



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210  
TELEPHONE (505) 748-1471

S. P. YATES  
PRESIDENT  
JOHN A. YATES  
VICE PRESIDENT  
B. W. HARPER  
SEC. - TREAS.

February 5, 1988

TO: Mr. William J. Lemay, Director  
New Mexico Oil Conservation Commission  
P.O. Box 2088, Santa Fe, N.M. 87504-2088

FROM: Eddie Mahfood, Senior Engineer  
Yates Petroleum Corporation  
Artesia, New Mexico 88210 *E.M.*

SUBJECT: Application for Salt Water Disposal

As provided for under NMOC Rule 701B 3. Yates Petroleum Corporation hereby makes application for Administrative approval for Salt Water Disposal in their Osage No. 1 located in Unit G Sec 21-T19S-R25E, Eddy County. Form C-108 with necessary attachments, proof of notification and copy of the legal publication in the Artesia Daily Press are submitted herewith.

## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Yates Petroleum Corporation  
Address: 107 S. Fourth Street, Artesia, New Mexico 88210  
Contact party: Eddie Mahfood Phone: 748-1471
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \* VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Eddie Mahfood Title: Senior Engineer  
Signature: Eddie Mahfood Date: 2-5-88
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal. \_\_\_\_\_

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

---

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Application for SWD  
Osage No. 1

III. Well Data

- A. 1.) Osage No. 1, Sec 21-19S-25E, 1980/N 1980/E  
2.) 13 3/8" 48# Csg @ 475', 17 1/2" hole, 550 sx. cmt to surface  
8 5/8" 24# Csg @ 1299', 12 1/4" hole, 600 sx. cmt to surface  
5 1/2" 15.5-17# Csg @ 7926', 7 7/8" hole, 475 sx, cmt @ 6150'  
by temperature survey.
- B. 1.) Injection zone - Canyon; Dagger Draw, No. - Upper Penn  
2.) Injection interval 7672-7813'; pres. pfs 7672-7704'; will  
make additional perfs.  
3.) Well was drilled by Coquina for Morrow test to 9410' & Plugged  
in 8-73. Well was re-entered by Anadarko for Canyon production  
in 8-82, is currently temporarily abandoned in original perfs  
7672-7704'.  
4.) There are no other perforated intervals in this well.  
5.) There were no other oil or gas zones found above the Canyon.  
Some gas encountered in Morrow at 9130-80', not commercial.

IV. This application is not an expansion of an existing project by YPC.  
Note, however, that Anadarko owns & operates a SWDW in same zone,  
interval 7800-8040', Dagger Draw No.1 Unit E Sec 22-19S-25E, OCD #R-7637  
issued 8-23-84. Also, YPC is currently disposing of produced water into  
Devonian formation in State "CO" #1, Unit K Sec 36-19S-24E. OCD #SWD 285  
issued 4-22-85.

V. A map is attached showing all wells and leases within a two-mile radius  
of the proposed injection well. The Area of Review, one-half mile radius,  
is circled on the map.

VI. There are no wells of public record, plugged or otherwise in the Area of  
Review.

- VII. 1.) Proposed rate of injection, average-1000 BPD, maximum-3000 BPD.  
2.) Closed system.  
3.) Proposed injection pressure, average-1500 psi, maximum-2000 psi.  
4.) Injection fluid will be produced water from Dagger Draw, No.-Upper Penn.  
5.) Formation water would be similar to the produced water although there  
is currently no productive well within one mile radius.

VIII. The injection zone is a facies intercrystalline dolomite, lower canyon strata  
of Pennsylvania age, 300-400 feet thick in the Dagger Draw area, at 7600-  
7800 ft. with a pinch-out to the North and Northwest, becoming limestone.  
Sulphur water, (7000 chlorides) is always produced with the oil and gas.

Underground sources of drinking water in this area are Rustler Sands at  
400-440 feet and San Andres limes and sands at 950-1060 feet.

IX. Proposed stimulation will be 7000-15000 g. acid with scale and corrosion  
inhibitors.

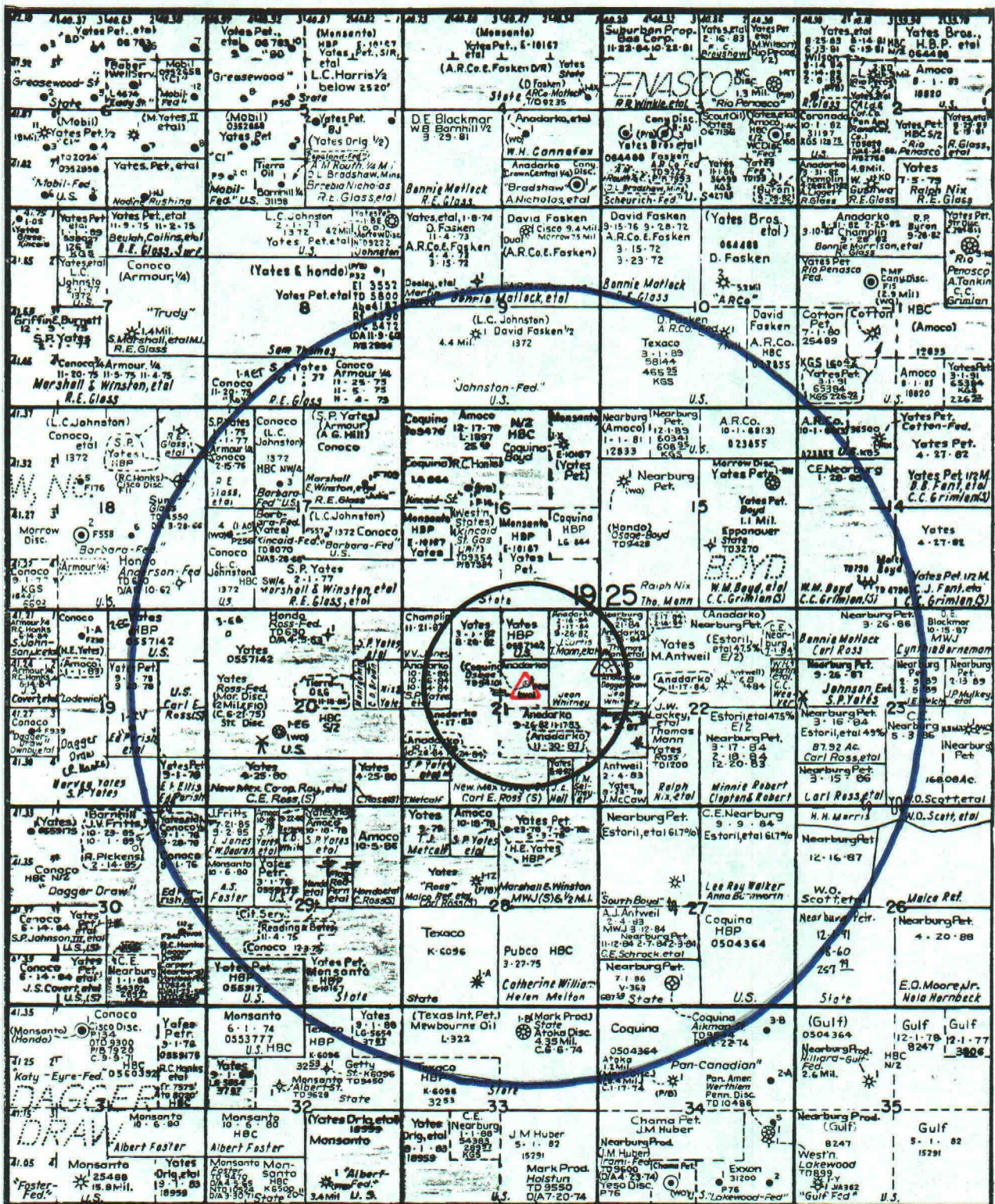
*Rodden G.D. well No. 2  
S 25, 19S, 24E.  
- TDS - 18, 246 -*

Application for SWD  
Osage No. 1

Page -2-

- X. Well logs are on file with the NMOCD.
- XI. Water analyses not available, no water wells within one-mile radius.
- XII. The undersigned has examined all available geologic & engineering data for this area and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Copies of this application have been furnished by Certified Mail to the Surface Owner and to leasehold operators within the review area. This intent for a salt water well has been advertised in accordance with NMOCD Rule 701-C, and Proof of Publication is attached.





# **YATES PETROLEUM CORPORATION** **APPLICATION FOR SALTWATER DISPOSAL WELL** **DAGGER DRAW NORTH, UPPER PENN**

**OSAGE NO. 1**

**1980 FNL & 1980 FEL**

**SEC. 21-T19S-R25E**

**EDDY COUNTY, NEW MEXICO**

✕ WINDMILL

• OIL WELL

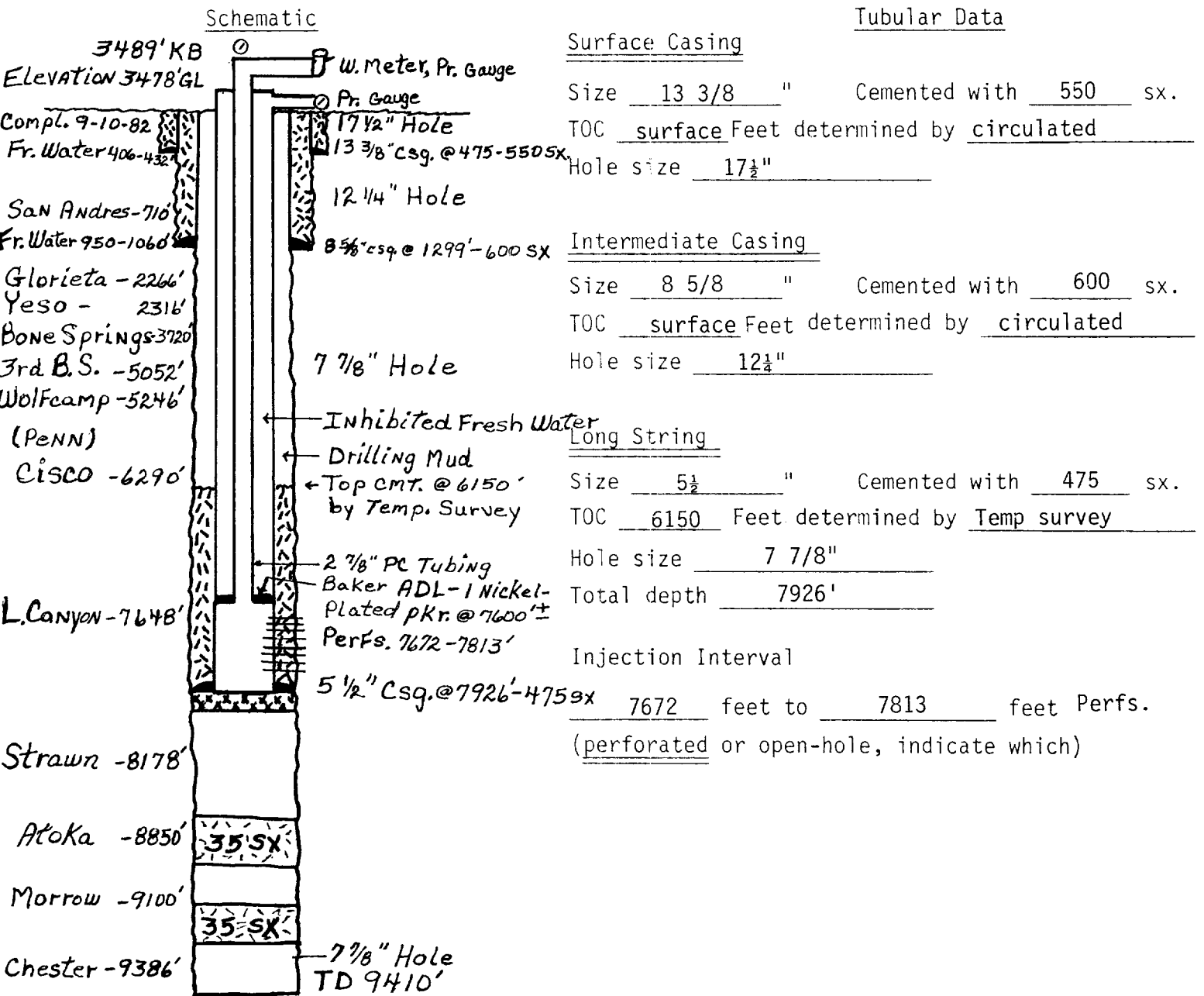
☆ GAS WELL

◇ DRY HOLE



## INJECTION WELL DATA SHEET

Yates Petroleum Corporation				OSAGE	
Operator				Lease	
1	1980 FNL	1980 FEL	21	19S	25E
Well No.	Footage Location		Section	Township	Range



Tubing size 2 7/8" lined with \_\_\_\_\_ Set in a  
 Baker model ADL-1 \_\_\_\_\_ packer at about 7600 feet  
 (brand and model)

(or describe any other casing-tubing seal).

## Other Data

- Name of the injection formation Canyon
- Name of Field or Pool (if applicable) Dagger Draw No.
- Is this a new well drilled for injection? ☐ Yes ☒ No  
 If no, for what purpose was the well originally drilled? Oil or Gas
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Boyd Morrow-9120'; Cemetery No. Atoka-8860'; Eddy Undes. Strawn 8575'.

BEFORE THE OIL CONSERVATION DIVISION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF :  
YATES PETROLEUM CORPORATION FOR :  
SALT WATER DISPOSAL, EDDY COUNTY, :  
NEW MEXICO :  
\_\_\_\_\_ :

AFFIDAVIT OF MAILING

STATE OF NEW MEXICO     )  
                                      : ss  
COUNTY OF EDDY         )

The undersigned, being first duly sworn, upon oath, states that the undersigned is an employee of Applicant, and that on the 2nd day of February, 1988, the undersigned did mail in the United States Post Office at Artesia, New Mexico, a true copy of the following instrument:

1. Application for Authorization To Inject in the Osage No. 1 Well; located 1980' FNL & 1980' FEL of Section 21, Township 19 South, Range 25 East, NMPM,


in securely sealed postage prepaid envelopes addressed to the following named persons:

<u>NAME</u>	<u>ADDRESS</u>
Bravo Energy	P. O. Box 2160 Hobbs, New Mexico 88241
Champlin Exploration Inc.	24 Smith Road, Ste. 280 Midland, Texas 79701
American National	P. O. Box 2960 Midland, Texas 79702
BHP Petroleum Company Inc.	1300 One Midland Nat'l Ctr. 500 West Texas Midland, Texas 79701
Anadarko Petroleum Corp.	P. O. Box 2497 Midland, Texas 79701
Carl Ross	P. O. Box 845 Artesia, New Mexico 88210

  
\_\_\_\_\_  
Randy G. Patterson

SUBSCRIBED AND SWORN TO before me this 8<sup>th</sup> day of February, 1988.

My commission expires:  
March 1, 1990

  
\_\_\_\_\_  
Notary Public



LEGAL NOTICE

Pursuant to the New Mexico Oil Conservation Division regulations governing the injection of fluids into a formation, NOTICE is hereby given that Yates Petroleum Corporation, 207 South Fourth Street, Artesia, New Mexico, 88210, (505) 748-1471, Eddie Mahfood contact party, proposes to utilize its Osage No. 1 well for the disposal of produced waters into the Canyon formation thru perforations 7672-7813'. Subject well is located 1980 FNL, 1980 FEL of Section 21 T19S-R25E in Eddy County, New Mexico. The proposed maximum injection pressure is 2000 psig.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico, 87501, within 15 days.

Published in the Artesia Daily Press, Artesia, New Mexico, a newspaper publication in Eddy County, N.M. on February 4, 1988.

# Affidavit of Publication

Copy of Publication

No. 12218

STATE OF NEW MEXICO,  
County of Eddy:

Gary D. Scott being duly sworn, says: That he is the Publisher of The Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and state, and that the hereto attached Legal Notice

was published in a regular and entire issue of the said Artesia Daily Press, a daily newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for 1 days consecutive weeks on the same day as follows:

First Publication February 4, 1988

Second Publication

Third Publication

Fourth Publication

and that payment therefore in the amount of \$ has been made.

Subscribed and sworn to before me this 5th day of February, 1988.

Gordon Ann Garses  
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1991

## LEGAL NOTICE

Pursuant to the New Mexico Oil Conservation Division regulation regarding the injection of water into a formation, NOTICE is hereby given that Yates Petroleum Corporation, 207 South Main Street, Artesia, New Mexico 8210, (505)744-1111, is a Mah-food cement water well to utilize the water well for water injection produced water from a Canyon formation oil formation 7672-7813. The well is located 1980 FNL, 1980 FNL of Section 21 T19S, R28E, in Eddy County, New Mexico. The proposed water injection pressure is 2,000 psi. Interested parties may object to the proposed water injection pressure by filing an objection with the Oil Conservation Division, 1000 West 10th, Santa Fe, New Mexico, 87501, before 4:00 p.m. on February 4, 1988. Published in the Artesia Daily Press, Artesia, New Mexico, a newspaper of general circulation in Eddy County, New Mexico, on February 4, 1988.

Legal 12218