yes.

Q Now, your producing well location.

A It is 10-A-7, and the producing well location is 330 feet from the west and 1,330 from the south line of Section 3.

Q What are the locations of the injection wells?

A 43-3 is 1,960 feet from the south line, 1,310 feet from the east line of Section 4.

19-B-6, ten feet from the north line and 1,320 feet from the east line of Section 9.

8-B-6 is 1,310 feet from the north line and ten feet from the west line of Section 15. All those are in 18, South 29, East.

Q Mr. Leadbetter, this map also shows the West Loco Hills Unit agreement boundary lines, does it not?

A Yes, it does.

Q Together with all the producing and injection wells therein?

A Yes.

Q Now, it also shows the location of Anadarko Production Company wells to the west of this?

A Yes.

Q Are they presently in the process of preparing an exhibit -- a unit agreement which will encompass the area adjoining the West Loco Hills Unit to the west?

A Yes, they are in the final stages of forming this unit, and it was my understanding that this had been set for hearing on December 11th, before the Oil Commission here.

Q Mr. Leadbetter, what formation produces oil in the area of these proposed injection and producing wells?

A The Grayburg Number 4 Sand, locally known as the Loco Hills Sand.

Q Referring down here to your injection, proposed injection well 8-B-6, and referring to the offset location, do you have any plans to drill any additional wells in that area?

A We plan, if the 8-B-6 encounters a sufficient sand

section, which we anticipate, we plan to drill a producing well to the east or to the southeast of the 8-B-6.

Q Mr. Leadbetter, are you familiar with the provisions of the Commission's order R-2871-B?

A Yes.

Q Now, was there an order entered by the Commission with respect to a development plan for this unit?

A Yes, this sets out the development of this unit by stages across the area that was divided into a buffer zone, plus five stages that were to be developed at six-month intervals.

Q That started from the east side of the unit and progressed to the west on six-month intervals?

A Yes.

Q You started the buffer zone development on July 1, 1963, is that correct?

A That's right.

Q Now, all of these four subject wells, the injection and the one producer are located in what stage?

A They would be in stage five.

Q And you commenced conversion of the injection wells pursuant to this order in stage five, on or about January 1, 1966?

A Yes.

Q Now, generally speaking, have the producing wells in this stage five area had a response to water injection?

A Yes, there are some particularly in stage four to the east that had good response; and the stage five, there are some responses in stage five. The injection in this area has been deliberately delayed, in order to wait for the formation of the Anadarko Unit, and to keep the oil from migrating across the unit boundary.

Q Actually, the terms of R-2871-B that you referred to, required only that conversion be made in stages and not when response was received by injection, is that correct?

A That's right, by administrative approval.

Q Now, these three injection wells on your west boundary, are they being drilled in cooperation with Anadarko Production Company?

A Yes, these three wells, along with others, have been agreed upon between the Newmont Oil Company, unit operator of the West Loco Hills Unit, and Anadarko that has operated the far West Loco Hills Unit as a cooperative plan along this lease line.

Q Mr. Leadbetter, referring only to the three injection wells, do you have an opinion as to whether those wells at that location will, one, protect the correlative rights of the interest owners and, two, will result in an efficient sweep of

the oil to the producing wells?

A Yes, they will.

Q Referring to your proposed producing well, 10-A-7, I notice that it is in a 160-acre tract which already has four wells, three of which are producers. Will you explain the reason you propose to drill this new well at an unorthodox location?

A The 10-A-4 and 10-A-3, which offset the proposed location, are performing poorly. We have water channeled, we think from the north. We felt like that by drilling this well at that particular location, we can adequately drain this area, and add a more economical way by drilling a new well, than try to repair the two wells that are presently there, and we can place it at a spot where we want it at this time.

Q All right, please refer to the form of cooperative agreement which has been marked as Exhibit 2, and tell the Examiner whether or not this is the proposed agreement that Newmont and Anadarco will enter into when Anadarco's unit is approved.

A Yes, this agreement has been verbally agreed to between Newmont and Anadarco, and they have promised to execute this.

Q And the only reason at this time to limit their

approval is that they need approval of their unit agreement?

A Right.

Q Now, does this agreement require Newmont Oil Company to drill the three proposed injection wells at the locations set forth in your application?

A Yes.

Q Now, let me ask you one question with respect to the agreement. There are some pressures indicated at which water will be injected into the proposed injection wells at a rate of between 500 and 1200 pounds per square inch, is that the intention of Newmont?

A Yes.

Q Please refer to what has been marked Exhibit 3-A, being the diagrammatic sketch of the proposed injection well completion for Well 43-3, and tell the Examiner what is shown on this sketch.

A This shows the proposed setting depths, and of the casing and the cement program. We plan to set eight and five-eighths-inch casing at the top of the salt, which we expect at about 375 feet. We plan to cement this eight and five-eighths-inch casing with 50 sacks of cement; to set new four and a half-inch, nine and a half-pound casing, 30 to 50 feet through the Loco Hills Sand, which we expect to find at 2,515 to 2,525.

Q In your opinion, will this 100 sacks of cement bring the cement back up the pipe at least 100 feet above the uppermost perforations?

A Yes, it should be in excess of that.

Q Please refer to what has been marked as Exhibit 3-B, being a similar diagrammatic sketch for your well 19-B-6, and explain what is shown on this exhibit.

A This exhibit shows the proposed casing strings, proposed to set eight and five-eighths casing at 380 feet, or five feet into the top of the salt, which we anticipate at 375 feet; set four and a half-inch, nine and a half-pound casing at 2,565, which is about 50 feet through the Loco Hills Sand, which we expect to find at 2,505 to 2,515. It will be cemented with 100 sacks.

Q And again, your 100 sacks will bring it, in your opinion, at least 100 feet above the uppermost perforations?

A Yes.

Q Referring to Exhibit 3-C.

A This exhibit shows the proposed casing program for West Loco Hills Unit 8-B-6, with eight and five-eighths set at 345 feet with 50 sacks, four and a half-inch set at 2,600 with 100 sacks. We expect to find the top of the salt at about 340 in the Loco Hills Sand, 3,537 to 3,547.

Q And again, your cement will go up the hole at least 100 feet above your uppermost perforations?

A Yes.

Q Mr. Leadbetter, at what pressures do you propose to inject this water into these three injection wells?

A Pressures up to 1200 pounds.

Q Approximately what volume of water?

A The average well in this area is taking approximately 400 barrels per day. There is a possibility that we might get slightly more than this into some of the wells for a period of time, but not a great deal more than that.

Q Mr. Leadbetter, in this West Loco Unit, are you reinjecting your produced water?

A Yes, we are.

Q Now, are you treating that produced water?

A Yes, we are treating it with a corrosion inhibitor.

Q Is your system for reinjecting water what could be known as a closed system?

A Yes.

Q May I ask you if you have an opinion with respect to this proposed producer, that Well 10-A-7, as to whether the drilling of the well at that location will permit you to recover oil that would otherwise not be recovered?

A Yes, very definitely.

Q Were Exhibits 1 through 3-C prepared by you or under your direction, Mr. Leadbetter?

A Yes.

MR. LOSEE: We move the introduction of Exhibits 1 through 3-C, Mr. Examiner.

MR. NUTTER: Newmont's Exhibits 1, 2, and 3-A through 3-C will be admitted into evidence.

(Whereupon, Applicant's Exhibits Numbers 1 through 3C, inclusive, were admitted in evidence.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Leadbetter, I notice from the application and from Exhibit 3-B, and also from the cooperative waterflood agreement, that this Well No. 19-B-6 is proposed to be located ten feet south of the north line and 1,320 feet west of the east line of Section 9, which is going to make it fall directly on the 40-acre line. Can we move that well five feet one direction or another, so we can attribute it to a 40-acre tract?

A We would be very glad to move it in any direction.

Q I hope it doesn't complicate the cooperative agreement.

A No, I am sure it won't. I didn't think about it being

that way. We moved everything else, I believe.

Q You moved it ten feet south so it wouldn't be on the line. Which way do you want to go with it?

A Let's move it west.

Q So it will be 1,325 feet. We will amend Exhibit 3-B to show the well location as being ten feet from the north line and 1,325 feet from the east line.

Mr. Leadbetter, is this particular area one of those areas where it is difficult to obtain circulation on your surface pipe?

A Yes. I don't think you probably could.

Q But in each case you are setting your eight and five-eighths-inch casing at least five feet down into the salt section?

A We say five feet. If we can get shut down in time, we would pick up the salt from the samples. When we get the salt, we shut down and set the surface pipe.

Q It is in the salt, however?

A Yes.

Q And then it is cemented with 50 sacks?

A We try not to get too much, because we felt like cementing might go up a little better without too much salt there.

Q Now, on your Exhibits 3-A, B, and C, the zone that is

shown here to the left is your expected Loco Hills Sand Zone, and that would be the perforated interval?

A That's right. This is just about estimated what we will perforate the Loco Hills Sand, and this is about where we expect it.

Q It is your intent to go about 50 feet below those perforations before you set your casing?

A Right.

Q And then cement with sufficient cement to come up at least 100 feet above the uppermost perforation?

A Yes, I think it would probably be in excess of that.

Q And the water is treated prior to injection?

A Yes. At the present time, this area is all fresh water, but it is possible that in time -- we have two plants, and the plant on the east side is the one where the salt water is all going down. But it is possible that this may not be the final arrangement.

Q At any rate, when you are injecting produced water, the water would be treated?

A Yes.

Q Do you operate a closed system?

A Yes.

Q Have you had any corrosion problem with the system

to date?

A We have never had any serious problems. I don't believe we have had any caisson leaks in the unit. We have had a few line leaks on the surface, but part of these are due to outside corrosion from alkaline salt, and they are primarily due to that.

MR. NUTTER: Any further questions of Mr. Leadbetter? You may be excused. Do you have anything further, Mr. Losee?

MR. LOSEE: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 3983?

MR. HATCH: The Commission has received a letter from Anadarco dated November 27, supporting the application of Newmont Oil Company to drill three water injection wells in unorthodox locations.

MR. NUTTER: If there is nothing further, we will take the case under advisement, and the hearing is recessed.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
HERMAN LEADBETTER	
Direct Examination by Mr. Losee	2
Cross Examination by Mr. Nutter	11

<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's Exhibits Numbers 1 through 3-C	2	11

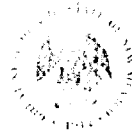
STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court 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.

Samuel Mortelette
 COURT REPORTER

I do hereby certify that the foregoing is
 a true and correct record of the proceedings
 before the New Mexico Oil Conservation Commission
 on 12/2/68 3983
Chenue
 New Mexico Oil Conservation Commission

State of New Mexico
Oil Conservation Commission



December 9, 1968

Re: Case No. 3983
Order No. R-3626
Applicant:

Newmont Oil Company

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

Other _____

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 6, 1969

C
O
P
Y

Mr. A. J. Losee
Attorney at Law
Post Office Box 239
Artesia, New Mexico 88210

Dear Sir:

Reference is made to Commission Order No. R-3626, recently entered in Case No. 3933, approving the expansion of Newmont's Loco Hills Sand Unit waterflood Project.

The expansion as approved authorizes three additional injection wells and one unorthodox location for a producing well. The three injection wells are to be completed with a string of new 8 5/8-inch casing cemented at a minimum of 345 feet and a string of new 4 1/2-inch casing cemented at a minimum depth of 2565 feet. Injection may be down the casing provided the casing and cement withstand the minimum test pressures prescribed by Rule 107(c) of the Commission Rules and Regulations.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which the portion of this project which is outside the buffer zone will be eligible to receive under the provisions of Rule 701-E-3 is 4158 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

--2--

Mr. A. J. Losee
Attorney at Law
Post Office Box 239
Artesia, New Mexico 88210

C
O
In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

O
P
Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

Y
ALP/DSN/lr

cc: Oil Conservation Commission
Hobbs and Artesia, New Mexico

U. S. Geological Survey
Drawer U
Artesia, New Mexico

Mr. D. E. Gray
State Engineer Office
Capitol Building
Santa Fe, New Mexico

ROUGH DRAFT FOR WATERFLOOD LETTERS

Mr. A. J. Losee
Attorney at Law
Post Office Box 239
Artesia, New Mexico 88210

Dear Sir:

Reference is made to Commission Order No. R-3626 *recently* entered in Case No. 3983, approving the *expansion of newmonts Lacortillo Sand Wash* Waterflood Project.

The expansion as approved authorizes the drilling of three additional injection wells and one north-south location for a producing well. The three injection wells are to be completed with a string of new 8 7/8-inch casing cemented at a minimum depth of 345 feet and a string of new 4 1/2-inch casing cemented at a minimum depth of 2565 feet. Injection may be down the casing provided the casing and cement will stand the minimum test pressures prescribed by Rule 107(c) of the

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which *the portion of this project which is outside the buffer zone* will be eligible to receive under the provisions of Rule 701-E-3 is 4158 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

cc: OCC: Hobbs x
Artesia x
Aztec

USGS Artesia

Mr. Frank Frby, State Engineer Office, Santa Fe, New Mexico

Mr. D. E. Gray

Commission Rules and Regulations

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. 3983
Order No. R-3626

APPLICATION OF NEWMONT OIL COMPANY
FOR A WATERFLOOD EXPANSION AND
UNORTHODOX WELL LOCATIONS, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 2, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 9th day of December, 1968, 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 the applicant, Newmont Oil Company, seeks authority to expand its Loco Hills Sand Unit Waterflood Project in the Loco Hills Pool by the injection of water into the Loco Hills Sand of the Grayburg formation through three injection wells to be drilled at unorthodox locations in Township 18 South, Range 29 East, NMPM, Eddy County, New Mexico, as follows:

A well to be drilled 1960 feet from the South line and 1310 feet from the East line of Section 4;

A well to be drilled 10 feet from the North line and 1325 feet from the East line of Section 9; and

-2-

CASE No. 3983

Order No. R-3626

A well to be drilled 1310 feet from the North line and 10 feet from the West line of Section 15.

(3) That the applicant also seeks authority to drill a producing well in said Loco Hills Sand Unit Waterflood Project at an unorthodox location 1330 feet from the South line and 330 feet from the West line of Section 3, Township 18 South, Range 29 East, NMPM, Eddy County, New Mexico.

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed non-standard locations are necessary to complete an efficient water injection and oil production pattern.

(6) That the proposed expansion of the Loco Hills Sand Unit Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(7) That the subject application should be approved and the expanded project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Newmont Oil Company, is hereby authorized to expand its Loco Hills Sand Unit Waterflood Project in the Loco Hills Pool by drilling the following injection wells at unorthodox locations for the injection of water into the Loco Hills Sand of the Grayburg formation in Township 18 South, Range 29 East, NMPM, Eddy County, New Mexico:

A well to be drilled 1960 feet from the South line and 1310 feet from the East line of Section 4;

A well to be drilled 10 feet from the North line and 1325 feet from the East line of Section 9; and

A well to be drilled 1310 feet from the North line and 10 feet from the West line of Section 15.

-3-

CASE No. 3983
Order No. R-3626

(2) That the applicant is hereby authorized to drill a producing well in said Loco Hills Sand Unit Waterflood Project at an unorthodox location 1330 feet from the South line and 330 feet from the West line of Section 3, Township 18 South, Range 29 East, NMPM, Eddy County, New Mexico.

(3) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(4) That monthly progress reports of the expanded waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.


(5) 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.

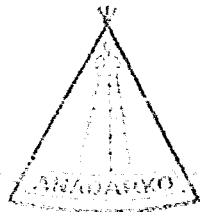
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


GUYTON B. HAYS, Member


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


esr/



ANADARKO PRODUCTION COMPANY

3109 WINTHROP AVENUE

P. O. BOX 9317

FORT WORTH, TEXAS 76107

CABLE ADDRESS: ANADARK

November 27, 1968

State of New Mexico
Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

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

RE: Case 3983 Examiner Hearing
December 2, 1968 - Newmont
Oil Company's West Loco
Hills Grayburg No. 4 Sand
Unit, Loco Hills Field, Eddy
County, New Mexico

Gentlemen:

Anadarko Production Company acknowledges receipt of the notice of hearing in the above referenced docket. Anadarko, as Unit Operator of the proposed Far West Loco Hills Sand Unit, Loco Hills Field, Eddy County, New Mexico, the hearing for approval of which is scheduled on December 11, 1968, supports the application of Newmont Oil Company to drill three water injection wells at unorthodox locations on their West Loco Hills Grayburg No. 4 Sand Unit as part of a cooperative waterflood development program with the proposed Far West Loco Hills Sand Unit.

Very truly yours,

ANADARKO PRODUCTION COMPANY

C. W. Stumhoffer

C.W. Stumhoffer
Superintendent
Secondary Recovery Division

CWS/nl

cc: Newmont Oil Company

(CASE 3982 continued)

the injection of water for secondary recovery purposes into the Queen formation of the Langlie-Mattix Pool in the open-hole interval from 3369 feet to 3518 feet through tubing.

CASE 3983: Application of Newmont Oil Company for a waterflood expansion and unorthodox well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Loco Hills Sand Unit Waterflood Project by the injection of water into the Loco Hills sand of the Grayburg formation through three injection wells to be drilled at unorthodox locations in Township 18 South, Range 29 East, Eddy County, New Mexico, as follows:

48-3
A well to be drilled 1960 feet from the South line and 1310 feet from the East line of Section 4;

198-6
A well to be drilled 10 feet from the North line and 1320 feet from the East line of Section 9; 1320

88-6
A well to be drilled 1310 feet from the North line and 10 feet from the West line of Section 15.

Applicant further seeks to drill a producing well in said project at an unorthodox location 1330 feet from the South line and 330 feet from the West line of Section 3, said Township and Range.

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 2

COOPERATIVE WATERFLOOD AGREEMENT NO. 3983

THIS AGREEMENT, made and entered into by and between NEWMONT OIL COMPANY, Operator of the West Loco Hills Grayburg No. 4 Sand Unit, hereinafter called "Newmont", and ANADARKO PRODUCTION COMPANY, Operator of the Far West Loco Hills Sand Unit, hereinafter called "Anadarko,"

W I T N E S S E T H:

WHEREAS, each of the parties hereto represents that it is the operator of the respective valid and subsisting oil and gas lease set forth in Exhibit "A", which is attached hereto and made a part hereof, covering lands in the West Loco Hills Unit and the Far West Loco Hills Unit, Eddy County, New Mexico, as shown on the plat marked Exhibit "B", which is attached hereto and made a part hereof, and that it is currently producing oil from one or more of the formations identified as the Loco Hills Sand through a well or wells located on the lands covered by its respective lease; and,

WHEREAS, the parties hereto desire to provide for a cooperative water-flooding program along the common boundary line between said leases and to the end that a greater ultimate recovery of oil may be obtained from the Loco Hills Sand underlying the lands included within the leases operated by the parties hereto;

NOW, THEREFORE, for and in consideration of the premises, and the mutual covenants and agreements hereinafter set forth, the parties hereto agree as follows:

I.

This agreement shall relate to and cover only the secondary recovery of oil in place by waterflooding the formation known and referred to as, the Loco Hills Sand, which underlines the lands covered by the leases described in Exhibit "A".

II.

It is recognized that each party hereto has individually received the

required approval and permit from the New Mexico Oil Conservation Commission to conduct waterflooding operations in the Loco Hills Sand underlying the lands covered by its respective lease, and this agreement is made subject to the terms and provisions of said approval and permit, to all rules and regulations of the United States of America and to the orders of any other governmental body having jurisdiction.

III.

Each of the parties hereto agrees that it shall, at its sole cost, risk and expense, perform the following development obligations:

A. Development Obligations of Anadarko as Operator of the Far West Loco Hills Unit:

1. Wells to be drilled and completed as water injection wells:

- a. Tract 8, Well No. 8, at a location 10 feet North of the South line and 2,640 feet West of the East line, Section 4, Township 18 South, Range 29 East, N.M.P.M.
- b. Tract 2, Well No. 3, at a location 330 feet South of the North line and 1,980 feet West of the East line, Section 16, Township 18 South, Range 29 East, N.M.P.M.

2. Wells to be re-entered and completed as water injection wells:

- a. Tract 1, Well No. 1, located in the SE/4 NE/4 of Section 4, Township 18 South, Range 29 East, N.M.P.M.

3. Wells to be converted to water injection wells:

- a. Tract 10, Well No. 2, located in the NE/4 SW/4 of Section 9, Township 18 South, Range 29 East, N.M.P.M.

B. Development Obligations of Newmont as Operator of the West Loco Hills Unit:

1. Wells to be drilled and completed as water injection wells:

- a. Tract 43, Well No. 3, at a location 1,960 feet North of the South line and 1,310 feet West of the East line, Section 4, Township 18 South, Range 29 East, N.M.P.M. 1325
- b. Tract 198, Well No. 6, at a location 10 feet South of the North line and 1,320 feet West of the East line, Section 9, Township 18 South, Range 29 East, N.M.P.M.

2. Wells to be converted to water injection:

- a. Tract 198, Well No. 4, located in the SW/4 NE/4 Section 9, Township 18 South, Range 29 East, N.M.P.M.

C. Development Obligations to be Carried Out Jointly, by Anadarko and Newmont (Newmont Operator):

1. Wells to be drilled and completed as water injection wells:

- a. Tract 88, Well No. 6, at a location 1,310 feet South of the North line and 10 feet East of the West line, Section 15, Township 18 South, Range 29 East, N.M.P.M.

The cost of drilling and completing this well shall be shared jointly by Anadarko and Newmont on a 50-50 basis. Operating costs of this jointly owned well shall be the sole burden of Newmont.

On the aforesaid wells to be drilled or re-entered, application to drill or re-enter will be made by each operator for his respective development well within ten (10) days after the effective date of this agreement. Operator shall, within thirty (30) days after receipt of permit to drill or re-enter, commence operations toward the drilling or re-entering of at least one of the wells to be drilled or re-entered as provided above and shall continue drilling or re-entering such additional wells as are provided for above, with not more than fifteen (15) days elapsing between the completion of one well and the commencement of the subsequent well, until such time as the required number of wells have been drilled or re-entered.

As to those wells which are to be converted to water injection wells, Anadarko and Newmont will, within fifteen (15) days after the effective date of this agreement, commence the necessary operations to make the required conversion.

IV.

Each party hereto shall provide, at its sole cost and expense, its own pressured water for injection into their respective injection wells, and will provide that the injection well will take the volume of water to be injected into the Loco Hills Sand, at the pressure hereinafter specified. Notwithstanding anything in this paragraph to the contrary, each party hereto shall be required to use only good faith efforts and shall not be required to perform remedial work or other operations which are not reasonable and in accord with good engineering practices which

a prudent operator would apply under the same or similar circumstances.

V.

Each party hereto agrees to continue to operate its injection well, to make such repairs and to take such remedial action as is necessary to maintain its injection well in operational order, and to inject processed and pressured water at the pressures hereinafter specified into the Loco Hills Sand through its water injection well during the term of this agreement.

All cost and expense incident to the operation of each water injection well, specifically including the cost of processed and pressured water injected into each such injection well and the cost of all repairs and remedial work with regard to such well shall be borne by the operator of the lease upon which such well is located.

VI.

The water injected into the Loco Hills Sand through each of the injection wells provided for herein shall be injected at a minimum pressure of 500 psi and a maximum pressure of 1,200 psi, or as may be mutually agreed upon by the parties hereto, provided, however, that each party agrees to use its best efforts not to inject water into any of its injection wells under such conditions so as to cause the bottom hole pressure for such well to exceed formation breakdown pressure.

VII.

Each party hereto agrees that it shall maintain records of the following, with respect to all wells located upon its lease as described in Exhibit "A", and that it shall furnish such information to the other party monthly:

1. Completion data on water injection wells operated by it;
and
2. Number of days operated, daily volume of water injected and injection pressures on each water injection well operated by it.

VIII.

This agreement is not intended to affect, nor is it to be construed

as affecting the rights and obligations of each party hereto to produce oil from the wells located upon its lease, and each party hereto shall be entitled to all production from its own wells and lease. The duties, liabilities and obligations of the parties hereto are intended to be several and not joint or collective, and nothing herein contained shall ever be construed to impose a partnership obligation or liability with regard to either of the parties hereto. Each party hereto shall be individually responsible only for its obligations as set out herein, and shall be liable only for its own costs and expenses incurred in complying with the terms of this agreement.

IX.

It is understood and agreed between the parties hereto that the creation, or attempted creation of an artificial water drive by the injection of water through the aforesaid water injection wells into the Loco Hills Sand is a reasonable and prudent producing and engineering practice, and is sufficient and adequate to protect the rights of the parties hereto. It is further agreed that neither party hereto shall be deemed to be guilty of trespass by the injection of water into the water injection wells upon its lease, and that such party does hereby assume the risks incident to the cooperative waterflood plan and, therefore, does hereby release the other party from any or all damages, claims or causes of action relating to the waterflood operations to be conducted hereunder.

X.

"Force Majeure," as that term is used herein, shall mean an act of God, strike, lockout or other industrial disturbance, act of public enemy, war, blockade, public riot, lightning, fire, storm, flood, explosion, governmental restraint or decree, unavailability of materials and equipment, and any other cause whether or not of the character enumerated above which is not within the reasonable control of the party claiming suspension. Whenever, as a result of force majeure, either party hereto is rendered unable wholly or in part to carry out its obligations under this agreement, the obligations of such party shall be suspended during, but not longer than the continuance of the force majeure. Any party so

prevented shall use due diligence and good faith in an attempt to eliminate the cause so preventing his compliance with this agreement. The requirement that any force majeure shall be remedied with due diligence shall not require the settlement of strikes, lockouts, or other labor difficulties by the party involved contrary to its wishes; all such difficulties to be handled shall be entirely within the discretion of the party concerned.

XI.

The effective date of this agreement shall be upon the execution hereof by both parties hereto. Each party hereto shall have been deemed to have executed this instrument as of the date of its acknowledgment.

XII.

If, at any time after the expiration of twelve (12) months following the effective date hereof, any party hereto is of the opinion that the injection of water into the Loco Hills Sand through a water input well located upon its lease and operated by such party, has ceased to aid economically in the recovery of oil in place from the Loco Hills Sand under such lease, and desires to plug and abandon said well or cease injecting water into the Loco Hills Sand through such input well, such party (hereinafter in this Section XII referred to as the "abandoning party") shall notify in writing the offset operators of such desire. The parties so notified shall have thirty (30) days from the receipt of such notice within which to elect to take over the operation of said input well and continue to inject water into the Loco Hills Sand. If, within said thirty (30) day period, the parties so notified elect not to take over said well or otherwise fail to elect to take over such well, the abandoning party shall thereafter have the right to plug and abandon said well or cease to inject water into the Loco Hills Sand through said well and otherwise utilize said well in any manner permitted by the applicable laws and regulations.

If the parties so notified, or any one of them, should, within said thirty (30) day period, elect to take over such well (such electing party or parties being hereinafter in this Section XII referred

to as the "electing party", whether one or more), the abandoning party agrees to designate the electing party, or the party selected as operator by the electing party, as the operator of said well in accordance with the applicable government regulations and otherwise agrees to grant, insofar as it has the right to do so, the electing party the right to continue to operate said well for the sole purpose of injecting water into the Loco Hills Sand, subject, however, to the terms and provisions of the Oil and Gas Lease covering the lands upon which said input well is located and to the electing party obtaining from persons other than parties to this agreement any easements or additional rights which are necessary to the continued operation of said water input well. Upon receipt of payment for the salvable value of the materials and equipment in and on said well, less the estimated cost of salvaging such material and equipment and of plugging and abandoning said well, the abandoning party shall assign its interest in such material and equipment to the electing party by an instrument in recordable form which grants to the electing party the operating rights described in the preceding sentence. The electing party agrees to operate said well in accordance with the terms and provisions of this agreement, and agrees to indemnify and save the abandoning party harmless against any and all claims and causes of action regarding or resulting from the continued operation of said well by the electing party.

When the electing party should desire to plug and abandon said well, it shall give the abandoning party notice of such intent, and the abandoning party shall have thirty (30) days after receipt of such notice within which to elect to re-acquire said well. If, within said thirty (30) day period, the abandoning party elects to re-acquire said well, the electing party shall, upon receipt of payment for the salvable value in and on said well, less the estimated cost of salvaging such material and equipment and of plugging and abandoning said well, assign, by an instrument in recordable form, all of its interest in such material and equipment together with all right or interest that

the electing party may have acquired in said well by virtue of the prior assignment with respect to such well from the abandoning party to the electing party, as hereinbefore provided. After the abandoning party has so re-acquired said well, the electing party shall be relieved of any future obligations hereunder with respect to said well and the abandoning party shall have the right to utilize said well in any manner permitted by the applicable laws and regulations. If, however, the abandoning party, within said thirty (30) day period elects not to re-acquire said well, the electing party shall plug and abandon said well in accordance with the applicable rules and regulations.

XIII.

Any such notice to be given hereunder shall be deemed to have been given when such notice in writing shall have been deposited in the United States mail, postage prepaid, and addressed to the parties at the following addresses:

Newmont Oil Company
1135 Capital National Bank Building
Houston, Texas 77002

Anadarko Production Company
P. O. Box 9317
Fort Worth, Texas 76107

Either party hereto may change its address by giving appropriate written notice to the other party hereto.

XIV.

The terms, covenants, and conditions hereof shall inure to the benefit of and be binding upon the respective parties hereto, and their respective successors and assigns.

This instrument may be executed in counterpart by both parties hereto and shall have the same effect as if each party hereto had executed each of such counterparts.

ATTEST:

Assistant Secretary

ATTEST:

NEWMONT OIL COMPANY

By _____
Vice President

ANADARKO PRODUCTION COMPANY

By _____

STATE OF TEXAS I

COUNTY OF HARRIS I

BEFORE ME, the undersigned authority, on this _____ day of _____, 1968, personally appeared JESSE L. GEORGE, JR., known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the NEWMONT OIL COMPANY, a corporation, and that he executed the same as an act of such corporation for the purposes and consideration therein expressed.

Notary Public in and for Harris County,
Texas

My Commission Expires:

STATE OF TEXAS I

COUNTY OF TARRANT I

BEFORE ME, the undersigned authority, on this _____ day of _____, 1968, personally appeared _____, known to me to be the person and officer whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the ANADARKO PRODUCTION COMPANY, a corporation, and that he executed the same as an act of such corporation for the purposes and consideration therein expressed.

Notary Public in and for Tarrant County,
Texas

My Commission Expires:

EXHIBIT "A"

TO COOPERATIVE WATERFLOOD AGREEMENT BETWEEN
NEWMONT OIL COMPANY AND ANADARKO PRODUCTION
COMPANY

ANADARKO PRODUCTION COMPANY LEASES

TRACT NO.	DESCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NUMBER AND EXPIRATION DATE	BASIC ROYALTY	RECORD LESSEE	WORKING INTEREST OWNER AND PERCENTAGE	OVERRIDING ROYALTY OWNERSHIP	PERCENTAGE TRACT PARTICIPATION
1	S/2 NE/4 Section 4 T18S, R29E	80	LC 058579 HBP	12.5% to 32.0%-Oil 12.5% to Husky Oil 16 2/3%-Gas Company	Depco, Inc. and Husky Oil	Depco, Inc. (Operator) - 50% Husky Oil Company - 50%	Banner Oil Co. 5.0000% (Below 2860')	2.248336
2	NW/4 NE/4 and SW/4 NW/4 Section 16 T18S, R29E	80	06-5359-i 4-21-69	State of New Mexico 12.5%	T. J. Sivley and John H. Trigg	Anadarko Production Company (Surface to 4,000')	Lonnie Kemper et ux - 1/16 of 8/8 on Oil	6.106848
							increasing to 1/8 of 8/8 after 25,000 barrels produced. 1/8 of 8/8 on Gas.	
8	W/2 SE/4; E/2 SW/4 Section 4-T18S, R29E	160	Fee Land HBP		Anadarko Production Company	Anadarko Production Company (Surface to 3220')	- 100%	21.695397
10	N/2 SW/4 Section 9 T18S, R29E	80	Fee Land HBP	J. L. Langford 10.9375% C. R. Baldwin 1.5625%	Gordon M. Cone and J. U. Cone Trustee for Douglas, Clifford, Thomas, Cathie and Kenneth Cone Trusts	Gordon M. Cone J. U. Cone-Trustee for Douglas, Clifford, Thomas, Cathie and Kenneth Cone Trusts.	- 50% None	13.080328

EXHIBIT "A"

TO COOPERATIVE WATERFLOOD AGREEMENT BETWEEN
NEWMONT OIL COMPANY AND ANADARKO PRODUCTION
COMPANY

NEWMONT OIL COMPANY LEASES

TRACT NO.	DESCRIPTION	ACRES	LEASE NO., DATE		RECORD LESSEE AND PERCENT	OVERRIDING ROYALTY AND PERCENT		WORKING INTEREST OWNERS AND PERCENT		PERCENTAGE TRACT PARTICIPATION	
			BASIC ROYALTY								
8-8	N/2 NW/4, Sec. 15, T18S, R29E	80	LC-056014 5-10-39 Step scale		Graridge Corp. Julia Brainard (6) 50.00 50.00 <u>100.00</u>	0lin F. Featherstone 10.00	Graridge Corp. Clyde Guy & Sons, Inc. Kate G. Lowrey Julia Brainard (6) 50.00 12.50 12.50 25.00 <u>100.00</u>	1.1161			
19-8	NE/4 Section 9, T18S, R29E	160	NM-02426 5-10-39 Step scale	J. Cleo Thompson, Sr.	All	Ballard E. Spencer Trust, Inc. 1.5000000 Delhi-Taylor Oil Corporation 5.4687500	J.Cleo Thompson, Sr. J.Cleo Thompson, Jr. L.G.M. Company (4) 33.333334 33.33333 33.33333 <u>100.00000</u>	3.2616			
43	E/2 SE/4 Sec. 4, T18S, R29E	80	(Fee) H. H. Herren H. G. Watson Oliver H. Smith, Jr. Geo. L. Reese, Jr. J. R. Cone B. A. Bowers Leona L. Stagner A. L. Cone	Fair Oil Co.	All	None	R. W. Fair James W. Fair Wilton H. Fair Richard L. Ray Gus W. Arnold Buren W. Williams Bright & LaRue Corporation 35.00 5.00 5.00 5.00 5.00 40.00 100.00	1.6379			
										<u>12.5000000</u>	

WEST LOCO HILLS UNIT
Well No. 43-3
1960' FSL & 1310 FEL Section 4-T-18S-R-29E
Eddy County, New Mexico

Top of Salt 375'

New 8 5/8" 20// casing set at
approximately 380' with 50 sacks
cement

Loco Hills Sand - 2515-25'

New 4 1/2" 9.5// casing set at
approximately 2575' with 100 sacks cement

Total Depth 2575'

Water to be injected down casing through perforations at approximately 2515-25'

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	39
CASE NO.	3983

1325 Feet line

WEST LOCO HILLS UNIT
Well No. 198-6
10' FNL & 1320' FEL Section 9-T-18S-R-29E
Eddy County, New Mexico

Top of Salt @ 375'

- New 8 5/8" 20# casing set at 380' with 50 sacks of cement

Loco Hills Sand Zone 2505' - 15

- New 4 1/2" 9.5# casing set at 2565' and cemented with 100 sacks

Total Depth 2565'

Water to be injected down casing through perforations at approximately 2505-15'

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 30-
CASE NO. 3983

WEST LOCO HILLS UNIT
Well No. 8B-6
1310' FNL & 10' FWL Section 15-T18S-R-29E
Eddy County, New Mexico

Top of Salt - - 340'

New 8-5/8" 20# casing set at
345' with 50 sacks of cement

Loco Hills Sand Zone 2537-47'

New 4 1/2" 9.5# casing set at 2600'
with 100 sacks cement

Total Depth 2600'

Water to be injected down casing through perforations at 2537-47'

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 3e
CASE NO. 3983

JOEL M. CARSON

LAW OFFICES
A. J. LOSEE
CARPER BUILDING - P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

November 14, 1968

AREA CODE 505
746-3508

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Case 3483

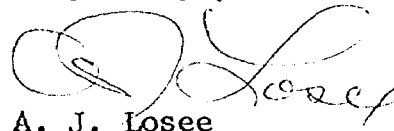
Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
of New Mexico
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed in triplicate, please find Application of Newmont Oil Company for an exception to Rule 104 to permit the drilling of one producing and three injection wells at unorthodox locations in the West Loco Hills Unit Area, Eddy County, New Mexico.

With a carbon copy of this letter, we are furnishing the State Engineer's Office with a copy of the application, complete with all attachments.

Very truly yours,


A. J. Losee

AJL:mlw

cc: State Engineer's Office
Certified Mail - Return
Receipt w/enclosures

cc: Newmont Oil Company

DOCKET MAILED

11-21-68

BEFORE THE OIL CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
NEWMONT OIL COMPANY FOR AN EXCEPTION
TO THE WELL LOCATION REQUIREMENTS OF
RULE 104 OF THE OIL CONSERVATION COMMISSION
AND FOR THE EXPANSION OF THE WEST LOCO HILLS
WATERFLOOD PROJECT BY THE ADDITION OF THREE
INJECTION WELLS, EDDY COUNTY, NEW MEXICO

NO. 3983

APPLICATION

COMES NEWMONT OIL COMPANY, by its attorney, A. J.
Losee, and states:

1. Applicant is the operator of the West Loco
Hills Unit, Eddy County, New Mexico and proposes to drill
one producing and three injection wells within said unit
area in Township 18 South, Range 29 East, N.M.P.M., at the
following unorthodox locations:

Producing Well

10A-7 - 330' FWL and 1330' FSL of Section 3

Injection Wells

43-3 - 1960' FSL and 1310' FEL of Section 4;
19B-6 - 10' FNL and 1320' FEL of Section 9;
8B-6 - 1310' FNL and 10' FWL of Section 15

The proposed producing well and three injection wells will
be drilled to the Loco Hills sand of the Grayburg forma-
tion.

2. There is attached hereto and by reference made
a part hereof a plat showing the location of the West Loco
Hills Unit Area, the unorthodox locations of the proposed
one producing well and three injection wells and the loca-
tion of all other wells and leases within a radius of one
mile.

3. A diagramatic sketch of the proposed injection wells, showing all casing strings, including diameters and approximate setting depths, quantities used and tops of cement, approximate perforated or open-hole intervals is hereto attached and by reference made a part hereof. There are no logs of the proposed injection wells.

4. Applicant proposes injecting water down the casing in the proposed three injection wells at the rate of approximately 400 barrels per day and at a well-head pressure of approximately 1200 p.s.i.

5. The approval of these unorthodox producing and injection well locations and the expansion of the West Loco Hills Waterflood Project will prevent waste and protect correlative rights.

WHEREFORE, Applicant prays the orders of the Commission as follows:


1. That this matter be set for hearing before an examiner duly appointed by the Commission and that due notice be given thereof as required by law.

2. That after hearing, an order be entered authorizing (a) the drilling of the one producing and three injection wells at the said unorthodox locations, and (b) the expansion of the West Loco Hills Waterflood Project by the addition of the three injection wells.

3. And for such other relief as may be just in the premises.

NEWMONT OIL COMPANY

By


A. J. Losee
Attorney for Applicant
P. O. Drawer 239
Artesia, New Mexico

WEST LOCO HILLS UNIT
Well No. 43-3
1960' FSL & 1310 FEL Section 4-T-18S-R-29E
Eddy County, New Mexico

Top of Salt 375'

New 8 5/8" 20# casing set at
approximately 380' with 50 sacks
cement

Loco Hills Sand - 2515-25'

New 4 1/2" 9.5# casing set at
approximately 2575' with 100 sacks cement
Total Depth 2575'

Water to be injected down casing through perforations at approximately 2515-25'

Chad 2983

WEST LOCO HILLS UNIT
Well No. 198-6
10' FNL & 1320 FEL Section 9-T-18S-R-29E
Eddy County, New Mexico

Top of Salt @ 375'

- New 8 5/8" 20# casing set at 380' with 50 sacks of cement

Loco Hills Sand Zone 2505' - 15

- New 4 1/2" 9.5# casing set at 2565' and cemented with 100 sacks

Total Depth 2565'

Water to be injected down casing through perforations at approximately 2505-15'

Case 3983

WEST LOCO HILLS UNIT
Well No. 8B-6
1310' FNL & 10' FWL Section 15-T18S-R-29E
Eddy County, New Mexico

Top of Salt - - 340'

New 8-5/8" 20# casing set at
345' with 50 sacks of cement

Loco Hills Sand Zone 2537-47'

New 4 1/2" 9.5# casing set at 2600'
with 100 sacks cement

Total Depth 2600'

Water to be injected down casing through perforations at 2537-47'

Case 3983

DRAFT

GMH/esr

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. 3983

Order No. R- 3636

APPLICATION OF NEWMONT OIL COMPANY
FOR A WATERFLOOD EXPANSION AND
UNORTHODOX WELL LOCATIONS, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 2, 1968,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of December, 1968, 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 the applicant, Newmont Oil Company, seeks authority
to expand its Loco Hills Sand Unit Waterflood Project in the
Loco Hills Pool by the injection of water into the Loco
Hills Sand of the Grayburg formation through three injection wells
to be drilled at unorthodox locations in Township 18 South, Range
29 East, NMPM, Eddy County, New Mexico, as follows:

A well to be drilled 1960 feet from the South
line and 1310 feet from the East line of Sec-
tion 4;

A well to be drilled 10 feet from the North
line and ¹³²⁵~~1320~~ feet from the East line of Sec-
tion 9; and

A well to be drilled 1310 feet from the North line and 10 feet from the West line of Section 15.

(3) That the applicant also seeks authority to drill a producing well in said Loco Hills Sand Unit Waterflood Project at an unorthodox location 1330 feet from the South line and 330 feet from the West line of Section 3, Township 18 South, Range 29 East, NMPM, Eddy County, New Mexico.

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

✓ (5) That the proposed non-standard locations are necessary to complete an efficient water injection and oil production pattern.

(6) That the proposed expansion of the Loco Hills Sand Unit Waterflood Project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(7) That the subject application should be approved and the expanded project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Newmont Oil Company, is hereby authorized to expand its Loco Hills Sand Unit Waterflood Project in the Loco Hills Pool by drilling the following injection wells at unorthodox locations for the injection of water into the Loco Hills Sand of the Grayburg formation in Township 18 South, Range 29 East, NMPM, Eddy County, New Mexico:

A well to be drilled 1960 feet from the South line and 1310 feet from the East line of Section 4;

A well to be drilled 10 feet from the North line and ¹³²⁵~~1320~~ feet from the East line of Section 9; and

A well to be drilled 1310 feet from the North line and 10 feet from the West line of Section 15.

(2) That the applicant is hereby authorized to drill a producing well in said Loco Hills Sand Unit Waterflood Project at an unorthodox location 1330 feet from the South line and 330 feet from the West line of Section 3, Township 18 South, Range 29 East, NMPM, Eddy County, New Mexico.

(3) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(4) That monthly progress reports of the expanded waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) 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.