

Telephone (817) 723-2166

S&J OPERATING COMPANY

FAX (817) 723-8113
DIVISION

811 Sixth Street, Suite 300

Post Office Box 2249

WICHITA FALLS, TEXAS
76307-2249

RELEASE 2-18-93
JAN 29 1993 8 52

January 29, 1993

Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Attn: Energy and Mineral Department

Re: Form C-108
Application for Authorization to Inject
S & J Operating Company
Saladar Unit Well No. 8
Section 33, T20S R28E
Eddy County, New Mexico

Gentlemen:

Please find enclosed Form C-108, Application for Authorization to Inject and accompanying data for S & J Operating Company's Saladar Unit well No. 8 located in Section 33, T20S R28E, Eddy County, New Mexico.

Please be advised that the proof of notice to the surface owner and all leasehold operators within one-half mile of the well location will be forwarded to you as soon as all of the Certified Return Receipts are received by S & J Operating Company. Also the proof of publication and a copy of the legal advertisement which will be published in the Carlsbad Current-Argus, which is a publication in Eddy County, New Mexico, will be supplied to you as soon as possible.

Should you have any questions, please do not hesitate to contact the undersigned.

Yours very truly,

S & J OPERATING COMPANY

William M. Kincaid

William M. Kincaid

WMK/dk

cc: Oil Conservation Division, District II
P. O. Drawer DD
Artesia, New Mexico 38210

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: S & J Operating
Address: P.O. Box 2249, Wichita Falls, TX. 76307
Contact party: William M. Kincaid Phone: (817) 723-2166
- 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 R5939.
- 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: William M. Kincaid Title: Petroleum Engineer
Signature: William M. Kincaid Date: 1-29-93
- * 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. August, 1978; Original application for and approval of unitization and secondary operations.

AOR = 26 total 13 P&A

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 a 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.

INJECTION WELL DATA SHEET

SIDE 1

S & J Operating Company

Saladar Unit

UNIT RATOR

LAST

#8 (SESM) 990' FSL & 2310' FWL
WELL NO. FOOTAGE LOCATION

33 SECTION

20 S TOWNSHIP

28E RANGE

Unit Letter "N"

Schematic

Tabular Data

Surface Casing

Size 7 " Cemented with 100 sx.
TOC Surface feet determined by Circulation
Hole size 7 7/8"

Intermediate Casing

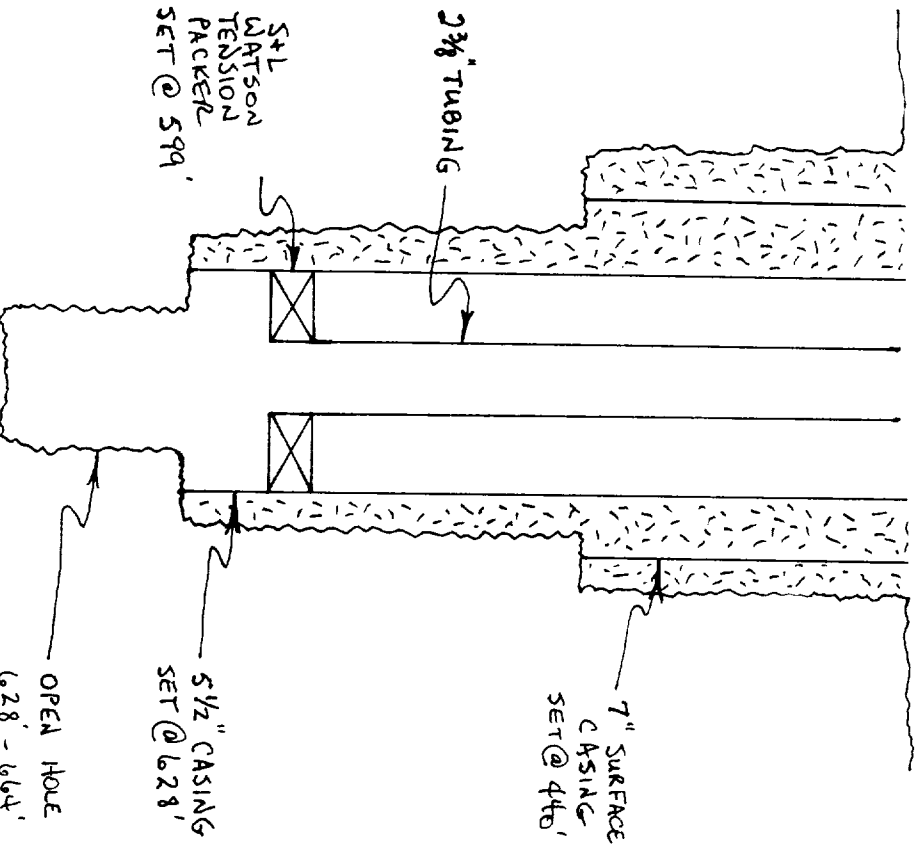
None

Size " Cemented with _____ sx.
TOC feet determined by _____
Hole size _____

Long string

Size 5 1/2" " Cemented with 35 sx.
TOC Surface feet determined by Circulation
Hole size 6 1/4"
Total depth 628'
Injection interval

628 feet to 664 feet
(perforated or open-hole, indicate which)



INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 3/8" lined with Plastic coated set in a

(material)

S & L Watson Tension packer at 599' feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Yates

2. Name of Field or Pool (if applicable) Saladar-Yates

3. Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? Oil well

4. 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) None

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Queen sand: approximately 1800'

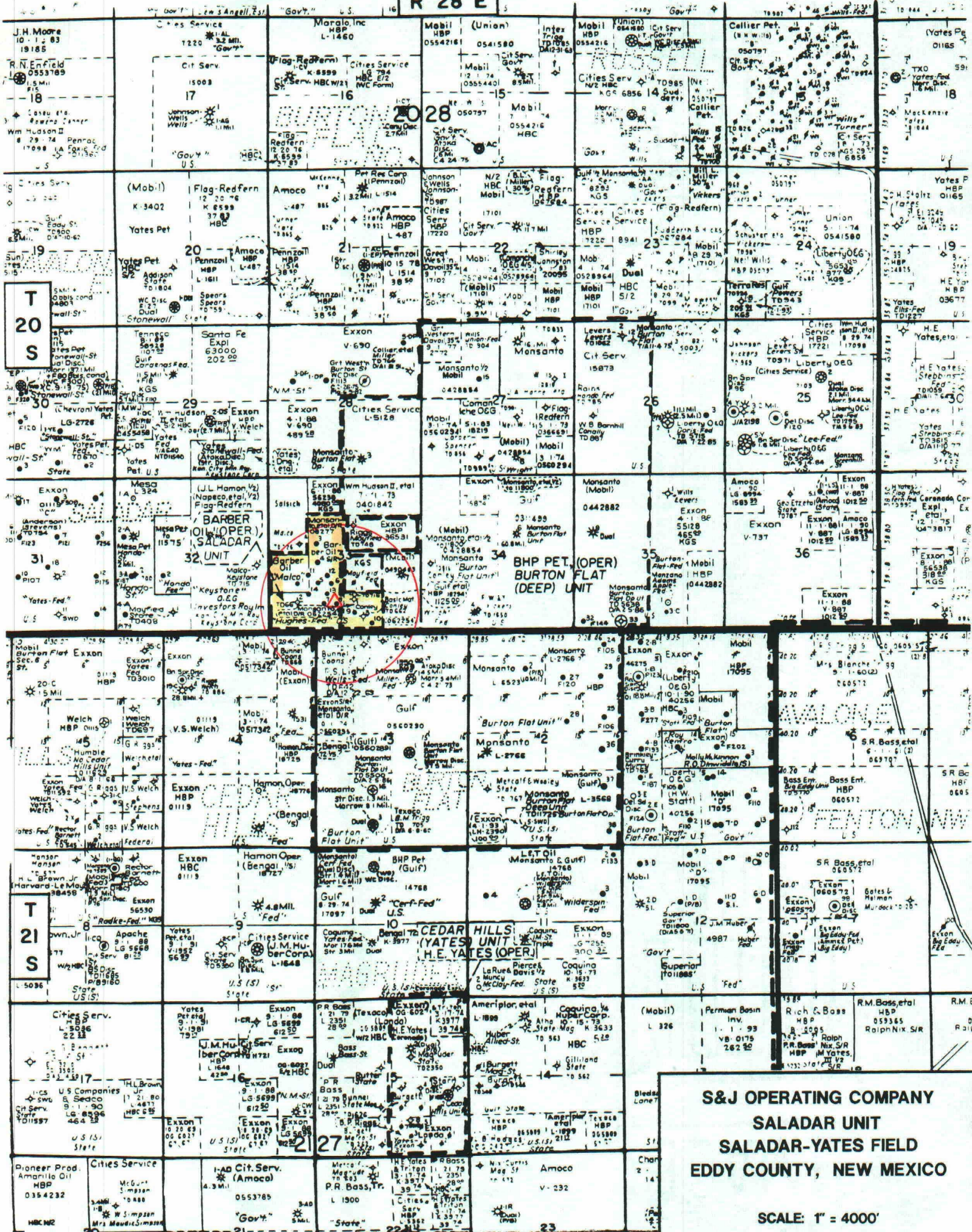
Application For Authorization To Inject
S & J Operating Company
Saladar Unit No. 8
Eddy County, New Mexico

VII. Proposed Operation:

1. Proposed Average Daily Injection Rate: 100 BWPD
Anticipated Maximum Daily Injection Rate: 200 BWPD
2. Injection System: Closed
3. Proposed Average Injection Pressure: 600 psig
Anticipated Maximum Injection Pressure: 600 psig

IX. Proposed Stimulation:

Formation will be treated with 500 gallons of 15% HCL.



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6226
Order No. R-5939

APPLICATION OF BARBER OIL, INC.
FOR A WATERFLOOD PROJECT, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 2, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 28th day of February, 1979, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Barber Oil, Inc., seeks authority to institute a waterflood project on its Saladar Lease, Saladar-Yates Pool, by the injection of water into the Yates formation through five injection wells located in Units K, L, N and O of Section 33, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico.

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

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

(5) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(6) That the Unit Operator should immediately notify the supervisor of the Artesia District Office of the Division of the failure of the tubing, casing, or packer of any well in the Unit Area or of the leakage of water from or around any well within one-half mile of the Saladar Unit Area, including wells which have been plugged and abandoned.

(7) That upon such failure of any well within one-half mile of an injection well in the Saladar Unit Area, the Division Director should be authorized to limit injection pressure in the Yates formation in such injection well to no more than hydrostatic pressure, and to maintain such pressure limitation until such time as workover operations (including re-plugging, if necessary) have been completed correcting such failure.

(8) That the injection wells or system should be equipped with a pressure control device or other acceptable substitute which will limit the surface injection pressure to no more than 557 psi. Provision should be made for the Division Director to administratively authorize a pressure limitation in excess of said 557 psi upon a showing by the Unit Operator that such higher pressure is necessary to effectively and efficiently waterflood the Saladar Unit Area and that such higher pressure limitation will not result in fracturing of the confining strata.

(9) That the subject application should be approved subject to the above conditions, and the project should be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Barber Oil, Inc., is hereby authorized to institute a waterflood project on its Saladar Lease, Saladar-Yates Pool, by the injection of water into the Yates formation through the following-described wells in Section 33, Township 20 South, Range 28 East, NMPM, Eddy County, New Mexico:

<u>Original Well Name and No.</u>	<u>Unit Well No.</u>	<u>Unit Letter</u>
Riggs Hughes Fed No. 3	1-3	K
Riggs Hughes Fed No. 5	1-5	K
Riggs Hughes Fed No. 7	1-7	N
Conley Mayfield Fed No. 2	2-2	O
Riggs Malco-Keystone No. 1	3-1	L

(2) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the casing shoe; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) That the operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area or within one-half mile of the Saladar Unit Area.

(4) That upon such failure of any well within one-half mile of an injection well in the Saladar Unit Area, the Division Director is hereby authorized to limit injection pressure in the Yates formation in such injection well to no more than hydrostatic pressure, and to maintain such pressure limitation until such time as workover operations (including re-plugging, if necessary) have been completed, successfully correcting such failure.

(5) That the injection wells or system shall be equipped with a pressure control device or other acceptable substitute which will limit the surface injection pressure to no more than 557 psi. The Division Director may administratively authorize a pressure limitation in excess of said 557 psi upon a showing by the Unit Operator that such higher pressure is necessary to effectively and efficiently waterflood the Saladar Unit Area and that such higher pressure limitation will not result in fracturing of the confining strata.

(6) That the subject waterflood project is hereby designated the Saladar Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

(7) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

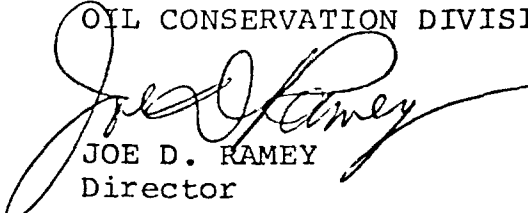
(8) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-4-

Case No. 6226
Order No. R-5939

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



JOE D. RAMEY
Director

S E A L

fd/

Telephone (817) 723-2166

S&J OPERATING COMPANY

811 Sixth Street, Suite 300

WICHITA FALLS, TEXAS
76307-2249

Post Office Box 2249

OIL CONSERVATION DIVISION
FAX (817) 723-8113
REL: JED
28 FEB 1993 AM 8 48

February 10, 1993

Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87501

Attn: Energy and Mineral Department

Re: Proof of Publication
Application for Authorization to Inject
S & J Operating Company
Saladar Unit Well No. 8
Section 33, T20S R28E
Eddy County, New Mexico

Gentlemen:

In conjunction with the above referenced Application for Authorization to Inject, please find attached the proof of publication required where an application is subject to administrative approval.

Should you have any questions, please do not hesitate to contact the undersigned.

Yours very truly,

S & J OPERATING COMPANY



William M. Kincaid

WMK/dk

Affidavit of Publication

State of New Mexico,
County of Eddy, ss.

E. C. Cantwell, being first duly sworn,
on oath says:

That he is publisher of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the state wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

FEBRUARY 4, 19 93
_____, 19 ____
_____, 19 ____
_____, 19 ____

that the cost of publication is \$ 21.00,
and that payment thereof has been made
and will be assessed as court costs.

Subscribed and sworn to before me this
4 day of FEBRUARY, 19 93

Rinda A. Martin

My commission expires 7/22/96
Notary Public

February 4, 1993

S & J Operating Company has applied to the Oil Conservation Division of the State of New Mexico for a permit to convert the Saladar Unit Well No. 8 to water injection service. This well will be an expansion of an existing secondary recovery project with water being injected into the Yates formation at a depth of 628' to 664' at an anticipated maximum injection rate of 200 barrels of water per day at a maximum injection pressure of 600 psig. The Saladar Unit Well No. 8 is located in Unit "N", 990' from the South line and 2,310' from the West line of Section 33, T20S R28E, Eddy County, New Mexico. Any questions concerning this matter should be directed to William M. Kincaid, S & J Operating Company, P. O. Box 2249, Wichita Falls, Texas 76307, phone number 817-723-2166. Interested parties must file objections or request for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days of this notice.

Index #	Invoice # 15064
930204	Due Date 930220
Amount 21.00	
Major 5020	Minor 21
11	IS # 99150
21.00	Debit Date 930204
2/0	
By: <i>WML</i>	Coded By: <i>mm</i>