

Case No.

764

Application, Transcript,  
Small Exhibits, Etc.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

December 17, 1954

Amerada Petroleum Corporation  
Box 312  
MIDLAND, TEXAS

Attention: Mr. J. C. Blackwood

Gentlemen:

We attach a copy of Order R-554 issued by the Oil Conservation Commission in Case 764, which was heard upon your company's application at the regular October 20 hearing in Hobbs, New Mexico.

Very truly yours,

W. B. Macey  
Secretary - Director

WBM:nr

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BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 764  
Order No. R-554

THE APPLICATION OF AMERADA PETROLEUM  
CORPORATION FOR AUTHORITY TO RECOMPLETE  
AND OPERATE ITS PREVIOUSLY ABANDONED L.  
COOPER WELL NO. 1, NW/4 NW/4 SECTION 2,  
TOWNSHIP 17 SOUTH, RANGE 38 EAST, NMPM, IN  
THE KNOWLES POOL, LEA COUNTY, NEW MEXICO,  
AS A SALT WATER DISPOSAL WELL, BY UTILIZING  
AN INJECTION ZONE IN THE SAN ANDRES FORMATION  
AT A DEPTH OF 6220-6500 FEET.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on October 20, 1954, at Hobbs, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 16<sup>th</sup> day of December, 1954, the Commission, a quorum being present, having fully considered the records and testimony adduced and being fully advised in the premises,

FINDS:

(1) That due notice of the time and place of hearing and the purpose thereof having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.

(2) That the applicant's L. Cooper Well No. 1, located in the NW/4 NW/4 Section 2, Township 17 South, Range 38 East, Lea County, New Mexico, in the Knowles Pool, was originally drilled to 12,620 feet in the Devonian formation, but was found uneconomical and was plugged and abandoned.

(3) That water production in the Knowles Pool is increasing and becoming difficult to dispose of; that approximately 500 barrels of water per day is presently being produced and the estimated future rate is 5000 barrels per day; that the present method of disposal of salt water in open evaporation pits is inadequate.

(4) That the applicant has presented to the Commission its plan for recompletion of said L. Cooper Well No. 1 as a salt water disposal well; that the recompletion plan and the manner and method of proposed salt water injection are mechanically feasible and practical.

(5) That the proposed zone of injection, from 6220 feet to 6500 feet, is in the San Andres formation and is not productive of oil or gas.

(6) That the injection of salt water at the interval and in the manner proposed will not result in waste or injury to correlative rights.

IT IS THEREFORE ORDERED:

(1) That the Amerada Petroleum Corporation be, and is hereby, granted authority to recomplete its L. Cooper Well No. 1, NW/4 NW/4 Section 2, Township 17 South, Range 38 East, NMPM, as a salt water disposal well.

(2) That the applicant be, and is hereby granted authority to operate said well as a salt water disposal well, utilizing an injection interval of from 6220' to 6500'.

Nothing in this order shall be deemed or construed to relieve the applicant from liability to any person, firm or corporation due to damage occasioned by its salt water disposal operations.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*E. L. Mechem*

EDWIN L. MECHEM, Chairman

*E. S. Walker*

E. S. WALKER, Member

*W. B. Macey*

W. B. MACEY, Member and Secretary





Reference —  
See Case 310, Order  
R- 116  
(Gulf SWQ)

AMERADA PETROLEUM CORPORATION  
P. O. BOX 312  
MIDLAND, TEXAS

MAIN OFFICE OCC

1954 SEP 2 AM 2:15 August 28, 1954

OK  
Worn  
Case 764

Oil Conservation Commission  
State of New Mexico  
Sante Fe, New Mexico

Re: Application to Recomplete Amerada  
L. Cooper No. 1, Knowles Pool,  
Lea County, New Mexico, as a salt  
water disposal well.

Gentlemen:

By this letter of application Amerada Petroleum Corporation wishes to state the following:

- A. That Amerada Petroleum Corporation L. Cooper No. 1, located in the NW/4 of the NW/4 of Section 2, Township 17-S, Range 38-E, was completed as a dry hole in the Devonian Formation at a total depth of 12,620 ft on October 16, 1950. The attached Exhibit A shows the location of this well on the Amerada L. Cooper Lease together with the location of all offset wells.
- B. That water production in the Knowles Pool, in which the subject well is located, is increasing and becoming difficult to dispose of. The current rate of water production is 1,200 barrels per day and the estimated maximum future rate is 5,000 barrels per day.
- C. That Amerada Petroleum Corporation wishes to recomplete Amerada Cooper No. 1, a plugged and abandoned well, in the manner necessary to dispose of the Knowles Pool water production. The proposed recompletion will be done in the following manner:
  1. Drill out cement plugs to 6500 ft and set a cement plug in open hole at 6500 ft.
  2. Set 5 1/2" casing at 6220 ft and cement with 300 sacks.
  3. Acidize open hole from 6220 ft to 6500 ft and complete well for injection.
- D. The proposed zone of injection, from 6220 ft to 6500 ft, is in the San Andres formation and is not productive of oil or gas. A drill stem test in this zone recovered only salt water.
- E. That the present method of disposal of salt water in open evaporation pits is inadequate.

Reference —  
See Case 310, Order  
R- 116  
(Gulf SWD)

F. That the manner and method of the proposed injection is both mechanically feasible and practical.

Therefore, Amerada Petroleum Corporation requests that the Oil Conservation Commission set a certain day on which this application may be heard and after said hearing grant permission to the applicant to recomplete the subject well as a salt water disposal well in the manner proposed in this application.

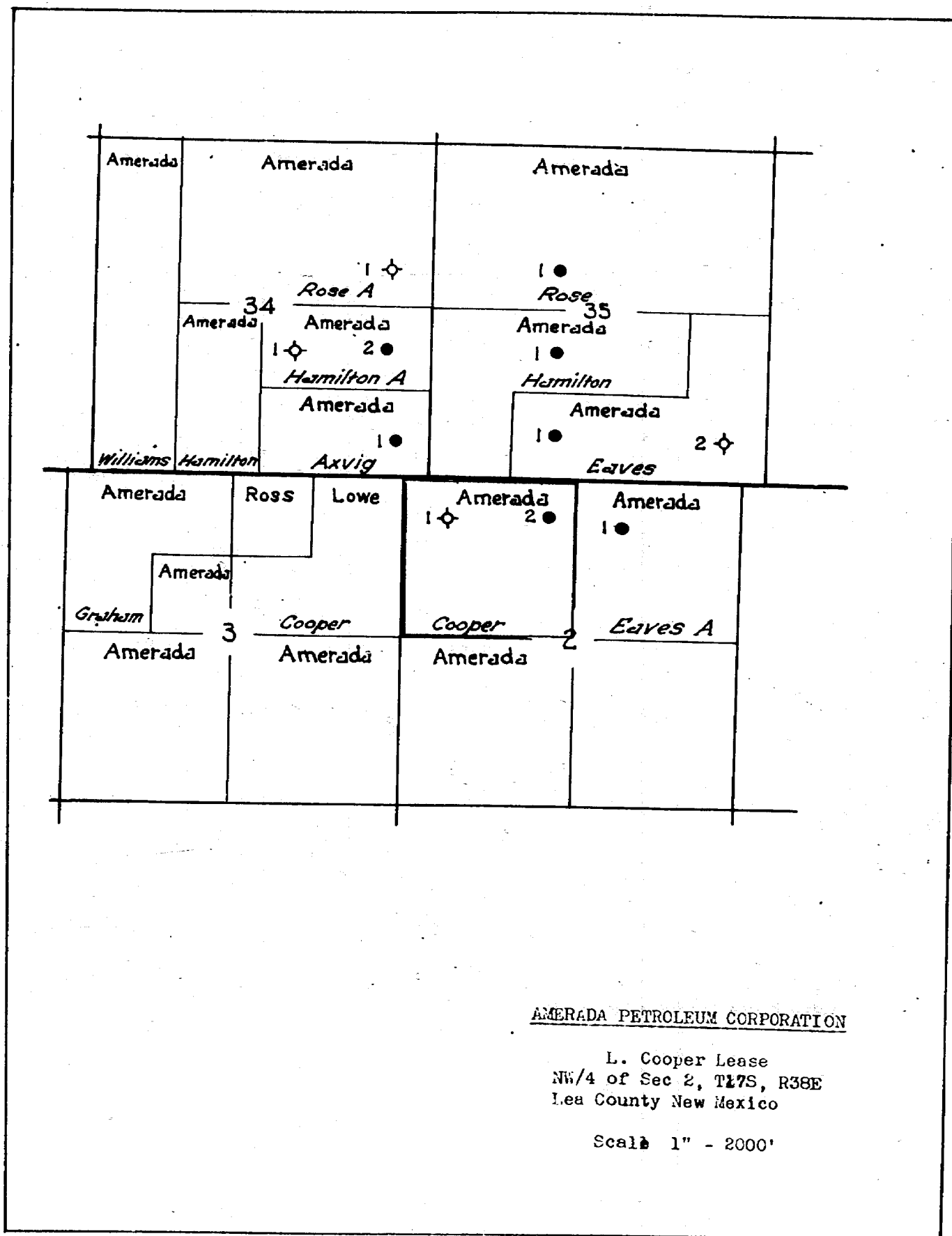
Respectfully submitted,

AMERADA PETROLEUM CORPORATION

  
J. C. Blackwood

JCB:vlh





AMERADA PETROLEUM CORPORATION

L. Cooper Lease  
NW/4 of Sec 2, T17S, R38E  
Lea County New Mexico

Scale 1" - 2000'

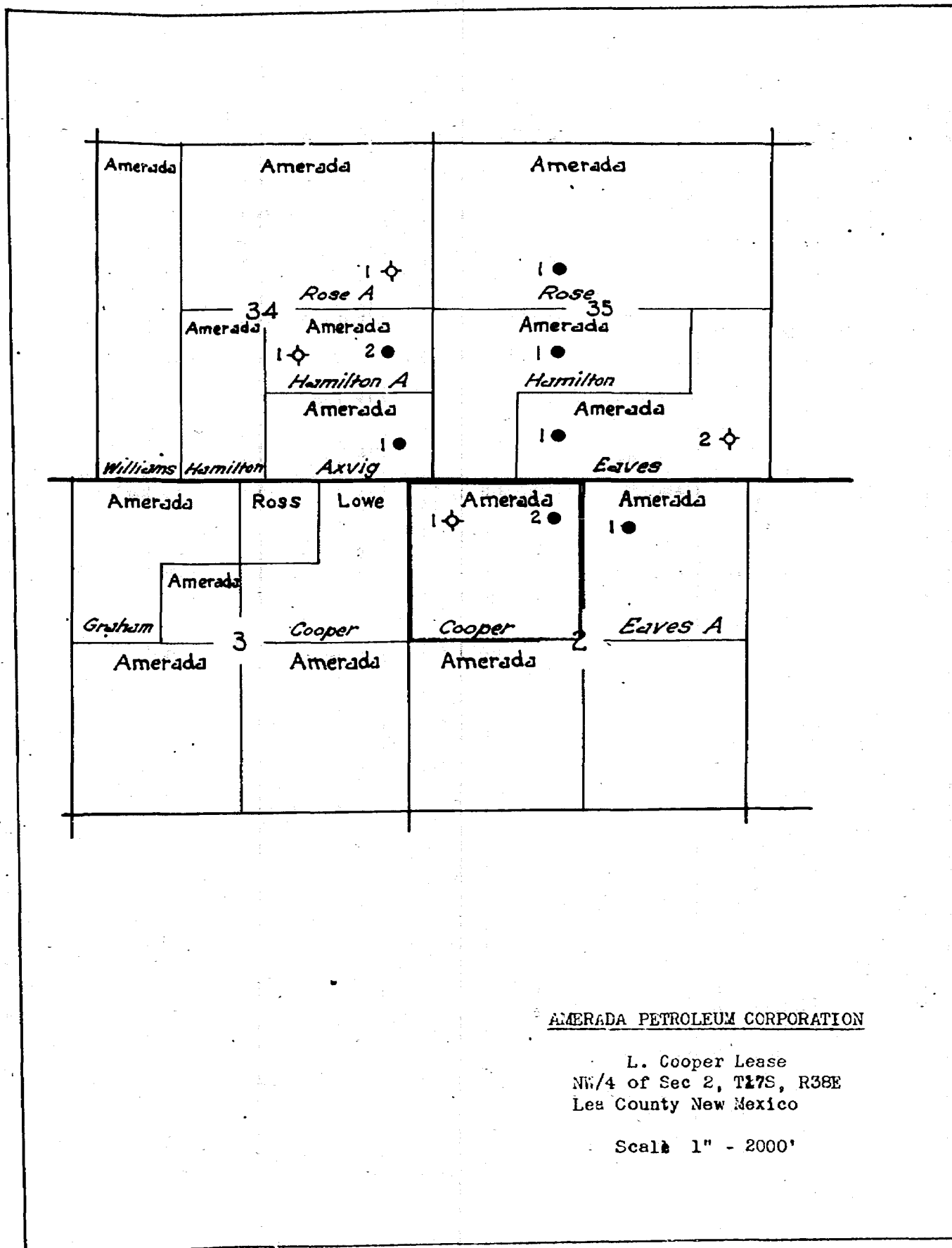


Exhibit "A"  
 Case 764

BEFORE THE

**Oil Conservation Commission**

SANTA FE, NEW MEXICO  
Hobbs, New Mexico  
October 20, 1954

IN THE MATTER OF:

CASE NO. 764- Regular Hearing

TRANSCRIPT OF PROCEEDINGS

**ADA DEARNLEY AND ASSOCIATES**

COURT REPORTERS

ROOMS 105, 106, 107 EL CORTEZ BUILDING

TELEPHONE 7-9546

ALBUQUERQUE, NEW MEXICO

BEFORE THE  
OIL CONSERVATION COMMISSION  
Hobbs, New Mexico  
October 20, 1954

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IN THE MATTER OF:

The application of Amerada Petroleum Corporation for approval of a salt-water disposal project.

Applicant, in the above-styled cause, seeks authority to operate its previously abandoned L. Cooper Well No. 1, NW/4, NW/4 Section 2, Township 17 South, Range 38 East, in the Knowles Pool, Lea County, New Mexico, as a salt-water disposal well, after drilling out cement plugs and recompleting the well in such manner that an injection zone may be utilized in the San Andres formation at a depth of 6220-6500 feet.

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Case No. 764

BEFORE:

Honorable Edwin L. Mechem  
Mr. E. S. (Johnny) Walker  
Mr. William B. Macey

TRANSCRIPT OF HEARING

MR. MACEY: The next case on the docket is Case 764.

MR. WOODWARD: This is the application of Amerada for authority to dispose of salt water in Cooper No. 1, located in the Knowles Field.

R. S. CHRISTIE,

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

DIRECT EXAMINATION

By MR. WOODWARD:

Q Mr. Christie, will you state your full name, please?

A R. S. Christie.

Q Where do you live?

A Tulsa, Oklahoma.

Q By whom employed and in what capacity?

A Amerada Petroleum Corporation as an engineer.

Q Have you previously testified before this Commission in your capacity as a petroleum engineer, and as an expert witness?

A Yes, I have.

Q Are the witness's qualifications accepted by the Commission?

MR. MACEY: They are.

Q Mr. Christie, Amerada's Exhibit A in Case 764 has been submitted to the Commission. Are you familiar with that Exhibit?

A Yes, sir.

Q Will you state what it shows, please?

A Exhibit A is a map of the Knowles Field, showing all the producers and the dry holes, including the L. Cooper No. 1, which is subject to this application.

Q As shown by Exhibit A, where is the injection well located?

A The injection well is in the northwest quarter of the northwest quarter of Section 2, Township 17 South, Range 38 East.

Q How was this well initially completed?

A The Cooper No. 1 was originally drilled to the Devonian, 12,620 feet. It was found uneconomical and was plugged and abandoned.

Q What is the source of the salt water that you propose to inject into this well and approximately what volume of injection do you anticipate?

A At the present time we are producing approximately 500

barrels of water from the Devonian producers, and we propose to inject that amount at the present time. We anticipate that that volume will increase to perhaps as much as 5,000 barrels.

Q How do you propose to recompleate this well as a salt-water injection well?

A We propose to drill out the plugs that have been located in the well for abandonment, set another plug at approximately 6,500 feet, run a string of five and a half casing down to 12,622 feet, or rather 6,220 feet, and cement it with 300 sacks. We will then acidize the open hole between 6,220 and the plug at 6,500, and inject the salt water at that interval.

Q Amerada's Exhibit B has been submitted to the Commission. Will you tell what it shows, please?

A Exhibit B is a Schlumberger log of this Cooper No. 1, and I have indicated on the log the San Andres Formation and the zone through which we are going to inject the water.

MR. WOODWARD: Amerada's Exhibits A and B are offered into evidence.

MR. MACEY: Is there objection to the introduction of evidence of Amerada's Exhibits A and B in Case 764? If not they will be received.

Q You have stated that the San Andres is the formation through which you propose to inject this salt water?

A No, the San Andres does not produce oil in the Knowles Field.

Q Will the injection of salt water, by the method you have proposed, result in any waste or injury to correlative rights?

A No.

MR. MACEY: Are there any further questions of the witness?  
If no further questions of the witness, the witness may be excused.  
(Witness excused.)

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) SS.

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Hobbs, 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 5th day of November, 1954.

  
Notary Public, Court Reporter

My Commission Expires:  
June 19, 1955

