

CASE 2799: Application of PHILLIPS
for a waterflood project, Lea
County New Mex

CASE No.
2799

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 24, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Phillips Petroleum Company for
a waterflood project, Lea County, New Mexico.
Applicant, in the above-styled cause, seeks
authority to institute a waterflood project
by the injection of water into the Grayburg-
San Andres formations, Maljamar Pool, Lea
County, New Mexico, through one well in Unit
J, Section 2, Township 17 South, Range 32
East.

CASE 2799

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2799.

MR. DURRETT: Application of Phillips Petroleum Company
for a waterflood project, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa
Fe, representing the Applicant. We have one witness I would
like to have sworn, please.

(Witness sworn.)

DON L. CZIRR

called as a witness, having been first duly sworn on oath, testi-
fied as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:



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Q Would you state your name, please?

A Don Czirr. C-z-i-r-r is the last name.

Q Mr. Czirr, have you testified before the Oil Conservation Commission and made your qualifications as an engineer a matter of record?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir, they are.

Q (By Mr. Kellahin) Are you familiar with the application of Phillips Petroleum Company in Case 2799?

A Yes, sir, I am.

(Whereupon, Applicant's Exhibit No. A, 1 through 8, marked for identification.)

Q Will you state briefly what Phillips proposes in this application?

A Phillips proposes to operate their Kennedy State lease as a waterflood project under the Commission's Rule 701; to also inject water into the No. 1 Well; and to request the transfer of allowable privileges as provided under the waterflood Rule 701.

Q In other words, you are proposing to operate strictly under the provisions of Rule 701, is that correct?

A That is correct.

Q Referring to what has been marked as Exhibit No. 1, will you discuss the information shown on that exhibit, please?



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A Exhibit No. 1 is a map of a portion of the Maljamar Pool area of Lea County, New Mexico, and shows the Phillips Kennedy State lease in green. The arrow shows the Phillips Kennedy State Well No. 1 which we propose to convert to water injection. The Exhibit 1 was submitted with the application and shows all the wells within a radius of two miles of the proposed injection well. It also shows that the Phillips Kennedy State lease is on the extreme north and on the edge of the Maljamar Grayburg-San Andres Oil Field.

Q Are all the wells within this two-mile radius producing from the Grayburg-San Andres?

A Yes, sir, with the exception as noted, the Pan American North Maljamar Deep Unit Well No. 1.

Q Would you refer to Exhibit No. 2 in Exhibit A and discuss the information shown on that exhibit?

A Exhibit No. 2 is a larger scale map also of a portion of the Maljamar Pool in and around the Phillips Kennedy State lease. Again, the 80-acre Phillips Kennedy State lease is designated as green, and the proposed water input well, that is the No. 1 Well, is designated by the arrow.

In addition, by color codes, the other waterflood operations in this immediate vicinity are designated. Immediately south is the Boller-Nichols waterflood area, and it can be seen from the triangles which represent water input wells that the conversion of the No. 1 Phillips Kennedy State Well to water



input will complete an injection pattern that is now in existence on the Boller-Nichols project, and has been approved by the Commission. This completion of this pattern will increase the efficiency of the waterflood operations in this area, and in my judgment will result in increased recovery.

Q Will the interest of all the operators be protected by this injection as proposed by Phillips?

A Yes, sir, it will. There are no immediately offset San Andres wells to the north. This would benefit the offset operator, the Boller-Nichols flood, in that it completes their pattern as well as increases the water injection in the vicinity of the Phillips Kennedy State lease.

Q Now referring to Exhibit No. 3 to Exhibit A, will you discuss the information shown on that exhibit, please?

A Exhibit No. 3 is a schematic sketch of the oil producing rates and water injection rates for wells in the vicinity of the Phillips Kennedy State lease. It shows the two wells on the Phillips Kennedy State lease and the injection and producing wells on the Boller-Nichols waterflood project. It has been included to show that the waterflood operations in this area are successful, that they do result in a stimulation of producing rates and an increase in recovery.

It also shows that the conversion of the Phillips Kennedy State No. 1 Well as proposed will improve the pattern efficiency of the waterflood in this area.

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Q This is the same basic information that was presented to the Commission in a prior hearing, was it not?

A That's correct. It has been up-dated for the purpose of this hearing is the only change. One other thing, it will be noted that our No. 2 Well, which will be the producing well under this proposal, is receiving stimulation from waterflood operations in this area at the moment, so there is no question but that this 80-acre tract can be successfully waterflooded.

Q That was the well for which Phillips had received an increase in allowable because of stimulation, is that right?

A That is correct. Immediately north of the Kennedy State lease, the permeability is gradually reduced and, based on our experience, further extension of the field in that direction is not commercially possible.

At the same time fluid is allowed to migrate, so we had previously asked for a capacity allowable for what is now designated as our Phillips Kennedy State No. 2 for the sole purpose of preventing the migration of fluid from the waterflood area into the border area and non-commercial area of the Maljamar Pool. Now the application we are making today is in response partially to suggestions by the Commission to see if there wasn't some way that we could unitize these tracts, or to convert certain wells to improve the efficiency; and the only means we have found, after considerable exploring of the subject, has been to acquire the 40-acre tract designated as the Phillips Kennedy



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State No. 1 now. It was formerly the Kennedy State, and we think that that does do what is necessary in the area to reduce this migration.

It will allow us to produce the 42 barrels currently assigned to the Phillips Kennedy State No. 2, plus the 42-barrel waterflood credit from the injection well; and we think this additional allowable will aid in the prevention of migration of fluid out of this area into this border and non-commercial portion of the field. So in that regard, we think that it will be certainly in the interest of conservation.

Q Referring to what has been marked as Exhibit No. 4 in Exhibit A, will you identify that as an exhibit and discuss the information pertaining to it?

A Exhibit No. 4, Cross Section A-A¹, is a north-south cross section that shows the correlation of the Grayburg-San Andres producing zone in these wells, and shows that the producing well is the well designated here under its old name, Mexico "A" No. 2, now Kennedy State Well No. 2, is identical with the wells being operated on the Boller-Nichols waterflood project to the south. It is one common source of supply and in communication, and should respond to waterflood operations just like it has in fact done.

Q Referring to Exhibit 5 of Exhibit A, will you discuss that?

A Exhibit 5 is an east-west cross section submitted for



the same reason, designated as B-B¹. It was submitted to show the correlation between the now Phillips Kennedy State Well No. 2, which will be the producing well, and the Phillips Kennedy State Well No. 1, which is the proposed injection well. We believe the correlation, just as in the north-south cross section, is good through here. These zones are common to both wells and should respond to waterflooding.

Q Now referring to Exhibit 6 of Exhibit A, would you identify that exhibit and discuss the information shown on it?

A This exhibit is a decline curve of the Phillips Kennedy State lease and shows that the primary rate of production has declined to near the economic limit, and that waterflooding is required to maintain income from this property over an extended length of time, and also shows that waterflood response has in fact been received. This increase in production is a result of the production from the Phillips Kennedy State Well No. 2, and in the absence of the increased allowable which we obtained, or the approval of extending this waterflood project to where we could have a higher allowable for No. 2 Well, this oil would be expected to migrate out of the commercial limits of the field.

Q At the time what was then Mexico Well No. 2, now the Kennedy State No. 2, received its response, had the Kennedy well received a response, the one that you propose to now use for injection?

A No, sir, it has not received any response whatsoever.



Q Now referring to Exhibit 7 of Exhibit A, would you discuss the information shown on that exhibit?

A Exhibit No. 7 is the Phillips Kennedy State lease injection well data form and shows the well location, the fact that the classification is in the Maljamar Grayburg-San Andres Field, and shows the injection interval as being through the particular pay that is 4,000 foot to 4,420 foot; injection will be into open hole. We tentatively plan to use Ogallala water as our injection water, and it will be purchased water as opposed to water developed on our lease.

Q What is your source?

A It will be from the adjacent operator, Waterflood Associates are operating the Boller-Nichols project. We are in the process of negotiating to obtain water from that operator to inject into the Phillips Kennedy State No. 1.

Also this exhibit shows the casing programs. It will be noted the 9-5/8ths inch casing was set at 1200 foot and cemented with 600 sacks of cement. This is well through any fresh water strata, and the 600 sacks of cement are more than the calculated requirements to circulate cement.

This well was not drilled by Phillips, so I couldn't testify to the fact that it was circulated, but a 9-5/8ths 12-inch hole annulus would be about 3-1/2 linear foot per sack of cement or some 2,142 foot of fill; taking the larger size hole of 12-3/4 inch and the annulus between it and 9-5/8 inch casing would be



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1572 linear foot of fill, so under any reasonable hole diameter estimate there, the 9-5/8ths inch is in fact cemented, it would be anticipated to be cemented back to the surface and all strata of fresh water are protected.

It also shows the fact that we have production casing string set at 4,000 foot and cemented with 1,000 sacks of cement.

Q The exhibit shows 100.

A Excuse me, please correct that to 100. I misread my own numbers.

Q Did you calculate the top of the cement for the 5-1/2 inch string?

A From our experience in the area, we would anticipate about 400 foot of cement or in there back to around 3600 foot.

Q Is that in your opinion adequate to protect all producing formations in the area?

A Yes, sir.

Q And all fresh water?

A Yes.

Q What's the condition of the casing here?

A We have not inspected the casing. We anticipate from our experience in the general area that the condition will be good. In addition, of course, we have an annulus between our 5-1/2 inch casing and our 9-5/8ths. There is no real question but this injection water couldn't go into the fresh water strata,



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but in any event, just in our normal waterflood operations and in trying to control our injection, we will maintain an observation of the pressure on the annulus between the 9-5/8ths and the 5-1/2 and should the production casing fail, we will of necessity correct it and we will be able to observe any failure that might occur.

Q How do you propose to inject, through the casing or through the tubing?

A We propose to inject down the casing. This is being done on the offset Boller-Nichols project successfully, and we anticipate that we will be able to successfully inject in that manner, also.

Q Is the water you are using fresh water?

A Yes, sir.

Q You have no danger of corrosion to the water supply, is that correct?

A We do not anticipate any particular abnormal corrosion problem, no, sir.

Q Do you have any estimate as to the amount of water the well will take?

A The only estimate we could make would be by judging the Boller-Nichols experience to the south. Our injection rates will be designed to cooperate across this common boundary to where a near equal amount of water will be injected to keep the production stabilized in the area.



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Q Would that fall within the 100 to 500 barrels per day figure that you have given?

A That's our present target.

Q That would be adjusted to fix the injection program across the lease line?

A Yes, sir.

Q Do you anticipate that the well will take it on vacuum or expect that you will have to pressure it?

A We expect that we will have to inject under pressure.

Q Do you know what pressure you are talking about?

A The pressures to the south have ranged in the order of 1500 to 2,000 pounds. We might expect pressures that high.

Q Has this program -- did you submit your proposal to the Office of the State Engineer?

A Yes, sir. I have included a copy of our letter to the State Engineer which transmitted a copy of our application to the New Mexico Oil Conservation Commission.

Q And that is your Exhibit No. 8 in your Exhibit A?

A That is correct.

Q Do you have anything further to add, Mr. Czirr?

A I believe not. At this time we can say that our well is capable of producing the top waterflood allowable rate without water production, we are not at this moment producing water from our Kennedy State Well No. 2.

Q Were Exhibits 1 through 8 of Exhibit A prepared by you



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or under your supervision?

A Yes, sir.

MR. KELLAHIN: At this time we would like to offer in evidence the exhibits contained in Exhibit A, being Nos. 1 through 8.

MR. UTZ: Exhibit A in eight parts will be accepted into the record of this case.

(Whereupon, Applicant's Exhibit A, Nos. 1 through 8, admitted in evidence.)

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

CROSS EXAMINATION

BY MR. UTZ:

Q How old is the casing in the No. 1 Well?

A The well was completed in 1949.

Q What kind of a test do you intend to make on this casing to be sure it will hold your 1500 pounds pressure?

A In all probability we will, by running injection profile surveys, but insofar as the test would be concerned, we will have an automatic test by injecting into the well. Should any pressure loss be encountered on our 5-1/2 - 9-5/8 casing annulus, then we would be obligated just to either run a packer or repair the casing as a matter of normal operations.

Q In most cases, I will advise you that the Commission usually, where injection is through casing, requires a 2,000



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pound test on the casing prior to injection. If the casing doesn't stand this, then the alternative is to repair the casing or check it out below the packer. Would you be willing to run this 2,000 pound test prior to injection?

A If it is a requirement with the Commission, we can assure you we will be willing to.

Q On your production graphs in the Exhibit A --

A It's Exhibit 3.

Q -- in the latter part, or the middle of 1962, your Kennedy State No. 2 shows considerable response, is that true?

A That's correct.

Q The flood to the south. Do you have any explanation why your Kennedy State No. 1 didn't show any response?

A My opinion would be probably, or my opinion is that probably what happened is that our No. 2 Well is directly offset by injection well. The Phillips Kennedy State No. 1 Well is immediately offset to the south by a producing well. I think that would be the most logical explanation as to why it had not responded similarly to the No. 2 Well.

Q At any rate, you don't feel there's any question but what the communication between the producing zones of your 1 and 2 wells exists?

A Not at all, no, sir.

MR. UTZ: Any other questions of the witness? The witness may be excused.



(Witness excused.)

MR. UTZ: Any other statements in this case? The case will be taken under advisement.

* * *

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, ADA DEARNLEY, a Notary Public 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.

WITNESS my Hand and Seal this 10th day of May, 1963.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 27799 heard by me on Apr. 24, 1963.
[Signature] Examiner
New Mexico Oil Conservation Commission

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OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

May 10, 1963

C
O
P
Y

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1713
Santa Fe, New Mexico

Dear Sir:

Enclosed herewith is Commission Order No. R-2484 entered in Case No. 2799, approving the Phillips Petroleum Company Maljamar Waterflood Project.

According to our calculations, when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 84 barrels per day.

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.

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

-2-

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

ALP/DSW/ir

Enclosure

cc: New Mexico Oil Conservation Commission
Post Office Box 2045
Hobbs, New Mexico

C
O
P
Y

GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

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

P. O. BOX 871
SANTA FE

John Bell

19

Gentlemen:

Enclosed herewith is Commission Order No. R-*2484* entered in Case No. *2799* approving the *Phillips Petroleum Company Maljamar* Water Flood Project.

According to our calculations, when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is *84* barrels per day.

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,

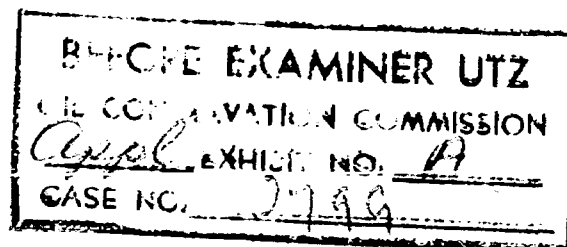
A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

PHILLIPS PETROLEUM COMPANY'S

Application For Authority To Initiate A Waterflood Project
On Its Kennedy State Lease, Maljamar Pool, Lea County, New
Mexico

Case No. 2799

April 24, 1963



SUMMARY OF EXHIBITS

- Exhibit No. 1 - A map of that portion of the Maljamar Pool in the vicinity of Phillips' Kennedy State proposed waterflood area showing all wells within a radius of two miles of the proposed injection well.
- Exhibit No. 2 - A plat of the Maljamar area showing the waterflood projects and the injection wells in the vicinity of the proposed Phillips' Kennedy State waterflood project.
- Exhibit No. 3 - A skematic sketch showing the oil producing rates and water injection rates of wells in the vicinity of the proposed Phillips' Kennedy State waterflood project.
- Exhibit No. 4 - A north-south cross-section through the Phillips' Kennedy State Lease.
- Exhibit No. 5 - An east-west cross-section through the Phillips' Kennedy State Lease.
- Exhibit No. 6 - Phillips' Kennedy State Lease production curve.
- Exhibit No. 7 - Phillips' Kennedy State Lease injection well data.
- Exhibit No. 8 - Copy of a letter to the State Engineer transmitting a copy of Phillips' application to the New Mexico Oil Conservation Commission for permission to inject water into the Phillips' Kennedy State Well No. 1 and for designation of the lease as a waterflood project area.

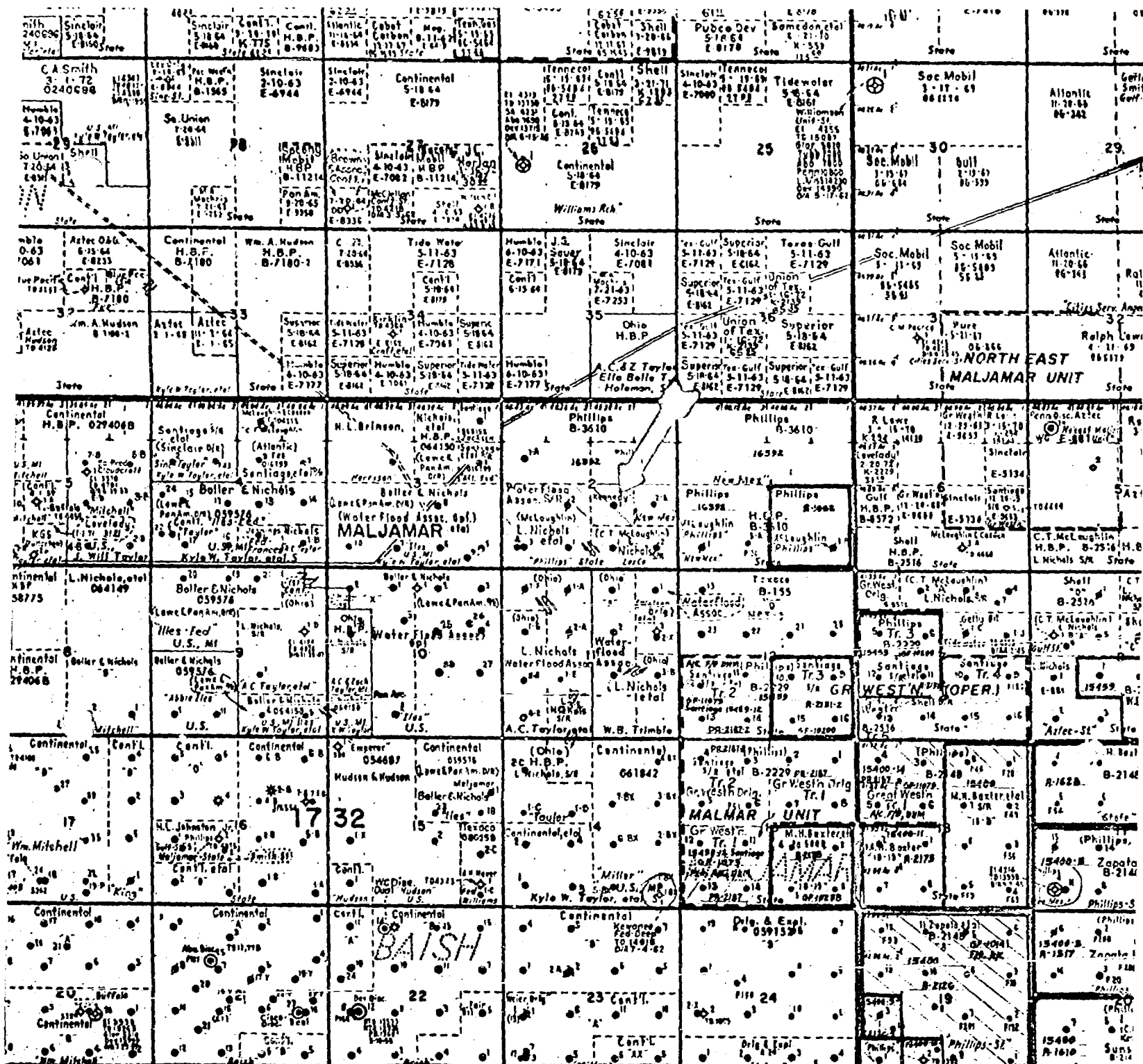
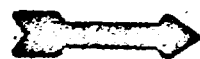


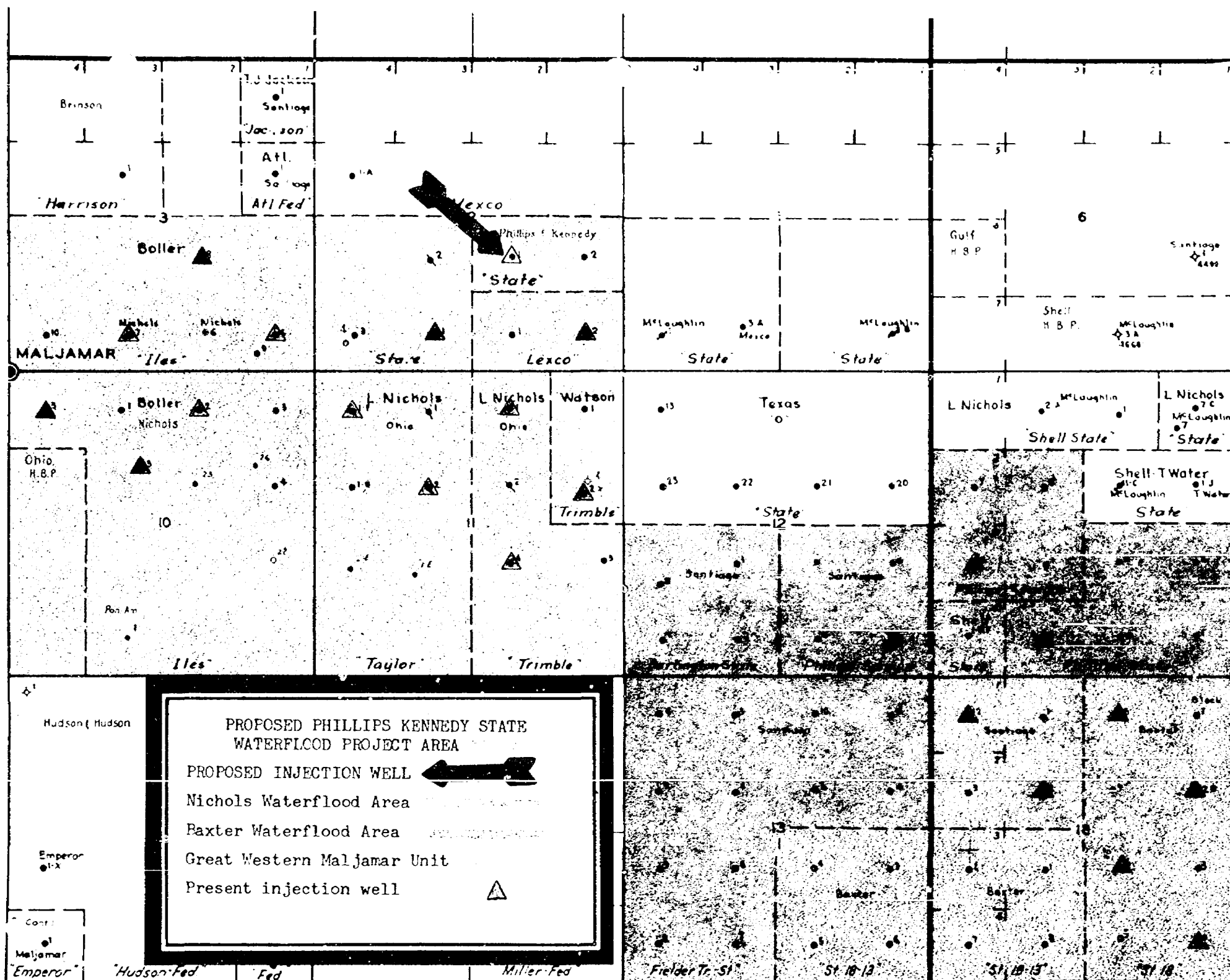
Exhibit No. 1

MAP OF THAT PORTION OF THE MALJAMAR POOL IN THE VICINITY OF
PHILLIPS' KENNEDY STATE PROPOSED WATERFLOOD AREA
N/2, SE/4, SECTION 2, 17S-32E, LEA COUNTY, N.M.



Proposed injection well Phillips' Kennedy State No. 1, Unit J of
Section 2, 17S-32E.

All wells within a radius of two miles of the proposed water injection well produce from the Grayburg San Andres zone except the Pan American North Maljamar Deep Unit Well No. 1, Unit W, Section 10, 17S-32E which produces from the Wolfcamp 10,834 ft. to 10,876 ft.



PHILLIPS PETROLEUM COMPANY

EAST-WEST CROSS SECTION

B- B'
MALJAMAR FIELD

17 S - 32 E

LEA CO., N.M.

GEOLOGY BY: J. C. VAUGHN

B

WEST

B'

EAST

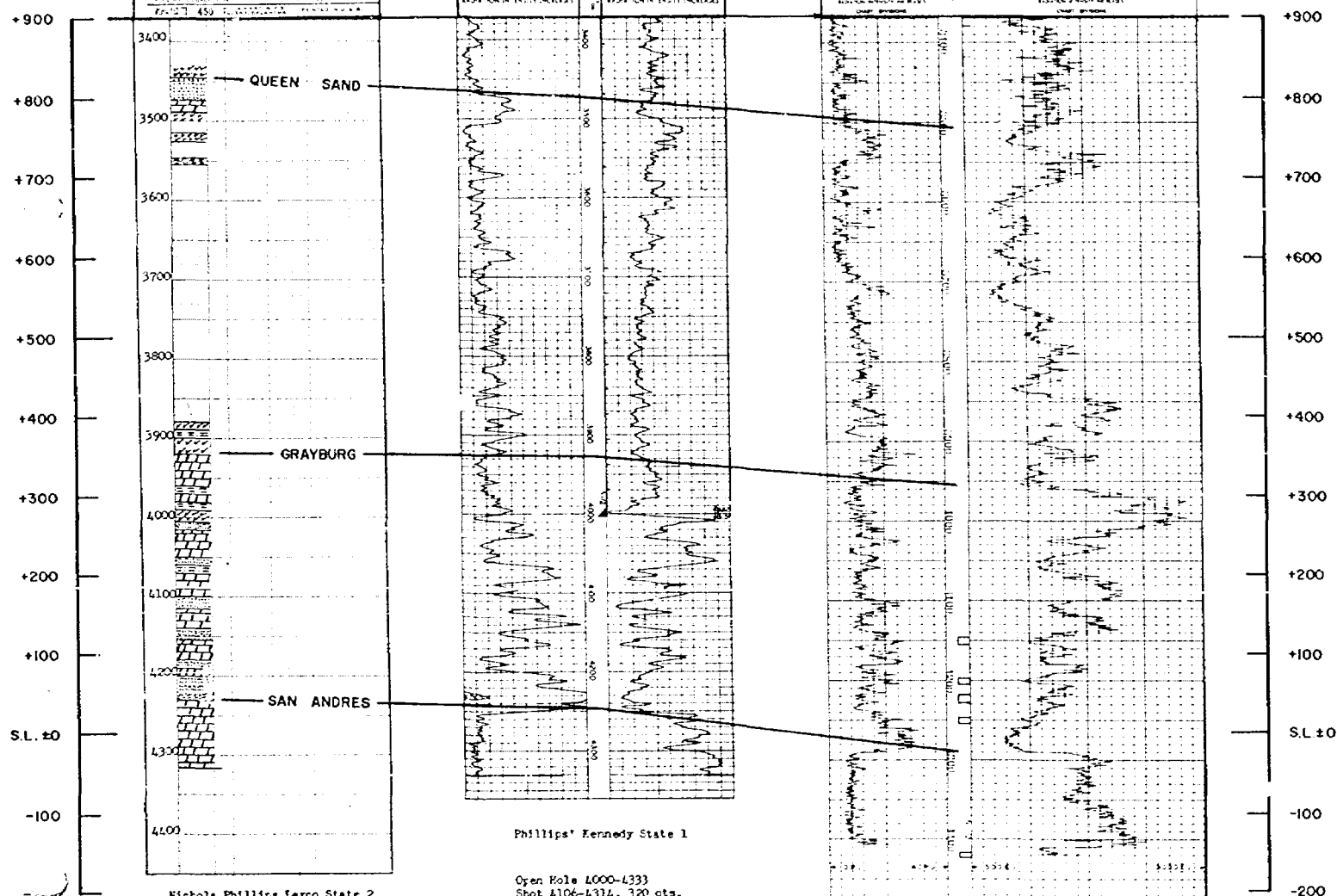
STATE	New Mexico
COUNTY	Lea
TOWNSHIP	17S
RANGE	32E
SECTION	4
WELL NO.	4274
DATE	11/29/45
COMPLETED	3/25/46
PRODUCER	4274
CASING RECORD	8 5/8" - 1230-50 7-3470-set 5 1/2" - 4063-100 2" - 4270

LANE RADIOACTIVITY LOG COMPACT	
WELL NO.	4274
DATE	11/29/45
LOCATION	Maljamar Field
LOGGERS	J. C. Vaughn
WELL DEPTH	4270
WELL TYPE	Oil
WELL STATUS	Producing
WELL HISTORY	Open Hole 4000-4333 Shot 4106-4314, 320 qts. 1FP 58 BCFD, Grty. 36° Comp 4-22-49

Nuclear Log	
WELL NO.	4274
DATE	11/29/45
LOCATION	Maljamar Field
LOGGERS	J. C. Vaughn
WELL DEPTH	4270
WELL TYPE	Oil
WELL STATUS	Producing
WELL HISTORY	Open Hole 4000-4333 Shot 4106-4314, 320 qts. 1FP 58 BCFD, Grty. 36° Comp 4-22-49

SCALE
100'
300'

ANHYDRITE
SHALE
SAND
DOLOMITE



Nichols Phillips Leno State 2

Open Hole 4083-4315
Shot 4180-4315, 130 qts.
1FP 43 BCFD, Grty 36°
Comp 3-25-46

Phillips' Kennedy State 1

Open Hole 4000-4333
Shot 4106-4314, 320 qts.
1FP 58 BCFD, Grty. 36°
Comp 4-22-49

Phillips' Kennedy State 2

Perf 4118-22, 4146-55, 4192-1204, 4219-29
4248-53
Frac 30,000 + 40,000 #
1FP 66 BCFD, Grty 34°
Comp 6-27-60

INJECTION WELL DATA - PHILLIPS KENNEDY STATE
LEASE

Waterflood Project Area Application

Well Name Phillips Kennedy State Well No. 1
Well Location Unit "J", 1980' FSL and FEL, Section
2-17S-32E, Lea County, New Mexico
Field Classification. Maljamar (Grayburg San Andres)
Surface Casing 9-5/8" set at 1200' and cemented
with 600 sacks
Production Casing 5-1/2" set at 4000' and cemented
with 100 sacks
Injection Interval Open hole 4000' to 4420'
Zone of Injection Grayburg-San Andres
Injection Fluid Water
Type of Injection System Closed
Water Source (tentative). 250' Ogallala water well NE/4,
NE/4, NE/4, Section 1-17S-32E,
Lea County, New Mexico
Injection Rates 100 to 500 barrels of water per day



PHILLIPS PETROLEUM COMPANY
3rd Floor Permian Building
Midland, Texas

April 5, 1963

Re: Kennedy State Lease, Maljamar Field,
Lea County, New Mexico
Waterflood Application

State Engineer
P. O. Box 1079
Santa Fe, New Mexico

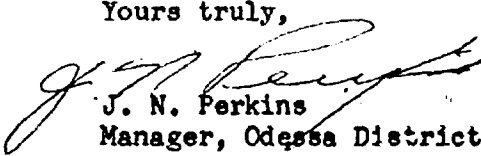
Dear Sir:

The attached copy of Phillips' application to the New Mexico Oil Conservation Commission for permission to convert its Kennedy State Well No. 1, Unit J, Section 2, 17S-32E, Lea County, New Mexico, to water injection and for designation of the N/2 of the SE/4 of the Section as a waterflood project area is being furnished in compliance with Memorandum No. 5-58.

The arrangements for a water supply for this project have not been completed, but it is anticipated that water will be purchased. The source of water under consideration is a 250 ft. Ogallala sand well located in the NE/4, NE/4, NE/4 of Section 1, 17S-32E, Lea County, New Mexico.

We will furnish your office confirmation of the water supply source and a water analysis as soon as the supply has been firmly established.

Yours truly,


J. N. Perkins
Manager, Odessa District
Production Division

DLC/jw

EXHIBIT NO.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 24, 1963

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, as alternate examiner:

- CASE 2792: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Everett D. Burgett and all other interested parties to appear and show cause why the Meyers Union Well No. 1, located in Unit I of Section 11, Township 23 South, Range 27 East, and the Richardson-Bass State Well No. 1, located in Unit H of Section 5, Township 25 South, Range 28 East, both in Eddy County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2793: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Everett D. Burgett and all other interested parties to appear and show cause why the Pure State Wells Nos. 1, 2, 3, and 7, located in Units J and O of Section 15, and the Magnolia State Well No. 1, located in Unit E of Section 14, all in Township 21 South, Range 27 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2794: Application of Ambassador Oil Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Grayburg-Jackson Unit Area comprising 1600 acres of Federal and State lands in Township 17 South, Range 30 East, Eddy County, New Mexico.
- CASE 2795: Application of Marathon Oil Company for a multiple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing the triple completion (conventional) of its State McCallister Well No. 5, located in Unit M of Section 25, Township 17 South, Range 34 East, Lea County, New Mexico, to produce oil from the North Vacuum Abo, the Vacuum-Wolfcamp, and the Vacuum-Devonian Pools through parallel strings of tubing.
- CASE 2796: Application of Texaco Inc. for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its L. R. Manning Federal "B" Well No. 4 at an unorthodox location 330 feet from the South line and 1491 feet from the East line of Section 28, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

- CASE 2797: Application of Texaco Inc. for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 360-acre non-standard gas proration unit comprising the SW/4, N/2 SE/4, and SE/4 SE/4 of Section 31, and the S/2 SW/4 of Section 32, Township 23 South, Range 37 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its E. E. Blinebry "A" Well No. 2, located in Unit I of said Section 31.
- CASE 2798: Application of Pan American Petroleum Corporation for a salt water disposal dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Navajo "C" Well No. 1, located in Unit D of Section 1, Township 29 North, Range 17 West, San Juan County, New Mexico, to produce hydrocarbons from the Pennsylvanian-Paradox formation and to dispose of produced salt water through the intermediate casing annulus into the open hole interval from 2300 feet to approximately 5000 feet.
- CASE 2784: (Continued from April 10, 1963 Examiner Hearing)
Application of Continental Oil Company for authority to conduct interference tests, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to shut-in all wells in the Oil Center-Blinebry Pool, Lea County, New Mexico, for approximately 7 days to achieve stabilization, to leave one well shut-in for a period not to exceed 90 days to observe pressure behavior, and to transfer the allowables and make-up underproduction from the shut-in wells.
- CASE 2799: Application of Phillips Petroleum Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formations, Maljamar Pool, Lea County, New Mexico, through one well in Unit J, Section 2, Township 17 South, Range 32 East.
- CASE 2800: Application of Olen F. Featherstone for a special allowable, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing the assignment of a special allowable to his Valentine Well No. 1, located in Unit M of Section 27, Township 16 South, Range 31 East, Eddy County, New Mexico. Said well offsets and has received a response from Newmont's East Square Lake Waterflood Project.

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Docket No. 13-63

CASE 2801:

Application of Socony Mobil Oil Company, Inc. for a multiple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (conventional) of its State Bridges Well No. 96, located in Unit H of Section 26, Township 17 South, Range 34 East, Lea County, New Mexico, to produce oil from the Vacuum-Pennsylvanian, Vacuum-Wolfcamp, and North Vacuum-Abo Pools through parallel strings of tubing.

~~Case~~
Case 2776

Case 2789

Heard 4-24-63

Rec. 4-25-63

1. Grant Phillips request for a waterflood to be operated in conformance with Rule 701.
2. Project area shall be N/2 SE/4 sec. 2-175-32 E.
3. The injection well shall be the Phillips Kennedy Lt. #1, 1980/5 & E lines sec. 2.
4. Prior to injecting water the casing of the #1 well shall be tested to 2000 psi. Use order in case 2776 as a guide for this testing requirement.

Thos H. Vlf.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

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

May 3, 1963

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1713
Santa Fe, New Mexico

Re: Case No. 2799
Order No. R-2484
Applicant:
Phillips Petroleum Company

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

OTHER

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 2799
Order No. R-2484

APPLICATION OF PHILLIPS PETROLEUM
COMPANY FOR A WATERFLOOD PROJECT,
MALJAMAR 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 April 24, 1963, 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 8th day of May, 1963, 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, Phillips Petroleum Company, seeks permission to institute a waterflood project in the Maljamar Pool by the injection of water into the Grayburg-San Andres formations through its Kennedy State Well No. 1, located 1980 feet from the South line and 1980 feet from the East line of Section 2, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

(3) That the proposed project area consists of the N/2 SE/4 of Section 2, Township 17 South, Range 32 East, NMPM, Lea 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.

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CASE No. 2799

Order No. R-2484

(5) That the proposed waterflood project is in the interest of conservation and should result in recovery of otherwise unrecoverable oil.

(6) That the applicant proposes to inject water down 5 1/2-inch production casing into an open hole interval at approximately 4000 to 4420 feet after testing the production casing to withstand 2000 pounds pressure psi to assure adequate protection of producing formations in the area.

(7) That if the casing will not withstand 2000 pounds pressure psi, injection should be accomplished through internally plastic-coated tubing installed in a packer set above the injection interval.

(8) That the subject application should be approved and the project should be governed by the provisions of Rule 701 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Phillips Petroleum Company, is hereby authorized to institute a waterflood project in the Maljamar Pool by the injection of water into the Grayburg-San Andres formations through its Kennedy State Well No. 1, located 1980 feet from the South line and 1980 feet from the East line of Section 2, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That the project area shall consist of the N/2 SE/4 of Section 2, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

(3) That the applicant shall test the casing in the subject well prior to injection and notify the Commission's Hobbs District Office of the results of said test; that if the casing will not withstand 2000 pounds pressure psi, injection shall be accomplished through internally plastic-coated tubing installed in a packet set above the injection interval.

(4) That the subject waterflood project shall be governed by the provisions of Rule 701 of the Commission Rules and Regulations, including the allowable provisions thereof, and including the provisions with respect to expansion of the waterflood project.

(5) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

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CASE No. 2799

Order No. R-2484

(6) 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


Jack M. Campbell
JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

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

esr/



PHILLIPS PETROLEUM COMPANY
Exploration & Production Department

P. O. Box 2105
Hobbs, New Mexico

June 4, 1963

In re: Kennedy State Lease, Maljamar Pool, Lea County, New Mexico -
Request for Waterflood Allowable

New Mexico Oil Conservation Commission
P. O. Box 2045
Hobbs, New Mexico

Gentlemen:

As directed in the Commission's Order No. R-2484, we wish to advise the following information concerning the two unit Kennedy State Lease, Maljamar Pool, waterflood project.

This waterflood project was started effective June 3, 1963 by injection of water down casing into the Kennedy State Well No. 1.

Prior to injection of water the casing in Well No. 1 was tested with 2500 psi pressure. The pressure was held for thirty minutes with no pressure loss.

Monthly progress reports of this authorized waterflood project will be submitted to the Commission in accordance with Rules 704 and 1119.

The Kennedy State Well No. 2 has received waterflood stimulation and is capable of producing in excess of the maximum allowable for this waterflood project. We therefore ask that a supplement to the oil proration schedule be issued setting the maximum allowable of 84 barrels per day for this project.

Very truly yours,

W. C. Rodgers
Area Superintendent

MGC:wma

cc: New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

BEFORE THE OIL CONSERVATION COMMISSION OF
THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
PHILLIPS PETROLEUM COMPANY FOR
APPROVAL OF A WATERFLOOD PROJECT
CONSISTING OF THE N/2 OF SE/4 OF
SECTION 2, TOWNSHIP 17 SOUTH,
RANGE 32 EAST, MALJAMAR (GRAYBURG-
SAN ANDRES) POOL, LEA COUNTY, NEW
MEXICO, AND TO CONVERT THE PHILLIPS
KENNEDY-STATE WELL NO. 1 THEREON TO
A WATER INJECTION WELL.

CASE NO. 1111

APPLICATION

NOW COMES applicant PHILLIPS PETROLEUM COMPANY, a Delaware corpora-
tion with offices in Midland, Texas, and makes application for approval of a
waterflood project consisting of the N/2 of SE/4 of Section 2, Township 17
South, Range 32 East, Maljamar (Grayburg-San Andres) Pool, Lea County, New
Mexico, and to convert the Phillips Kennedy-State Well No. 1 thereon to a
water injection well, and in support thereof shows:

1.

Applicant is the owner and operator of an oil and gas lease cover-
ing the North Half (N/2) of Southeast Quarter (SE/4) of Section 2, Township
17 South, Range 32 East, Lea County, New Mexico, now known and designated as
the "Phillips Kennedy-State Lease," located within the horizontal and verti-
cal limits of the Maljamar (Grayburg-San Andres) Oil Pool.

2.

Applicant proposes to waterflood the said Phillips Kennedy-State
Lease for secondary recovery by injecting fresh water through a closed system
into the Grayburg and San Andres Formations in the Phillips Kennedy-State Well
No. 1, located 1,980 feet from the South and East lines (Unit "J") of Section
2, Township 17 South, Range 32 East, Lea County, New Mexico; and for such
purpose applicant requests authority to convert said well to a water injection
well. Water will be injected in anticipated volumes of 100 to 500 barrels per
day into the open hole between 4,000 and 4,420 feet.

Applicant proposes to operate the waterflood project under the pro-
visions of Rule 701, including the allowable provisions thereof and the pro-
visions with respect to expansion of the waterflood project.

DOCKET MAILED

Date 4/11/63

3.

Applicant proposes to obtain water for such waterflood project from the 250-foot Ogallala Sand from a source well located in NE/4 NE/4 NE/4 of Section 1, Township 17 South, Range 32 East, or by other purchase of Ogallala water in the same general vicinity.

4.

Attached hereto and made a part hereof are the following Exhibits in support of this application:

Exhibit "1" -- Plat showing the location of the proposed injection well, and the location of all other wells and the formation from which such wells are producing and have produced and indicating the lessees, within a radius of two miles from the proposed injection well.

Exhibit "2" -- Log of said proposed injection well.

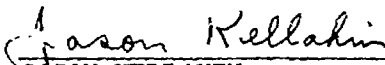
Exhibit "3" -- Description of the casing program of the proposed injection well.

Exhibit "4" -- Copy of letter sent to the State Engineer in compliance with Memorandum No. 5-58, dated January 31, 1958.

5.

Applicant would show that this application and the requested waterflood project is in the interest of conservation and should result in recovery of otherwise unrecoverable oil.

WHEREFORE, applicant PHILLIPS PETROLEUM COMPANY respectfully requests that a public hearing be held before an Examiner in Santa Fe, New Mexico, on this application and that upon said hearing said Waterflood Project and the conversion of the said Phillips Kennedy-State Well No. 1 to a water injection well be approved and authority to waterflood the Grayburg and San Andres Formations underlying said Project area be granted by the Oil Conservation Commission.


JASON KELLAHIN
Kellahin and Fox
Post Office Box 1713
Santa Fe, New Mexico

CARL W. JONES
Post Office Box 791
Midland, Texas

Attorneys for Applicant,
Phillips Petroleum Company

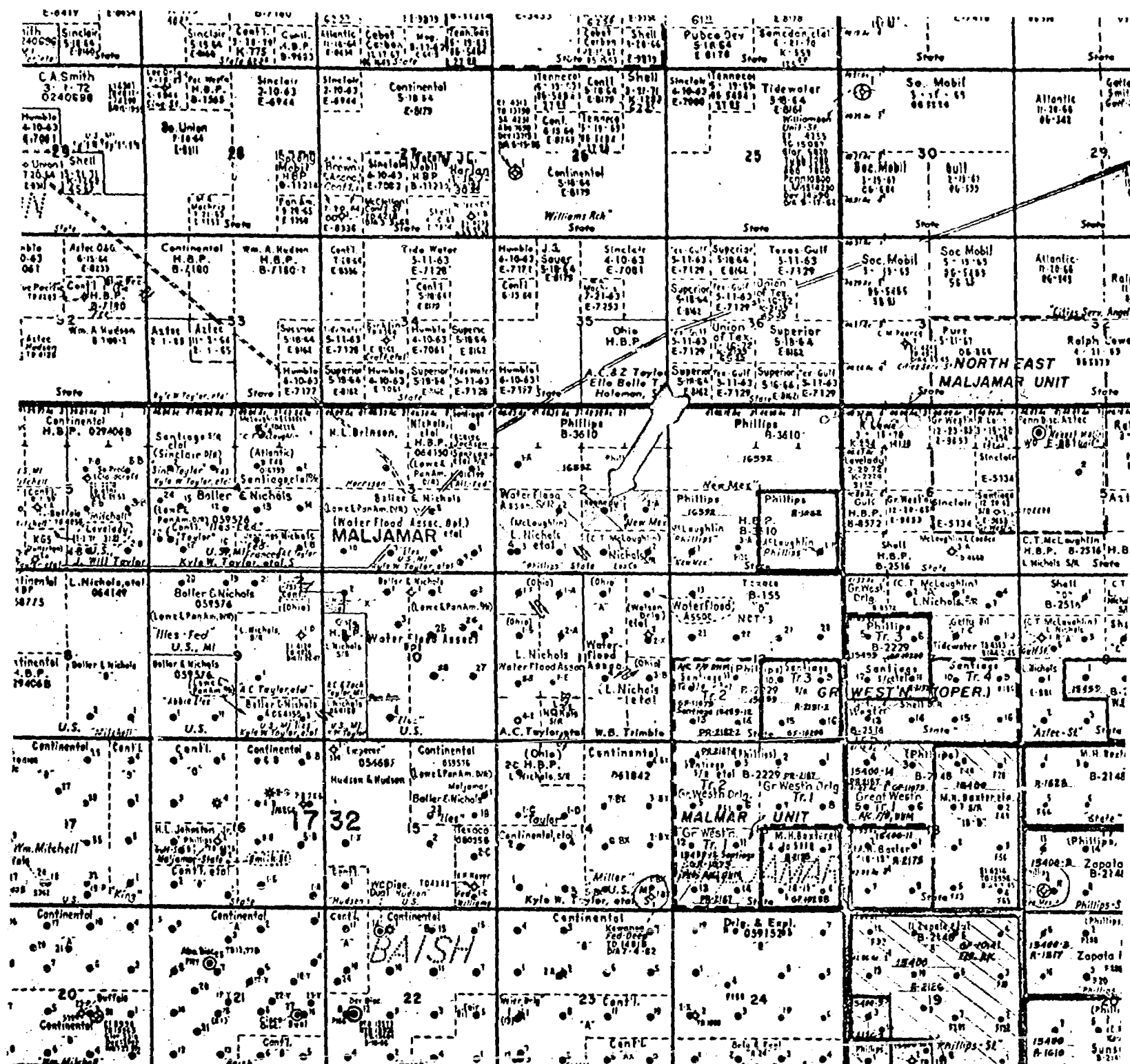
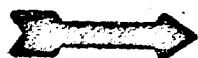


EXHIBIT NO. 1

MAP OF THAT PORTION OF THE MALJAMAR POOL IN THE VICINITY OF
PHILLIPS' KENNEDY STATE PROPOSED WATERFLOOD AREA
N/2, SE/4, SECTION 2, 17S-32E, LEA COUNTY, N.M.



Proposed injection well Phillips' Kennedy State No. 1, Unit J of
Section 2, 17S-32E.

All wells within a radius of two miles of the proposed water injection well produce from the Grayburg San Andres zone except the Pan American North Maljamar Deep Unit Well No. 1, Unit N, Section 10, 17S-32E which produces from the Wolfcamp 10,824 ft. to 10,876 ft.

INJECTION WELL DATA - PHILLIPS KENNEDY STATE
LEASE

Waterflood Project Area Application

Well Name Phillips Kennedy State Well No. 1
Well Location Unit "J", 1980' FSL and FEL, Sec.
2-17S-32E, Lea County, New Mexico
Field Classification. Maljamar (Grayburg San Andres)
Surface Casing. 9-5/8" set at 1200' and cemented
with 600 sacks
Production Casing 5-1/2" set at 4000' and cemented
with 100 sacks
Injection Interval. Open hole 4000' to 4420'
Zone of Injection Grayburg-San Andres
Injection Fluid Water
Type of Injection System. Closed
Water Source (tentative 250' Ogallala water well NE/4,
NE/4, NE/4, Section 1-17S-32E,
Lea County, New Mexico
Injection Rates 100 to 500 barrels of water per
day



PHILLIPS PETROLEUM COMPANY
3rd Floor Permian Building
Midland, Texas

April 5, 1963

Re: Kennedy State Lease, Maljamar Field,
Lea County, New Mexico
Waterflood Application

State Engineer
P. O. Box 1079
Santa Fe, New Mexico

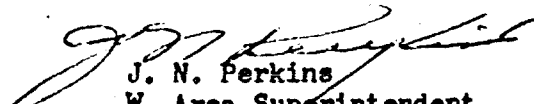
Dear Sir:

The attached copy of Phillips' application to the New Mexico Oil Conservation Commission for permission to convert its Kennedy State Well No. 1, Unit J, Section 2, 17S-32E, Lea County, New Mexico, to water injection and for designation of the N/2 of the SE/4 of the Section as a waterflood project area is being furnished in compliance with Memorandum No. 5-58.

The arrangements for a water supply for this project have not been completed, but it is anticipated that water will be purchased. The source of water under consideration is a 250 ft. Ogallala sand well located in the NE/4, NE/4, NE/4 of Section 1, 17S-32E, Lea County, New Mexico.

We will furnish your office confirmation of the water supply source and a water analysis as soon as the supply has been firmly established.

Yours truly,


J. N. Perkins
W. Area Superintendent
Production Division

DLC/jw

EXHIBIT NO. 4

Don Cjirr

Mutual 33311 Midland

Application of Phillips
Petroleum Company for
a Waterflood Project.
Lea County, New Mexico

Applicant, in the above-styled
Cause, seeks authority to institute
a waterflood project by the injection
of water into the ~~the~~ Grayburg-
San Andrea Formations, Maljamar
Pool, Lea County, New Mexico, through
one well in Unit I, Section 2,
Township 17 South, Range 32 East,

Don Cjirr

OK
DRAFT

JMD/esr
April 29, 1963

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. 2799

Order No. R- 2484

APPLICATION OF PHILLIPS PETROLEUM
COMPANY FOR A WATERFLOOD PROJECT,
MALJAMAR 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
April 24, 1963, 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 _____ day of May, 1963, 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, Phillips Petroleum Company, seeks
permission to institute a waterflood project in the Maljamar Pool
by the injection of water into the Grayburg-San Andres formations
through its Kennedy State Well No. 1, located 1980 feet from the
South line and 1980 feet from the East line of Section 2, Town-
ship 17 South, Range 32 East, NMPM, Lea County, New Mexico.

(3) That the proposed project area consists of the N/2 SE/4
of Section 2, Township 17 South, Range 32 East, NMPM, Lea 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 waterflood project is in the interest of conservation and should result in recovery of otherwise unrecoverable oil.

(6) That the applicant proposes to inject water down 5 1/2-inch production casing into an open hole interval at approximately 4000 to ⁴⁴²⁰~~4020~~ feet ^{after testing} ~~and to test~~ the production casing to withstand 2000 pounds pressure psi to assure adequate protection of producing formations in the area.

OK
(7) That if the casing will not withstand 2000 pounds pressure psi, injection should be accomplished through internally plastic-coated tubing installed in a packer set above the injection interval.

(8) That the subject application should be approved and the project should be governed by the provisions of Rule 701 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Phillips Petroleum Company, is hereby authorized to institute a waterflood project in the Maljamar Pool by the injection of water into the Grayburg-San Andres formations through its Kennedy State Well No. 1, located 1980 feet from the South line and 1980 feet from the East line of Section 2, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

(2) That the project area shall consist of the N/2 SE/4 of Section 2, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

OK
(3) That the applicant shall test the casing in the subject well prior to injection and notify the Commission's Hobbs District Office of the results of said test; that if the casing will not withstand 2000 pounds pressure psi, injection shall be accomplished through internally plastic-coated tubing installed in a packer set above the injection interval.

(4) That the subject waterflood project shall be governed by the provisions of Rule 701 of the Commission Rules and

Regulations, including the allowable provisions thereof, and including the provisions with respect to expansion of the waterflood project.

(5) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

(6) 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

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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