

Case Number  
4610

Application

Transcripts

Small Exhibits

ETC.

dearnley-meier reporting service, inc.

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

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6491 • ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Roswell, New Mexico

October 13, 1971  
Examiner Hearing

IN THE MATTER OF:

Application of Jack L.  
McClellan for a  
waterflood project, Chaves  
County, New Mexico.

Case No. 4610

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

1 MR. NUTTER: We will call next Case No. 4610.

2 MR. HATCH: Case 4610. Application of Jack L.  
3 McClellan for a waterflood project, Chaves County, New Mexico.

4 MR. KELLAHIN: If the Examiner please, Jason  
5 Kellahin, Kellahin and Fox appearing for the applicant. We  
6 have the same witness, Mr. Johnson.

7 Let the record show that he has been sworn and  
8 qualified in this case.

9 MR. NUTTER: The witness is qualified and still under  
10 oath.

11 JOE JOHNSON  
12 having been previously duly sworn, according to law, upon his  
13 oath testified as follows:

14 DIRECT EXAMINATION

15 BY MR. KELLAHIN:

16 Q Mr. Johnson, are you familiar with the application of  
17 Jack L. McClellan in Case 4610?

18 A Yes, I am.

19 Q What is proposed by the applicants in this case?

20 A We propose waterflood permit or permit to begin waterflood  
21 work in the Sulimar field.

22 (Whereupon, Applicant's Exhibits 1 through 18 were  
23 marked for identification.)

24 Q Mr. Johnson, in connection with the preparation for the  
25 waterflood project, did you do any work for Mr. McClellan?

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- 1 A Yes. We analyzed the prospect of waterflood and prepared
- 2 a report concerning the flood ability of the interval.
- 3 Q And it is on the base of this report that this waterflood
- 4 project was initiated; is that correct?
- 5 A This is correct.
- 6 Q Now, referring to what has been marked as the Applicant's
- 7 Exhibit No. 1, would you identify it?
- 8 A This is a location map indicating the location in the
- 9 Sulimar field located approximately 50 miles southeast of
- 10 Roswell, Chaves County.
- 11 Q And Exhibit No. 2, would you identify that exhibit, please?
- 12 A Exhibit No. 2 are the well records indicating the
- 13 completion date, elevation, total depth of the casing
- 14 information, top of the Queen, sub-sea data, net effective
- 15 pay, completion interval, producing zone, treatment,
- 16 initial potential on each of the wells in the Sulimar
- 17 field.
- 18 Q It also shows the present status of the wells in some
- 19 instances; is that correct?
- 20 A Yes.
- 21 Q Other than those that are shown as shut-in or dry holed
- 22 are they presently producing?
- 23 A Yes.
- 24 Q Now, referring to what has been marked as Exhibit No. 3
- 25 would you identify that exhibit?

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1 A These are the most recent well tests obtained on the  
2 wells in the Sulimar field. It also indicates on the right  
3 hand side the status of the wells at the present time.

4 You will note that in the Pubco and City Service that  
5 we did not have exact well tests. These are estimated  
6 tests.

7 Q Now, does the 80-acre production indicate that the Sulimar  
8 has reached an advanced stage of completion?

9 A Yes, sir. We are estimating at this time that we  
10 probably are in the range of about ninety percent complete  
11 primary reserves.

12 Q And it is suitable at this point for secondary recovery?

13 A Yes, sir.

14 Q It is at the stripper stage?

15 A Yes, sir.

16 Q Is there anything else you want to add in connection with  
17 that exhibit?

18 A No, sir.

19 Q Now, Exhibit No. 4, would you identify that exhibit?

20 A This is the map indicating the -- it is a geologic  
21 structure map contoured on top of the Queen sand in the  
22 Sulimar field.

23 Q It also indicates the gas-oil and water-oil context based  
24 on completion information and has the water-oil content or  
25 the determining factor; is that correct?

- 1 A Yes, sir, along the -- along the east side, and we have  
2 the sand pinch-out line along the north side. We also  
3 have the same pinch-out position along the west side with  
4 the small gas cap located along the west side.
- 5 Q And to the south what is it?
- 6 A To the south we have combination of the same pinch-out as  
7 well as the water.
- 8 Q That is reflected by the dry holes which are on the south  
9 and east sides?
- 10 A Yes, sir.
- 11 Q Also to the north? Now, referring to what has been marked  
12 as Exhibit No. 5 would you identify that exhibit?
- 13 A This is an isopach map contoured on the estimated net  
14 effective oil pay, thickness in the Sulimar field. This  
15 also indicates the pinch-out position that we are  
16 previously referring to.
- 17 Q And this substantially encloses the area that you propose  
18 to flood, does it not?
- 19 A Yes, sir, it does.
- 20 Q Is it relatively close producing zone in there?
- 21 A To the best of our knowledge it is closed.
- 22 Q And it would be suitable then for effective control of the  
23 flood?
- 24 A Yes, sir.
- 25 Q Now, referring to Exhibit No. 6 would you identify that

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1 exhibit?

2 A Exhibit 6 is the oil production history in each of the  
3 leases and in the Sulimar field from the beginning of  
4 production through July 1971.

5 It indicates that the total recovery to date from  
6 the field has been 516,812 barrels.

7 Q Do you have any estimate on what could be anticipated from  
8 secondary recovery?

9 A We are estimating similar production.

10 Q Same production?

11 A Approximately the same, roughly 5 to 600,000 barrels.

12 Q And is that oil? Would it not otherwise be recovered if  
13 you did not institute a waterflood project?

14 A Yes, sir.

15 Q Now, referring to Exhibit No. 7 would you identify that  
16 exhibit, please?

17 A Exhibit 7 is a reservoir performance curve. This is the  
18 total field and indicates the primary performance up  
19 through July 1971.

20 It is anticipated that this decline which is being  
21 shown now would continue down to an economic limit and  
22 would reach a primary economic limit probably in about a  
23 two to three year point through the installation of the  
24 flood which we anticipate to be in the immediate future.

25 We assume we will have a decline in production as

1 shown on the extension followed by eleven and then an  
2 increase in production with the performance of the flood  
3 shown on the dashed line.

4 Q And then that reflects the ultimate secondary recovery to  
5 which you have just testified?

6 A Yes, sir.

7 Q Now, we come to a series of exhibits, Nos. 8 through 15  
8 inclusive. Would you discuss those as a group, please?

9 A These are reservoir performance curves of each of the  
10 leases involved in the Sulimar-Queen field indicating the  
11 primary production to date, the declined trend now being  
12 indicated or estimated of the future decline that would be  
13 indicated on the property without a flood, and the primary  
14 economic limit which would be reached.

15 All of these are virtually the same type of curve and  
16 marked with oil production barrels per month on the left  
17 side as opposed to time.

18 Q And this does not reflect any effect of the waterflood  
19 project in your estimation?

20 A No.

21 Q Now, is it shown on your Exhibit No. 7?

22 A This is correct.

23 Q Is there any particular one you wish to point out any  
24 information on, Mr. Johnson?

25 A No. They are all about the same.



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- 1 Q They are all about the same?
- 2 A Yes.
- 3 Q Now, does this include all of the leases which would be
- 4 affected by your proposed waterflood project?
- 5 A Yes, it does.
- 6 Q And it shows the performance to date?
- 7 A Yes, sir.
- 8 Q On all of those individual lease bases?
- 9 A Yes, sir.
- 10 Q Now, referring to what has been marked as Exhibit No. 16
- 11 would you identify that exhibit?
- 12 A Exhibit 16 is a plat of the waterflood area or the Sulimar
- 13 field, also has been marked as the proposed well to be
- 14 converted to injection status in triangle symbol, the outer
- 15 edge limit reservoir is also shown on the plat.
- 16 It basically indicates the wells that we anticipate
- 17 converting to injection status with this flood.
- 18 Q And have you found it necessary to change your flood
- 19 pattern from that originally proposed on a plat which was
- 20 filed with the Oil Commission in connection with this case?
- 21 A Yes. We have changed it recently.
- 22 Q And in your opinion will a waterflood injection pattern as
- 23 proposed here be an effective waterflood project?
- 24 A Yes, sir, it will.
- 25 Q And would you control it by raising injection in the various

1 wells rather than by necessarily the location of the  
2 injection wells?

3 A Yes, sir. It would have to be controlled in order to center  
4 on producing wells.

5 Q And that would be done by the injection rate?

6 A Yes, sir.

7 Q Now, would you refer please to Exhibit No. 17?

8 A This is the legal description of each of the leases along  
9 with the lease name and lease number.

10 Q And does that cover include all of the area then that would  
11 be affected by the waterflood project?

12 A Yes, sir.

13 Q Now, referring to Exhibit No. 18 would you identify that  
14 exhibit?

15 A This exhibit is the proposed injection wells that were  
16 shown on the previous map exhibit. It also gives their  
17 unit position, section, township and range.

18 MR. NUTTER: 16 is the map, 17 is this list of leases,  
19 then this would be 18?

20 THE WITNESS: Yes, sir.

21 MR. KELLAHIN: This is the last exhibit.

22 MR. NUTTER: Okay.

23 Q (Mr. Kellahin continuing) And that gives the unit location  
24 of each of the proposed injection wells?

25 A Yes, sir, it does.

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1 Q Now, Mr. Johnson, this originally was projected as a unit  
2 area with a waterflood project, was it not?  
3 A Yes, sir, it was.  
4 Q And it caused some problems in connection with the unit  
5 agreement. What action have you determined to take at this  
6 time?  
7 A We will go to a cooperative type project.  
8 Q And do all of the working interest owners agree that this  
9 can be done in this phase?  
10 A Yes, sir.  
11 Q Have you received approval from the United States Geological  
12 Survey?  
13 A Yes, sir.  
14 Q And they agree to a proposed waterflood project?  
15 A Yes, sir.  
16 Q On a cooperative base?  
17 A Yes.  
18 Q Were Exhibits 1 through 18 prepared by you or under your  
19 supervision?  
20 A Yes, sir, they were.  
21 MR. KELLAHIN: At this time I will move the  
22 introduction of Exhibits 1 through 18.  
23 MR. NUTTER: Applicant's Exhibits 1 through 18 will be  
24 admitted in evidence.  
25 Q (Mr. Kellahin continuing) Do you have anything further to

1 add, Mr. Johnson?

2 A No, sir, I do not.

3 MR. KELLAHIN: That completes our presentation.

4 CROSS-EXAMINATION

5 BY MR. NUTTER:

6 Q Mr. Johnson, since you have had to abandon the unit consent  
7 here at least for the time being and proposed to launch  
8 this waterflood project on a cooperative base, it would  
9 appear that all of the injection wells on your Exhibit  
10 No. 16 belong to Mr. McClellan with the exception of one  
11 City Service injection well on the far south end of the  
12 pool; is this correct?

13 A Yes, sir, this is correct.

14 Q So in effect, what you are doing here today is acting as  
15 agent for City Service requesting authority for them to  
16 operate a waterflood project?

17 MR. KELLAHIN: If the Examiner please, I think we will  
18 work out a designation of operator arrangement of some kind  
19 where it will all be operated under one control. At least this  
20 is what we anticipate pending unitization.

21 THE WITNESS: Yes, sir.

22 Q So you are seeking authority today for City Service under  
23 a water injection well on their federal lease?

24 A That's right.

25 Q And then of course Mr. McClellan is asking for water

1 injection on various of his leases in the Pubco lease in  
2 the north half of the northeast quarter of Section 26 which  
3 I believe is all of the acreage that they have in the area.

4 A Yes, sir.

5 MR. KELLAHIN: That's correct.

6 Q That is productive?

7 A Yes, sir.

8 Q That doesn't have an injection well on it?

9 A No, sir. Here again we anticipate making an agreement with  
10 City Service and Pubco along with the McClellan group so  
11 that the cooperative type flood can be conducted.

12 Q Well, until such time as the acreage has been unitized or  
13 until such time as some sort of cooperative arrangements  
14 have been made and evidence thereof submitted to the  
15 Commission, each one of these leases would have to stand  
16 on its own as far as allowable is concerned and not --

17 A Yes, sir, of course.

18 MR. KELLAHIN: If the Examiner please, I believe there  
19 is no lease without a producing well.

20 MR. NUTTER: Right.

21 Q (Mr. Nutter continuing) Now, Mr. Johnson, you didn't go  
22 into the rates of injection and the source of water and such  
23 as that.

24 A The source of water will be coming from Double Eagle. We  
25 will be purchasing this water. Rate of injection

1 anticipated to be in the order of 2400 to 3000 barrels of  
2 water per day.

3 Injection rates will be as I said earlier -- will be  
4 set in accordance with flood proposition and rates for  
5 each individual well set there in accordance with this.

6 Q Well, apparently if you are going to inject 2400 to 3000  
7 barrels of water per day you have got seven injection  
8 wells, so it will be in the neighborhood of 300 to 400  
9 barrels per day?

10 A Yes, sir, this is correct.

11 Q Do you have any idea yet as to pressures that would be  
12 required?

13 A I would anticipate about 1000 barrels.

14 Q How many barrels of water do you expect is going to be  
15 required for fill-ups before you start getting a response?

16 A We anticipate response in about a six-month period in the  
17 order of 400,000 barrels.

18 Q 400,000?

19 A Yes, sir.

20 Q Now, your total cumulative primary production from the  
21 pool to date was somewhere in the neighborhood of 500?

22 A 517.

23 Q And 17,000 barrels? Have you made a calculation as to what  
24 you can anticipate on secondary recovery?

25 A Yes, sir. We gave that a minute ago.

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- 1 Q I missed it.
- 2 A It would be in the order of around 600,000 barrels.
- 3 Q 600,000?
- 4 A Yes, sir.
- 5 Q Now, the mechanism is going to be utilized here for the
- 6 construction of the injection wells, Mr. Johnson?
- 7 A Injections wells will be running tubing, setting packer
- 8 approximately fifty feet above the producing interval.
- 9 Q A little slower, please. Packer fifty feet above the
- 10 producing interval?
- 11 A Yes, sir. Loading the back side of the hole it is not
- 12 anticipated initially to use plastic tubing, plastic-coated
- 13 tubing. We anticipate control of the corrosion rate so
- 14 that this will not be necessary.
- 15 Q And how will that be achieved?
- 16 A Through chemical injection.
- 17 Q I see. Control corrosion by treatment of the water then?
- 18 A Yes, sir, also control of scale hopefully.
- 19 Q Now, when you mentioned that you would load the back of
- 20 the hole you mean the annulus between the tubing and casing?
- 21 A Yes, sir.
- 22 Q With inert fluid?
- 23 A Yes, sir.
- 24 Q And can you equip those well heads with a pressure gauge
- 25 on that annulus?

1 A Yes, sir.

2 Q So it would detect leakage?

3 A Yes, sir.

4 MR. NUTTER: Are there any further questions of Mr.  
5 Johnson? He may be excused.

6 (Witness excused)

7 MR. NUTTER: Do you have anything further, Mr.  
8 Kellahin?

9 MR. KELLAHIN: Not in this case, sir.

10 MR. NUTTER: Does anyone have anything they wish to  
11 offer in Case No. 4610? If no one has anything further in  
12 Case No. 4610 we will take that case under advisement.

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I N D E X

WITNESS

PAGE

JOE JOHNSON

Direct Examination by Mr. Kellahin

2

Cross-Examination by Mr. Nutter

11

E X H I B I T S

MARKED

PAGE

Applicant's Exhibits 1 through 18

2

OFFERED IN EVIDENCE

PAGE

Applicant's Exhibits 1 through 18

10

dearnley-meier reporting service

1 STATE OF NEW MEXICO )  
2 )  
3 COUNTY OF BERNALILLO )

4 I, LINDA MALONE, Court Reporter, do hereby certify that  
5 the foregoing and attached Transcript of Hearing before the  
6 New Mexico Oil Conservation Commission was reported by me;  
7 that the same is a true and correct record of the said  
8 proceedings, to the best of my knowledge, skill and ability.

9  
10  
11 *Linda Malone*  
12 Court Reporter  
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22 I do hereby certify that the foregoing is  
23 a complete record of the proceedings in  
24 the hearing of Case No. 4610  
25 heard by me on 10/13/71.  
*[Signature]* Examiner  
New Mexico Oil Conservation Commission



## OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**

P. O. BOX 2088 - SANTA FE

87501

October 22, 1971

GOVERNOR  
BRUCE KING  
CHAIRMAN

**LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER**

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

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

Re: Case No. 4610  
Order No. R-4214  
Applicant:  
Jack L. McClellan

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,

Very truly yours,  
A. L. Carter, Jr.

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC	x
Artesia OCC	x
Aztec OCC	
State Engineer	x

**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. 4610  
Order No. R-4214

APPLICATION OF JACK L. McCLELLAN  
FOR A WATERFLOOD PROJECT, CHAVES  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1971, at Roswell, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 21st day of October, 1971, 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, Jack L. McClellan, seeks authority to institute two waterflood projects in the Sulimar-Queen Pool, by the injection of water into the Queen formation through 7 injection wells in Sections 13, 24, and 26, Township 15 South, Range 29 East and Section 18 of Township 15 South, Range 30 East, NMPM, Chaves County, New Mexico.

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

(4) That the proposed waterflood projects should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

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CASE NO. 4610  
Order No. R-4214

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Jack L. McClellan, is hereby authorized to institute two waterflood projects in the Sulimar-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Eddy County, New Mexico:

McClellan Lisa Sulimar Waterflood Project

<u>Well Name</u>	<u>Well No.</u>	<u>Unit</u>	<u>Sec.</u>	<u>Twn</u>	<u>Rge</u>
McClellan Lisa Fed. A	9	M	13	15S	29E
McClellan Lisa Fed. A	2	F	24	15S	29E
McClellan Lisa Fed. A	6	L	24	15S	29E
McClellan Lisa Fed. C	4	J	24	15S	29E
McClellan Lisa Fed. A	5	N	24	15S	29E
McClellan Lisa Fed. B	2	M	18	15S	30E

Cities Snyder Sulimar Waterflood Project

<u>Well Name</u>	<u>Well No.</u>	<u>Unit</u>	<u>Sec.</u>	<u>Twn</u>	<u>Rge</u>
Cities Service Snyder Federal	2	G	26	15S	29E

(2) That the subject waterflood projects shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

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

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CASE NO. 4610  
Order No. R-4214

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



*Bruce King*  
BRUCE KING, Chairman

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

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

S E A L

dr/



## OIL CONSERVATION COMMISSION

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

November 3, 1971

GOVERNOR  
BRUCE KING  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

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

Dear Mr. Kellahin:

Reference is made to Commission Order No. R-4214, recently entered in Case No. 4610, approving the McClellan Lisa Sulimar and Cities Snyder Sulimar Waterflood Projects.

Injection into each of the seven authorized water injection wells shall be through tubing which shall be set in a packer located approximately 50 feet above the producing interval. The casing-tubing annulus shall be loaded with an inert fluid and shall be equipped with a pressure gauge at the surface. Injection water if other than fresh shall be continuously chemically treated to control corrosion.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which the McClellan Lisa project will be eligible to receive under the provisions of Rule 701-E-3 is 630 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less, while the maximum for the Cities Snyder Project is 84 barrels per day. The combined projects upon unitization, and with the inclusion of the Carthel, Smernoff, and Pubco Leases, would have a total allowable, under a 42 barrel or less normal allowable, of 882 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

-2-

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

November 3, 1971

any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

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

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/DSN/ir

cc: Oil Conservation Commission  
Hobbs and Artesia, New Mexico

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

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





IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

P. O. Drawer U  
Artesia, New Mexico 88210

October 12, 1971

Mr. Jack L. McClellan  
Post Office Box 848  
Roswell, New Mexico 88201

Dear Mr. McClellan

Your letter of September 23, 1971 requests approval to operate a waterflood project of the Queen formation in T. 15 S., R. 29 and 30 E., N.M.P.M., Chaves County, New Mexico on the following Federal oil and gas leases:

Las Cruces 069280-A

Las Cruces 069280-B

Las Cruces 069280-C

New Mexico 0558684

New Mexico 0556543

New Mexico 0458356

New Mexico 0493370-A

Insofar as it covers the S $\frac{1}{2}$ NE $\frac{1}{4}$  sec. 26, T. 15 S., R. 29 E.

New Mexico 0518428

Insofar as it covers the N $\frac{1}{2}$ NW $\frac{1}{4}$  sec. 25, T. 15 S., R. 29 E.

The flood pattern would be non-symmetrical with injection well equity across lease lines determined by agreement. It is proposed to convert the following wells to water injection:

<u>Well Number And Lease</u>	<u>Location</u>
2-Lisa Fed. "A"	SE-NW 24-15S-29E
5-Lisa Fed. "A"	SE-SW 24-15S-29E
6-Lisa Fed. "A"	NW-SW 24-15S-29E
8-Lisa Fed. "A"	SE-SW 13-15S-29E
4-Lisa Fed. "B"	SE-SE 13-15S-29E
3-Lisa Fed. "C"	SE-NE 24-15S-29E
4-Lisa Fed. "C"	NW-SE 24-15S-29E
2-Cartheil Fed.	SE-SE 23-15S-29E
1-Larue Fed.	NW-NW 25-15S-29E
2-Snyder Fed.	SW-NE 26-15S-29E

These wells would be converted as the initial injection wells indicated a response, and it is also proposed to drill as water injection the following wells:

Well Number And Lease  
10-Lisa Fed. "A"  
11-Lisa Fed. "A"

Location  
SW-SW 13-15S-29E  
NW-NW 24-15S-29E

The plan for operating the waterflood project as proposed in the application is satisfactory to this office, and hereby approved subject to approval by the New Mexico Oil Conservation Commission and the following:

1. This project will be operated in compliance with the New Mexico Oil Conservation Commission regulations governing waterflood operations.
2. Duplicate copies of a monthly progress report, N.M.O.C.C. form C-120 acceptable, are to be submitted to this office showing the volume of water injected and average pressures for the injection wells and production for the producing wells in the project area.
3. This approval does not preclude the necessity for further approval when the project is expanded to include other wells and leases or the necessity to submit the usual notices and reports on wells involved. When this project is expanded to involve other operators and interests, the correlative rights of all concerned should be considered.

Sincerely yours,

(Orig. Sgd.) JAMES A. KNAUF

James A. Knauf  
District Engineer

cc:  
N.M.O.C.C., Santa Fe ✓  
Roswell  
Accounts

N. M. O. C. C. CORY

SUITE 814  
PETROLEUM BUILDING

JACK L. McCLELLAN  
GEOLOGIST AND OIL PRODUCER  
P. O. BOX 848  
ROSWELL, NEW MEXICO 88201

505 622-3200 OFFICE  
505 622-4076 HOME

SEPTEMBER 23, 1971

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U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

U. S. G. S.  
DRAWER U  
ARTESIA, NEW MEXICO 88210

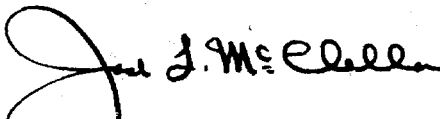
GENTLEMEN:

THIS LETTER IS TO REQUEST PERMISSION TO COMMENCE WATER-FLOODING OPERATIONS ON A LEASE BASIS INVOLVING THE LEASES DESCRIBED ON EXHIBIT "A" ATTACHED HERETO.

IT IS THE PLAN TO COMMENCE INJECTING WATER INTO THE PRODUCING WELLS DESCRIBED ON EXHIBIT "B" ATTACHED HERETO THAT WILL BE CONVERTED TO WATER INJECTION WELLS ON APPROXIMATELY NOVEMBER 1, 1971.

IT IS PLANNED TO CONVERT THE PRODUCING WELLS AS DEPICTED ON EXHIBIT "B", INTO WATER INJECTION WELLS AND INTRODUCE WATER INTO THESE WELLS IN A PATTERN AS DEPICTED ON THE ACCOMPANYING PLAT. ALL OF THESE CONVERSIONS WILL NOT BE MADE IN THE SAME PERIOD OF TIME, BUT WILL BE DONE IN STAGES AS THE WATERFLOOD PROGRESSES.

VERY TRULY YOURS,

  
JACK L. McCLELLAN

JLMc:LT  
ENCL'S.



U. S. G. S.  
SEPTEMBER 23, 1971

EXHIBIT "B"

PROPOSED WELLS (OLD WELL CONVERSIONS)

	<u>WELL</u>	<u>UNIT</u>	<u>SEC.</u>	<u>TWP.</u>	<u>RNG.</u>
(1)	JACK L. McCLELLAN LISA FED. 8-A	N	13	15S	29E
(2)	JACK L. McCLELLAN LISA FED. 4-B	P	13	15S	29E
(3)	JACK L. McCLELLAN Lisa Fed. 2-A	F	24	15S	29E
(4)	JACK L. McCLELLAN LISA FED. 3-C	H	24	15S	29E
(5)	JACK L. McCLELLAN LISA FED. 6-A	L	24	15S	29E
(6)	JACK L. McCLELLAN LISA FED. 4-C	J	24	15S	29E
(7)	JACK L. McCLELLAN LISA FED. 5-A	N	24	15S	29E
(8)	JACK L. McCLELLAN CARTHEL FED. 2	P	23	15S	29E
(9)	JACK L. McCLELLAN LARUE FED. 1	D	25	15S	29E
(10)	CITIES SERVICE SNYDER FED. 2	G	26	15S	29E
(11)	JACK L. McClellan Lisa Fed. 2-A	F	24	15S	29E

PROPOSED WELLS (NEW WELLS) TO BE DRILLED

(1)	Jack L. McClellan Lisa-Fed. 10-A	M	13	15S	29E
(2)	Jack L. McClellan Lisa-Fed. 11-A	D	24	15S	29E

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U. S. GEOLOGICAL SURVEY  
ALBUQUERQUE, NEW MEXICO



Docket No. 22-71

DOCKET: REGULAR HEARING - WEDNESDAY - OCTOBER 13, 1971

OIL CONSERVATION COMMISSION - 9 A.M. - ROSWELL INN, 1815 NORTH MAIN,  
ROSWELL, NEW MEXICO

- ALLOWABLE: (1) Consideration of the oil allowable for November and December, 1971;
- (2) Consideration of the allowable production of gas for November, 1971, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for November, 1971.

CASE 4575: (De Novo)

Application of Anadarko Production Company for the amendment of the special pool rules for an existing pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the special rules and regulations governing the South Eunice-San Andres Pool to provide for the classification of oil and gas wells, spacing and well location requirements, and an allocation formula for withdrawals by oil and gas wells.

Upon application of Anadarko Production Company, this case will be heard De Novo under the provisions of Rule 1220.

CASE 4557: (De Novo)

Application of Continental Oil Company for transfer of allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to transfer allowable across boundaries of the participating area and the leases outside said area, but within the Maljamar Co-operative Area, MCA Unit Area, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.

Upon application of Continental Oil Company, this case will be heard De Novo under the provisions of Rule 1220.

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NUTTER, EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER, ALSO AT THE  
ROSWELL INN:

- CASE 4605: Application of Elk Oil Company for special pool rules and a non-standard gas proration unit, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Round Tank-Queen Pool,

(Case 4605 continued)

including provisions for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and a limiting gas-oil ratio of 6,000 to 1. Applicant further seeks approval of a 120-acre non-standard gas proration unit comprising the W/2 SW/4 and SE/4 SW/4 of Section 30, Township 15 South, Range 29 East, Chaves County, New Mexico, to be dedicated to its JW Well No. 2 located in Unit L of said Section 30.

CASE 4606: Application of Black River Corporation for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location for its Cities-Federal Well No. 2 located 2310 feet from the South and East lines of Section 34, Township 25 South, Range 24 East, undesignated Morrow gas pool, Eddy County, New Mexico, with the E/2 of said Section 34 to be dedicated to the well.

CASE 4448: (Reopened)

In the matter of Case 4448 being reopened pursuant to the provisions of Order No. R-4060, which order established 160-acre spacing units and an 80-acre proportional factor of 4.00 for the West Mescalero-Pennsylvanian Pool, Lea County, New Mexico, for a period of one year. All interested persons may appear and show cause why said pool should not be developed on less than 160-acre spacing units and why the 80-acre proportional factor of 4.00 assigned to the pool should or should not be retained.

CASE 4607: Application of Penroc Oil Corporation for a waterflood expansion and amendment of Order No. R-3494, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to expand its Phillips Artesia Waterflood Project, Artesia Pool, by an additional injection well to be located 2645 feet from the South line and 1325 feet from the East line of Section 27, Township 17 South, Range 28 East, Eddy County, New Mexico. Applicant further seeks the amendment of Order No. R-3494 to permit administrative approval for additional



(Case 4607 continued)

injection wells in said project without a showing of well response.

CASE 4608: Application of Jack L. McClellan for the creation of a new pool and special pool rules, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the Siluro-Devonian formation for his Bar-J Federal Well No. 1 located in Unit E of Section 15, Township 6 South, Range 27 East, Chaves County, New Mexico, and the assignment of approximately 32,300 barrels of discovery allowable to said well. Applicant further seeks the promulgation of special rules for said pool including a provision for 80-acre spacing and proration units.

CASE 4609: Application of Jack L. McClellan for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Sulimar-Queen Unit Area comprising 1520 acres, more or less, of Federal lands in Sections 13, 23, 24, 25, and 26 of Township 15 South, Range 29 East and Sections 18 and 19 of Township 15 South, Range 30 East, Chaves County, New Mexico.

CASE 4610: Application of Jack L. McClellan for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Sulimar-Queen Pool by the injection of water through various wells located in Sections 13, 23, 24, 25, and 26 of Township 15 South, Range 29 East and Sections 18 and 19 of Township 15 South, Range 30 East, Chaves County, New Mexico.

CASE 4611: Southeastern New Mexico nomenclature case calling for an order for the extension of certain pools in Lea, Chaves and Roosevelt Counties, New Mexico.

(a) Extend the Allison-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM  
SECTION 3: N/2 SE/4

(Case 4611 continued)

(b) Extend the Bluit-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM  
SECTION 16: S/2

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

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM  
SECTION 28: SE/4

(d) Extend the Wantz-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM  
SECTION 12: NE/4

CASE 4539: (Continued from the September 1, 1971 Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Doanbuy Lease & Company, Inc., and all other interested persons to appear and show cause why its following described wells in Section 27, Township 14 South, Range 33 East, Saunders Pool, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 4593: (Continued from the September 15, 1971 Examiner Hearing)

Application of Continental Oil Company for an exception to Order No. R-3221, as amended, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, to dispose of water produced by wells located on its W. R. Means lease comprising the S/2 and NW/4 of Section 28, and E/2 and E/2 W/2 of Section 29, Township 14 South, Range 30 East, Vest Ranch-Queen Pool, Chaves County, New Mexico, in unlined surface pits.

JASON W. KELLAHIN  
ROBERT E. FOX

KELLAHIN AND FOX  
ATTORNEYS AT LAW  
54½ EAST SAN FRANCISCO STREET  
POST OFFICE BOX 1769  
SANTA FE, NEW MEXICO 87501

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TELEPHONE 982-4315  
AREA CODE 505

October 4, 1971

OIL CONSERVATION COMM.  
SANTA FE

*Sub  
file - Case  
4610*

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

Re: Application of Jack L. McClellan for a waterflood  
Project, Sulimar-Queen Pool, Chaves County, New Mexico

Gentlemen:

In connection with the above application, the water injection well locations were not available at the time the application was filed, nor were the volumes of water to be injected.

Enclosed is copy of a plat showing the project area, location of proposed injection wells and other pertinent information, and a tabulation of information on the proposed water injection wells.

The operator proposes to inject approximately 3,000 barrels of water per day, with a total injection volume throughout the life of the project, an estimated eleven years, of 9.736.000 barrels. Water will be purchased from Double Eagle Corporation, with produced water to be reinjected in later stages of the waterflood project.

If any further information is required prior to the hearing on this case, please let me know.

Yours very truly,

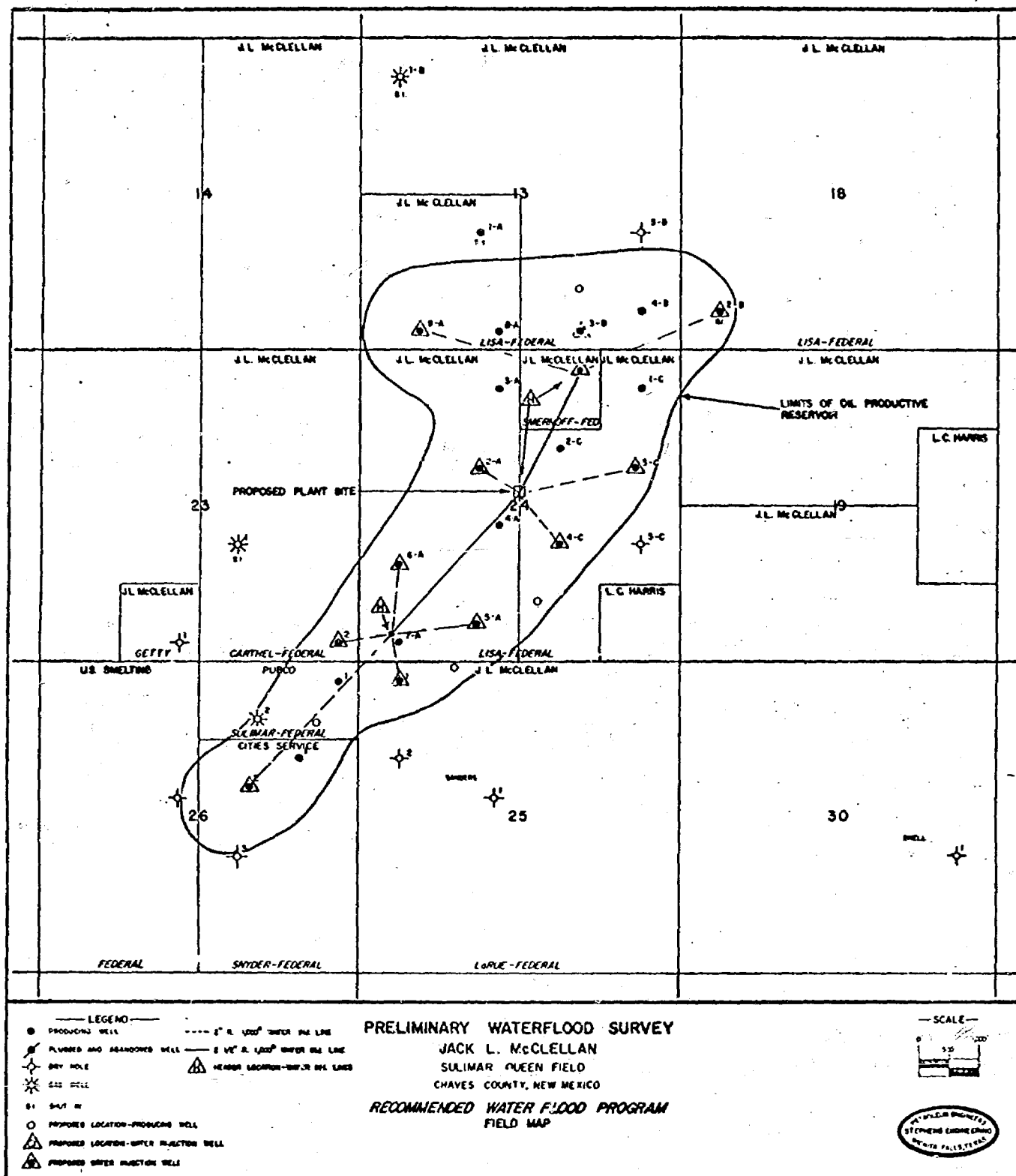
*Jason W. Kellahin*  
Jason W. Kellahin

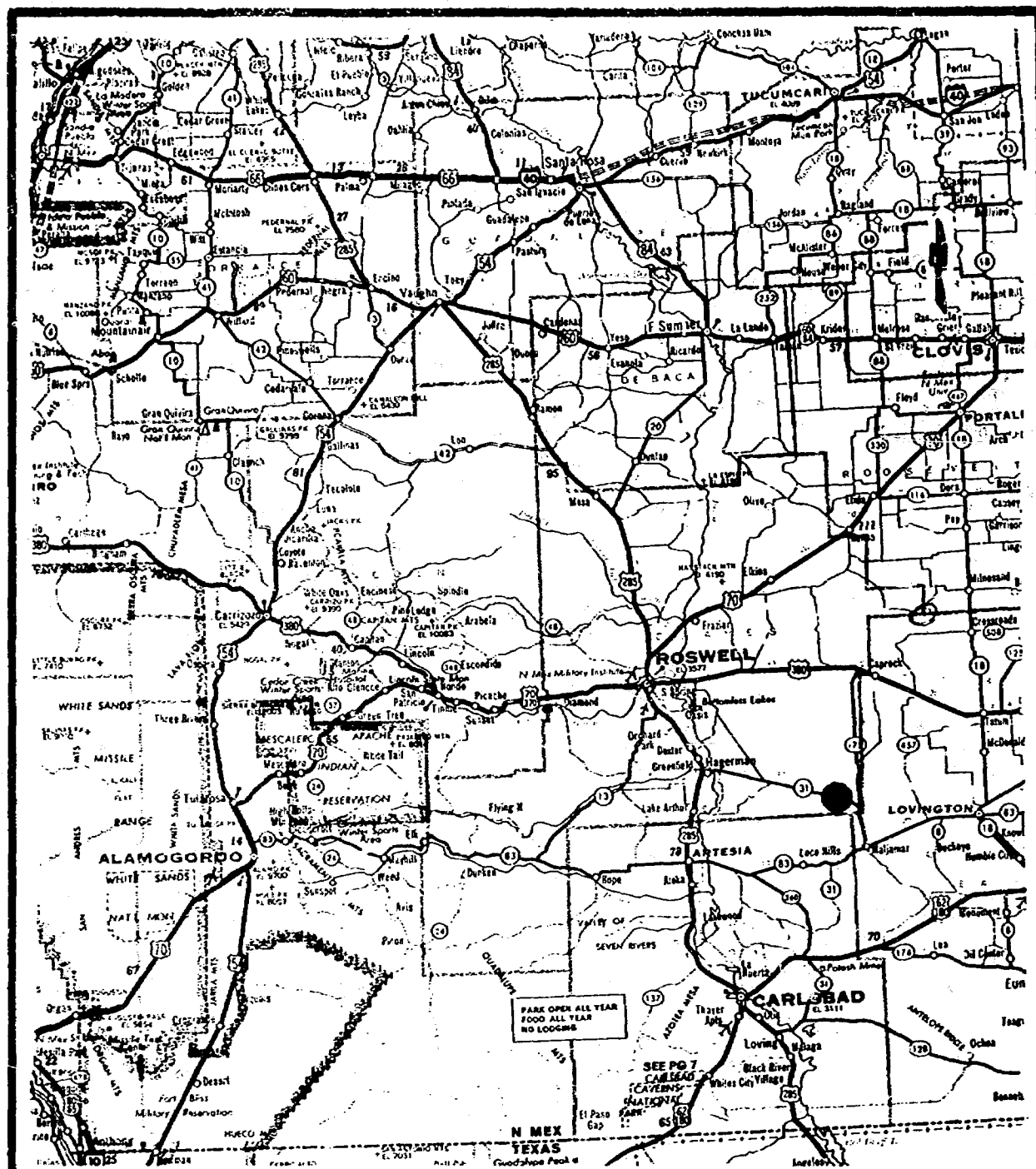
JWK/sr  
Encl. as stated

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OCT 1 - 6 1971

OIL CONSERVATION COMM.  
OIL CONSERVATION COMM.  
SANTA FE





# PRELIMINARY WATERFLOOD SURVEY

JACK L. McCLELLAN

SULIMAR QUEEN FIELD

CHAVES COUNTY, NEW MEXICO

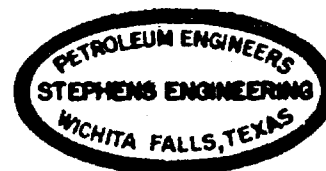
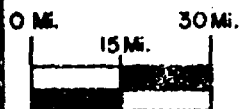
## GENERAL LOCATION MAP

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 1

CASE NO. 4610



PRELIMINARY WATER FLOOD SURVEY  
JACK L. McCLELLAN  
SULIMAR QUEEN FIELD  
CHAVES COUNTY, NEW MEXICO

WELL RECORDS

Operator Lease	Well No.	Compl. Date	Elev. Feet	Total Depth Feet	Producing Casing Size & Seat	Top of Queen Sand Subsur Ft.	Subsea Ft.	Est. Net Effective Pay-Feet Gas Oil Wtr	Completion Interval Feet	Producing Zone Name	Initial Treatment	Initial Potential BOPD	BWPD	Remarks
Jack L. McClellan Lisa-Federal "A"	1	6-13-68	3946	3510	4 1/2 @3534	1975	+1971	1 12 0	3290-3482	San Andres	6000 A, 60,000#	30	150	Shut-in
	2	4-5-69	3953	2008	5 1/2 @2005	1968	+1985	0 13 0	1972-1979	Queen	200 A, 13,000#	72	0	
	3	5-22-69	3960	2025	5 1/2 @2020	1980	+1980	0 13 0	1980-1992	Queen	200 A, 30,000#	100	120*	
	4	7-2-69	3936	2012	5 1/2 @2012	1975	+1961	0 14 0	1975-1988	Queen	200 A, 30,000#	120	80*	
	5	7-26-69	3929	2020	5 1/2 @2016	1972	+1957	0 16 0	1976-1988	Queen	200 A, 30,000#	70	60*	
	6	8-27-69	3953	2003	5 1/2 @2003	1963	+1990	5 18 0	1967-1975	Queen	200 A, 25,000#	65	0	
	7	10-5-69	3924	1999	5 1/2 @1999	1956	+1968	0 16 0	1960-1967	Queen	250 A, 18,000#	100	0	
	8	1-17-70	3955	2025	5 1/2 @2016	1984	+1971	0 13 0	1984-1996	Queen	250 A, 25,000#	90	0	
	9	5-15-70	3940	1995	5 1/2 @1992	1956	+1984	0 14 0	1958-1969	Queen	30,000#	146	0	
Lisa-Federal "B"	1	4-5-66	3934	3537	5 1/2 @2060	1957	+1991	16 0 0	1959-1974	Queen	750 A, 20,000#	0	0	Gas Well 2,000 MCF/Day Seperate Field
	2	8-10-69	3970	3487	7 @2055	2028	+1942	0 2 4	2027-2030	Queen	200 A, 9,000#	4	75	
	3	11-1-68	3969	2045	5 1/2 @2045	2016	+1953	0 13 0	2015-2032	Queen	30,000#	100	0	
	4	12-3-68	3969	2056	5 1/2 @2053	2019	+1950	0 14 3	2018-2034	Queen	30,000#	40	0	
	5	6-8-69	3973	2115	-	2028	+1945	0 0 0	-	-	-	0	0	Dry Hole
Lisa-Federal "C"	1	6-24-68	3973	2067	7 @2063	2028	+1945	0 18 2	2031-2039	Queen	500 A, 30,000#	100	0	
	2	2-19-69	3954	2040	5 1/2 @2035	1986	+1966	0 13 0	1988-2002	Queen	30,000#	120	0	
	3	3-10-69	3955	2056	5 1/2 @2056	2013	+1942	0 6 6	2014-2026	Queen	200 A, 30,000#	128	0	
	4	5-2-69	3936	2038	5 1/2 @2038	1989	+1947	0 7 2	1989-2002	Queen	200 A, 30,000#	112	96*	
	5	11-11-69	3935	2013	-	2008	+1927	0 0 5	-	-	-	0	0	Water 2008-2013. P & A
Carthel-Federal	1	11-18-69	3949	1975	9 5/8 @2883	1920	+2029	8 0 0	1919-1936	Queen	30,000#	0	0	Well was orig. deeper test. Presently shut-in.
	2	12-18-69	3940	1994	5 1/2 @1992	1953	+1987	2 7 0	1954-1964	Queen	200 A, 30,000#	648	0	
Getty-Federal	1	-	3920	1915	-	1899	+2021	14 0 0	-	Queen	-	0	0	Gas Well
Pan American Petr. Corp. Sarnoff-Federal	1	9-30-68	3958	2048	4 1/2 @2048	2001	+1957	0 13 0	2003-2012	Queen	4200 A, 25,000#	138	171*	
LaRue-Federal	1	9-14-69	3919	1996	4 1/2 @1996	1956	+1963	0 12 0	1958-1970	Queen	500 A, 31,000#	72	284*	
	2	10-23-69	3909	2014	-	2014	+1895	0 0 1+	-	-	-	-	-	Dry Hole - Water
Pubco Petr. Corp. Sulimar-Federal	1	11-4-69	3939	2006	4 1/2 @2006	1962	+1977	0 9 0	1962-1968	Queen	30,000#	477	0	
	2	1-2-70	3935	1986	4 1/2 @1980	1939	+1596	7 1 0	1946-1952	Queen	40,000#	30	0	Gas Well
Cities Service Oil Co. Snyder-Federal	1	4-5-70	3935	2005	5 1/2 @2004	1972	+1963	0 8 0	1973-1982	Queen	500 A, 20,000#	228	58*	
	2	6-8-70	3915	1976	NA	1954	+1962	0 8 0	1954-1963	Queen	500 A, 10,000#	75	0	
	3	7-16-70	3898	1995	NA	1960	+1938	0 0 14	-	Queen	-	-	-	Dry Hole - Water

\*Load Water

BEFORE EXAMINEE NUTTER  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 4610  
CASE NO. 4610



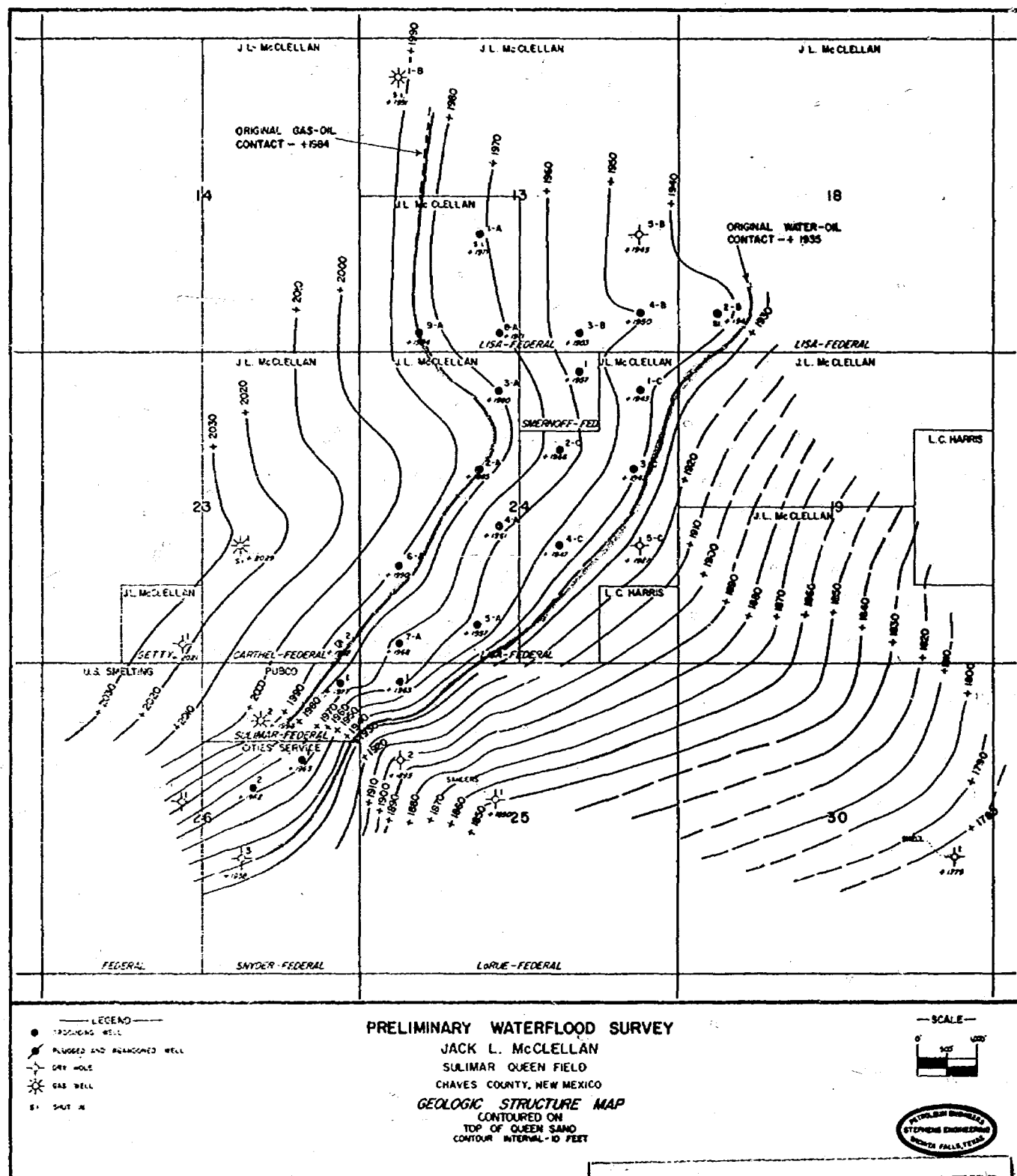
JACK L. McCLELLAN  
SULIMAR QUEEN FIELD  
CHAVES COUNTY, NEW MEXICO

WELL TEST SUMMARY  
July, 1971

<u>Operator</u> <u>Lease</u>	<u>Well</u> <u>No.</u>	<u>Daily Production</u> <u>Oil</u>	<u>Water</u>	<u>Remarks</u>
<u>Jack L. McClellan</u>				
Lisa "A"	1	-	-	Shut-in
	2	8	0	
	3	8	0	
	4	20	0	
	5	14	0	
	6	8	0	
	7	8	0	
	8	18	0	
	9	0	0	
Sub-Total		84	0	
Lisa "B"	1	-	-	Shut-in Gas
	2	-	-	Shut-in
	3	12	0	
	4	23	0	
Sub-Total		35	0	
Lisa "C"	1	11	5	
	2	25	7	
	3	41	10	
	4	28	20	
Sub-Total		105	42	
Carthel	2	0	0	Shut-in
Smernoff	1	7	1	
LaRue	1	8	140	
<u>Pubco Petroleum Corp.</u>				
Sulimar	1	8	0	Estimated
	2	1	0	Estimated
		9	0	
<u>Cities Service</u>				
Snyder	1	12	4	Estimated
	2	21	4	Estimated
Sub-Total		33	8	
Field Total		281	190	

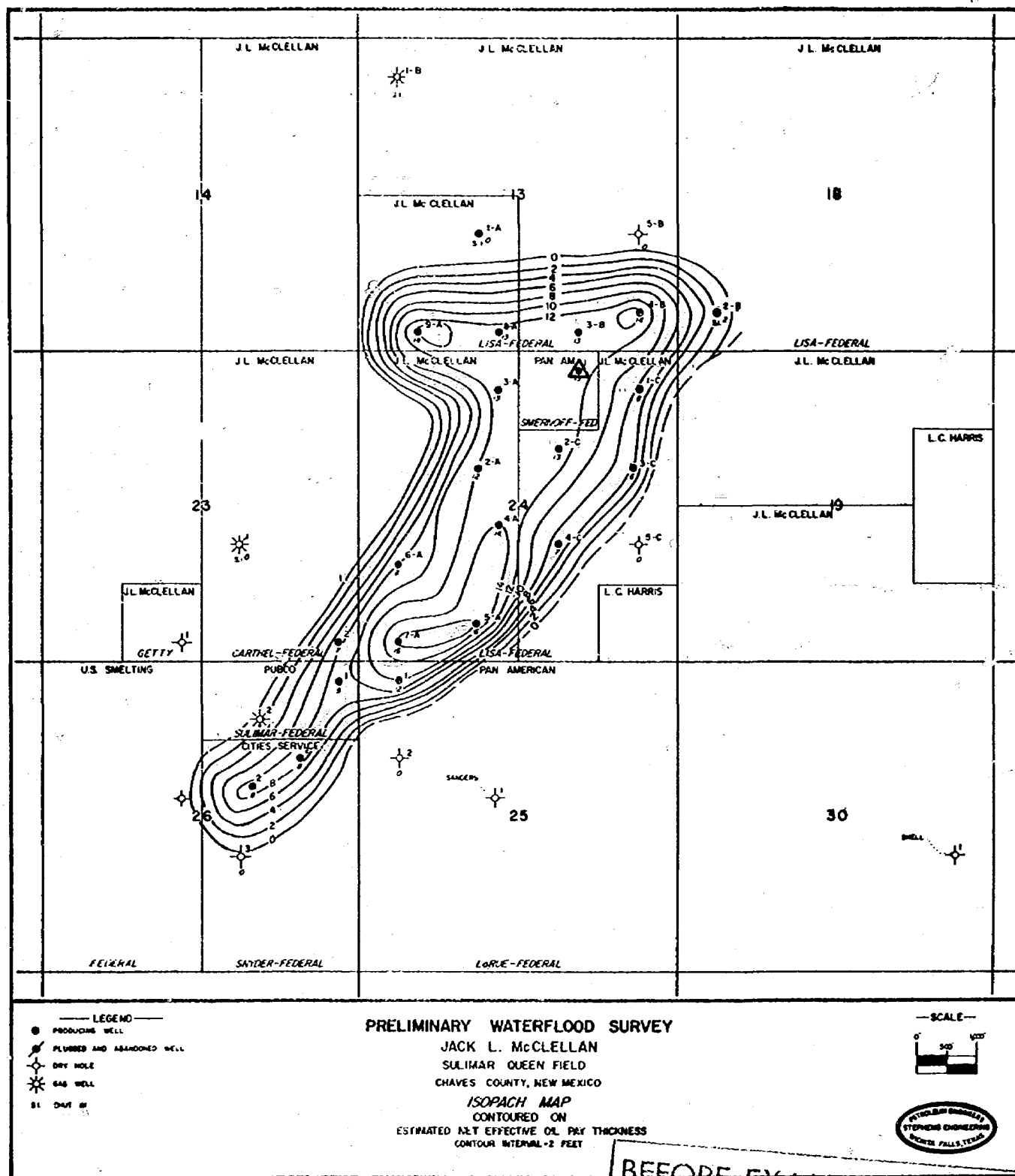


BEFORE EXAMINED BY THE  
OIL CONSERVATION COMMISSION  
*Apple* EXHIBIT NO. 3  
CASE NO. 4611



BEFORE EXAMINER NUTTER  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 4610  
 CASE NO. 4610





**BEFORE EXAMINER NUTTER**  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 444  
 CASE NO. 46-19

PRELIMINARY WATER FLOOD SURVEY  
JACK L. McCLELLAN  
SULIMAR QUEEN FIELD  
CHAVES COUNTY, NEW MEXICO

OIL PRODUCTION HISTORY

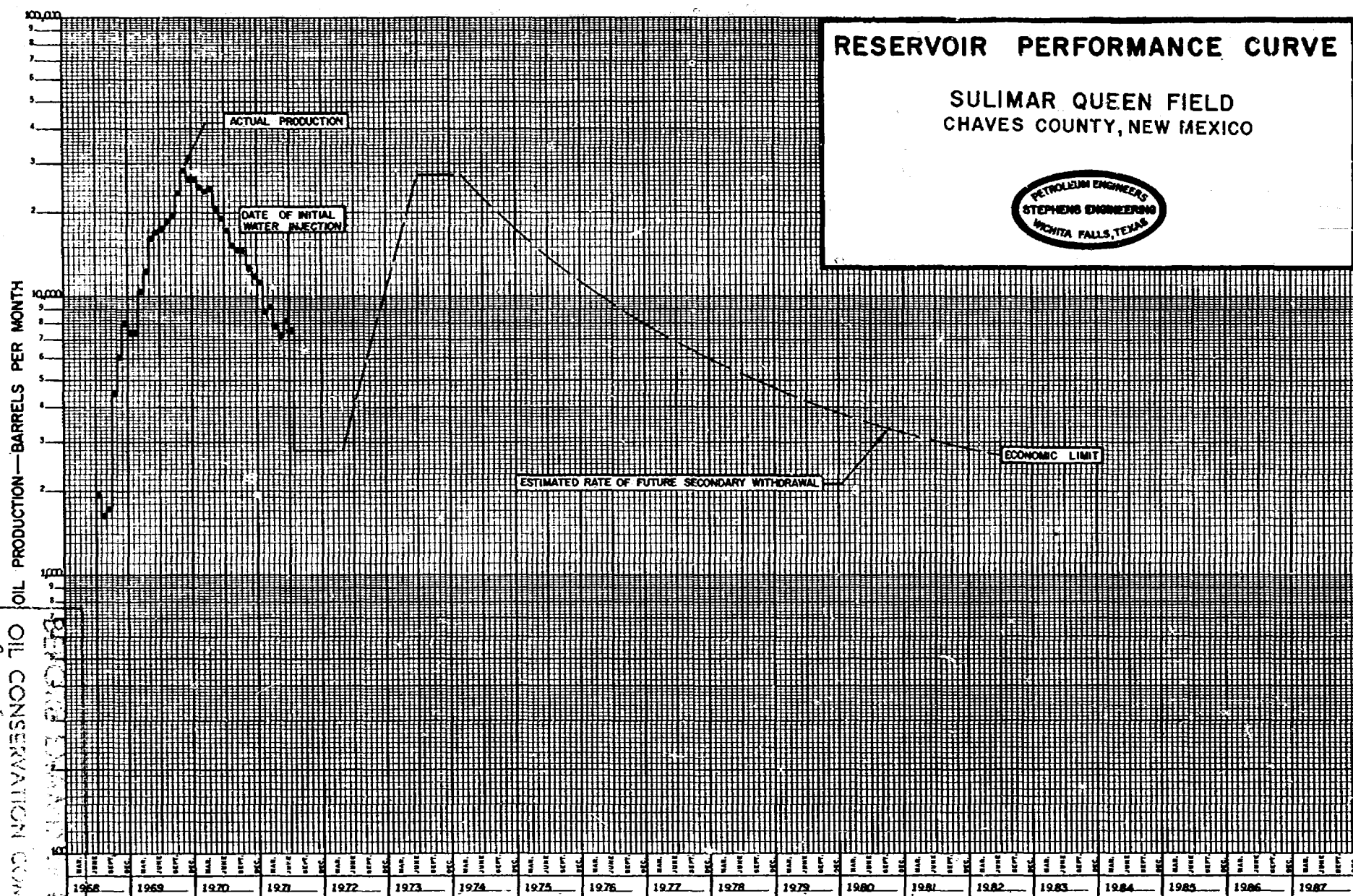
Operator Lease	Cities Service Oil Co. Snyder-Federal	Jack L. McClellan Carthel-Federal	Jack L. McClellan Lisa "A"-Federal	Jack L. McClellan Lisa "B"-Federal	Jack L. McClellan Lisa "C"-Federal	Jack L. McClellan Laque-Federal	Jack L. McClellan Smernoff-Federal	Pubco Petr. Corp. Sulimar-Federal	Field Total
Year Mo.	Monthly Oil Production Bbls.	Monthly Oil Production Bbls.	Monthly Oil Production Bbls.	Monthly Oil Production Bbls.	Monthly Oil Production Bbls.	Monthly Oil Production Bbls.	Monthly Oil Production Bbls.	Monthly Oil Production Bbls.	
1968 Jul			384		1,541				1,925
Aug			188		1,434				1,622
Sep			149		1,560				1,709
Oct			138		2,445		1,870		4,453
Nov				2,024	2,303		1,780		6,107
Dec				3,720	2,273		1,990		7,983
Year Sub-Total			859	5,744	11,556		5,640		23,799
1969 Jan			300	3,490	1,842		1,932		7,264
Feb			1,188	3,219	2,583		1,472		7,274
Mar			4,003	3,406	2,329		1,850		10,585
Apr			5,151	3,919	5,987		1,844		12,050
May			6,743	4,200	8,798		1,890		16,076
Jun			7,446	2,955	8,189		1,946		17,093
Jul			10,238	2,651	7,945		1,960		17,797
Aug			12,615	2,346	7,664		1,890		18,843
Sep				2,162	8,122	1,071	1,867		20,668
Oct				2,299	7,863	1,392	1,483		23,275
Nov				2,576	9,344	622	1,194	1,763	28,114
Dec		580	12,070	2,002	8,248	770	958	2,103	26,731
Year Sub-Total		580	59,754	35,225	82,114	3,855	20,286	3,866	205,680
1970 Jan		971	10,920	2,201	7,571	1,072	1,455	3,033	27,223
Feb		849	11,979	1,848	5,735	1,369	1,056	1,977	24,813
Mar		427	10,958	2,298	6,073	1,305	1,025	1,868	23,954
Apr	2,304	258	9,915	1,802	5,689	1,074	831	1,831	23,704
May	2,473	114	9,353	1,612	4,913	665	619	1,499	21,248
Jun	3,518	5	7,556	1,420	5,002	151	619	880	19,151
Jul	3,020	0	6,732	1,345	4,750	144	491	831	17,313
Aug	3,119	0	5,075	1,170	4,676	192	529	761	15,522
Sep	2,748	0	4,904	1,051	4,645	115	401	642	14,506
Oct	2,628	0	4,675	1,231	4,915	135	328	606	14,518
Nov	2,270	0	4,151	869	4,413	299	354	420	12,776
Dec	1,910	0	4,096	749	4,005	466	313	447	11,996
Year Sub-Total	23,990	2,624	90,314	17,596	62,387	6,987	8,021	14,795	226,714
1971 Jan	1,684	0	3,722	1,123	3,861	357	191	434	11,372
Feb	1,235	0	2,773	748	3,092	232	442	400	8,922
Mar	1,435	0	3,014	871	3,040	98	439	359	9,256
Apr	1,106	0	2,537	832	2,738	0	365	350	7,928
May	1,177	0	2,316	700	2,106	323	422	349	7,393
Jun	1,085	0	2,126	1,062	3,243	262	210	253	8,241
Jul	997	0	2,067	1,086	2,583	247	248	279	7,507
Year Sub-Total	3,719	0	18,555	6,422	20,663	1,519	2,317	2,424	60,619
Lease Total	32,709	3,204	169,482	64,987	176,720	12,361	36,264	21,085	516,812

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 6  
CASE NO. 4610



# RESERVOIR PERFORMANCE CURVE

SULIMAR QUEEN FIELD  
CHAVES COUNTY, NEW MEXICO



OIL CONSERVATION COMMISSION  
EXHIBIT NO. 7  
CASE NO. 4513

# RESERVOIR PERFORMANCE CURVE

JACK L. McCLELLAN

LISA "A" LEASE

SULIMAR QUEEN FIELD

CHAVES COUNTY, NEW MEXICO



PRODUCTION—BARRELS PER MONTH

ACTUAL PRODUCTION

ESTIMATED RATE OF FUTURE PRIMARY WITHDRAWAL

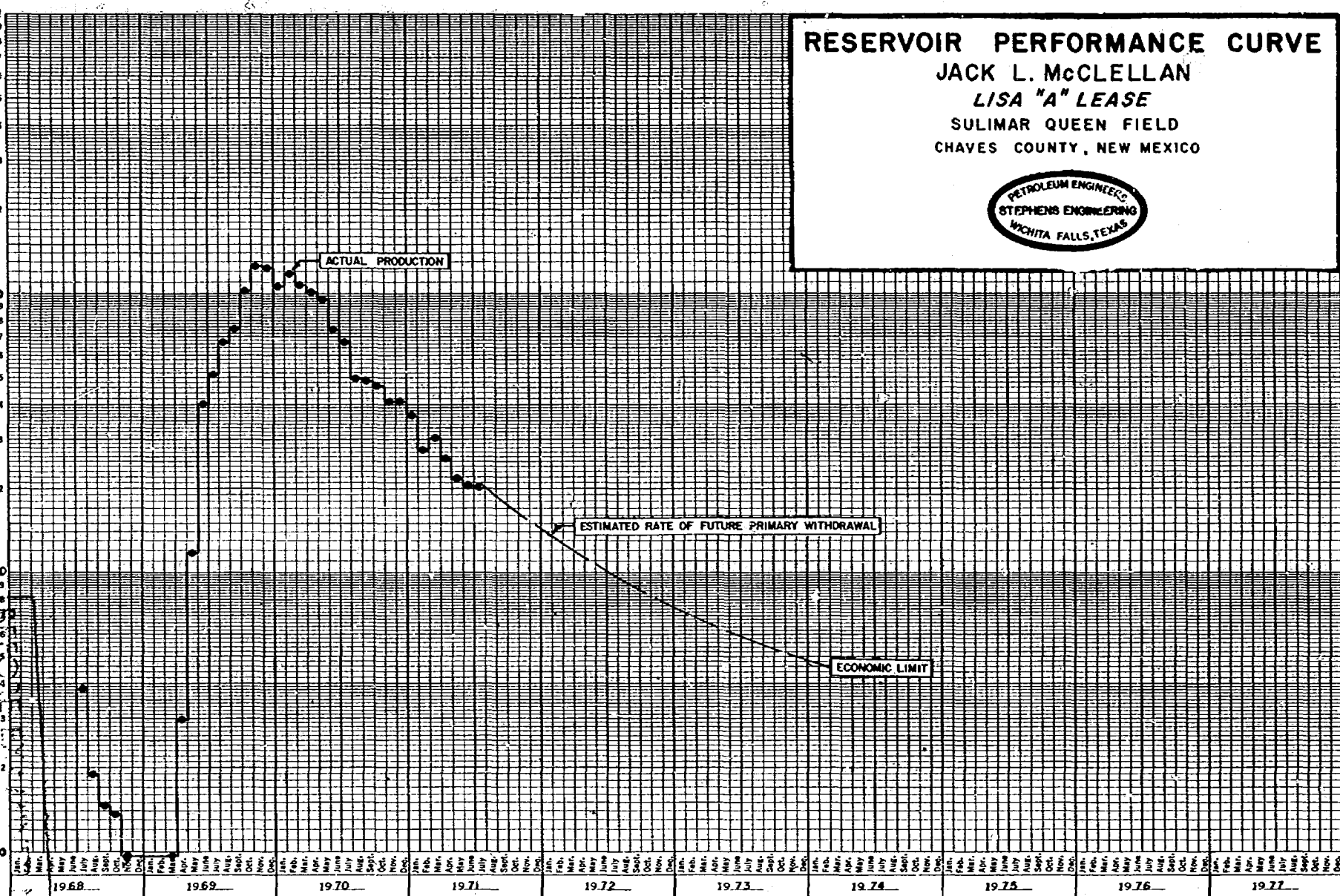
ECONOMIC LIMIT

CASE NO.

EXHIBIT NO.

4610

WATER



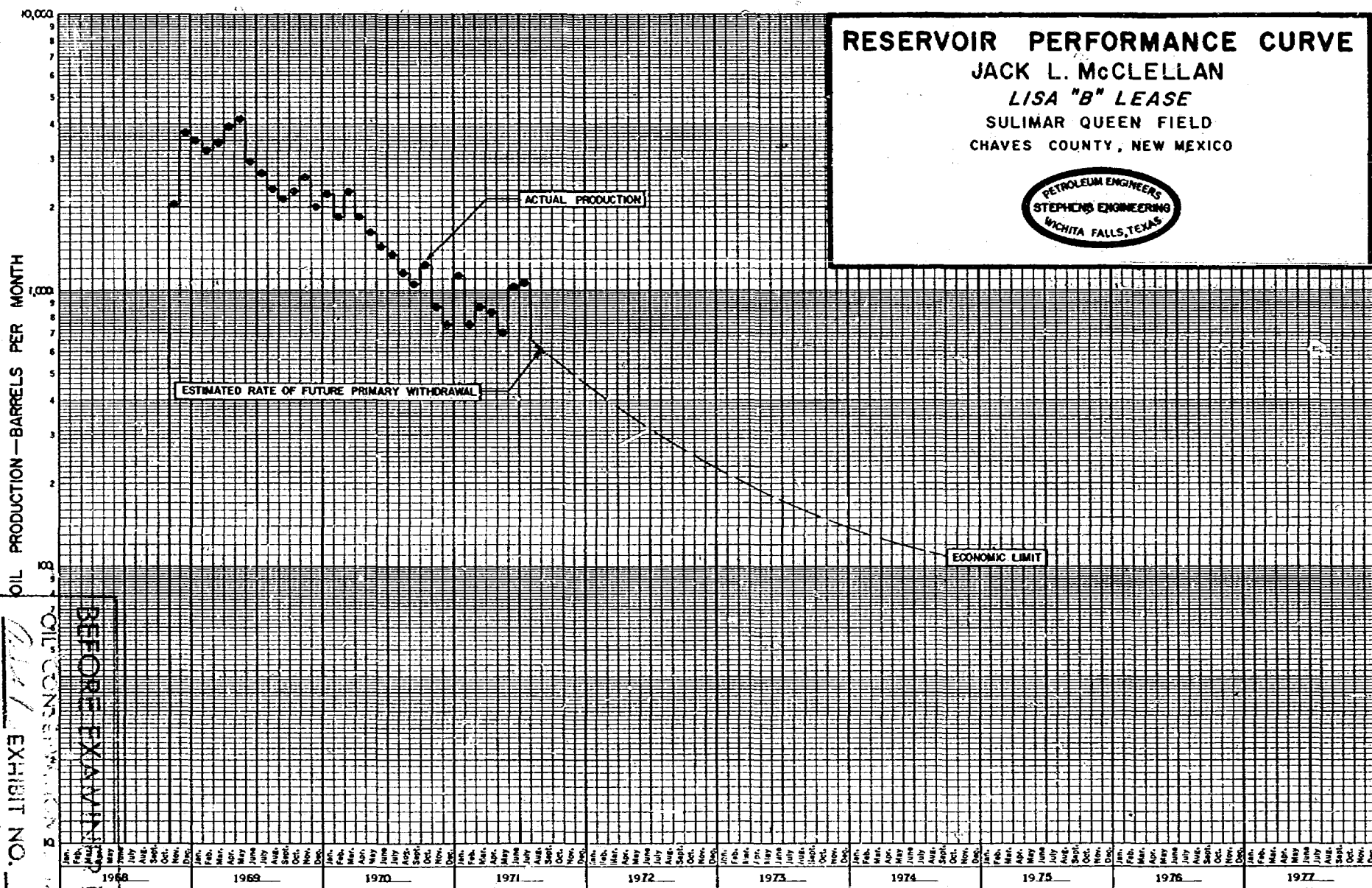
# RESERVOIR PERFORMANCE CURVE

JACK L. McCLELLAN

LISA "B" LEASE

SULIMAR QUEEN FIELD

CHAVES COUNTY, NEW MEXICO



BEFORE EXAMINATION  
CASE NO. 44119  
EXHIBIT NO. 9  
JAN 1977

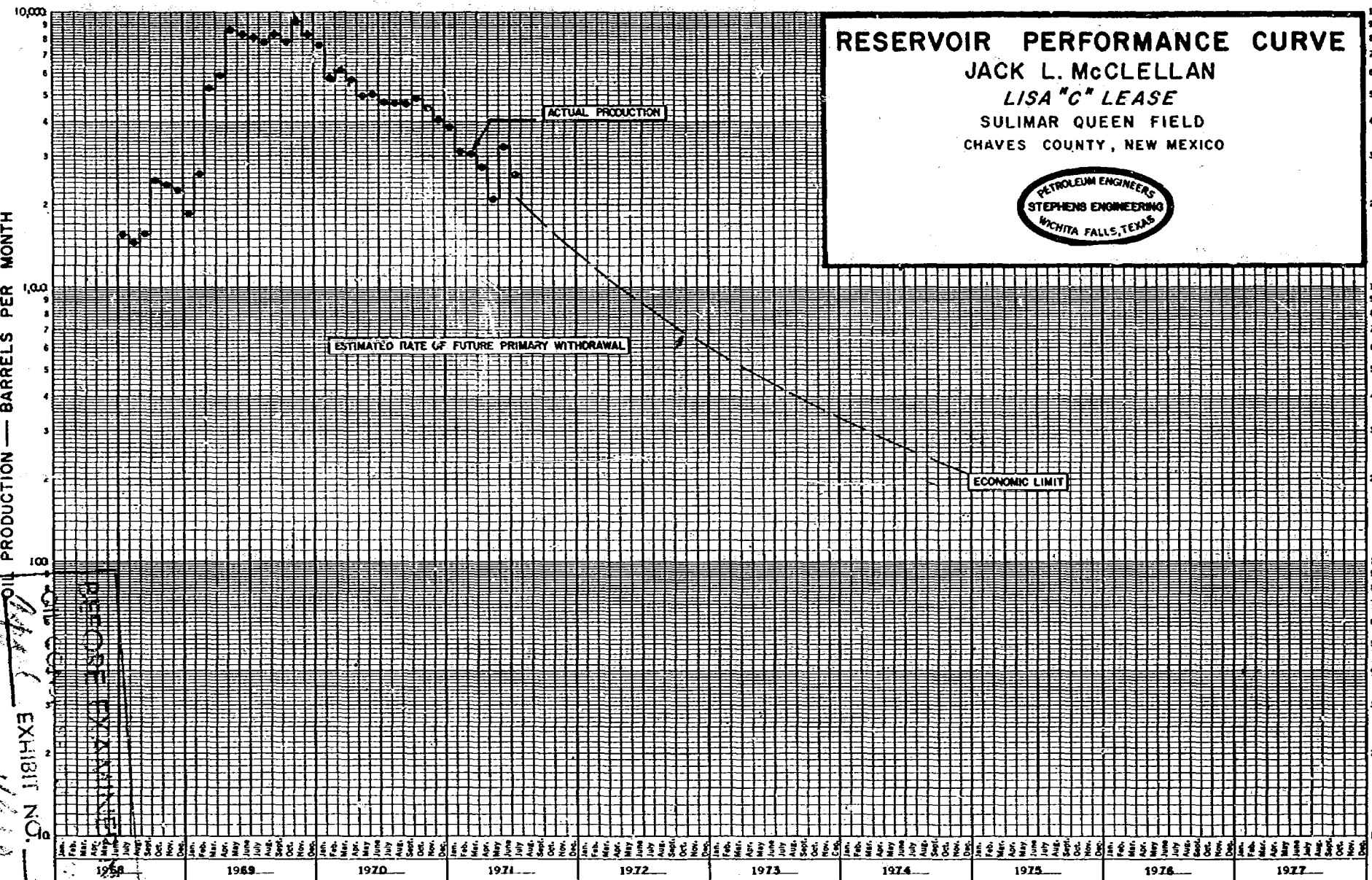
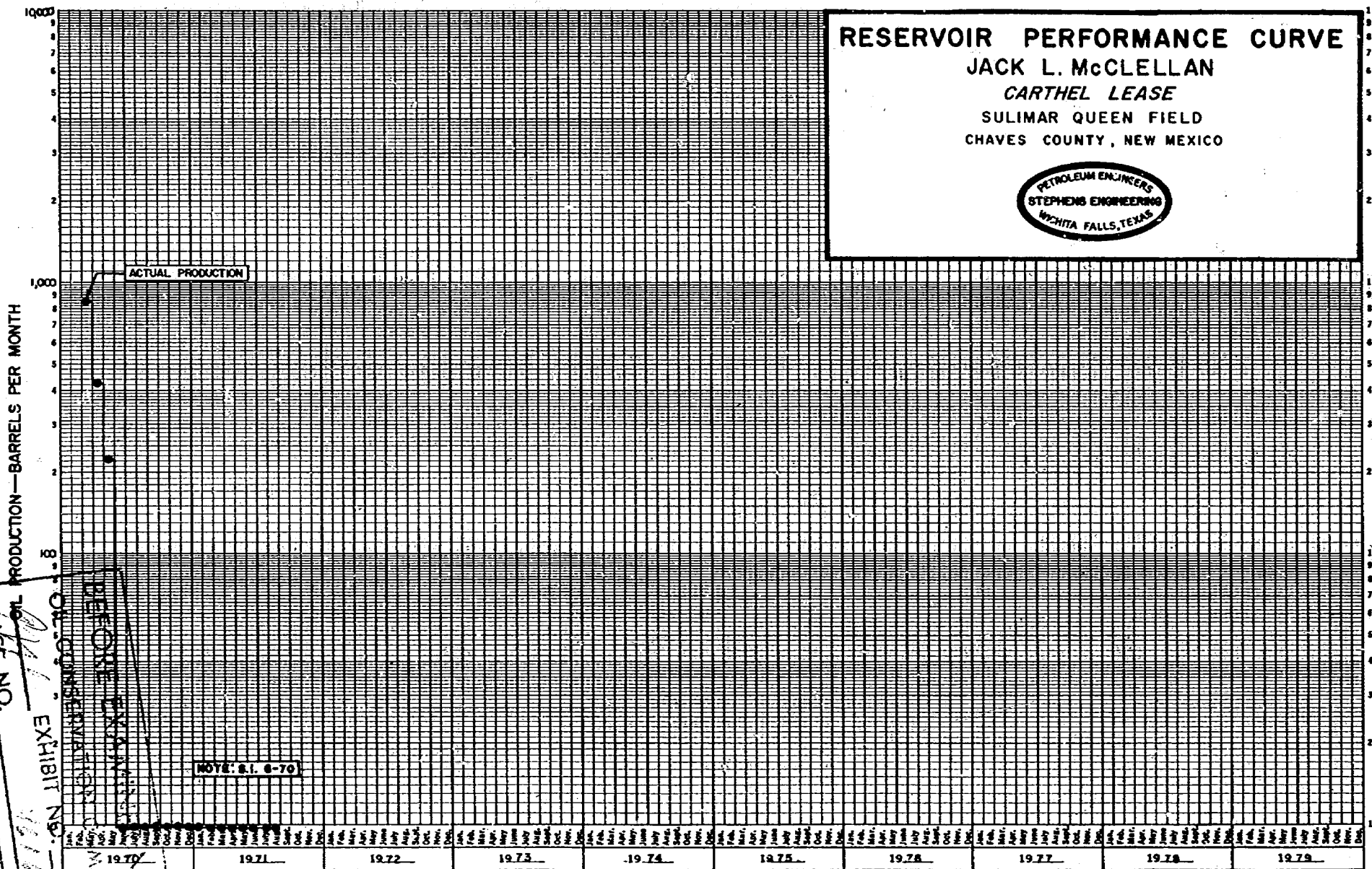


EXHIBIT NO. 1  
CASE NO. 4617  
UTTER



**RESERVOIR PERFORMANCE CURVE**  
**JACK L. McCLELLAN**  
**CARTHEL LEASE**  
**SULIMAR QUEEN FIELD**  
**CHAVES COUNTY, NEW MEXICO**



PRODUCTION—BARRELS PER MONTH

CASE NO. 1011 EXHIBIT NO. 11

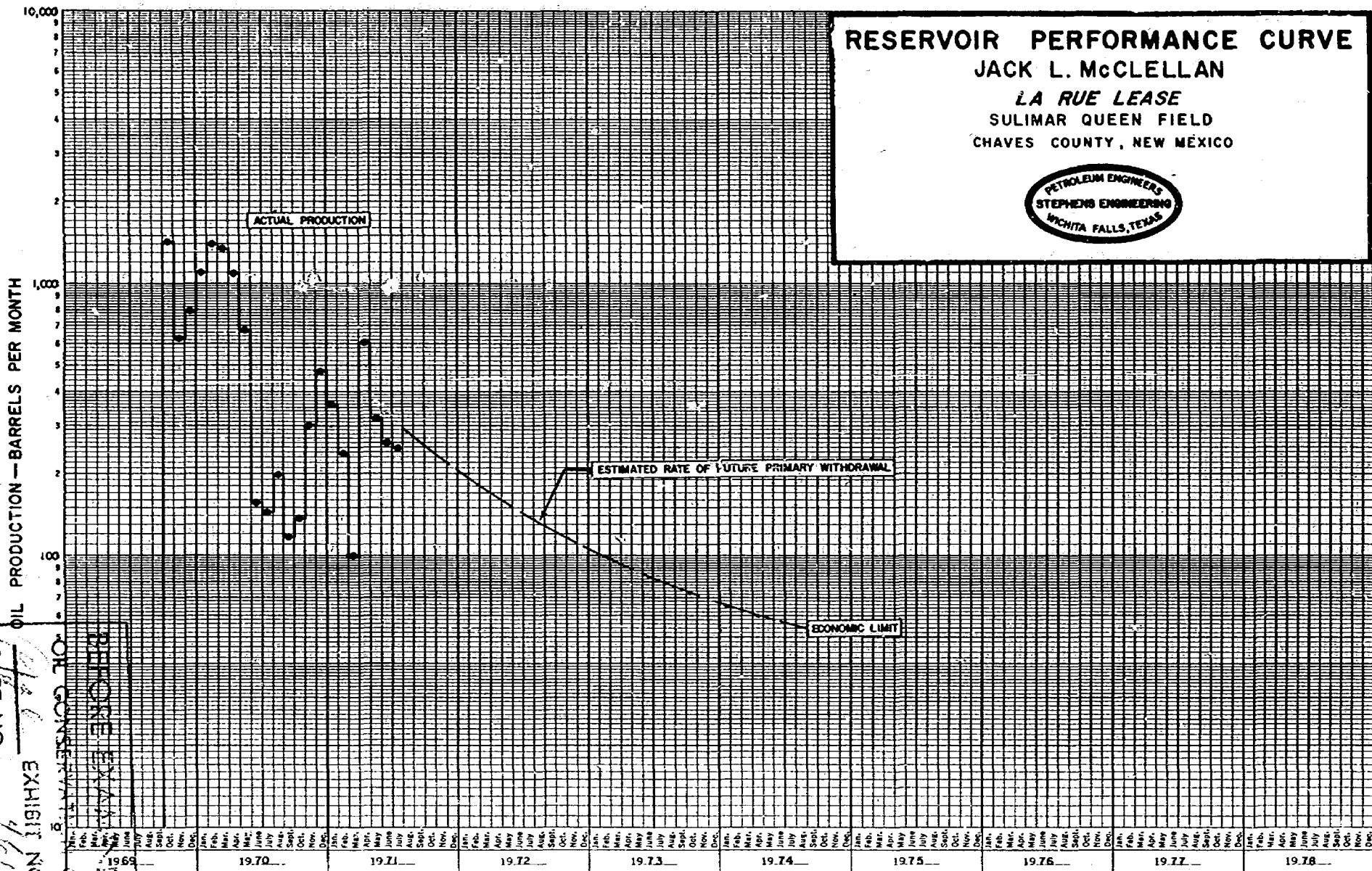
OUTER

BEFORE EXAMINATION

MISSION

# RESERVOIR PERFORMANCE CURVE

JACK L. McCLELLAN  
LA RUE LEASE  
SULIMAR QUEEN FIELD  
CHAVES COUNTY, NEW MEXICO



OIL PRODUCTION — BARRELS PER MONTH

PHONE EXAM. BY NUTTER  
OIL CONSERVATION COMMISSION  
CASE NO. 4610  
EXHIBIT NO. 12



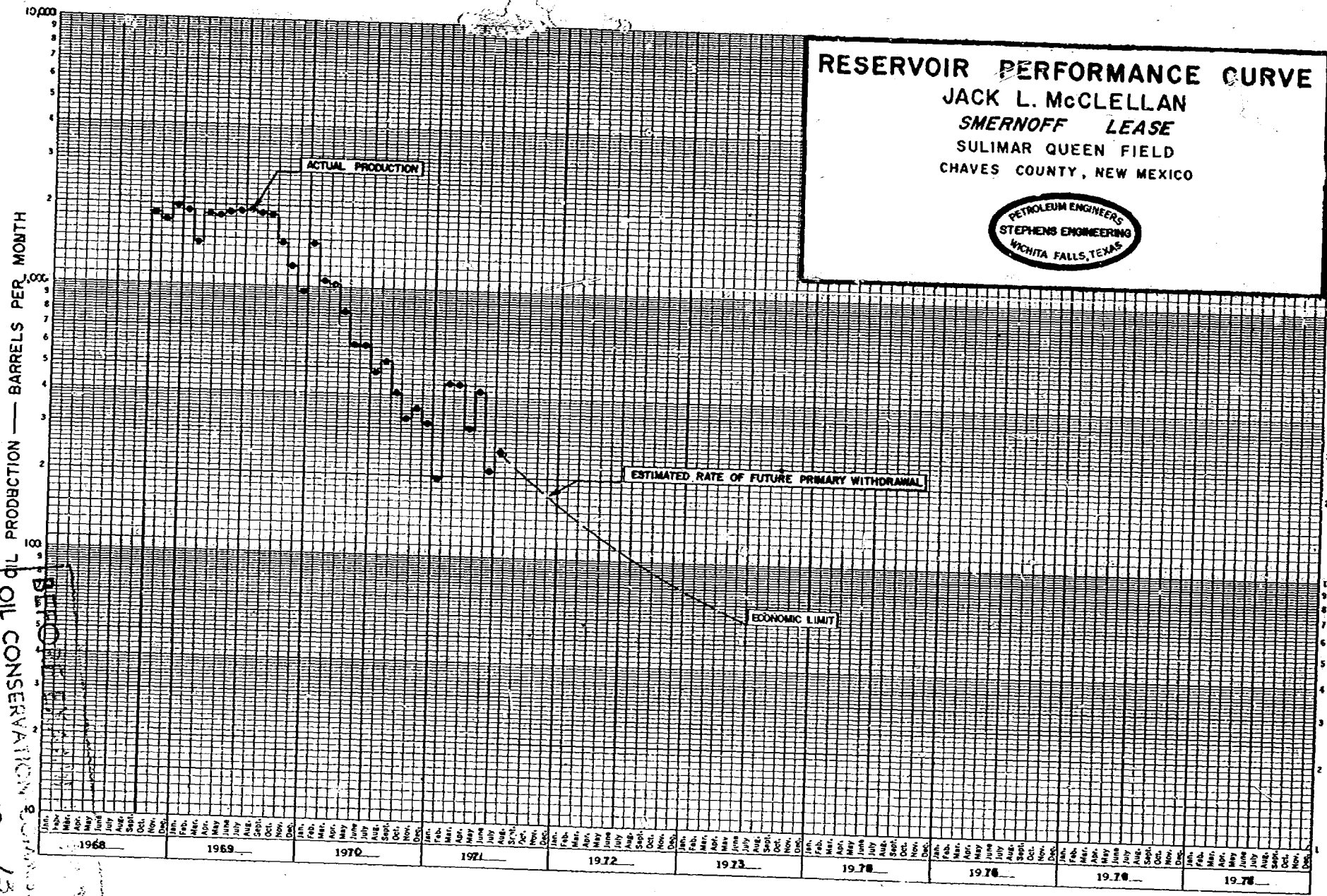
# RESERVOIR PERFORMANCE CURVE

JACK L. McCLELLAN

SMERNOFF LEASE

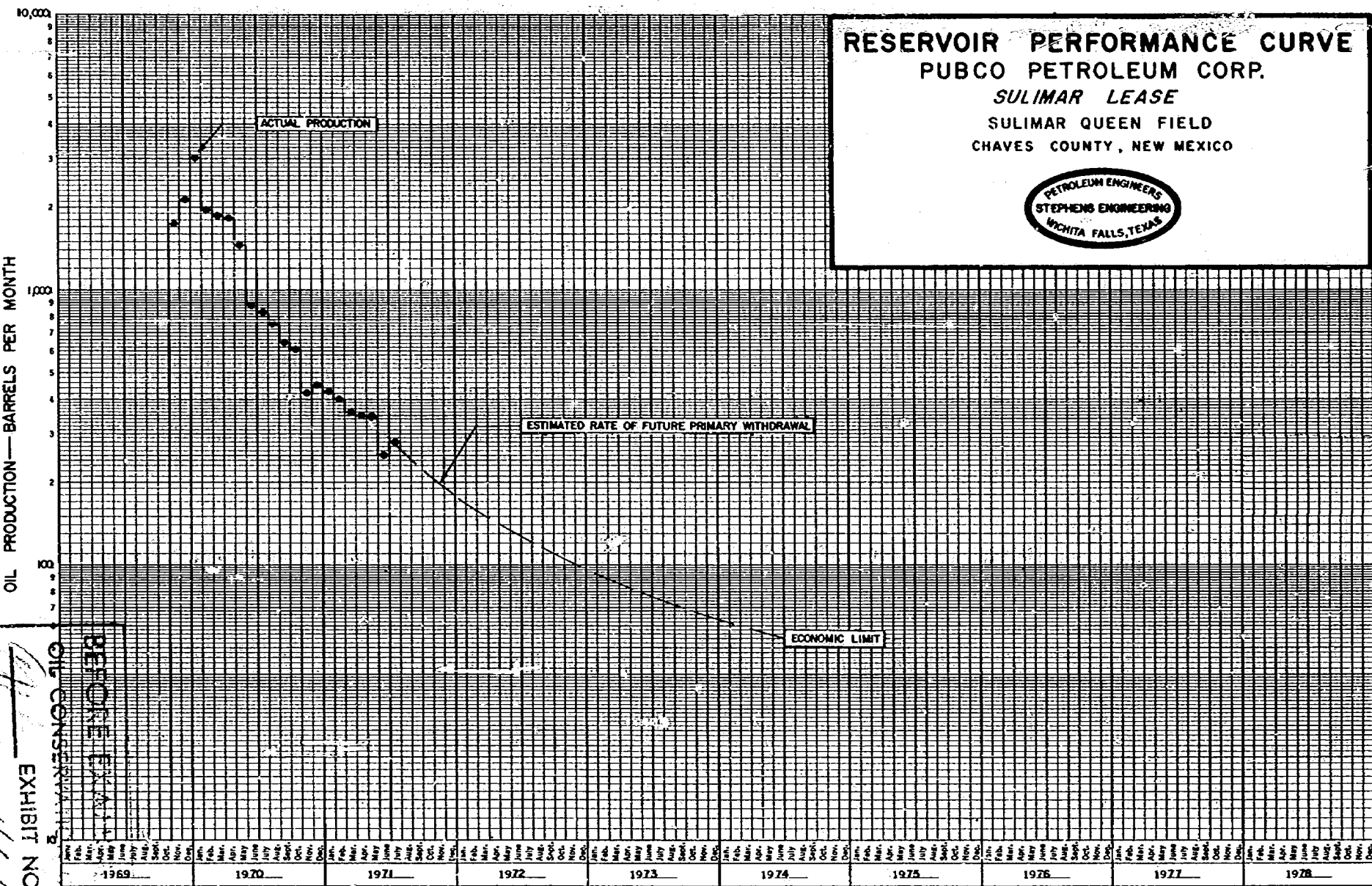
SULIMAR QUEEN FIELD

CHAVES COUNTY, NEW MEXICO



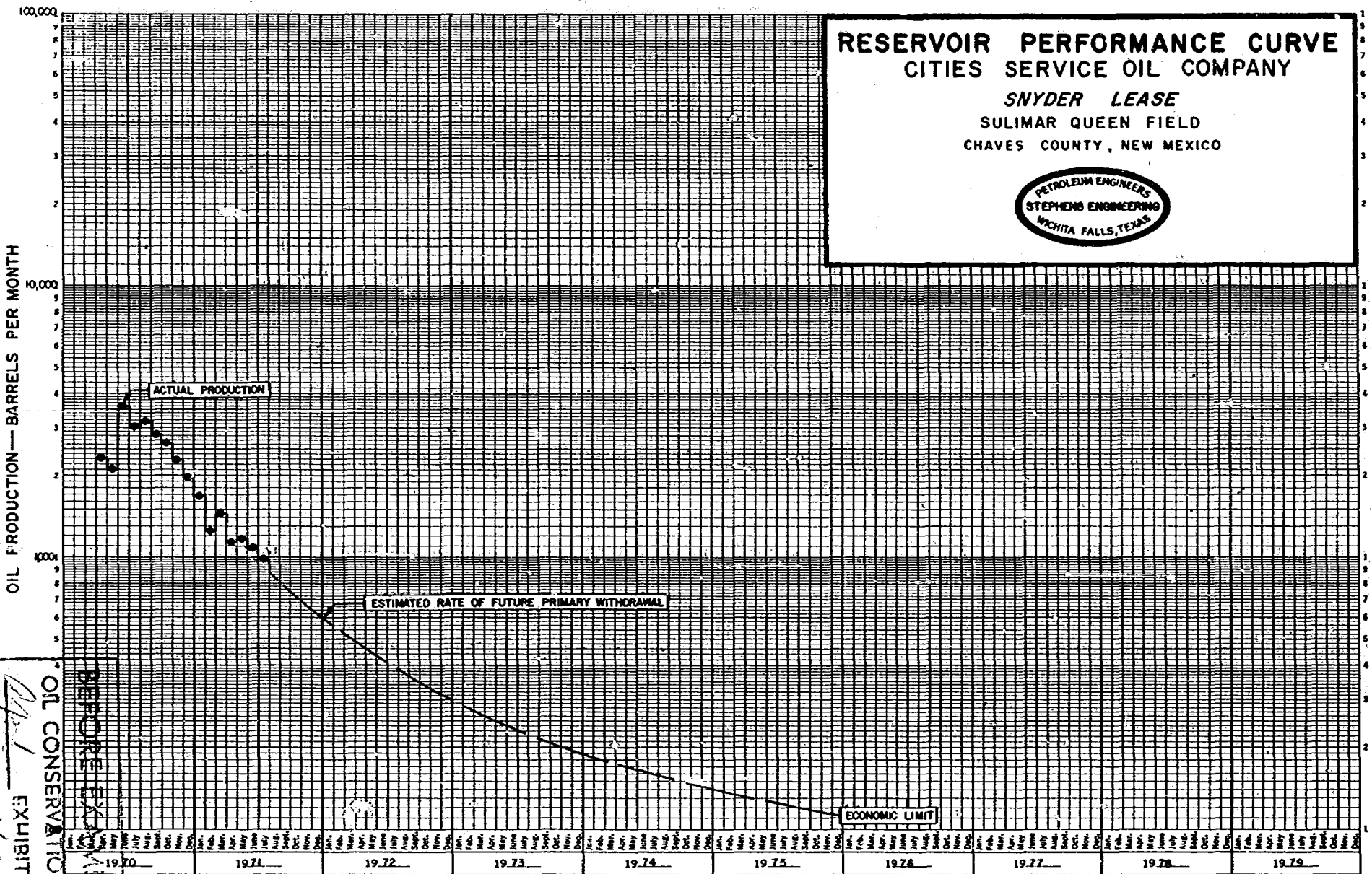
Oil PRODUCTION — BARRELS PER MONTH

Case NO. 4610  
EXHIBIT NO. 13



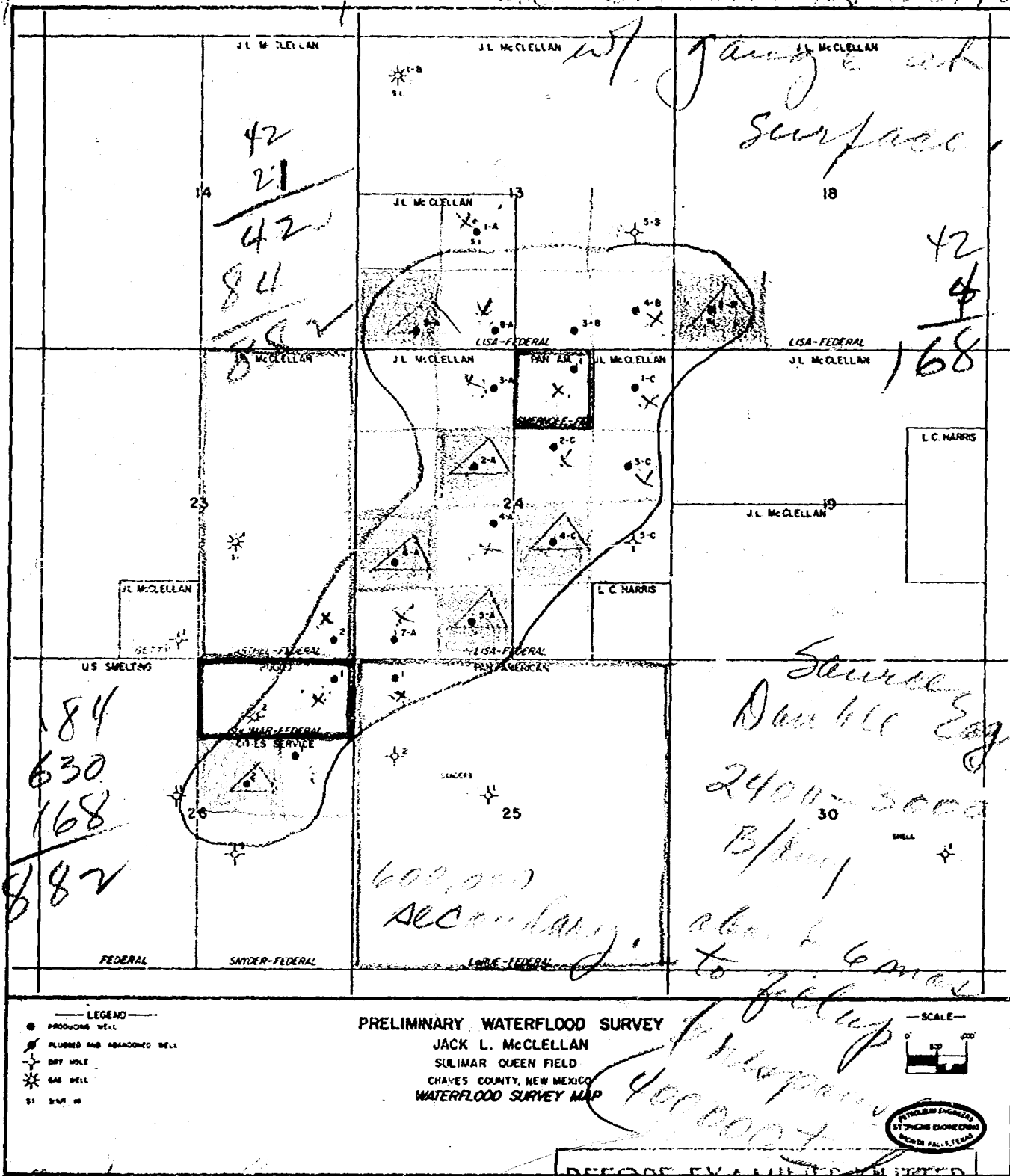
BEFORE EXHIBIT  
 OIL CONSERVATION  
 CASE NO. 4610  
 EXHIBIT NO. 14  
 AFTER  
 CONSERVATION

**RESERVOIR PERFORMANCE CURVE**  
**CITIES SERVICE OIL COMPANY**  
**SNYDER LEASE**  
**SULIMAR QUEEN FIELD**  
**CHAVES COUNTY, NEW MEXICO**



BEFORE EXAMINER NOTED  
 OIL CONSERVATION COMMISSION  
 CASE NO. 4610  
 EXHIBIT NO. 15

no plastic  
 - viewing, part 1.50' above  
 central injection  
 by 1000 ft. below  
 part 1.50' above  
 lead accumulation work



Mc Clellan Lisa  
 project  
 2 inj 40's  
 9 prod 40's

Cities proj  
 1 inj 40  
 1 prod 40  
 2 x 42 = 84

BEFORE EXAMINER PUTTER  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 16  
 CASE NO. 4610

15

42  
 1.5  
 63.0

LEASE NAME AND NUMBER	DESCRIPTION
LISA "A" FEDERAL NM-069280-A	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 13: SW $\frac{1}{4}$ SEC. 24: W $\frac{1}{2}$ TOWNSHIP 15 SOUTH, RANGE 30 EAST SEC. 19: LOTS 3 & 4, E $\frac{1}{2}$ SW $\frac{1}{4}$ , W $\frac{1}{2}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$
LISA "B" FEDERAL NM-069280-B	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 13: N $\frac{1}{2}$ , SE $\frac{1}{4}$ TOWNSHIP 15 SOUTH, RANGE 30 EAST SEC. 18: ALL SEC. 19: LOTS 1 & 2, E $\frac{1}{2}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ NE $\frac{1}{4}$
LISA "C" FEDERAL NM-069280-C	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 24: S $\frac{1}{2}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ NE $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$
CARTHEL FEDERAL NM-0556543	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 23: E $\frac{1}{2}$
SMERNOFF FEDERAL NM-0558684	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 24: NW $\frac{1}{4}$ NE $\frac{1}{4}$
LARUE FEDERAL NM-0518428	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 25: N $\frac{1}{2}$ NW $\frac{1}{4}$
SULIMAR FEDERAL NM-0458356	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 26: N $\frac{1}{2}$ NE $\frac{1}{4}$
SNYDER FEDERAL NM-0493370	TOWNSHIP 15 SOUTH, RANGE 29 EAST SEC. 26: N $\frac{1}{2}$ SE $\frac{1}{4}$

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 17  
CASE NO. 4612

<u>WELL</u>	<u>UNIT</u>	<u>SEC.</u>	<u>TWP.</u>	<u>RNG.</u>	
JACK L. McCLELLAN LISA FED. 9-A ✓	M	13	15S	29E	✓
JACK L. McCLELLAN LISA FED. 2-B ✓	M	18	15S	30E	
JACK L. McCLELLAN LISA FED. 2-A ✓	F	24	15S	29E	✓
JACK L. McCLELLAN LISA FED. 6-A ✓	L	24	15S	29E	✓
JACK L. McCLELLAN LISA FED. 4-C ✓	J	24	15S	29E	✓
JACK L. McCLELLAN LISA FED. 5-A ✓	N	24	15S	29E	✓
CITIES SERVICE SNYDER FED. 2	G	26	15S	29E	✓

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
EXHIBIT NO. <u>18</u>	
CASE NO. <u>4610</u>	

RECEIVED

SEP 14 1971

OIL CONSERVATION COMM.

BEFORE THE OIL CONSERVATION COMMISSION

OF NEW MEXICO

IN THE MATTER OF THE APPLICATION  
OF JACK L. McLELLAN FOR APPROVAL  
OF A WATERFLOOD PROJECT, CHAVES  
COUNTY, NEW MEXICO

*Case 4610*

A P P L I C A T I O N

Comes now Jack L. McClellan and applies to the Oil  
Conservation Commission of New Mexico for approval of a water-  
flood project in the Sulimar-Queen Oil Pool, Chaves County,  
New Mexico, and in support thereof would show the Commission:

1. Applicant is the operator of wells located in the  
Sulimar-Queen Oil Pool, including wells in the following  
described acreage:

Township 15 South, Range 29 East, N.M.P.M.

Section 13 - SW/4, SE/4	320
Section 23 - E/2 SE/4	80
Section 24 - All	480
Section 25 - N/2 NW/4, SW/4 NW/4, 120	
Section 26 - NE/4, N/2 SE/4	240

Township 15 South, Range 30 East, N.M.P.M.

Section 18 - W/2 SW/4	80
Section 19 - NW/4 NW/4	40

*1160  
240  
1400  
120  
1520*

2. Wells in the area have reached an advanced stage of  
depletion, and the injection of water will result in the re-  
covery of oil that would not otherwise be recovered.

3. Applicant will submit a list of proposed injection  
wells and their location prior to the hearing on this appli-  
cation.

4. Injection will be into the Queen formation of the  
Sulimar-Queen Pool.

DOCKET MAILED

*10-1-71*

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law the Commission enter its order approving the waterflood project as applied for.

Respectfully submitted,

JACK L. McCLELLAN

By Jason W. Kellahin  
KELLAHIN & FOX  
P.O. Box 1769  
Santa Fe, New Mexico 87501

Attorneys for Applicant



ROUGH DRAFT FOR WATERFLOOD LETTERS

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

Dear Sir:

*Reference is made to* Commission Order No. R-4214, entered in Case No. 4610, approving the McClellan Lisa Sulimar and Cities Snyder Sulimar Waterflood Projects.

*Injection wells each of the seven authorized water injection wells shall be through tubing which shall be set in a packer located approximately 50 feet above the producing interval. The casing-tubing annulus shall be coated with an inert fluid and shall be equipped with a pressure gauge at the surface. Injection water if other than fresh shall be continuously chemically*

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which ~~the~~ *McClellan Lisa* project will be eligible to receive under the provisions of Rule 701-E-3 is 630 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less, while the maximum

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

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

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

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

cc: OCC: Hobbs x  
Artesia x  
Aztec       

USGS       

~~State Engineer Office~~, State Engineer Office, Santa Fe, New Mexico  
D. E. Gray

DRAFT

GMH/dr

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. 4610

Order No. R- 4214

APPLICATION OF JACK L. McCLELLAN  
FOR A WATERFLOOD PROJECT, CHAVES COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1971,  
at ~~XXXXXXX~~ Santa Fe, New Mexico, before Examiner Daniel S. Nutter  
Roswell

NOW, on this \_\_\_\_\_ day of October, 1971, 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, Jack L. McClellan,  
seeks authority to institute <sup>two</sup> ~~as~~ waterflood projects in the ~~Sulimar~~  
~~Queen~~ Queen Unit Area, Sulimar-Queen Pool,  
by the injection of water into the Queen formation  
through ~~various~~ 7 injection wells in Sections 13, 22, 24, 25, and 26  
Township 15 ~~NMPM~~, South, Range 29 ~~West~~, East,  
and Sections 18 and 19 of Township 15 South, Range 30 East, NMPM  
~~NMPM~~, Chaves County, New Mexico.

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

(4) That the proposed waterflood project should result in  
the recovery of otherwise unrecoverable oil, thereby preventing  
waste.

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Jack L. McClellan,  
is hereby authorized to institute <sup>Two</sup> ~~the~~ waterflood project, in the  
Unit Area, Sulimar-Queen Pool,  
by the injection of water into the Queen formation  
through the following-described wells in Township 15 South  
~~and Township 15 South Range 20 East~~  
~~XXXXXX Range 20 West, East, NMPM,~~

Eddy County, New Mexico:

McClellan Lisa Sulimar Waterflood Project

<u>Well Name</u>	<u>Well No.</u>	<u>Unit</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>
McClellan Lisa Federal A	9	M	13	15S	29E
McClellan Lisa Federal A	2	F	24	15S	29E
McClellan Lisa Federal A	6	L	24	15S	29E
McClellan Lisa Federal C	4	J	24	15S	29E
McClellan Lisa Federal A	5	N	24	15S	29E
McClellan Lisa Federal B	2	M	18	15S	30E

Cities Service Sulimar Waterflood Project

<u>Well Name</u>	<u>Well No.</u>	<u>Unit</u>	<u>Section</u>	<u>Township</u>	<u>Range</u>
Cities Service Snyder Federal	2	G	26	15S	29E

tions.

(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.

CASE 4611:

SOUTHEASTERN NEW MEXICO  
NOMENCLATURE