

CASE 3957: Application of YATES  
PETROLEUM CORP. FOR SALT WATER  
DISPOSAL, EDDY COUNTY, N.M.

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Case Number

3957

Application

Transcripts.

Small Exhibits

ETC.

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

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BEFORE THE  
NEW MEXICO GIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
November 20, 1968

IN THE MATTER OF:

Application of Yates Petroleum  
Corporation for salt water  
disposal, Eddy County, New Mexico.

Case No. 3957

BEFORE: ELVIS A. UTZ

TRANSCRIPT OF HEARING

MR. UTZ: Case 3957.

MR. HATCH: Application of Yates Petroleum Corporation  
for salt water disposal, Eddy County, New Mexico.

MR. UTZ: Appearances?

MR. LOSEE: A. J. Losee, Artesia, New Mexico,  
appearing for the applicant.

MR. UTZ: Let the record show the same witness  
sworn, as in the previous cases.

(Whereupon Applicant's Exhibits  
1 through 4 marked for identification)

\* \* \* \* \*

PAUL G. WHITE, called as a witness, having been previously  
duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LOSEE:

Q You are the Paul White of Artesia, New Mexico, who  
is Production Superintendent for Yates Petroleum Corporation,  
whose qualifications as an expert have previously been  
accepted by this Commission?

A Yes, sir.

Q Please refer to what has been marked as Exhibit 1  
which is the plat of the proposed salt water disposal well  
showing its location and in order that the plat may be corrected  
it shows the A.V. 2 Well which actually is located in Unit C

or the northeast of the northwest quarter of Section 23, when in fact, it's the well in Unit B located in the northwest of the northeast quarter of Section 23 that is shown as a dry hole, is that correct?

A Yes, that is correct. The plat was wrong.

MR. LOSEE: We would ask the Commission to amend it to show the other well.

MR. UTZ: The docket was correct?

MR. LOSEE: Yes, the Unit B is right.

MR. UTZ: It's just mismarked on your initial plat?

THE WITNESS: Yes, sir, that's right.

MR. LOSEE: Yes.

Q (By Mr. Losee) This shows the location of the offset operators and their producing wells, does it not?

A Yes, that's right.

Q What zones produce in the area of your A. V. 2 within a two-mile radius?

A Only the San Andres.

Q Please refer to what has been marked as Exhibit 2, being the diagrammatic sketch of the proposed disposal well, and explain what is shown by this exhibit.

A The diagrammatic sketch shows the well mechanics as proposed for produced water disposal, showing the 5 and 1/2-

inch casing at 1260 with cement circulated, the 2 and 3/8ths-inch tubing at 1230 feet with a packer set at 1225 feet, the open hole interval to total depth of 1410 feet. The actual zone on the well, the San Andres zone, is located from 1270 feet to 1300 feet and from 1380 to total depth.

Q How far below the fresh water in the area is your 5 and 1/2-inch casing set?

A By Commission Regulations, at least 100 feet below the Artesian aquifer.

Q Do you propose to plastic-coat this tubing if the Commission requires it?

A Mr. Losee, on this one, I did not propose that because of the shallow depth of the well. It appeared to me that it would be more economical to pull the tubing out and replace it rather than plastic-coat the string that's in there and we haven't had, in this area, any real problems with corrosion.

Q If the Commission requests it, will you load your annulus and put a gauge on the surface?

A Yes, sir, we certainly will.

Q Is that your proposal in this well?

A No, I did not propose that, Mr. Losee, but if the Commission requires the inhibitor fluid in the annulus and the

coating of the 2 and 3/8ths tubing, we will comply with this.

Q Now, please refer to Exhibit 3 which is the log of the proposed salt water disposal well. You have previously testified that the producing intervals, and I suppose they're reflected on the log run from 1270 to 1300 and from 1380 to 1410?

A Yes, sir.

Q Is there anything further shown in this log which bears on this case?

A No, sir, not that would bear on the case. It's my opinion that the produced water would go into the Slaughter Section, the lower Section 1390 to 1410.

Q From what oil zones will the produced water be coming, which is disposed of in this well?

A It will be produced in four other small San Andres wells in the immediate area, a volume of approximately 60 barrels per day.

Q So that actually the produced water is coming from the same zone into which you are disposing of the water?

A Yes, sir, that's right.

Q Do you feel like it will gravity into the zone, or will it be necessary to inject it under pressure?

A I feel, Mr. Losee, that it will gravity for a time,

but that we will, in a period of time, run into a situation where we might have wellhead injection pressures of say, up to 1000 psi.

Q Now, is this well presently producing out of the San Andres?

A Yes, sir it does. It produces three barrels of oil per day and three barrels of water per day.

Q In your opinion, is it economical to continue to produce this well from the San Andres?

A No, sir, our net revenue statements show that it's not economical to produce.

Q Do you have an opinion as to whether the disposal of produced water in this well in the manner proposed creates any danger to oil, gas or fresh water reservoirs in the area?

A No, sir, I do not. The volume of injected water will be quite low and substantially lower than the displacement of oil and water from the other wells, creating the possibility of only a real minor pressure maintenance type thing.

Q Exhibit 4b is the data sheet reflecting the information to which you have previously testified?

A Yes, sir.

Q Is that correct?

A Yes, sir.



Q Were Exhibits 1 through 4 prepared by you or under your direction?

A Yes, sir, they were.

MR. LOSEE: We move to introduce Exhibits 1 through 4, Mr. Examiner.

MR. UTZ: Without objection, Exhibits 1 through 4 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits 1 through 4 offered and admitted in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. White, you gave us two injection intervals. Does not the open hole include both of these?

A Yes, sir, it does.

Q So there are no perforations?

A No, sir.

Q You just feel this is the area into which the water will go?

A Yes, sir, this uppermost interval has a history in the area of being gasius when you drill it and of low perm, and the predominant producing zone in the other four wells surrounding this is the Slaughter zone which is indicated on this log at 1394 to 1410.

Q How deep is the Artesian water in this area?

A Well, it varies, Mr. Examiner, from a, generally the maximum depth is in the neighborhood of 950 feet, this again is subject to the particular well, we go more on drilling time than we go on the log data, to set our casing and this casing seat is picked by, or at least authorized by the District Representative from the New Mexico Oil Conservation Commission.

Q So that your casing shoe is probably 300 feet below the base of the water?

A This could be a possibility here, I don't have the drilling time on this well. It was drilled with cable tools and I don't know. I think certainly that we have an effective shut-off from any artesian waters because this would be quite unwieldy if the artesian waters were interfering into the well bore.

Q The San Andres into which you are injecting, is producing in this area?

A Yes, sir.

Q The water from the San Andres is salty?

A Yes, sir.

Q The artesian water is not?

A No, sir.

MR. UTZ: Any questions of the witness? The case will be taken under advisement.

(Witness excused.)

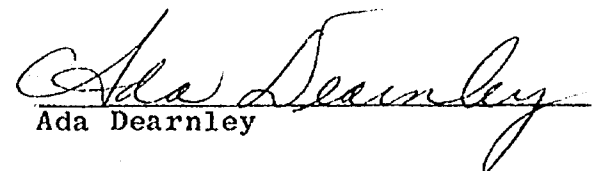
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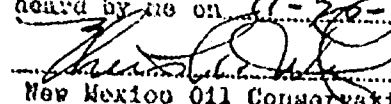
WITNESS		PAGE
<u>PAUL G. WHITE</u>		
Direct Examination by Mr. Losee		2
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<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's 1 through 4	2	7

STATE OF NEW MEXICO    )  
                                   ) ss  
 COUNTY OF BERNALILLO    )

I, ADA DEARNLEY, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my hand this 2nd day of December, 1968.

  
 Ada Dearnley

I do hereby certify that the foregoing is  
 a complete record of the proceedings in  
 the Examiner hearing of Case No. 3857  
 heard by me on 11-20-68, 19.....  
  
 Examiner  
 New Mexico Oil Conservation Commission

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

State of New Mexico  
Oil Conservation Commission



LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

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

P. O. BOX 2088  
SANTA FE

November 27, 1968

Mr. A. J. Losee  
Attorney at Law  
Post Office Box 239  
Artesia, New Mexico 88210

Re: Case No. 3957  
Order No. R-3693  
Applicant:  
Yates Petroleum Corp.

Dear Sir:

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

Very truly yours,

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

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC X

Aztec OCC       

Other State Engineer Office

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. 3957  
Order No. R-3603

APPLICATION OF YATES PETROLEUM  
CORPORATION FOR SALT WATER DISPOSAL,  
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 8:30 a.m. on November 20, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 27th day of November, 1968, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Yates Petroleum Corporation, is the owner and operator of the A. V. Gissler Well No. 2, located in Unit B of Section 23, Township 17 South, Range 25 East, NMPM, Eagle Creek-San Andres Pool, Eddy County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Andres formation, with injection into the open-hole interval from approximately 1260 feet to 1410 feet.

(4) That the injection should be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 1225 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

-2-

CASE No. 3957  
Order No. R-3603

IT IS THEREFORE ORDERED:

(1) That the applicant, Yates Petroleum Corporation, is hereby authorized to utilize its A. V. Gissler Well No. 2, located in Unit B of Section 23, Township 17 South, Range 25 East, NMPM, Eagle Creek-San Andres Pool, Eddy County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 1225 feet, with injection into the open-hole interval from approximately 1260 feet to 1410 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined or that the produced salt water shall be continuously treated prior to injection to prevent casing and tubing corrosion, and coupon corrosion tests conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretary-Director of the Commission; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
GUYTON B. HAYS, Member

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

  
esr/

W3957

nd 11-20-68.

LC. 11-21-68.

Grant. Yates Pet permission to  
convert their A.V. Heiser ~~to~~  
# 2 - B-23-175-25 E, Eagle Creek -  
S.A. port to a S u D well. Injection  
shall be thru 2 3/8" tubing  
under a packer and into the S.A.  
from thru open hole 1260-1410.  
Annulus shall be filled with  
inert fluid for pressure gauge  
at surface.

The water shall be treated & capped  
~~tests run~~ tests run & reported  
quarterly or the tubing annu-  
ally coated. - Thos. L. [Signature]

- CASE 3953      3418 feet to 3429 feet in the Bernice Dinnin A Well No. 2 located in Unit J of Section 23, Township 20 South, Range 33 East, Teas Yates-Seven Rivers Pool, Lea County, New Mexico.
- CASE 3954:      Application of C. E. Long, Jr., for a non-standard gas proration unit and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard gas proration unit comprising the S/2 SW/4 of Section 32, Township 21 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to his Shell-State Well No. 1 at an unorthodox location for said pool 660 feet from the South line and 2310 feet from the West line of said Section 32.
- CASE 3955:      Application of Yates Drilling Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian formation in the perforated interval from approximately 9640 feet to 9660 feet in its Lillie M. Yates Well No. 4 located in Unit D of Section 31, Township 8 South, Range 37 East, Allison Pennsylvanian Pool, Roosevelt County, New Mexico.
- CASE 3956:      Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated interval from approximately 4411 feet to 4464 feet in its Federal AK Well No. 1 located in Unit I of Section 3, Township 19 South, Range 25 East, Penasco-Wolfcamp Pool, Eddy County, New Mexico.
- CASE 3957:      Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the interval from approximately 1260 feet to 1410 feet in its A. V. Gissler Well No. 2 located in Unit B of Section 23, Township 17 South, Range 25 East, Eagle Creek-San Andres Pool, Eddy County, New Mexico.
- CASE 3958:      Application of Yates Petroleum Corporation for a dual completion and salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete three wells in Section 8, Township 19 South, Range 25 East, and Section 25, Township 18 South, Range 25 East, Penasco Draw-San Andres Yeso Pool, Eddy County, New Mexico, in such a manner as to permit the production of oil from the San Andres formation and the disposal of produced salt water

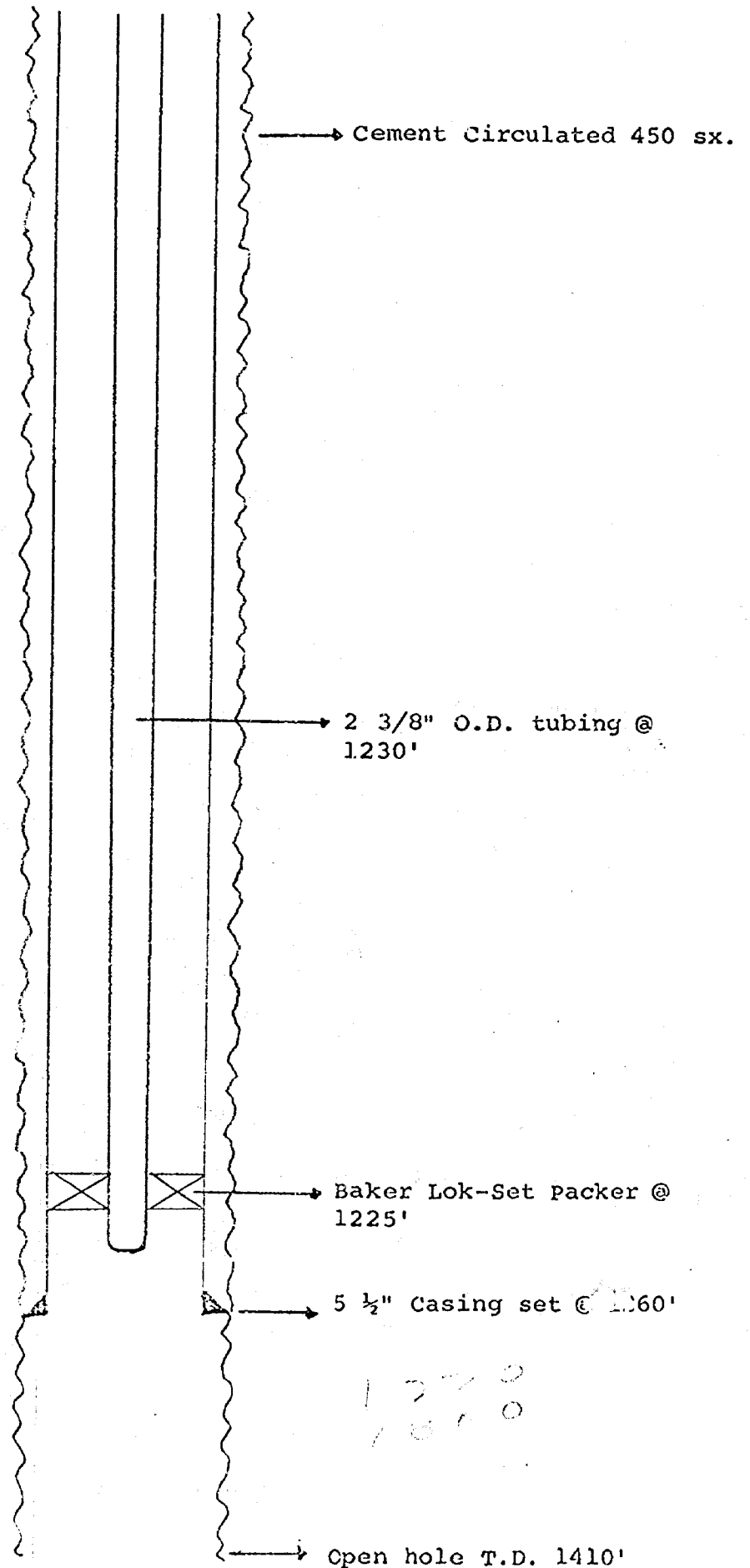


DIAGRAMMATIC SKETCH  
PROPOSED SWD WELL  
YATES PETROLEUM CORP.  
A.V. GISSLER NO. 2

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 2  
CASE NO. 3957

EXHIBIT 2  
DATE 10-28-68

1380 to T.D.



YATES PETROLEUM CORPORATION  
PERTINENT DATA SHEET

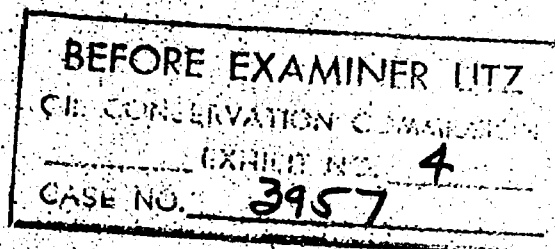
1. Produced water will be injected into the San Andres Formation from (1260-1410).
2. The produced water to be injected is produced from San Andres oil wells in the area.
3. The produced water is all San Andres water.
4. The volume of water injected will approximate 60 BWPD.
5. The San Andres Formation in the proposed injector produces approximately 3 BOPD and 3 BWPD and is uneconomical to produce.

EXHIBIT

4

DATE

10 - 28 - 68





YATES BUILDING - 207 SOUTH 4TH ST.  
ARTESIA, NEW MEXICO - 88210

S. P. YATES  
PRESIDENT  
HARVEY E. YATES  
VICE PRESIDENT  
MARTIN YATES, III  
VICE PRESIDENT  
JOHN A. YATES  
VICE PRESIDENT  
HUGH W. PARRY  
SEC. - TREAS.

October 15, 1968

*Case 3957*

State of New Mexico  
Oil Conservation Commission  
P. O. Box 2080  
Santa Fe, New Mexico 87501

Attn: Secretary Director, Mr. A. L. Porter Jr.

Re: Conversion of (1) San  
Andres Producer to Salt  
Water Disposal Well

Dear Sir:

The Yates Petroleum Corporation respectfully requests that the New Mexico Oil Conservation Commission set for hearing as soon as possible a case for the conversion of the following well:

A. V. Gissler No. 2 Unit B Sec. 23-T17S-R25E Eddy Co.

The Yates Petroleum Corporation seeks authority to convert the subject well from a San Andres Oil Producer to a salt water disposal well.

This application is accompanied by (1) plat of area (2) diagrammatic sketch of proposed conversion (3) log on well (4) pertinent data sheet.

Copies of this application and all exhibits pertaining thereto have been sent to all offset operators.

Sincerely,

*Paul A White*

Paul G. White

PGW/gs

cc: John W. Gates  
Atlantic Richfield

DOCKET MAILED

Date 11-7-68

*Eagle Creek - San Andres*

DRAFT  
GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 3957

Order No. R-3603

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CORPORATION FOR SALT WATER DISPOSAL,  
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ORDER OF THE COMMISSION

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NOW, on this \_\_\_\_\_ day of November, 1968, the Commission, a  
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and the recommendations of the Examiner, and being fully advised  
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(1) That due public notice having been given as required by  
law, the Commission has jurisdiction of this cause and the subject  
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25 East, NMPM, Eagle Creek-San Andres Pool, Eddy  
County, New Mexico.

(3) That the applicant proposes to utilize said well to  
dispose of produced salt water into the San Andres  
formation, with injection into the open-hole interval  
from approximately 1260 feet to 1410 feet.

(4) That the injection should be accomplished through  
2 3/8-inch ~~plastic-lined~~ tubing installed in a packer set at

approximately 1225 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus ~~or the annulus left open~~ at the surface in order to determine leakage in the casing, tubing, or packer.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Yates Petroleum Corporation, is hereby authorized to utilize its A. V. Gissler Well No. 2, located in Unit B of Section 23, Township 17 South, Range 25 East, NMPM, Eagle Creek-San Andres Pool, Eddy County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 1225 feet, with injection into the open-hole interval from approximately 1260 feet to 1410 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined ~~or that~~ *the produced salt water shall be continuously treated prior to injection to prevent casing and tubing corrosion, and ~~for~~ ~~the~~ coupon corrosion tests ~~shall be~~ conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretary-Director of the Commission; and that a pressure gauge shall be attached to the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.*

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

*Under 7*