P. O. Box 11005

MIDLAND, TEXAS 79702

915/699-1410

August 29, 1997

Oil Conservation Division 2040 Pacheco St. Santa Fe, New Mexico 87505

Re: Application for Authorization
to Inject
State "BF" #4 Well
330' FNL & FEL Sec. 16,
T-20-S, R-33-E, N.M.P.M.,
Lea County, New Mexico
Salt Lake Prospect

Gentlemen:

Please find enclosed for your and review Stevens & Tull, Inc.'s Application for Authorization to Inject covering the captioned well. As required, we have notified the offset leasehold owners of this application and put same in the Hobbs Star Sun newspaper.

We propose to inject an average of 1,200 bbls. and a maximum of 1,600 bbls. of produced water per day from the Yates-Seven Rivers formation back into the Yates-Seven Rivers formation which is a known productive hydrocarbon formation. The proposed system will be a closed system. Our injection pressures will average 300 psi with a maximum pressure of 700 psi. We have submitted copies of paperwork on all wells located within 1/2 mile of the subject well. Additionally, we have enclosed a plat reflecting the leasehold ownership of the offset leases.

We have also enclosed for your review two (2) Exceptions to Order No. R-3221, being Case No. 4021, Order No. R-3682 and Case No. 4022, Order No. 3683, which thoroughly discuss the lack of fresh water zones in this area. Also enclosed is a copy of Administrative Order SWD-631. The surface is owned by the State of New Mexico. We request that you give this matter your prompt attention. Should you have questions about this matter, please contact our office.

Yours very truly,

JELL Husen

Jesse Lawson Petroleum Engineer

f:\lt\request.inj

STATE OF NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT Oil Conservation Div. 2040 Pacheco St. Santa Fe, NM 87505

FORM C-108 Revised 7-1-81

## APPLICATION FOR AUTHORIZATION TO INJECT

1.	PURPOSE: Application quali	Secondary RecoveryPressure Main fies for administrative approval?YesX_No	 isposal	Storage
<b>H</b> .	OPERATOR:	STEVENS & TULL, INC.	 	
	ADDRESS:	P.O. Box 11005, MIDLAND, TEXAS 79702	 	
	CONTACT PAR	ry: Michael G. Mooney	 _PHONE:	915/699-1410

III. WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Additional sheets may be attached if necessary.

- IV. Is this an expansion of an existing project:  $\underline{X}$  Yes No If yes, give the Division order number authorizing the project SWD-631
- 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/1 or less) overlying the proposed injection zone as well as any such sources 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: Jerry A. Weant	 TITLE: Landman	
SIGNATURE:	DATE: 8/4/97	

If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be 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 lata 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 wi hin the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of c ment, 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 submitt ng 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 of 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 wi hin 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, PO Box 2088, Santa Fe, NM 87504-2088 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	INJECTION W.LL DATA SHEET		Side
OPERATOR STEVENS & TULL, INC.		LEASE STATE BF		
WELL NO. 4 FOOTAG	FOOTAGE LOCATION	16 SECTION	20S 33F TOWNSHIP RANGE	IE VGE
Schematic			Well Construction Data	
	л, - 1	Surface Casing Size 9 5/8	- Cemented with	440 <b>sx</b> .
	9 5/8", 36# J55, LT & C	TOC SURFACE	feet determined by CII	CIRCULATED
2 7/8" tbg	1,115	Hole Size 12 Intermediate Casing	12 1/4"	
	5 1/2", 17#	Size TOC	Cemented with     feet determined by	SX.
PKR @ 3,100'	38.T1 ,CCL	Hole Size		
¥9 ¥9¥ = 1 ¥ Å Å Å Å Å Å →	PERFS 3,160*-3,418"	Long String Size 5 1/2	Cemented with 635	35 sx.
	TD @ 3,465'	RFA	feet determined by <u>CI</u>	CIRCUALTED
		Hole Size 8 3/4" Total Depth 3,465"		
		Injection Interval		
		3,160' feet to 3,4±8' (nerforated or open-hole: Indicate which)	feet to 3,4±8° feet	

Side

## INJECTION WELL DATA SHEET

σı	Tubing Size     2 7/8"     III       BAKER AD-1     BAKER AD-1       Other type of tubing / casing seal if applicable       Other Data       1.     Is this a new well drilled for injection?       If no, for what purpose was the well or
	s a new well c
Name of the injection formation YATES - SEVEN RIVERS Name of Field or Pool (if applicable) WEST TEAS Y-SR	
	Name of the Injecti

ပ္ Give the names and depths of any over or underlying oil of gas zones (pools) in this area.

NONE