

MICHAEL L. WILLIAMS, CHAIRMAN  
CHARLES R. MATTHEWS, COMMISSIONER  
TONY GARZA, COMMISSIONER



RICHARD A. VARELA  
DIRECTOR, OIL AND GAS DIVISION  
LESLIE SAVAGE  
ASSISTANT DIRECTOR FOR ENVIRONMENTAL SERVICES

# RAILROAD COMMISSION OF TEXAS

## OIL AND GAS DIVISION PERMIT TO INJECT FLUID INTO A RESERVOIR PRODUCTIVE OF OIL OR GAS

PROJECT NO. F 1464, AMENDED

WALSH PETROLEUM, INC.  
301 N COLORADO STE 359  
MIDLAND TX 79701

Based on information contained in your application (Forms H-1 and H-1A) dated March 13, 2000, you are hereby authorized to use the following wells to inject fluid into the Queen Formation:

University Consolidated -1X- Lease, (19397), Well Nos. 43, 46, McFarland, East  
(Queen) Field, Andrews County, RRC District 08

This authority is granted in accordance with Statewide Rule 46 of the Railroad Commission of Texas and subject to the following special and standard conditions:

### SPECIAL CONDITIONS:

1. For each well authorized by this permit, the PERMITTED INJECTION WELL TABLE specifies the permitted subsurface injection interval, each permitted injection fluid and the maximum injection volume for each fluid, and the maximum permitted surface injection pressure. The PERMITTED INJECTION WELL TABLE is attached to and incorporated as a part of this permit.
2. An annual annulus pressure test must be performed on both wells and the results submitted in accordance with the instructions of Form H-5.
3. The injection of fresh water shall not exceed 7,000,000 barrels for the life of the project.

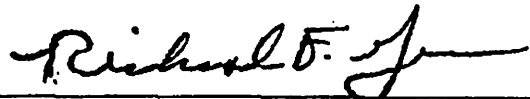
### STANDARD CONDITIONS:

1. Fluid injection must be through tubing set on a packer.
2. The District Office must be notified 48 hours prior to
  - a. running tubing and setting packer;
  - b. beginning any workover or remedial operation;
  - c. conducting any required pressure tests or surveys.

3. The wellhead must be equipped with a pressure observation valve on the tubing and for each annulus.
4. Prior to beginning injection, and subsequently after any workover, an annulus pressure test must be performed. The test pressure must equal the maximum authorized injection pressure or 500 psig, whichever is less, but must be at least 200 psig. The test must be performed and the results submitted in accordance with the instructions of Form H-5.
5. The injection pressure and injection volume must be monitored at least monthly and reported annually on Form H-10 to the Commission's Austin Office.
6. Within 30 days after completion, conversion to fluid injection, or any workover which results in a change in well completion, a new Form W-2 or G-1 must be filed in duplicate with the District Office to show the current completion status of the well. The date of the injection permit and the project number must be included on the new Form W-2 or G-1.
7. Written notice of intent to transfer the permit to another operator must be submitted to the Commission by filing Form P-4 at least 15 days prior to the date the operator plans for the transfer to occur. Permit transfer will not occur until the Form P-4 has been approved by the Commission.
8. A well herein authorized cannot be converted to a producing well and have an allowable assigned without filing an amended Form W-1 and receiving Commission approval.
9. Unless otherwise required by conditions of this permit, completion and operation of each well shall be in accordance with the information represented on the application (Forms H-1 and H-1A).
10. This permit will expire when the Form W-3, Plugging Record, is filed with the Commission.

Provided further that, should it be determined that such injection fluid is not confined to the approved strata, then the permission given herein is suspended and the fluid injection must be stopped until the fluid migration from such strata is eliminated.

APPROVED AND ISSUED ON May 1, 2000



Richard F. Ginn, Deputy Assistant Director  
for Underground Injection Control

PROJECT NO. F 1464

Page 2

**PERMITTED INJECTION WELL TABLE**

---

University Consolidated -1X-, (19397)

WELL NOS.                      43                      46

**INJECTION INTERVAL**

Top (feet)                      4803                      4822  
Bottom (feet)                      4847                      4864

**INJECTION FLUID  
(VOLUME)**

Salt Water and  
Fresh Water                      300                      300  
(bbl/day max)

Fresh Water                      87                      87  
(bbl/day avg)

MAXIMUM  
INJECTION                      2400                      2400  
PRESSURE  
(psig)

---