

CASE 4054: Application of AMERADA  
PETROLEUM CORP. FOR AN AMENDMENT  
TO ORDER NO. R-2197, LEA COUNTY.

---

Case Number

4054

Application

Transcripts.

Small Exhibits

ETC.

dearnley-meier reporting company

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
February 26, 1969  
EXAMINER HEARING

-----  
IN THE MATTER OF: )

Application of Amerada )  
Petroleum Corporation for )  
an unorthodox oil well )  
location and amendemnt to )  
Order No. R-2197, Lea County, )  
New Mexico. )  
----- )

Case No. 4054

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Oil Case 4054.

MR. HATCH: Case 4054, application of Amerada Petroleum Corporation for an unorthodox oil well location and amendment to Order No. R-2197, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please. Jason Kellahin, Kellahin and Fox, appearing for the Applicant. I have one witness I would like to have sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 and 2 were marked for identification.)

MR. UTZ: Other appearances? You may proceed.

MR. KELLAHIN: If the Examiner please, this is the application for Amerada Petroleum Corporation for an unorthodox well location and for an amendment to Order R-2197. I think a little background on this would be appropriate because what we are dealing with here is a unit which was approved in October of 1962 and a waterflood project which was initiated in 1963. The unit is off-set on two sides by present waterflood projects and undoubtedly will be off-set on the other two sides in the not too distant future by waterflood projects which causes problems which are unique to this particular flood and that is the reason for the type of application we have here today.

CHARLES C. STEPHENSON

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Charles C. Stephenson, S-t-e-p-h-e-n-s-o-n.

Q By whom are you employed and in what position, Mr. Stephenson?

A I am employed by Amerada Petroleum Corporation, currently as Division Engineer.

Q Where are you located?

A In Midland, Texas.

Q Have you ever testified before the Oil Conservation Commission before?

A No, sir, I have not.

Q For the benefit of the Examiner, would you briefly outline your education and experience as a Petroleum Engineer?

A I graduated from the University of Oklahoma in 1959 with a Bachelor of Science Degree in petroleum engineering.

Shortly after graduation, I accepted employment with Amerada and have worked continuously for the last nine years at various jobs, ranging from petroleum engineer, staff engineer, district engineer, and most recently, as division engineer for West Texas-New Mexico area.

Q Now, in your duties as an engineer for the West Texas-New Mexico area, do you have anything to do with the Langlie-Mattix Pool?

A Yes. As division engineer, the Langlie-Mattix Woolworth unit is under my direct supervision.

MR. KELLAHIN: Are the witnesses qualifications acceptable?

MR. UTZ: Yes, sir, they are.

Q (By Mr. Kellahin) Mr. Stephenson, you heard my outline of the application of the Amerada. Did I correctly state what is being proposed in the application?

A Yes, sir.

Q Calling your attention to what has been marked Exhibit No. 1, would you identify that exhibit, please?

A Exhibit No. 1 is a performance graph of the Langlie-Mattix Woolworth unit. Some of the items of interest on the map are the monthly oil and water production, the

monthly water injection and the gas-oil ratio history. As you can see from the graph, the unit was formed in October, 1962. Water injection was commenced in a pilot waterflood project in May of 1963. It was about two years -- two and a half years before we began to see response in our pilot flood. Since that time, production has increased. In the middle of 1967, we began to expand our water injection project and we have added since that time eleven more injection wells. We are expanding outward from the initial pilot area and you can see the response that has occurred from the addition of the additional injection wells. Our monthly production is currently ranging about forty-seven thousand barrels per month as opposed to about five thousand barrels a month prior to unitization.

Q Now, this increase in your production and your injection, occurred within the last year, last fourteen months, is that correct?

A That's correct, for our additional injection wells. We initially had a response in 1966 to the initial pilot.

Q Now, do you anticipate that there will be further expansion of your waterflood project within the near future?

A Very definitely. We are working on that at the present time and hope to expand as soon as possible.

Q Now, directing your attention to what has been marked as Exhibit No. 2, would you identify that exhibit, please?

A Exhibit No. 2 is a unit map of the Langlie-Mattix Woolworth Unit. Of interest on the map, we have located the injection wells with triangles and the producing wells with dots. The producing wells that have large circles are wells that have responded to our water injection program. The red triangles within the unit area were our initial pilot waterflood project. The blue triangles are wells that we have added as we have expanded the project. Also shown are injection wells to the north that off-set us in other waterfloods.

Q Now, that's the George Buckles Company Waterflood, is it not?

A It is, and the Pan American Waterflood to the northeast.

Q Now, do you have a line agreement with Buckles and Pan American?

A Yes, we do.



Q In connection with that line agreement, you did obtain approval of the unorthodox well location in the number five wells on a line, is that correct?

A Yes, sir.

Q That was part of your line agreement?

A It was.

Q You are cooperating with Buckles on the injection wells shown on his project, is that correct?

A That is correct.

Q Now, are you off-set by a waterflood project to the west?

A No, sir, we are not at the present time; however, we are negotiating cooperative waterflood agreements there.

Q Are you off-set to the south or east?

A At the present time, there is a waterflood in the southeast part of the map. However, the wells adjacent to ours have not been put on injection and we are in the process of negotiating lease line agreements in that area, also.

Q How is the proposed unorthodox well location indicated on that exhibit?

A It is indicated by the red arrow.

Q What is that location?

A Twelve hundred fifty feet from the west line, twenty-two hundred twenty feet from the south line of Section 28.

Q What's the significance of the wells marked with the red dot?

A These are our anticipated injection wells for this particular five spot pattern. The center well as you see that we have located is primarily in the center of this particular five spot location so that we can recover the maximum amount of oil in that area.

Q Now, the well to the west of that, is that a Continental oil well?

A It is.

Q Are you negotiating an agreement with Continental Oil Company at the present time whereby that well will be placed on injection?

A Yes, we are.

Q Does that then account for the proposed unorthodox well location?

A Yes, it does.

Q In your opinion, with a well so located best achieve recovery from the waterflood project?

A Yes, sir, it will.

Q Now, in connection with the development of this project, do the rate of injection or the particular formation involved in various portions of the unit have any bearing on where your wells will be located?

A Yes, it has. Some of the wells have more pay present and also the injection rates in some of our injection wells vary. We have anticipated what our current flood front locations are in our injection wells and this data is used in the location of future development producing wells.

Q Now, in making your well location, is it best to take advantage of the injection pattern of your off-setting operators as well as your own?

A When it is possible, that's right.

Q Now, in doing that, is it necessary from time to time to locate your wells at what would be an unorthodox well location?

A Very definitely.

Q In order to do any future expansion of your waterflood project, is it going to be necessary for you to obtain line agreements with the off-setting operators?

A Well, as you can see from Exhibit 2, we have expanded to the point where almost any further expansion will be determined by lease line agreements with other operators. We have six different operators surrounding the unit in which we are negotiating lease line agreements and we hope to have them finished shortly.

Q Now, in order to obtain approval of the locations required to meet your obligations under these lease line agreements under the present rules, would it be necessary for you to have another hearing before this Commission?

A Yes, it would.

Q How many hearings would you anticipate, unless this order is amended?

A Under whatever scheme that we could work out with each operator, it would take as many as from six to twelve, probably a larger magnitude to complete the full expansion of our waterflood.

Q Is it possible for you to anticipate the location of all the wells in your injection pattern?

A Not at the present time.

Q Is it possible for you to anticipate the location of all the producing wells which will be utilized in this waterflood project?

A Again, you can at the present time because each producing well's location is dependent upon all future injection wells.

Q Is that the reason, then, that you are asking that Order No. R-2197 be amended to provide for an administrative procedure for location of both injection and producing wells?

A Yes, sir, it is.

Q Do you feel that that is necessary in order to facilitate the operation of this particular unit?

A Yes, sir, in my opinion it would definitely speed the procedure up in which we could reach full expansion.

Q Mr. Stephenson, in the event the Commission approves the proposed unorthodox well location, will that enable Amerada to produce its fair share of the oil underlying the unit?

A In this particular area, it should.

Q Will the correlative rights of any off-setting operator be affected?

A They should be protected equally as well.

Q Now, in the event the Commission sees fit to grant an administrative procedure for the location of injection and producing wells as requested, will that result in waste?

A No, sir.

Q Will the correlative rights of the off-setting operators be protected?

A Yes, I'm sure they will because these will be negotiated between the different parties to some reasonable agreement.

Q It would be a cooperating waterflood on both sides of the line?

A Yes, sir, it would be.

Q Were Exhibits 1 and 2 prepared by you or under your supervision?

A Yes, they were.

Q Now, in the event you are off-set by injection wells in order to protect the interest of Amerada Petroleum Corporation, will it be necessary to place wells on injection which have not had a response from the waterflood?

A Yes, it will. We also have found that the waterflood is working extremely well. We see no reason not to completely expand and put the entire project on at the present time.

Q You intend doing that?

A Yes, sir, we are.

MR. KELLAHIN: At this time I offer in evidence Exhibits 1 and 2.

MR. UTZ: Without objection, Exhibits 1 and 2 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits 1 and 2 were received in evidence.)

MR. KELLAHIN: That's all I have on direct examination.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Stephenson, what did you say the three crimson dots were surrounding your location on Exhibit 2?

A These are the locations of injection wells for this particular five spot area.

Q Those aren't exact locations, then?

A They are not exact as far as the dots are shown on the map. There will be a well to the west of the number three -- the 103 well; Continental will convert their number two well, and we will drill a well in the southwest corner of Section 28.

Q Those will be new wells?

A Two of the wells will be new wells; one will be a conversion.

Q Why is it that you are, at this time, unable to determine where you are going to spot your injection wells? Don't you have a pretty definite pattern set?

A Well, we know where we would probably prefer to have them, but in dealing with lease line agreements, sometimes there are some factors involved that may make you change your pattern, if the other company elects not to participate satisfactorily in what you would like to do. As a matter of fact, we have looked at as many as five or six different patterns in one particular area in trying to arrive at something mutually agreeable between us and the



off-set operators.

Q That's a matter of each party trying to negotiate to get the most oil, I presume?

A That's part of it.

Q Then, unless you know where the injection wells are going to be, you can't determine where your oil wells are going to be?

A That's correct.

Q That's why you're requesting administrative approval for non-standard locations of both injection wells and oil wells?

A That's correct.

Q Now, if the Commission should grant this request, could you state some minimum distance from your unit line that you would locate either injection or producing wells?

A Well, I'm sure the minimum distance will be approximately one hundred feet. Now, it may be more. We are still in the negotiating stage on some of these wells, but probably one hundred feet will be the best answer I could give you at this time.

Q Now, do the triangles that are colored in blue, are they also conversions at this time?

A Yes, sir, they are converted and on injection at the present time.

Q You are, at this time, requesting a definite location -- is that the number 203?

A Yes, sir.

Q How come the rest of them have one number and that one grew up so fast?

A These are our new unit designations for the wells.

Q Are you going to change them all?

A For our accounting purposes, they have been changed.

Q But, that is the definite location?

A Yes, sir, it is.

Q Have you stated the name of that well?

A Langlie-Mattix Woolworth Unit, tract two, well three.

Q Tract two, well three?

A That's fine with me.

Q We don't care. We've just got to name it.

Are there any other questions of the witness?

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Yes, sir, I would like to ask a couple of more questions. In response to a question by Mr. Utz, you stated that you thought one hundred feet would be as close as you would go to your external lease line, is that correct?

A Well, at the present time, this is what we are considering.

Q Well, actually, in order to meet your lease line obligations with Pan American, you had to locate considerably closer than that, did you not?

A Yes, sir, I believe that's correct.

Q Would you anticipate that you might be faced with the same situation with some of the other lease line agreements?

A It's very conceivable that this may occur. We have not finished the negotiations with these other people and it could be that this may be the end result.

Q Well, for example, with reference to the well to be placed on injection by Continental Oil Company, do you know where it is located?

A It is located three hundred thirty foot from the lease line.

Q So, you wouldn't have a line agreement similar to the one to the north?

A Not exactly similar.

Q Would you request that you have a little more flexibility than one hundred feet?

A Yes. I really would not want to limit the request to one hundred feet, if that was what was inferred by the other questions.

MR. UTZ: That's what was inferred. How close are you with your number five well to the north? In other words, if one hundred feet was set, it would certainly be applicable to your off-set operators as well as to yours? In other words, your off-set operators set one hundred feet, would you want to set closer?

MR. KELLAHIN: If the Examiner please, no, I would agree to that, but if you will look at the off-set flood to the north, the wells are practically on the lease line and there is a possibility you might have the same situation on some of the other lease lines. The location

of the wells, of course, would be subject to the negotiations with the off-set operators and it would be a cooperative arrangement, whereby they would be as close as we are, but to set a limit of one hundred feet could place us in the situation we are already in and we would have to come back again and ask for an exception and this is what we are attempting to avoid.

If the Examiner please, I believe the record in Case 3753 will show that Amerada's No. 54, unit 12, is located seventy-five feet from the north line.

RE CROSS EXAMINATION

BY MR. UTZ:

Q How many wells are you anticipating that might be non-standard?

A Well, I there there's -- there may be somewhere between six and twelve. This number is not final, I understood.

Q Of course, you might not have to have a hearing for each of those wells; you might have two or three wells at a hearing?

A That's possible, yes, sir.

MR. UTZ: Are there any other questions of the witness? He may be excused. Statements?

MR. KELLAHIN: If the Examiner please, Amerada, of course, they have no objection and would expect the order to contain some provision for giving adequate notice to any off-setting operators and any well locations and if there is an objection, then we could have a hearing on it and we certainly don't object to that.

MR. UTZ: Other statements? The case will be taken under advisement. We will take a coffee break of approximately ten minutes.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
CHARLES C. STEPHENSON	
Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Utz	13
Redirect Examination by Mr. Kellahin	17
Recross Examination by Mr. Utz	19

<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's 1 and 2	2	13

STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, GLENDA BURKS, 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.

Janda Banks  
Court Reporter

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Executive Hearing of Case No. 4054  
heard by us on Feb. 26 1969.  
James G. [Signature], Executive  
New Mexico Oil Conservation Commission





## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

March 12, 1969

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

Re: Case No. 4054 - 4057  
Order No. R-3704 R-3705  
Applicant:  
Amerada & Charles B. Read

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.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC ☒

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. 4054  
Order No. R-3704

APPLICATION OF AMERADA PETROLEUM  
CORPORATION FOR AN UNORTHODOX OIL  
WELL LOCATION AND AMENDMENT TO  
ORDER NO. R-2197, LEA COUNTY, NEW  
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 26, 1969,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 12th day of March, 1969, 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, Amerada Petroleum Corporation, is  
the operator of the Langlie Mattix Woolworth Unit Waterflood  
Project in its Langlie Mattix Woolworth Unit Area, Langlie-Mattix  
Pool, Lea County, New Mexico, approved by Commission Order No.  
R-2197 and expanded by Orders No. R-3407, as amended by R-3407-A.

(3) That the applicant seeks authority to drill a producing  
oil well in said waterflood project area at an unorthodox loca-  
tion 2220 feet from the South line and 1250 feet from the West  
line of Section 28, Township 24 South, Range 37 East, NMPM, Lea  
County, New Mexico.

(4) That the proposed unorthodox location is necessary  
to complete an efficient oil producing pattern.

-2-

CASE No. 4054

Order No. R-3704

(5) That the applicant further seeks the amendment of said Order No. R-2197 to provide for the establishment of an administrative procedure whereby the Secretary-Director of the Commission may authorize expansion of said Langlie Mattix Woolworth Unit Waterflood Project to include additional lands and injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern without the necessity of showing well response.

(6) That approval of the aforesaid amendment will afford the applicant the opportunity to produce its just and equitable share of the oil and gas in the Langlie-Mattix Pool, and will otherwise prevent waste and protect correlative rights, provided said producing wells and injection wells are drilled no closer than 330 feet to the outer boundary of said Langlie Mattix Woolworth Unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary.

(7) That the Langlie Mattix Woolworth Unit Waterflood Project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to drill a producing oil well in the Langlie Mattix Woolworth Unit Waterflood Project in its Langlie Mattix Woolworth Unit Area, Langlie-Mattix Pool, at an unorthodox location 2220 feet from the South line and 1250 feet from the West line of Section 28, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That Order (2) of Order No. R-2197 is hereby amended to read in its entirety as follows:

"(2) That the Langlie Mattix Woolworth Unit Waterflood Project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the Langlie Mattix Woolworth Unit Waterflood Project to include such additional lands and

-3-

CASE No. 4054

Order No. R-3704

injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern, provided said wells are drilled no closer than 330 feet to the outer boundary of said Langlie Mattix Woolworth Unit nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided that the application therefor has been filed in accordance with Rule 701 B of the Commission Rules and Regulations, and provided further, that a copy of the application has been sent to all offset operators, if any there be, and no such operator has objected within 15 days. The showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection."

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

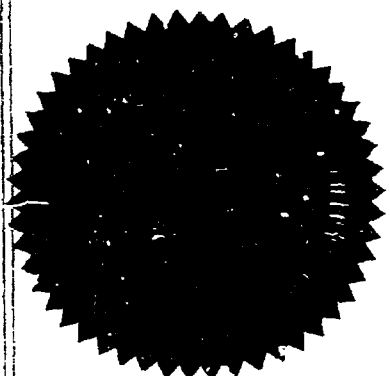
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
ALEX J. ARMING, Member

  
A. L. PORTER, Jr., Member Secretary



esr/

Case 4054

Heard 2-26-69

Rec. 3-3-69.

Grant Amerada approval of  
their request for a NSL of  
an oil well to be called Langley  
Matter Woodworth unit # 203 to be  
drilled 2220/S, 1250/W lines ~~see~~ 28  
24S - 37E.

Grant administrative approval  
for future oil or injection wells  
to be located not closer to the  
unit ~~to~~ outer boundary than 330'  
or closer than 10' to any ~~well~~  
legal subdivision boundary within  
the Langley Matter Woodworth unit.  
~~unit boundary~~.

Sheld W

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. 3780  
Order No. R-3407-A

APPLICATION OF AMERADA PETROLEUM  
CORPORATION FOR AN AMENDMENT TO  
ORDER NO. R-3407, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 5, 1968,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 18th day of June, 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 by Order No. R-3407, the applicant, Amerada Petro-  
leum Corporation, was authorized to expand its Langlie Mattix  
Woolworth Unit Waterflood Project in the Langlie-Mattix Pool  
by the injection of water into the Seven Rivers-Queen formation  
through an injection well to be drilled at an unorthodox location  
75 feet from the North line and 2635 feet from the West line of  
Section 27, Township 24 South, Range 37 East, NMPM, Lea County,  
New Mexico.

(3) That the applicant now seeks the amendment to Order  
No. R-3407 to permit the drilling of the water injection well  
at a point 75 feet from the North line and 2540 feet from the  
West line of said Section 27.

-2-

CASE No. 3780

Order No. R-3407-A

(4) That the previously authorized location of said well at a point 75 feet from the North line and 2635 feet from the West line of said Section 27 would fall on a graded county road.

(5) That approval of the subject application will not violate correlative rights and will permit an efficient water injection pattern to be maintained, thereby preventing waste.

IT IS THEREFORE ORDERED:

(1) That Order (1) of Order No. R-3407 is hereby amended to read in its entirety as follows:

"(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to expand its Langlie Mattix Woolworth Unit Waterflood Project in the Langlie-Mattix Pool by the injection of water into the Seven Rivers-Queen formation through an injection well to be drilled at an unorthodox location 75 feet from the North line and 2540 feet from the West line of Section 27, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico."

(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

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

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

S E A L

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. 2497  
Order No. R-2197

APPLICATION OF AMERADA PETROLEUM  
CORPORATION FOR A WATERFLOOD PRO-  
JECT, LANGLEIE-MATTIX POOL, LEA  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 27, 1962, at Santa Fe, New Mexico, before Elvis A. Utz, 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 March, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Amerada Petroleum Corporation, seeks permission to institute the Langlie Mattix Woolworth Waterflood Project in the Langlie-Mattix Pool in Sections 27, 28, 33 and 34, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, with the injection of water initially to be through six wells located in said sections.

(3) That the producing wells in the project area have reached an advanced stage of depletion and should be classified as "stripper" wells.

(4) That the proposed waterflood project should be authorized and should be governed by the provisions of Rule 701 of the Commission Rules and Regulations, including those provisions regarding allocation of allowables.

(5) That inasmuch as the bottom of the casing in some of the injection wells is set above the Langlie-Mattix Pool, the



operator should conduct flow tests to determine into which formation the water is being injected through said wells and should adequately case off the well bores in the event the water is being injected into any formation above the Langlie-Mattix Pool.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to institute the Langlie Mattix Woolworth Waterflood Project in the Langlie-Mattix Pool in Sections 27, 28, 33 and 34, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, with the injection of water initially to be through the following-described wells:

Amerada-R. J. Johnston Well No. 1 located in  
the NW/4 SW/4 of Section 27;

Amerada-R. J. Johnston Well No. 4 located in  
the SE/4 SW/4 of Section 27;

Humble-John Williams Well No. 4 located in  
the NW/4 NW/4 of Section 34;

Schermerhorn-Woolworth Well No. 2 located in  
the SE/4 NE/4 of Section 28;

Schermerhorn-Woolworth Well No. 7 located in  
the SE/4 SE/4 of Section 28 and

a proposed well to be drilled in the NW/4 SE/4  
of Section 28;

all in said Township and Range.

PROVIDED HOWEVER, That the operator shall conduct flow tests to determine into which formations the water is being injected through the injection wells in which the bottom of the casing is set above the Langlie-Mattix Pool.

PROVIDED FURTHER, That the operator shall adequately case off the well bores in the event the water is being injected into any formation above the Langlie-Mattix Pool.

(2) That the operator of the waterflood herein authorized shall be governed by Rule 701 of the Commission Rules and Regulations, including those provisions regarding allocation of allowables.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in

-3-

CASE No. 2497  
Order No. R-2197

accordance with Rule 704 and Rule 1119 of the Commission Rules and Regulations.

(4) 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 herein-above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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

SEAL

esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 26, 1969

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

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4052: Application of Mobil Oil Corporation for a pool creation and discovery allowable, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the Lightcap-Pennsylvanian Pool in Chaves County, New Mexico, comprising the NE/4 NE/4 of Section 7, Township 8 South, Range 30 East, and for the assignment of approximately 35,650 barrels of oil discovery allowable to the discovery well, its C. L. O'Brien Well No. 1 located in Unit A of said Section 7.

CASE 4036: (Continued from the February 5, 1969, Examiner Hearing) Application of Mobil Oil Corporation for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its C. L. O'Brien Well No. 1 located in Unit A of Section 7, Township 8 South, Range 30 East, Chaves County, New Mexico, to produce oil from an undesignated Pennsylvanian oil pool and the Lightcap (Devonian) Pool through parallel strings of tubing.

CASE 4053: Application of El Paso Products Company for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Gallegos-Gallup Pool, San Juan County, New Mexico, including provisions for the classification of oil and gas wells, 80-acre spacing for oil wells, and 320-acre spacing for gas wells.

CASE 4054: Application of Amerada Petroleum Corporation for an unorthodox oil well location and amendment to Order No. R-2197, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 1250 feet from the West line and 2220 feet from the South line of Section 28, Township 24 South, Range 37 East, in its Langlie Mattix Woolworth Unit Waterflood Project, Langlie-Mattix Pool, Lea County, New Mexico. Applicant also seeks the amendment of Order No. R-2197, which order authorized said waterflood project, to establish an administrative procedure whereby said project could be expanded to include additional lands and injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern without the necessity of showing well response.

- CASE 4055: Application of Albert Gackle for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3290 feet to 3620 feet in his George Etz Well No. 3 located in Unit N of Section 27, Township 23 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.
- CASE 4056: Application of Albert Gackle for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower Queen formation in the perforated interval from approximately 3642 feet to 3699 feet in his Sinclair "A" State Well No. 5 located in Unit I of Section 23, Township 23 South, Range 36 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 4057: Application of Charles B. Read for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Quail-Queen Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.
- CASE 4058: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3874 feet to 3951 feet in their State Well No. 2 located in Unit K of Section 16, Township 21 South, Range 34 East, West Wilson Pool, Lea County, New Mexico.
- CASE 4059: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Delaware formation in the open-hole interval from approximately 4030 feet to 4158 feet in their Eddy "AGA" State Well No. 2 located 660 feet from the North line and 1650 feet from the West line of Section 36, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.
- CASE 4060: Application of Sidney Lanier 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 formations in the open-hole interval from approximately 3402 feet to 3650 feet in his I. B. Ogg "A" Well No. 5 located in Unit J of Section 35, Township 24 South,

(Case 4060 continued)

Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.

CASE 4061: Application of Millard Deck Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers and Queen formations in the open-hole interval from approximately 3752 feet to 3872 feet in its Atha Well No. 1 located in Unit M of Section 31, Township 21 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.

CASE 4062: Application of Kersey & Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen formation in the perforated interval from approximately 1835 feet to 1870 feet in the Bass Well No. 3 located in Unit F of Section 12, Township 19 South, Range 28 East, East Millman Queen-Grayburg Pool, Eddy County, New Mexico.

CASE 4063: Application of Kerr-McGee Corporation for the creation of a new gas pool and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of gas from the Morrow formation by its Nix Well No. 1 located in Unit L of Section 11, Township 19 South, Range 26 East, Eddy County, New Mexico, and for the promulgation of special pool rules therefor, including a provision for 640-acre spacing.

CASE 4064: Application of Atlantic Richfield Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4207 feet to 4286 feet in its Tucker Well No. 4 located in Unit O of Section 23, Township 7 South, Range 32 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 4065: Application of Humble Oil & Refining Company for an unorthodox oil well location and reclassification of a water well to an oil well, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have its New Mexico State "S" Water Source Well No. 4 (CP-427), located at an unorthodox oil well location 650 feet from the West line and 175 feet from the

South line of Section 2, Township 22 South, Range 37 East, Lea County, New Mexico, reclassified as an oil well for the production of oil an undesignated San Andres Oil Pool and authority to produce same as an oil well.

CASE 4066: Application of Humble Oil & Refining Company for the consolidation of two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard 320-acre gas proration units into one standard 640-acre unit comprising all of Section 26, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its New Mexico State "G" Wells Nos. 2 and 4 located in Units P and G, respectively, of said Section 26. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.

CASE 4067: Application of Benson-Montin-Greer Drilling Corporation for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the La Plata-Gallup Pool, San Juan County, New Mexico, including a provision for 160-acre spacing and proration units. Applicant further requests that said special rules provide that the unit allowable for a 160-acre unit in said pool be allocated on the basis of four times the normal unit allowable for Northwest New Mexico, and that no credit be given for depth factors. Applicant further requests that said special rules be limited in their application to the exterior boundaries of the La Plata-Mancos Unit Area.

CASE 4068: Application of Martin Yates III for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in its Yates & Hanson McCord Well No. 1 located in Unit E of Section 22, Township 23 South, Range 26 East, Dark Canyon Field, Eddy County, New Mexico. Applicant further seeks a procedure whereby its Cordie King Well No. 2 located in Unit K of said Section 22 may be approved for the disposal of salt water without the requirement of notice and hearing.

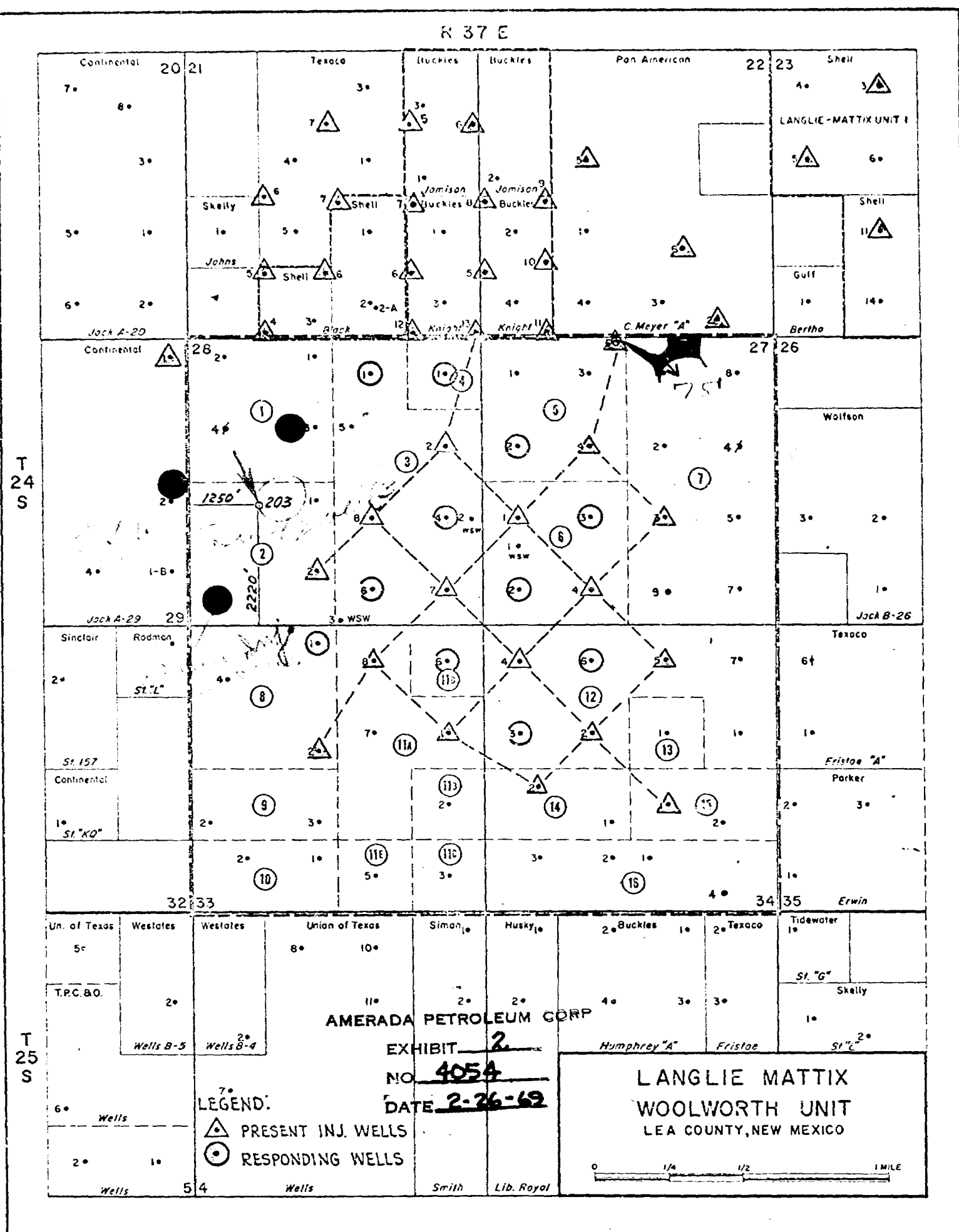
Examiner Hearing  
February 26, 1969

CASE 4045: (Continued from the February 5, 1969 Examiner Hearing)  
Application of H & S Oil Company for an amendment to Order No. R-3357, as amended by Order No. R-3357-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3357, as amended by Order No. R-3357-A, which order authorized the H & S West Artesia Unit Unit Waterflood Project. Applicant proposes to substitute the Roach Drilling Company-Leonard Well No. 18 located in Unit D of Section 17 as a water injection well in said project in lieu of the Cities Service-Mell Well No. 17 located in Unit M of Section 8, both in Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico.

CASE 4069: Application of Union Oil Company of California for the creation of a new pool, assignment of discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks the creation of a new Devonian oil pool for its Midway State Well No. 1 located in Unit F of Section 12, Township 17 South, Range 36 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 57,380 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 80-acre proration units.

CASE 4070: Application of C. E. LaRue and B. N. Muncy, Jr., for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the salt and Yates formations in the open-hole interval from approximately 1254 feet to 3000 feet in the La Rue-Muncy John "B" Well No. 2 located in Unit A of Section 35, Township 17, South, Range 32, East, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.





AMERADA PETROLEUM CORPORATION

P. O. BOX 2040

TULSA, OKLAHOMA 74102

LEGAL DEPARTMENT

February 3, 1969

69 FEB 4 PM 1 00

*Epa 4054*

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

Attention: Mr. A. L. Porter, Jr.  
State Geologist

Re: Applications for Hearing

Gentlemen:

Enclosed, in triplicate, are Amerada's applications for approval of an unorthodox well location and establishment of certain administrative procedures in the Langlie Mattix Woolworth Unit, Lea County, New Mexico. Please set these matters for hearing at the earliest possible hearing date.

Yours very truly,

*Thomas W. Lynch*  
THOMAS W. LYNCH

TWL:ac  
Enclosures

DOCKET MAILED

Date 2-13-69

69 FEB 4 PM 1 00

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

APPLICATION OF AMERADA PETROLEUM )  
CORPORATION FOR AN AMENDMENT TO ORDER )  
NOS. R-2197 AND R-2206 TO ESTABLISH )  
AN ADMINISTRATIVE PROCEDURE FOR AP- )  
PROVING THE CONVERSION OF WELLS TO )  
INJECTION WELLS AND APPROVING UNORTHODOX )  
LOCATIONS FOR PRODUCING WELLS AND INJEC- )  
TION WELLS IN THE LANGLIE MATTIX WOOL- )  
WORTH UNIT, LANGLIE-MATTIX POOL, LEA )  
COUNTY, NEW MEXICO. )

CASE NO. 4054  
~~4044~~

APPLICATION

Applicant Amerada Petroleum Corporation states that:

1. Applicant operates the Langlie Mattix Woolworth Unit in the Langlie-Mattix Pool, Lea County, New Mexico. By Order No. R-2197, dated March 14, 1962, this Commission approved a waterflood project which became the Langlie Mattix Woolworth Unit when the unit agreement was approved by Order No. R-2206, dated April 4, 1962.

2. In order to improve the efficiency of the Langlie Mattix Woolworth Unit and to expedite the making of cooperative injection agreements between the Unit and other operators in the Langlie-Mattix Pool, this Commission should amend the above-described orders by establishing an administrative procedure for (a) obtaining approval of the conversion of wells to injection wells in the Unit without the necessity of showing substantial response under Statewide Rule 701-E-5; and (b) obtaining approval of unorthodox locations for producing wells and injection wells in the Unit.

Applicant therefore requests that this matter be set for hearing, that notice thereof be given as required by law, and that upon conclusion of such hearing an order be entered granting this application.

AMERADA PETROLEUM CORPORATION

By

Thomas W. Lynch

Thomas W. Lynch, Attorney  
P. O. Box 2040  
Tulsa, Oklahoma 74102

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

APPLICATION OF AMERADA PETROLEUM)  
CORPORATION FOR APPROVAL OF AN )  
UNORTHODOX LOCATION FOR AN OIL )  
WELL IN ITS LANGLEIE MATTIX )  
WOOLWORTH UNIT IN THE LANGLEIE- )  
MATTIX POOL, LEA COUNTY, NEW )  
MEXICO. )

4054  
~~4044~~  
CASE NO. \_\_\_\_\_

APPLICATION

Applicant Amerada Petroleum Corporation states that:

1. Applicant operates the Langlie Mattix Woolworth Unit in the Langlie-Mattix Pool, Lea County, New Mexico. The Unit was approved by Commission Order No. 2206, dated April 4, 1962.

2. In order to bring the well density of the unit closer to the well density permitted by Statewide Rule 104, and in order to produce oil and gas which might not otherwise be recoverable, Applicant proposes to drill a well to the Langlie-Mattix Pool at the following unorthodox location:

1250 feet from the West line and 2220 feet from  
the South line of Section 28-24S-37E,  
Lea County, New Mexico.

3. To prevent waste and protect correlative rights, this Commission should approve the unorthodox location above described.

Applicant therefore requests that this matter be set for hearing, that notice thereof be given as required by law, and that upon conclusion of such hearing an order be entered granting this application.

AMERADA PETROLEUM CORPORATION

By

Thomas W. Lynch  
Thomas W. Lynch, Attorney  
P. O. Box 2040  
Tulsa, Oklahoma 74102

DRAFT

GM H/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. 4054

Order No. R- 3704

APPLICATION OF AMERADA PETROLEUM  
CORPORATION FOR AN UNORTHODOX OIL  
WELL LOCATION AND AMENDMENT TO  
ORDER NO. R-2197, LEA COUNTY, NEW  
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 26, 1969,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 16th day of March, 1969, 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, Amerada Petroleum Corporation, is  
the operator of the Langlie Mattix Woolworth Unit Waterflood  
Project in its Langlie Mattix Woolworth Unit Area, Langlie-Mattix  
Pool, Lea County, New Mexico, approved by Commission Order No.  
R-2197 and expanded by Orders Nos. R-3407, <sup>as amended by</sup> and R-3407-A.

(3) That the applicant seeks authority to drill a producing  
oil well in said waterflood project area at an unorthodox loca-  
tion 2220 feet from the South line and 1250 feet from the West  
line of Section 28, Township 24 South, Range 37 East, NMPM, Lea  
County, New Mexico.

(4) That the proposed unorthodox location is necessary  
to complete an efficient oil producing pattern.

*the amendment of said Order No. R-2197  
to provide for the*

(5) That the applicant further seeks the establishment of an administrative procedure whereby the Secretary-Director of the Commission may authorize expansion of said Langlie Mattix Woolworth Unit Waterflood Project to include additional lands and injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern without the necessity of showing well response.

*aforsaid amendment*  
(6) That approval of the ~~subject application~~ will afford the applicant the opportunity to produce its just and equitable share of the oil and gas in the Langlie-Mattix Pool, and will

otherwise prevent waste and protect correlative rights, *provided said producing wells and injection wells are drilled no closer than 330 feet to the outer boundary of said Langlie-Mattix Woolworth Unit nor closer than 10 feet to any*

(7) That the Langlie Mattix Woolworth Unit Waterflood Project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to drill a producing oil well in the Langlie Mattix Woolworth Unit Waterflood Project in its Langlie Mattix Woolworth Unit Area, Langlie-Mattix Pool, at an unorthodox location 2220 feet from the South line and 1250 feet from the West line of Section 28, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

" (2) That the Langlie Mattix Woolworth Unit Waterflood Project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission

*(2) That Order (2) of Order No. R-2197 is hereby amended to read in its entirety as follows:*

*greater greater within or adjacent to said boundary.*

may approve expansion of the Langlie Mattix Woolworth Unit Waterflood Project to include such additional lands and injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern,

provided that the application therefor has been filed in accordance with Rule 701 B of the Commission Rules and Regulations, and provided further, that a copy of the application has been sent to all offset operators, <sup>if any there be,</sup> and no such operator has objected within 15 days. The showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection."

(3) That monthly progress reports of the Langlie Mattix Woolworth Unit Waterflood Project shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(3) (4) 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.

provided said wells are drilled  
no closer than 330 feet to the water  
boundary of said unit Langlie - Mattix  
Woolworth Unit now shown than 10  
feet to any present or future section or subdivision  
within boundary of the