

CASE 2775: Application of CIMA  
CAPITAN, INC., et al for a water-  
flood project.

CASE NO  
2775

Application,  
TRANSCRIPTS,  
SMALL Exhibits  
ETC.

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BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
March 20, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Cima Capitan, Incorporated, for a waterflood project, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formation, Red Lake Pool, Eddy County, New Mexico, through 13 wells located in Sections 22 and 27, Township 17 South, Range 28 East.

Case No. 2775

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case Number 2775.

MR. DURRETT: Application of Cima Capitan, Incorporated, et al, for a waterflood project, Eddy County, New Mexico.

MR. WATSON: I am Fred Watson of the law firm of Watson and Watson of Artesia, New Mexico, representing the applicant in this case. I have with me Burt Murphy, who is the president of Cima Capitan, Incorporated.

MR. UTZ: Are there any other appearances in this case? You may proceed.

MR. WATSON: If the Examiner please, I do have a

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letter of authorization from Red Lake Oil Company and Castle and Wigzell to give to Cima Capitan, to represent them in this hearing. Would the Examiner like to have this file?

MR. UTZ: I think it will be well to have a copy made a part of the record.

MR. WATSON: We introduce these three operators at the outset of the application for cooperative waterflood. The leases will still stand on an individual basis.

BERT MURPHY

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

DIRECT EXAMINATION

BY MR. WATSON:

Q Would you state your full name, Mr. Murphy?

A Bert H. Murphy.

Q What is your residence?

A Artesia, New Mexico.

Q What is the extent of your education, Mr. Murphy?

A I have a Bachelor of Science degree in Petroleum Engineering from Stanford University and I have done graduate work in reservoir and oil properties appraisal in the University of Southern California.

Q I see, what is your practical experience in it?

A I have participated in approximately, oh, five waterfloods; one, being in California and the rest in the mid-



continent, in one or more capacities, as Project Engineer or Supervisor or Chief Engineer in a waterflood. I have also been Coordinator and Engineer and Owner of some of these waterfloods.

MR. WATSON: Are the witness' qualifications acceptable?

MR. UTZ: Yes, they are.

Q (By Mr. Watson) Mr. Murphy, I will hand you what has been marked as Exhibit Number 1 in Case 2775 and ask you to state what that is and what it depicts?

A This is a blueprint from the Southwest Line Company showing the operating leases on and around the proposed project in Section 22 of Township 17, 28. It shows this for a distance of approximately two miles south, two north and two east and two west.

Q It shows the ownership within more than a mile from the radius of the project?

A Yes, sir.

Q The proposed project is marked in yellow?

A Yes, it showed that the project will cover the entire Section 22 with the exception of the southeast to the southwest and the southeast to the southeast. It will also include the north half of the north half of Section 27.

Q I will hand you Exhibit Number 2 and ask you if that is a picture of the immediate project area?

A Yes, this map shows Section 22 in the north half of

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the north half of Section 27 and an area of approximately one-half mile around the proposed project area. It also shows the proposed injection wells and producing wells for the project.

Q Does it show those wells which are now producing, which are proposed to be converted into injection wells?

A It shows--the wells presently producing to be converted, are the solid center circle with an additional circle around that. The ones that are proposed to be drilled are shown as concentric circles not colored in the center of them.

Q Does this project show that there is 80 acres described as the northeast of the northwest and the northwest of the northeast are operated by Castle and Wegzell?

A That is correct.

Q Or, it shows Castle and Wegzell's Gulf State lease? Cima Capitan is shown as the owner of the operating rights?

A The remainder of the section, with the exception of the southeast to the southwest and the southwest to the southeast.

Q As, the Red Lake is shown to have the northeast of the northwest of Section 27?

A Yes.

Q Does this Exhibit Number 2 reflect the type of pattern you will use for the proposed waterflood?

A Yes, it does.

Q What type of pattern is it?

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A It is a modified five spot pattern type of flood.

Q What is the reason for it being modified?

A It is modified to take advantage of existing facilities and to conform with the reservoir characteristics.

Q Part of the reason it is modified is because of the irregular spacing of the existing wells?

A That is correct. Also, of course, to protect correlative rights.

Q Do you feel that this pattern will give an effective sweep efficiency?

A Yes.

Q Do you feel it will protect the correlative rights of interested parties?

A Yes, with one modification that has been pointed out to us by the State Land Department, in that you have State and Federal leasing adjoining between Sections 22 and 15 and at this time, the effectiveness of the flooding in that area is unknown and there has been no arrangements made with Kincaid and Watson or with Phillips who own Kincaid and Watson, the southeast quarter; as, we would propose that the Castle Gulf State Number 1 not be converted until cooperation is arranged with them or in the event that it can not be arranged, to move the proposed injection well location from the northeast of the northeast, up to the line to protect correlative rights between the State and Federal leases.

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Q Actually, all the wells shown on here as either producing and to remain producing or shown as to be converted as injection wells or to be drilled as producing or injection wells are based upon a modified five spot pattern?

A Yes.

Q Application has been made, but this is proposed?

A Yes.

Q Name the producing wells that are proposed to be converted to injection wells?

A The producing wells proposed to be converted to injection are the Capitan Wells Number 3, 4 and 6 and to recomplate the Castle Well Number 1 or if it is impossible to recomplate that well, to drill a new injection well in the vicinity of the abandoned location or the abandoned well.

Q As to the wells which you have identified, they are numbered in Exhibit Number 2 in accordance with the numbers you have just given?

A Yes, sir.

Q And, the project depends on the performance from this initial five spot, as to whether the applicant will go on beyond that?

A Yes.

Q But, they are applied for?

A Yes.

Q I will now hand you Exhibits 3A, 3B and 3C and I



will ask you what these exhibits depict?

A These exhibits show the production in barrels per year for the three tracts that have separate operators. Exhibit 3A is the Capitan-Red Lake lease in Section 22, showing the production history from January 1st, 1933 to January 1st, 1963.

Q On the 480 acres which Capitan has been operator of?

A Yes. Exhibit 3B shows this information for the Red Lake Oil Company levers lease in Section 27 from--actually, there is no record from 1935 through '40 but from 1941 again to the 1st of January of 1963. And, Exhibit 3C shows this information for the Castle and Wegzell Gulf State lease for the years--this is a recently drilled lease--for the years 1959 to the 1st of January, 1963.

Q Leaving Exhibits 3A through 3C inclusive, I would like for you to turn to Exhibit 4A, 4B and 4C and I will ask you what these are?

A Again, that is these data on production in graphic form. The production has been graphed, showing years along the bottom and production rates and average barrels per month along the vertical scale. It also shows that the present production on the Capitan-Red Lake lease is on an average 1.2 barrels per day per well. On the Red Lake Oil Company levers lease--

Q That is in Section 27?

A Yes. The average is 1.1 barrels per day, per well.

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And, on the Castle and Wegzell State lease, the average is 3 barrels per day per well.

Q Exhibit 4A then is a graphic reproduction of the annual production of the 480 acres of which you are operators?

A Yes, sir.

Q Exhibit 4B shows the annual production, graphically, of the Red Lake levers lease of Section 27?

A That is right.

Q And coming to the 4C is the 180 acre tract of Castle and Wegzell's Gulf State lease?

A That is right.

Q From these graphs, and tabulations of annual production, would you say that the leases for which this application is sought are approaching an economic limit?

A Yes, they are marginally producing lease . The graphic data indicates clearly that they have declined to marginal or stripper condition.

Q Do you believe that flooding these leases in accordance with the application made here would tend to conserve oil which would otherwise be lost?

A Yes.

Q I will hand you what are marked as Exhibits 5A, 5B and 5C and ask you to state what these exhibits reflect?

A These exhibits tabulate the well data. Again, Exhibit 5A is the Capitan-Red Lake. Exhibit 5B is the Red Lake levers

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lease; and, Exhibit 5C is the Castle and Wegzell Gulf State lease. And, the information shown on these exhibits are the well number, location, completion date, total depth casing record and treatments where that information was available to us.

Q Where the information was not available, the treatment is of course, marked "NR", no record?

A That is correct.

Q Will you please identify Exhibit Number 6?

A Exhibit Number 6 is a Gamma-Ray neutron log, a well log of the Red Lake Oil Company levers lease 24, which is located in the Section 27. It is our only available electric type log on these wells.

Q And, where does the log show the pay interval?

A It shows the pay interval in this well by approximately 1900 feet. The top of it at approximately 1923 feet, going through to the bottom of the pay zone at 1937. This is the premier sand zone.

Q Premier sand of the Grayberg?

A Yes, sir.

Q Do you know whether or not this is the same zone which has been flooded before?

A Yes, it has been flooded and it is being flooded in the western portion of the Red Lake field and it has been flooded in other projects in the area.

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Q From your knowledge, have these been successful flood projects?

A They have indicated success, yes.

Q Now, on this proposed flood, will you have water available for the flood?

A Yes, we will have.

Q I will hand you Exhibit Number 7 and ask you to identify that and read it into the record, please.

A This is a letter from the Caprock Water Company to Cima Capitan Incorporated dated March 16, 1963, and it says:

"Gentlemen:

Thank you for your inquiry regarding injection water for your waterflood project in Section 22, T17S, R28E.

We have water available in your area and are willing to furnish the necessary amounts to you at your plant site.

Yours Very Truly,

CAPROCK WATER COMPANY"

Signed by Roy Elliott, who is assistant to Harold Morgan.

Q Has Cima Capitan Incorporated prepared a skematic showing the manner in which they will complete the injection wells?

A Yes, they have.

Q Is this depicted on what has been marked Exhibit Number 8?

A Yes, it is.

Q Would you state what Exhibit Number 8 shows?



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A Exhibit Number 8 shows that the pay interval occurs at approximately 2,000 feet and that it has been, on the wells to be converted to present producing status that they have been shot with nitroglycerine and cleaned out, leaving a shot cavity. It shows that it is planned by Capitan to run casing to just above the pay zone and cement this casing to the surface so that you have a cased and cemented well to the surface. It also shows that in the old producing wells that 8-5/8 inch casing had been set. It is Capitan's further plan to inject through tubing by setting a packer near the bottom of the casing.

Q Do you believe that the proposed completion shown on Exhibit Number 8 will adequately protect the surface waters in the area, if any?

A Yes, sir.

Q Do you know whether or not the casing skematic of the injection well completion, do you know whether this exhibit has been submitted to the State Engineering Office?

A I believe it has been.

Q More for summary than anything else, then, is it your opinion that the leases for which this waterflood application is made are not at the economic limit but reaching the economic limits; and, is it your further opinion that this proposed waterflood project as outlined in these exhibits and the application will result in conservation of oil which would otherwise be lost?



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A Yes.

Q Do you believe that the program as set up will protect correlative rights?

A Yes.

MR. WATSON: At this time the Applicant offers Exhibits 1 through 8 inclusive.

MR. UTZ: Without objection, Exhibits 1 through 8 will be admitted.

MR. DURRETT: Mr. Murphy, for the purpose of the record, Exhibits 1 through 8, with the exception of the log and the letter were prepared by you or under your direction?

A Yes, they were.

MR. DURRETT: Thank you.

MR. UTZ: Are there any questions of the witness?  
Mr. Irby?

CROSS EXAMINATION

BY MR. IRBY:

Q Frank Irby, State Engineer's Office. I would like Mr. Murphy to state for the record the source of the water which Caprock is furnishing for this flood?

A Mr. Irby, that water is from the Red Lake area which is several miles north of here. This water was used by the Gray Ridge Oil Company in their waterflood in the Artesia field. It is under the State water easements and is outside the Artesian Basin. It is salty.



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Q Yes, sir. Do you have a copy of the analysis of this water available?

A I do have. I don't have one with me but I have one available in Artesia. I'd be happy to submit one.

MR. IRBY: I would appreciate receiving one and that is all I have.

MR. UTZ: Any other questions?

BY MR. UTZ:

Q Do you intend to utilize tubing either plastic or cement for your injection strike?

A Yes, plastic coated tubing.

Q I believe you stated in relation to Exhibit 8 that all your injection wells would have casing set to the top of the pay and cement circulating to the surface?

A Yes, sir, in the case of a new injection well, we might set through the pay and perforate; but, that would be the only change in the completion.

Q On your Cima Capitan Red Lake lease, you have stated that the average production per day is 1.2 barrels. How long a period is this average for? Is it just for the last month?

A The last year.

Q 1962 production?

A Yes.

Q Now, what is the range of production among those wells? In other words, what is the low and high?

A They are on a central power and the facilities for



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frequent tests are not available but they have been tested over the past year. I believe the highest is in the order of  $3\frac{1}{2}$  barrels per day and the low is--I don't know what--something less than a barrel.

Q Well, if it is only  $3\frac{1}{2}$  barrels for high, I wouldn't worry about the low one.

A Yes.

Q How about your Red Lake lease or the Red Lake levers lease? What would be your high for that?

A I don't have that data but I can state that there would be no well there making in excess of 3 barrels.

Q On your Castle and Wigzell, you only have two wells on that lease, do you not?

A Yes, two wells and they are averaging 3.

Q On your Exhibit Number 1, you have shown what I would interpret to be a Red Lake unit. Is that a waterflood to the west?

A Yes, that is Cursy and Company.

Q That is called the Red Lake unit 1 flood?

A I believe, yes.

Q That is the closest flood to this area then?

A That is correct.

Q Is that flood operating under Rule 701?

A I am quite sure it is.

MR. UTZ: Are there any questions of the witness?

MR. DURRETT: Yes, I have one. Mr. Murphy, do I





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understand correctly that concerning your Castle and Wigzell Gulf State's Well Number 1, which is located in the northwest quarter of the northeast quarter of Section 22, that you don't propose to put that well on injection until you have worked out an agreement or received approval from the Federal Government to do so?

A Well, it would be a line cooperation with Kincaid and Watson. In other words, if and when they apply for flooding on their lease and would work out something and protect the correlative rights between the states and Federal public lands and if it was harming the floods and delaying it, then we would propose not to put that on and move the injection well from the northeast to the northeast up to the line so that it was 15 feet from the line. Next, we would have a situation similar to our pattern in the center of Section 22 where we have two inside producers surrounded by injection wells. It should be a sufficient pattern.

MR. DURRETT: Thank you. I think that is all cleared up.

MR. UTZ: Mr. Murphy, are all of your proposed injection wells listed on your Exhibit 5A, B and C?

A They are listed, I believe, they are listed in the application.

MR. WATSON: If we could look those over just a moment?

MR. UTZ: Yes. They are probably listed but not as



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injection wells.

A This 5A shows all the presently active wells on the Capitan and it doesn't specify that they are producing or injection wells but 3, 4 and 6, on that list would be.

Q Well, if you know them readily, let's just state on each one what the injection wells are?

A On 5A, the Capitan Red Lake, the well No. 3, 4 and 6 are proposed as injections. All the other injection wells that are proposed on that lease or that operation or location so there is no data shown.

MR. UTZ: You don't know where you intend to drill those wells?

A We have them shown in the units, production units, that they would be in on Exhibit Number 2 and they would be located approximately as shown on this map, with any modifications that might develop from data developed as the project goes on that would change the locations being submitted to the Commission.

Q Then, it would probably be better for you not to apply now for the locations, but get administrative procedure at the time you are to drill them.

A Yes, sir.

MR. UTZ: Can you identify the proposed injection wells on the Red Lake lease?

A The proposed injection wells are numbered 20 and 24. And on the Castle and Wigzell Exhibit 5C, it is Well Number 1



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with the qualifications as outlined concerning correlative rights.

Q How about the second well that you show on your exhibit?

A This is presently a well that has been plugged and abandoned and we would propose to re-enter that well and complete it as an injection well if possible, or if not, drill a new injection well in that vicinity.

Q Well, that is the well in the southwest corner of that Gulf State lease that you are speaking of?

A Yes, sir.

Q How about the one which you show as an injection well, which is not a producing well?

A That is the one I suggested the qualifications are for protecting correlative rights. It is a proposed injection well but the conversion of it depends upon something that is satisfactory to the State Land Office on protecting correlative rights between the Federal and State leases.

Q And, you don't know for sure whether you want to use that one as an injection well or not?

A That is right.

Q So, actually, all you are requesting at this time on that particular lease is one well as an injection well?

A Yes, sir.

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

witness may be excused. Any other statements to be made in this case?

MR. WATSON: Mr. Examiner, I am not sure that I understand one of your remarks as to the wells which the Applicant proposed to drill. Should we file an amended application leaving those out or what?

MR. UTZ: The usual waterflood order includes an administrative procedure for further injection wells which may be applied for and granted in the judgement of the Secretary-Director.

MR. WATSON: In other words, the owner will merely give approval to the program subject to the various applications?

MR. UTZ: For the number of wells that you have so stated you want, you know the exact location of three. For instance, in paragraph number 5 of the application, we have seven tentative wells to be drilled in this program if the additional five spot warrants it.

(To the witness) Now, all that we have discussed up to now on Exhibit 5A, B and C, are five wells?

A Yes.

MR. WATSON: Well, actually, there'd be six wells, I believe.

MR. UTZ: That is true.

MR. WATSON: The owner itself wouldn't encompass these proposed wells to be drilled. They have to be applied for?

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MR. UTZ: Not unless you state what the locations are and that you intend to drill them.

MR. DURRETT: I think the wells that you propose to drill are not included in any order that the Commission might issue approving your application. That might be handled by the Administrative Rules.

MR. WATSON: In other words, the owner will accept the six present wells we are talking about now?

MR. UTZ: Unless you want to change the location of these wells in the record?

MR. WATSON: We prefer to handle it by administrative procedure. I just didn't want there to be any conflict as to what the Examiner is willing to put in the Order and what we have applied for. We will handle the drilled wells by administrative action.

MR. UTZ: All right, sir. Any statements to be made? If there are not, the case will be taken under advisement and we will have a 15 minute recess.

(Whereupon a recess was taken at 10:30 A.M.)

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STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) ss

I, STEVEN McCRYSTAL, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, I have affixed my hand and notarial seal this 1st day of May, 1963.

*Steven McCrystal*  
COURT REPORTER  
NOTARY PUBLIC

My Commission Expires:

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2775 heard by me on May 20, 1963.  
*Shirley H. [Signature]*, Examiner  
New Mexico Oil Conservation Commission

## CIMA CAPITAN, INC.

WELL DATA - RED LAKE LEASE  
 SECTION 22, T17S, R28E, Eddy County, New Mexico  
 S/2 N/2 & N/2 SW/4

WELL #	LOCATION	COMP. DATE	T.D.	CASING RECORD	TREATMENT
1	SW NE NW	10-1-1933	1966	10" at 109' 8-5/8" at 450' 6-5/8" at 1692	N.R.
2	NW SE SW	5-1-1934	1959	10" at 150' 8-5/8" at 550' 6-5/8" at 1700'	N.R.
3	NE SW SW	12-15-1934	1980	10" at 150' (pulled) 8-1/4" at 550' 6-5/8" at 1717'	Shot 100 qts. 1955-1975'
4	SW NW NW	5-27-1935	1954	8-5/8" at 495' 6-5/8" at 1700'	Shot with 50 qts. (interval unknown)
6	SE NE SW	4-27-1936	1954	8-5/8" at 475' 6-5/8" at 1675'	Shot with 60 qts. 1925-1937
7	NW NW SE	7-1-1936	1957	10" at 145' 8-5/8" at 1368'	Shot with 60 qts. 1934-1944
8	SE NW SW	3-1-1937	1953	8-5/8" at 495' 6-5/8" at 1300'	Shot with 60 qts. (interval unknown)
9	SW SW NW	8-29-1937	1955	8-5/8" at 497' 7" at 800' (set on packer)	Shot with 60 qts. 1916-1929.

# Memo

From

E. A. UTZ  
GAS ENGINEER

To

to  
2.2. 1950  
3, 4, 6.

30 yrs. old.  
8 1/2 495+500' surface.

# Memo

From

E. A. UTZ  
GAS ENGINEER

To

Office

1950  
of  
15  
15



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BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CIMA CAPITAN, INCORPORATED (N.S.L.),  
A NEW MEXICO CORPORATION, CASTLE &  
WIGZELL, A PARTNERSHIP, AND RED LAKE  
OIL COMPANY, A PARTNERSHIP, FOR A  
WATER FLOOD PROJECT, RED LAKE FIELD,  
EDDY COUNTY, NEW MEXICO.

No. 2775

APPLICATION

COME NOW Cima Capitan, Incorporated (N.S.L.), a New Mexico corporation, Castle & Wigzell, a partnership composed of John B. Castle and H. Brace Wigzell, and Red Lake Oil Company, a partnership composed of Nell Gillespie, Van P. Welch, Jr., Marjorie Nell Hickey and Robert Hill Welch, by their attorneys, Watson & Watson, and state:

1. That applicants are the operators of fifteen (15) producing oil wells located in Sections 22 and 27, Township 17 South, Range 28 East, N.M.P.M., as follows:

Castle & Wigzell

Township 17 South, Range 28 East, N.M.P.M.

Section 22: Well No. 1, NW $\frac{1}{4}$ NE $\frac{1}{4}$   
Well No. 2, NE $\frac{1}{4}$ NW $\frac{1}{4}$

Cima Capitan, Incorporated (N.S.L.)

Township 17 South, Range 28 East, N.M.P.M.

Section 22: Well No. 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$   
Well No. 2, SE $\frac{1}{4}$ NW $\frac{1}{4}$   
Well No. 9, SW $\frac{1}{4}$ NW $\frac{1}{4}$   
Well No. 4, NW $\frac{1}{4}$ SW $\frac{1}{4}$   
Well No. 8, NW $\frac{1}{4}$ SW $\frac{1}{4}$   
Well No. 1, NE $\frac{1}{4}$ SW $\frac{1}{4}$   
Well No. 6, NE $\frac{1}{4}$ SW $\frac{1}{4}$   
Well No. 7, NW $\frac{1}{4}$ SE $\frac{1}{4}$

Red Lake Oil Company

Township 17 South, Range 28 East, N.M.P.M.

Section 27: Well No. 21, NW $\frac{1}{4}$ NW $\frac{1}{4}$   
Well No. 20, NE $\frac{1}{4}$ NW $\frac{1}{4}$   
Well No. 5, NW $\frac{1}{4}$ NE $\frac{1}{4}$   
Well No. 24, NW $\frac{1}{4}$ NE $\frac{1}{4}$   
Well No. 23, NE $\frac{1}{4}$ NE $\frac{1}{4}$

and the proposed project area covered by this Application is NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 27 and all of Section 22, except for SE $\frac{1}{4}$ SW $\frac{1}{4}$  and SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Township 17 South, Range 28 East, N.M.P.M.

2. That there are attached hereto and made a part hereof by reference two certain plats as follows:

(a) Plat showing the project area and the location of the proposed injection wells (Exhibit "A").

(b) Area plat showing the location of all other wells and leases within a radius of one mile from the proposed injection wells (Exhibit "B").

3. That the wells operated by applicants have reached an advanced or "stripper" state of depletion, and applicants propose to inject water into the producing Grayburg-San Andres Formation in sufficient quantities and under sufficient pressure to stimulate the production of oil from the wells in the project area.

4. That applicants propose to convert six (6) presently producing oil wells to water injection wells as follows:

Castle & Wigzell Gulf State Lease

Township 17 South, Range 28 East, N.M.P.M.

Well No. 1, NW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 22

Cima Capitan, Incorporated (N.S.L.) - Red Lake Lease

Township 17 South, Range 28 East, N.M.P.M.

Well No. 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 22

Well No. 4, NW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 22

Well No. 6, NE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 22

Red Lake Levers Lease

Township 17 South, Range 28 East, N.M.P.M.

Well No. 20, NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 27

Well No. 24, NW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 27

5. That applicants propose to drill seven (7) new water injection wells as follows:

Cima Capitan, Incorporated (N.S.L.) - Red Lake Lease

Township 17 South, Range 28 East, N.M.P.M.

Well in NW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 22

Well in NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 22

Well in NE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 22

Well in SW $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 22

Well in SW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 22

Red Lake Levers Lease

Township 17 South, Range 28 East, N.M.P.M.

Well in NW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 27

Well in NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 27

6. That applicants propose to drill two (2) new oil producing wells as follows:

Castle & Wigzell Gulf State Lease

Township 17 South, Range 28 East, N.M.P.M.

Well in NW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 22

Red Lake Levers Lease

Township 17 South, Range 28 East, N.M.P.M.

Well in NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 27

7. That applicants propose to re-enter a dry well located on the Castle & Wigzell Gulf State Lease in the Southwest Corner of the NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 22, Township 17 South, Range 28 East, N.M.P.M. for the purpose of making said well a water injection well; or, alternatively, applicants will drill an additional injection water well in the vicinity of said dry well.

8. The source of water for this project is purchased from Caprock Water Company or other similar source.

9. That applicants propose to conduct said water flood project in accordance with the allowable provisions of Rule 701 of the New Mexico Oil Conservation Commission.

10. The approval of this water flood project will be in the interest of conservation and prevent waste, and correlative rights will be protected.

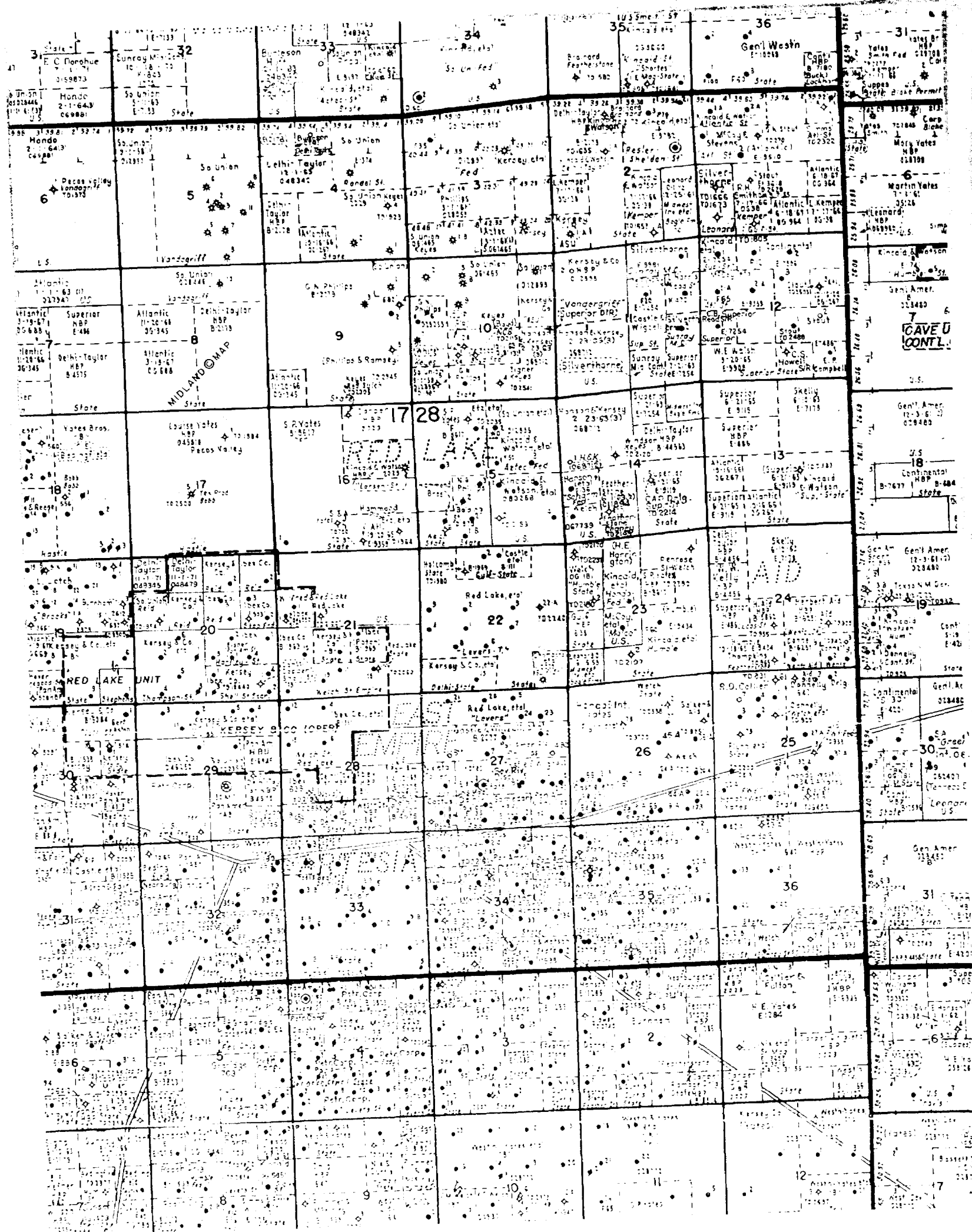
WHEREFORE, applicants pray:

1. That this matter be heard by an examiner duly appointed by the Oil Conservation Commission of the State of New Mexico after due Notice has been given.

2. That after hearing, an Order be entered authorizing applicants to institute the aforementioned water flood project by the injection of water into the producing Grayburg-San Andres Formation through the injection wells hereinabove described, and that allowables be established for the project in conformity with Rule 701, and for such other relief as may be just in the premises.

CIMA CAPITAN, INCORPORATED (N.S.L.),  
CASTLE & WIGZELL and RED LAKE OIL  
COMPANY

By Frederick A. Watson of Watson & Watson,  
Attorneys at Law, P. O. Drawer 6,  
Artesia, New Mexico.



104 SOUTH FOURTH ST.

TELEPHONE 748-6911

## CAPROCK WATER COMPANY

P. O. BOX 607

ARTESIA, NEW MEXICO

March 13, 1963

Cima Capitan Incorporated  
P. O. Box 1072  
Artesia, New Mexico

Attention: Mr. Thomas F. Welch


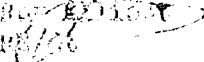
Gentlemen:

Thank you for your inquiry regarding injection  
water for your water flood project in  
Section 22, T17s, R28E.

We have water available in your area and are willing  
to furnish the necessary amounts to you at your  
plant site.

Yours Very Truly

CAPROCK WATER COMPANY

  
BY   
1963

Case 2775

Heard 3-20-63

Rec. 3-21-63

1. Grant Cima Capitan, Inc. a  
waterflood for the project area  
described as;

17 S - 28 E,

sec. 22 N/2, N/2 N/2, SW/4 SW/4,  
SW/4 / SE/4.

sec. 17, N/2 N/2,

2. The injection wells are

Castle & Wiggell, Half Lt. #1, NWN 22-17S-28E

~~NE NW " "~~  
Cima Capitan-Red Lake #3, NESWSW 22-17S-28E

" " " " #4, SWNNW " " "

" " " " #6, SENESEW " " "

Red Lake-Denver #20, NENW 27-17S-28E

" " " " #24, NWN 27-17S-28E

Grant H<sub>2</sub>O flood order otherwise,

*[Signature]*

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

*State of New Mexico*  
**Oil Conservation Commission**



LAND COMMISSIONER  
E. B. JOHNNY WALKER  
MEMBER

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

P. O. BOX 671  
SANTA FE

April 1, 1963

Mr. Fred Watson  
Watson & Watson  
Attorneys at Law  
Post Office Drawer E  
Artesia, New Mexico

Re: Case No. 2775  
Order No. R-2461  
Applicant:  
Cima Capitan, Inc., et al

Dear Sir:

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

Very truly yours,

A. L. PORTER, JR.  
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC   x  

Artesia OCC   x  

Aztec OCC           

OTHER

DRAFT

JMD/esr

March 22, 1963

*Ida -  
need spec  
letter of transmittal  
also copy of order  
to JGL*

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. 2775

Order No. R- 2461

*WHD*  
*su*  
*ATP*  
*3/28/63*  
APPLICATION OF CIMA CAPITAN, INCORPORATED  
(N.S.L.), CASTLE & WIGZELL, AND RED LAKE OIL  
COMPANY, FOR A WATERFLOOD PROJECT, RED LAKE  
POOL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
March 20, 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 April day of March, 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 applicants, Cima Capitan, Incorporated (N.S.L.),  
Castle & Wigzell, and Red Lake Oil Company, seek authority to  
institute a waterflood project in the Red Lake Pool, Eddy County,  
New Mexico, by the injection of water into the Grayburg-San Andres  
formation through *14 wells located in Section 22 on the N/2 N/2*  
~~the following described six presently producing~~  
*of Section 27, Township 17 South, Range 28 East, NMPM.*  
~~or wells.~~

~~Castle & Wigzell Gulf State Lease~~

~~Well No. 1, located in the NW/4 NE/4 of Section 22~~

~~Cima Capitan, Incorporated (N.S.L.) - Red Lake Lease~~

~~Well No. 3, located in the SW/4 NE/4 of Section 22~~

~~Well No. 4, located in the NW/4 SW/4 of Section 22~~

~~Well No. 6, located in the NE/4 SW/4 of Section 22~~

~~Red Lake Levers Lease~~

~~Well No. 20, located in the NE/4 NW/4 of Section 27~~

~~well No. 24, located in the NW/4 NE/4 of Section 27~~



all in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicants also seek authority to inject water into the Grayburg-San Andres formation, Red Lake Pool, Eddy County, New Mexico, through the following-described seven water injection wells to be drilled:

Cima Capitan, Incorporated (N.S.L) - Red Lake ~~Lease~~  
Well in the NW/4 NW/4 of Section 22  
Well in the NE/4 NE/4 of Section 22  
Well in the NE/4 SE/4 of Section 22  
Well in the SW/4 SE/4 of Section 22  
Well in the SW/4 SW/4 of Section 22

Red Lake Levers ~~Lease~~  
Well in the NW/4 NW/4 of Section 27  
Well in the NE/4 NE/4 of Section 27

all in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(4) That the applicants also propose to drill the following-described oil producing wells in connection with said waterflood project:

Castle & Wiggell Gulf State ~~Lease~~  
Well in the NW/4 NE/4 of Section 22

Red Lake Levers ~~Lease~~  
Well in the NE/4 NW/4 of Section 27

in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(5) That the applicants also propose to re-enter and convert to water injection a dry well located in the SW/4 NE/4 NW/4 of Section 22, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico; that if the well cannot be successfully converted to water injection, the applicants seek authority to drill an additional water injection well in the SW/4 NE/4 NW/4 of said Section 22.

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

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

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

IT IS THEREFORE ORDERED:

(1) That the applicants, Cima Capitan, Incorporated (N.S.L.), Castle & Wigzell, and Red Lake Oil Company, are hereby authorized to institute a waterflood project in the Red Lake Pool, Eddy County, New Mexico, by the injection of water into the Grayburg-San Andres formation through the following-described six wells:

Castle & Wigzell Gulf State Lease

Well No. 1, located in the NW/4 NE/4 of Section 22

Cima Capitan, Incorporated (N.S.L.) - Red Lake Lease

Well No. 3, located in the SW/4 NE/4 of Section 22

Well No. 4, located in the NW/4 SW/4 of Section 22

Well No. 6, located in the NE/4 SW/4 of Section 22

Red Lake Levers Lease

Well No. 20, located in the NE/4 NW/4 of Section 27

Well No. 24, located in the NW/4 NE/4 of Section 27

all in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(2) That the applicants are hereby authorized to inject water into the Grayburg-San Andres formation, Red Lake Pool, Eddy County, New Mexico, through the following-described seven water injection wells to be drilled:

Cima Capitan, Incorporated (N.S.L.) - Red Lake Lease

Well in the NW/4 NW/4 of Section 22

Well in the NE/4 NE/4 of Section 22

Well in the NE/4 SE/4 of Section 22

Well in the SW/4 SE/4 of Section 22

Well in the SW/4 SW/4 of Section 22

Red Lake Levers Lease

Well in the NW/4 NW/4 of Section 27

Well in the NE/4 NE/4 of Section 27

all in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicants are hereby authorized to drill the following-described oil producing wells in connection with said waterflood project:

Castle & Wigzell Gulf State Lease

Well in the NW/4 NE/4 of Section 22

Red Lake Levers Lease

well in the NE/4 NW/4 of Section 27

in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(4) That the applicants are hereby authorized to re-enter and convert to water injection a dry well located in the SW/4 NE/4 NW/4 of Section 22, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico; ~~that~~ if the well cannot be successfully converted to water injection, the applicants are hereby authorized to drill an additional water injection well in the SW/4 NE/4 NW/4 of said Section 22.

(5) 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.

(6) 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.

(7) 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

GOVERNOR  
EDWIN L. MECHEM  
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

Mr. Fred Watson  
Watson & Watson  
Attorneys at Law  
Post Office Drawer E  
Artesia, New Mexico

Gentlemen:

Enclosed herewith is Commission Order No. R-2461, entered in Case No. 2775, approving the Cimacapitan et al Red Lake 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 952 barrels per day. *Provided however, that unless otherwise agreed to by all parties and evidence thereof furnished the Commission,*

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,

*The transfer of allowables within the project area of this waterflood shall be authorized only insofar as the transfer is made between wells having common ownership.*

A. L. PORTER, Jr.  
Secretary-Director

*and when all of the proposed wells have been drilled or re-entered and placed on production, and assuming the Delhi State Oil & Gas Co. Chambers & Kennedy & Co. only State lease shall be a part of the project.*

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. 2775  
Order No. R-2461

APPLICATION OF CIMA CAPITAN, INCORPORATED  
(M.S.L.), CASTLE & WIGZELL, AND RED LAKE  
OIL COMPANY, FOR A WATERFLOOD PROJECT,  
RED LAKE POOL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 20, 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 1st day of April, 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 applicants, Cima Capitan, Incorporated (M.S.L.), Castle & Wigzell, and Red Lake Oil Company, seek authority to institute a waterflood project in the Red Lake Pool, Eddy County, New Mexico, by the injection of water into the Grayburg-San Andres formation through 14 wells located in Section 22 and the N/2 N/2 of Section 27, Township 17 South, Range 28 East, NMPM.
- (3) That the wells in the proposed area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project is in the interest of conservation and should result in recovery of otherwise unrecoverable oil.

-2-

CASE No. 2775  
Order No. R-2461

(5) 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 applicants, Cima Capitan, Incorporated (M.S.L.), Castle & Wigzell, and Red Lake Oil Company, are hereby authorized to institute a waterflood project in the Red Lake Pool, Eddy County, New Mexico, by the injection of water into the Grayburg-San Andres formation through the following-described six wells:

Castle & Wigzell Gulf State

Well No. 1, located in the NW/4 NE/4 of Section 22

Cima Capitan, Incorporated (M.S.L.) - Red Lake

Well No. 3, located in the SW/4 NE/4 of Section 22

Well No. 4, located in the NW/4 SW/4 of Section 22

Well No. 6, located in the NE/4 SW/4 of Section 22

Red Lake Levers

Well No. 20, located in the NE/4 NW/4 of Section 27

Well No. 24, located in the NW/4 NE/4 of Section 27

all in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(2) That the applicants are hereby authorized to inject water into the Grayburg-San Andres formation, Red Lake Pool, Eddy County, New Mexico, through the following-described seven water injection wells to be drilled:

Cima Capitan, Incorporated (M.S.L.) - Red Lake

Well in the NW/4 NW/4 of Section 22

Well in the NE/4 NE/4 of Section 22

Well in the NE/4 SE/4 of Section 22

Well in the SW/4 SE/4 of Section 22

Well in the SW/4 SW/4 of Section 22

Red Lake Levers

Well in the NW/4 NW/4 of Section 27

Well in the NE/4 NE/4 of Section 27

all in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicants are hereby authorized to drill the following-described oil producing wells in connection with said waterflood project:

-3-

CASE No. 2775  
Order No. R-2461

Castle & Wiggall Gulf State  
Well in the NW/4 NE/4 of Section 22

Red Lake Levers  
Well in the NE/4 NW/4 of Section 27

in Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(4) That the applicants are hereby authorized to re-enter and convert to water injection a dry well located in the SW/4 NE/4 NW/4 of Section 22, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico; if the well cannot be successfully converted to water injection, the applicants are hereby authorized to drill an additional water injection well in the SW/4 NE/4 NW/4 of said Section 22.

(5) 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.

(6) 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.

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

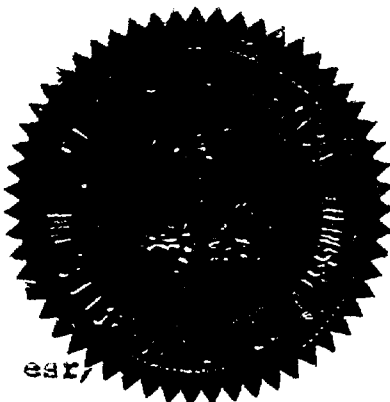
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

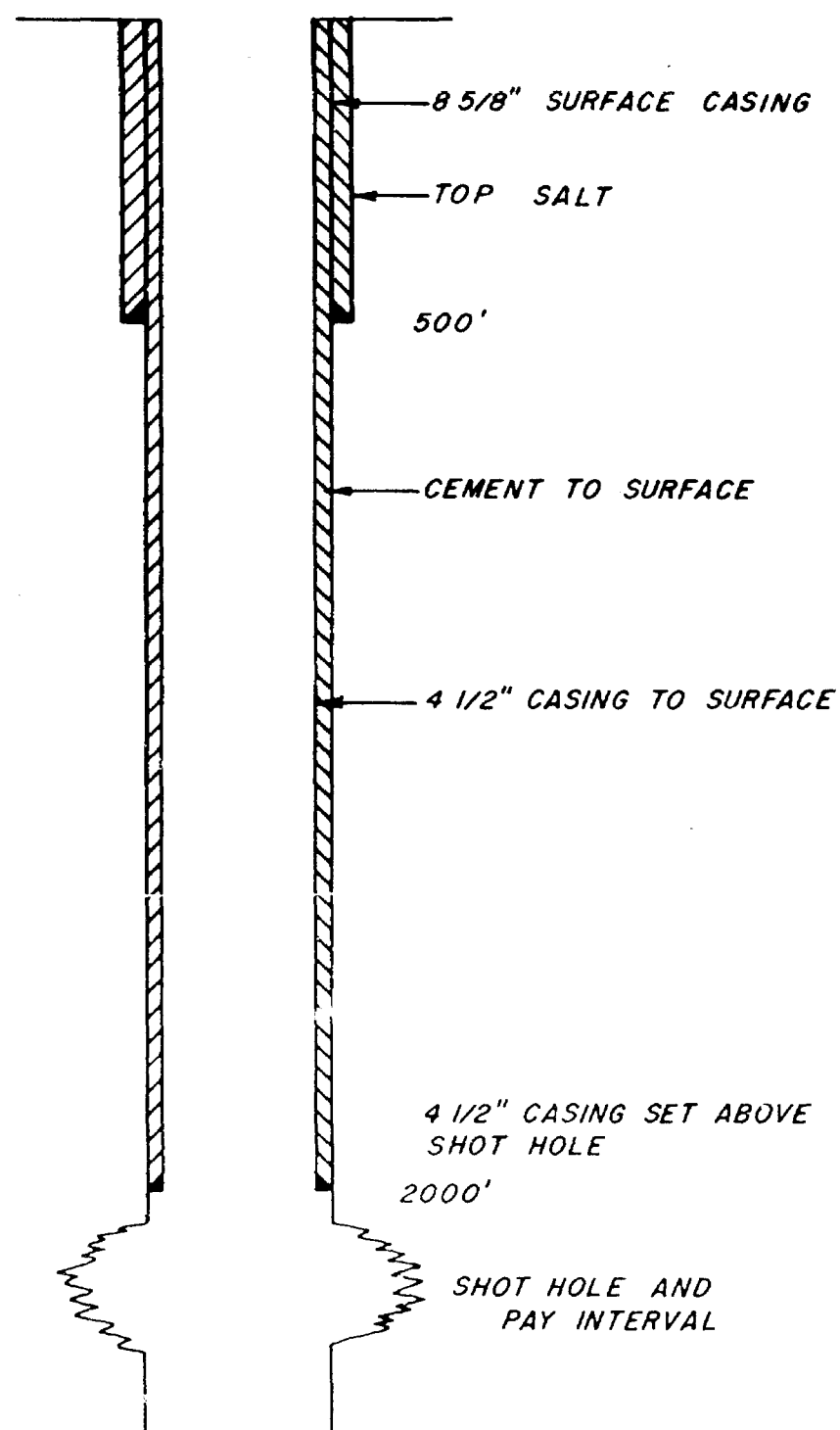
*Jack M. Campbell*  
JACK M. CAMPBELL, Chairman

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

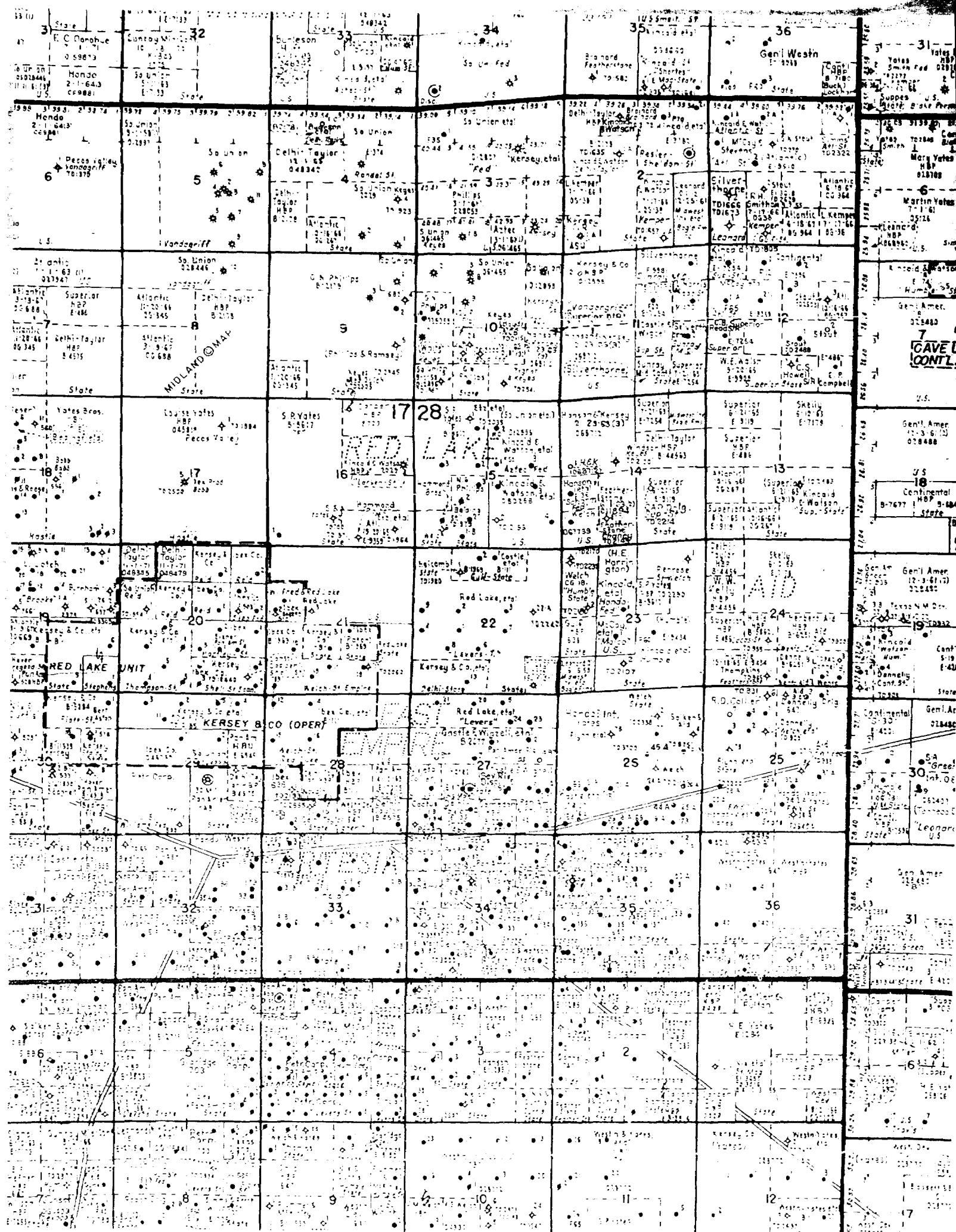
*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Member & Secretary



CIMA CAPITAN INC.  
SCHEMATIC OF INJECTION WELL COMPLETION







205 SOUTH FOURTH ST.

TELEPHONE 746-6911

## CAPROCK WATER COMPANY

P. O. BOX 607

ARTESIA, NEW MEXICO

March 13, 1963

Cima Capitan Incorporated  
P. O. Box 1072  
Artesia, New Mexico

Attention: Mr. Thomas F. Welch

Gentlemen:

Thank you for your inquiry regarding injection  
water for your water flood project in  
Section 22, T17s, R28E.

We have water available in your area and are willing  
to furnish the necessary amounts to you at your  
plant site.

Yours Very Truly

CAPROCK WATER COMPANY

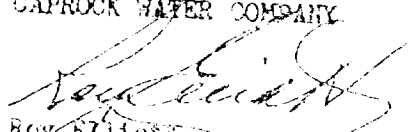
  
Roy Elliott  
R/E

EXHIBIT NO. 5-C  
CASE NO. 2725

72 1 1974 0000 JAN 27 1974

WELL #	LOCATION	COMP. DATE	T.D.	CASING RECORD	TREATMENT
1	NW NE	2-24-1959	2017	8-5/8" at 525 cem. w/50 sx 5-1/2" at 1970 cem. w/100 sx	Sandfrac w/20,000 gal oil & 30,000# sand.
2	NE NW	7-3-1959	2015	8-5/8" at 497 cem. w/50 sx 5 1/2" at 2015 cem. w/140 sx	Perf. 1962-1970, 1986-2000. Sandfrac w/21,000 gal oil & 42,000# sand.

**BEFORE EXAMINER UTZ**

IL CONSERVATION COMMISSION

EXHIBIT NO. 54

ASE NO. 1222

RED LAKE OIL COMPANY

WELL DATA - LEVERS LEASE

Section 27, T17S, R28E, Eddy County, New Mexico

WELL #	LOCATION	COMP. DATE	T.D.	CASING RECORD	TREATMENT
5	NW NE	12-2-1935	1938	10" at 170' 8 1/4" at 800'	60 qts Nitro Shot 1904-1914
20	NE NW	11-5-1954	1947	10" at 118' 8" at 450' cem. w/50 sx 5 1/2" at 1900' cem. w/100 sx	Sandfrac 1915-1925 w/ 10,000 gal oil 20,000# sand Sandfrac 1870-1880 w/ 10,000 gal oil 20,000# sand.
21	NW NW	3-1-1955	1960	7" at 515 cem. w/50 sx 5 1/2" at 1360 cem. w/50 sx	Perf. 1909-1925 Sandfrac w/10,000 gal oil & 20,000# sand.
23	NE NE	3-15-1961	2355	8-5/8" at 480 cem. w/50 sx. 5 1/2" at 2020 cem. w/125 sx.	Perf. 1910-1923 Sandfrac w/10,000 gal oil & 20,000# sand.
24	NW NE	12-27-1961	1975	8-5/8" at 457' cem. w/50 sx 5 1/2" at 1972' cem. w/125 sx.	Perf 1785-1787, 1790- 1796, 1800-1803, 1920- 1937. Sandfrac w/20,000 gal oil & 45,000# sand.

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 5-A  
CASE NO. 5775

IMA CAPITAN, INC.

WELL DATA - RED LAKE LEASE  
SECTION 12, T17S, R10E, Eddy County, New Mexico  
8/1 N, 2 1/2 E N/2 SW/4

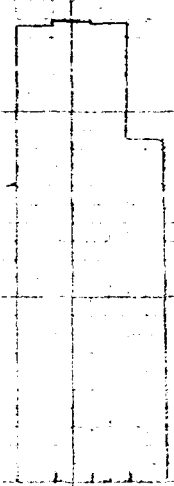
WELL #	LOCATION	COMP. DATE	T.D.	CASING RECORD	TREATMENT
1	SW NE NW	10-1-1933	1965	10" at 105' 8-5/8" at 450' 6-5/8" at 1692'	N.R.
2	NW SE SW	5-1-1934	1959	10" at 150' 8-5/8" at 550' 6-5/8" at 1700'	N.R.
3	NE SW SW	12-15-1934	1980	10" at 150' (pulled) 8-1/4" at 550' 6-5/8" at 1717'	Shot 100 qts. 1955-1975'
4	SW NW NW	5-27-1935	1954	8-5/8" at 495' 6-5/8" at 1700'	Shot with 50 qts. (interval unknown)
6	SE NE SW	4-27-1936	1954	8-5/8" at 470' 6-5/8" at 1675'	Shot with 60 qts. 1925-1937
7	NW NW SE	7-6-1936	1957	10" at 145' 6-5/8" at 1365'	Shot with 60 qts. 1934-1944
8	SE NW SW	3-1-1937	1951	8-5/8" at 495' 6-5/8" at 1350'	Shot with 60 qts. (interval unknown)
9	SW SW NW	6-29-1937	1951	8-5/8" at 495' " at 1350' (not in record)	Shot with 60 qts. 1910-1937.

BEFORE EXAMINER U  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 4-C  
 CASE NO. 2725

CASTLE & WIGZELL  
 OIL STATE LEASE  
 SEC. 22-17-28 EDG. CO.

PRODUCTION RATE AVE. BBL / MO

300  
 200  
 100



AVE 3 BBL PER  
 WELL PER DAY

250  
 1000

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

EXHIBIT NO. 4-13

CASE NO. 2775

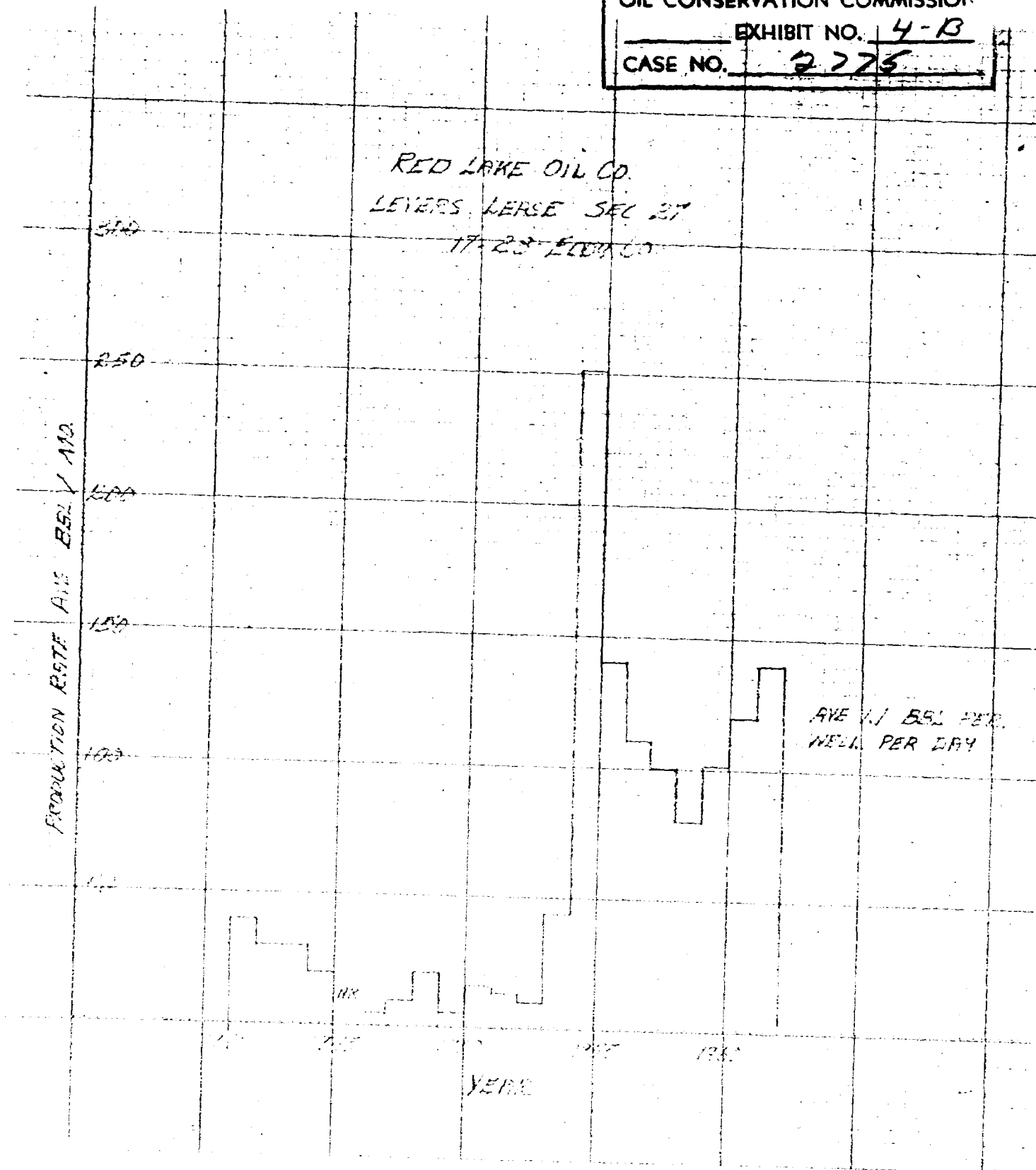
RED LAKE OIL CO.  
LEVERS, LEASE SEC 27  
17-23-100 CO.

PRODUCTION RATE AVE BBL V 110.

300  
250  
200  
150  
100  
50

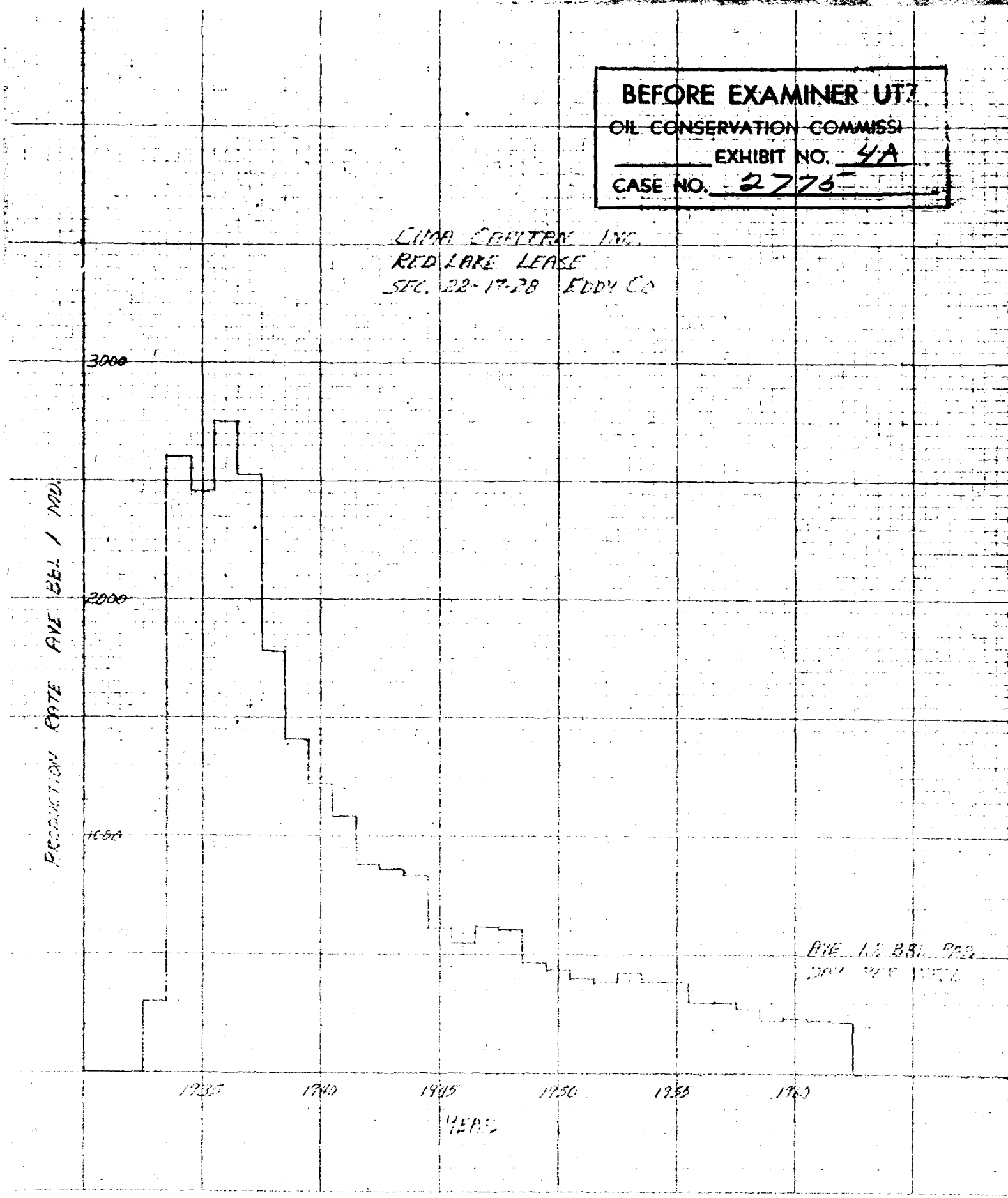
Ave 1/1 BBL PER  
WELL PER DAY

1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930  
YEAR



BEFORE EXAMINER UT  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 4A  
 CASE NO. 2776

CIMA CREDIT INC.  
 RED LAKE LEASE  
 SEC. 22-17-28 EDDY CO



BYE L. B. B. P. 22  
 201 218 221



**BEFORE EXAMINER UTZ**  
**OIL CONSERVATION COMMISSION**  
EXHIBIT NO. 3-A  
**CASE NO. 2775**

CIMA CAPITAN, INC.

Red Lake Lease 22-17-28

Production History

<u>Year</u>	<u>Annual Production</u>
1933	3,665
1934	31,428
1935	29,608
1936	32,942
1937	30,364
1938	21,300
1939	17,000 Est.
1940	14,719
1941	13,126
1942	10,621
1943	10,373
1944	10,087
1945	7,402
1946	6,627
1947	6,532
1948	6,212
1949	5,870
1950	5,335
1951	4,870
1952	4,702
1953	5,061
1954	4,705
1955	4,082
1956	3,057
1957	3,722
1958	3,800
1959	3,755
1960	3,721
1961	3,820
1962	3,591

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 3B  
CASE NO. 2775

RED LAKE OIL COMPANY

Lever's Lease 27-17-28

Production History

<u>Year</u>	<u>Annual Production</u>
1935-1940	No Records
1941	465
1942	336
1943	392
1944	235
1945	No Records
1946	60
1947	134
1948	250
1949	215
1950	72
1951	198
1952	171
1953	128
1954	538
1955	3,038
1956	1,739
1957	1,384
1958	1,235
1959	1,016
1960	1,309
1961	1,429
1962	1,762

**BEFORE EXAMINER UTZ**  
**OIL CONSERVATION COMMISSION**  
EXHIBIT NO. 3-C  
CASE NO. 2775

CASTLE & WIGZELL

Gulf-State Lease 22-17-28

Production History

<u>Year</u>	<u>Annual Production</u>
1959	1,482
1960	2,981
1961	2,972
1962	2,218

EXHIBIT 3-C

NEIL B. WATSON  
FRED A. WATSON

LAW OFFICES  
WATSON & WATSON  
CARPER BUILDING - P.O. DRAWER E  
ARTESIA, NEW MEXICO

February 26, 1963

RECEIVED  
1963 FEB 27 PM 1:35  
TELEPHONE  
SHERWOOD 6-4151

The Oil Conservation Commission  
of the State of New Mexico,  
Santa Fe, New Mexico.

Gentlemen:

Re: Proposed water flood project by Cima Capitan,  
Incorporated (N.S.L.), a New Mexico corporation,  
Red Lake Oil Company, a partnership, and Castle  
& Wigzell in Section 22 and the N<sup>1</sup>/<sub>2</sub> of Section  
27, Township 17 South, Range 28 East, N.M.P.M.,  
Eddy County, New Mexico.

Will you please schedule a hearing for the above described proposed  
water flood project just as soon as the same may be conveniently  
scheduled. I would also appreciate your furnishing me a case number  
for such hearing.

A properly executed Application and exhibits will follow in the near  
future.

Yours very truly,

*Fred A. Watson*  
Fred A. Watson

FAW:rjb

cc: Cima Capitan, Incorporated (N.S.L.),  
P. O. Box 1343,  
Artesia, New Mexico.

DOCKET MAILED

Date 3/8/63  
*JK*

NEIL B. WATSON  
FRED A. WATSON

LAW OFFICES  
**WATSON & WATSON**  
CARPER BUILDING - P. O. DRAWER E  
ARTESIA, NEW MEXICO

TELEPHONE  
SHERWOOD 6-4151

March 14, 1963

CS

Oil Conservation Commission of the  
State of New Mexico,  
State Land Office Building,  
Santa Fe, New Mexico.

Gentlemen:

Re: Case No. 2775, Application of Cima Capitan,  
Incorporated (N.S.L.) for a water flood project  
in the Red Lake Field.

I herewith enclose, in triplicate, the Application in the caption.

The exhibits will be furnished at the hearing in a number of copies  
on March 20, 1963.

Yours very truly,

*Fred A. Watson*  
Fred A. Watson

FAW:rjb  
Encs.

cc: Red Lake Oil Company,  
Hooker Building,  
Artesia, New Mexico.

Castle & Wigzell,  
P. O. Box 868,  
Midland, Texas.

Cima Capitan, Incorporated (N.S.L.),  
P. O. Box 1343,  
Artesia, New Mexico.

No. 10-63

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 20, 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 2773: Application of C. W. Trainer for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Hume-Queen Unit Area comprising 1,240 acres of State land in Township 16 South, Range 34 East, Lea County, New Mexico.
- CASE 2774: Application of C. W. Trainer 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 Queen formation, Hume-Queen Pool, Lea County, New Mexico, through 15 wells located in Sections 7, 8, 9, and 17, Township 16 South, Range 34 East.
- CASE 2775: Application of Cima Capitan, Inc. et al, for a waterflood project, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formation, Red Lake Pool, Eddy County, New Mexico, through 13 wells located in Sections 22 and 27, Township 17 South, Range 28 East.
- CASE 2776: Application of International Oil & Gas Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation, High Lonesome Pool, Eddy County, New Mexico, through one injection well located in Section 15, Township 16 South, Range 29 East.
- CASE 2777: Application of Consolidated Oil & Gas, Inc., for an unorthodox location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Apache Well No. 2-16 at an unorthodox location 790 feet from the North line and 1850 feet from the West line of Section 16, Township 26 North, Range 3 West, Blanco Mesaverde Pool, Rio Arriba County, New Mexico.
- CASE 2778: Application of Tenneco Oil Company for a unit agreement, San Juan County, New Mexico. Applicant, in the above-styled

cause, seeks approval of the Central Totah Gallup Unit Area comprising 2,738 acres of Federal and Fee lands in Townships 28 and 29 North, Range 13 West, San Juan County, New Mexico.

CASE 2737: (Continued from January 23, 1963 Examiner Hearing)

Application of Gulf Oil Corporation for special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of special pool rules for the White City-Pennsylvanian Gas Pool, Eddy County, New Mexico, including provisions for 640-acre spacing therein. This case was continued to the March 20, 1963 examiner hearing by Order No. R-2429.

CASE 2761: (Continued)

Application of Compass Exploration, Inc., for the creation of a Gallup Gas Pool, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order deleting certain acreage from the South Blanco-Tocito Pool and re-designating portions of said acreage to comprise a new Gallup gas pool for its Northwest Lindrith Well No. 1-3, located in Unit K of Section 3, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

CASE 2746: (Continued)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Continental National Insurance Group and all other interested parties to appear and show cause why the Kenneth V. Barbee Well No. 1, located 1980 feet from the South line and 660 feet from the East line of Section 9, Township 11 South, Range 25 East, NMPM, Chaves County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.

No. 10-63

SUPPLEMENTAL DOCKET - EXAMINER HEARING - WEDNESDAY, MARCH 20, 1963

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

The following case will be heard before Elvis A. Utz, Examiner, or  
Daniel S. Nutter, as alternate examiner:

CASE 2779:

Application of Marathon Oil Company for a unit agreement,  
Eddy County, New Mexico. Applicant, in the above-styled  
cause, seeks approval of the North Indian Basin Unit Area,  
comprising 5786 acres, more or less, of State and Federal  
Lands in Townships 20 $\frac{1}{2}$  and 21 South, Range 23 East, Eddy  
County, New Mexico.



March 11, 1963

LETTER OF AUTHORITY

Cima Capitan, Incorporated (N.S.L.),  
a New Mexico corporation,  
P. O. Box 1343,  
Artesia, New Mexico.

Gentlemen:

The undersigned are entering into a water flooding project together with other parties hereinafter indicated. The project will be a cooperative project, but will not in any manner pool or unitize the respective leases of the participants insofar as the production from the various leases is concerned.

The respective properties in the project are as follows:

Cima Capitan, Incorporated (N.S.L.), a New Mexico corporation

Township 17 South, Range 28 East, N.M.P.M.  
Section 22:  $W\frac{1}{2}NW\frac{1}{4}$ ,  $SE\frac{1}{4}NW\frac{1}{4}$ ,  $E\frac{1}{2}NE\frac{1}{4}$ ,  $SW\frac{1}{4}NE\frac{1}{4}$ ,  $W\frac{1}{2}SW\frac{1}{4}$ ,  
 $NE\frac{1}{4}SW\frac{1}{4}$ ,  $W\frac{1}{2}SE\frac{1}{4}$  and  $NE\frac{1}{4}SE\frac{1}{4}$ ,

operating rights from the surface down to, but not below, a maximum depth of 3500 feet beneath the surface held by Cima Capitan, Incorporated (N.S.L.), operator, under and by virtue of Operating Agreement from Red Lake Oil Company.

Castle & Wigzell, a partnership

Township 17 South, Range 28 East, N.M.P.M.  
Section 22:  $NE\frac{1}{4}NW\frac{1}{4}$  and  $NW\frac{1}{4}NE\frac{1}{4}$ ,

shallow operating rights held by Operating Agreement from Gulf Oil Corporation to Castle & Wigzell, as recorded in Book 100 at Page 347 of the Records of Oil and Gas of Eddy County, New Mexico.

Red Lake Oil Company, a partnership

Township 17 South, Range 28 East, N.M.P.M.  
Section 27:  $N\frac{1}{2}NE\frac{1}{4}$ ,

Levers State held by Red Lake Oil Company.

This letter will constitute authority from the undersigned to Cima Capitan, Incorporated (N.S.L.) to represent the undersigned and introduce all exhibits and put on all testimony before the Oil Conservation Commission of the State of New Mexico at the hearing on said water flood project to be held March 20, 1963.

Yours very truly,

CASTLE & WIGZELL

By

Partner

RED LAKE OIL COMPANY

By

Partner

Attorney-in-Fact & Manager

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	1
CASE NO.	2627

205 SOUTH FOURTH ST.

TELEPHONE 748-6911

## CAPROCK WATER COMPANY

P. O. BOX 607

ARTESIA, NEW MEXICO

March 13, 1963

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 7  
CASE NO. 5775

Cima Capitan Incorporated  
P. O. Box 1072  
Artesia, New Mexico

Attention: Mr. Thomas F. Welch

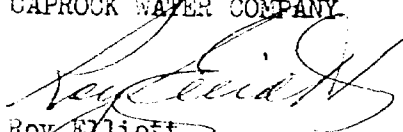
Gentlemen:

Thank you for your inquiry regarding injection  
water for your water flood project in  
Section 22, T17s, R28E.

We have water available in your area and are willing  
to furnish the necessary amounts to you at your  
plant site.

Yours Very Truly

CAPROCK WATER COMPANY

  
Roy Elliott  
RE/et

CASTLE & WIGZELL

WELL DATA - GULF STATE LEASE

Section 22, T1/S, R28E, Eddy County, New Mexico

WELL #	LOCATION	COMP. DATE	T.D.	CASING RECORD	TREATMENT
1	NW NE	2-24-1959	2017	8-5/8" at 525 cem. w/50 sx 5-1/2" at 1970 cem. w/100 sx	Sandfrac w/20,000 gal oil & 30,000# sand.
2	NE NW	7-3-1959	2015	8-5/8" at 497 cem. w/50 sx 5 1/2" at 2015 cem. w/140 sx	Perf. 1962-1970, 1986- 2000. Sandfrac w/ 21,000 gal oil & 42,000# sand.

CASTLE & WIGZELL  
Gulf-State Lease 22-17-28  
Production History

<u>Year</u>	<u>Annual Production</u>
1959	1,482
1960	2,981
1961	2,972
1962	2,218

RED LAKE OIL COMPANY

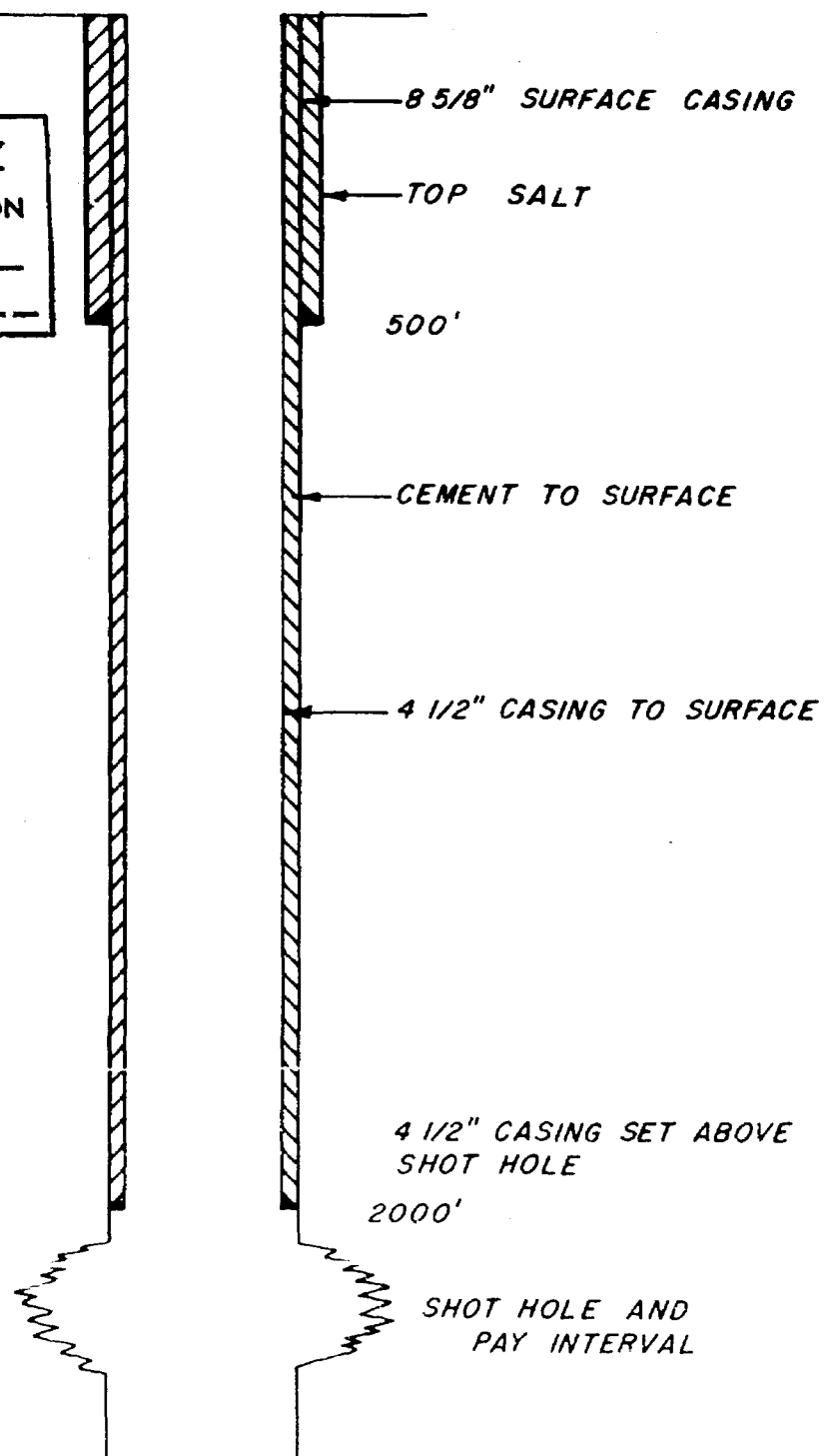
WELL DATA - LEVERS LEASE

Section 27, T17S, R28E, Eddy County, New Mexico

WELL #	LOCATION	COMP. DATE	T.D.	CASING RECORD	TREATMENT
5	NW NE	12-2-1935	1938	10" at 170' 8½" at 800'	60 qts Nitro Shot 1904-1914
20	NE NW	11-5-1954	1947	10" at 118' 8" at 450' cem. w/50 sx 5½" at 1900' cem. w/100 sx	Sandfrac 1915-1925 w/ 10,000 gal oil 20,000# sand Sandfrac 1870-1880 w/ 10,000 gal oil 20,000# sand.
21	NW NW	3-1-1955	1960	7" at 515 cem. w/50 sx 5½" at 1960 cem. w/50 sx	Perf. 1909-1925 Sandfrac w/10,000 gal oil & 20,000# sand.
23	NE NE	3-15-1961	2355	8-5/8" at 480 cem. w/50 sx. 5½" at 2020 cem. w/125 sx.	Perf. 1910-1923 Sandfrac w/10,000 gal oil & 20,000# sand.
24	NW NE	12-27-1961	1975	8-5/8" at 457' cem. w/50 sx 5½" at 1972' cem. w/125 sx.	Perf 1785-1787, 1790- 1796, 1800-1803, 1920- 1937. Sandfrac w/20,000 gal oil & 45,000# sand.

CIMA CAPITAN INC.  
SCHEMATIC OF INJECTION WELL COMPLETION

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 8  
CASE NO. 2775



**OIL CONSERVATION COMMISSION**

**P. O. BOX 871**

**SANTA FE, NEW MEXICO**

**April 2, 1963**

**Mr. Fred Watson  
Watson & Watson  
Attorneys at Law  
Post Office Drawer E  
Artesia, New Mexico**

**Dear Sir:**

Enclosed herewith is Commission Order No. R-2461, entered in Case No. 2775, approving the Cima Capitan et al Red Lake Waterflood Project.

According to our calculations, when all of the authorized injection wells have been placed on active injection, and when all of the proposed wells have been drilled or re-entered and placed on production, and assuming the Kersey & Co. Delhi State Lease and the Chambers & Kennedy Gulf State Lease to both be a part of the project, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 952 barrels per day. Provided however, that unless otherwise agreed to by all parties and evidence thereof furnished the Commission, the transfer of allowables within the project area of this waterflood shall be authorized only insofar as the transfer is made between wells having common ownership.

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

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**OIL CONSERVATION COMMISSION**

P. O. BOX 871

SANTA FE, NEW MEXICO

-2-

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

ALP/lr  
Enclosure (1)

cc: Oil Conservation Commission  
Drawer DD  
Artesia, New Mexico

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P  
Y



**OIL CONSERVATION COMMISSION**

P. O. BOX 871

**SANTA FE, NEW MEXICO**

*Case File*

**May 6, 1963**

**Cima Capitan, Inc.  
P. O. Drawer 1343  
Artesia, New Mexico**

**Attention: Mr. Tom Welch**

**Gentlemen:**

This is to advise that the Oil Conservation Commission has this date approved an option of two alternative methods of completing the injection wells for the water flood project authorized by Order No. R-2461 on April 1, 1963, for Cima Capitan, Castle and Wiggell and Red Lake Oil Company in the Red Lake Pool, Eddy County, New Mexico.

The alternative casing programs are in exception to the programs proposed in the hearing of Case No. 2775 and are as follows:

Option No. 1 - Set 4½ inch casing approximately 200 feet above the top of the Premier Zone of the Grayburg formation and circulate cement to the surface; injection to be down plastic coated tubing under a packer.

Option No. 2 - Perforate the 6 5/8 inch production casing at a point not more than 300 feet above the top of the Premier Zone of the Grayburg formation and circulate cement to the surface; injection to be down plastic coated tubing under a packer.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

-2-

These alternative methods of completion are approved as a result of a conference on this date between Mr. Tom Welch and Mr. Frank Irby of the State Engineer Office, Mr. Elvis A. Uts and Mr. Daniel S. Nutter of the Oil Conservation Commission.

Very truly yours,

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

ALP/DSN/og

cc: Mr. Mose Armstrong  
Drawer DD  
Artesia, New Mexico

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