## Railroad Commission of Texas

OIL AND GAS DIVISION

ARTHUR H. BARBECK Chief Engineer

COMMISSIONERS
BEN RAMSEY
Chairman
BYRON TUNNELL
JIM C. LANGDON



MEMORANDUM TO THE COMMISSION:

Docket No. 6 - 56,124

APPLICATION:

East Texas Salt Water Disposal Co. for a permit to drill and use Warren No. 5 as a salt water disposal well in Upshur County, Texas

DATE OF HEARING:

March 4, 1966

APPEARANCES:

W. S. Morris for applicant and Wm. H. Price for L & G Oil Co.

The East Texas Salt Water Disposal Company desires to drill and utilize the B. E. Warren No. 5 for salt water disposal purposes in the East Texas Field. The well is located 2886 feet north and 1944 feet west of the southeast corner of the J. Couch Survey. The nearest producing oil well is  $l_2^{\frac{1}{2}}$  miles away in an easterly direction. The location was requested to relieve the high pressures required for injection operations now being conducted in two present injection wells. This well would be the eighth injection well in an area west of the productive limits of the reservoir.

L & G Oil Company requested that the Commission consider the application carefully. The L & G producing properties are at least three miles away. In cross examination, Mr. W. S. Morris testified that he couldn't see any harm being caused since the water injected dissipates into such a large aquifer. Mr. Morris characterized the operation as entirely water disposal and not pressure maintenance.

The well will be drilled and completed as follows:

- 1. A 15-inch hole will be drilled to a depth of 1,100 feet where 1,100 feet of 10 3/4-inch surface pipe will be set and cemented from bottom to top.
- 2. The hole will be deepened to the top of the Woodbine sand where the size will be reduced from 9.7/8-inch to 4.7/8-inch. Drilling will be continued to the base of the Woodbine which is expected to be reached at about 3744 feet.
- 3. An electric log will then be run to find a suitable casing seat below the first substantial shale break. Since the location of the well is outside the original producing limits of the field, and the entire section of the Woodbine sand is water-bearing, it is expected that a suitable casing seat will be found near or at the top of the Woodbine formation. Before the pipe is run into the well, the selected casing seat will be approved by the District Engineer of the Kilgore office of the Railroad Commission.
- 4. Approximately 3700 feet of 7-inch 0. D. 23# casing will be run to the approved casing seat and cemented with 150 sacks of cement. For corrosion control, the pH of the mud will be raised to 9.5 by the addition of sodium

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hydroxide; also 300 pounds of sodium dichromate will be added making a concentration of 2,000 ppm. The casing will be pressure-tested.

5. After the cement has set a minimum of 12 hours the plug will be drilled and the hole cleaned out to total depth using filtered water to wash the mud and cuttings from the hole. The well will then be ready to receive salt water through the 7-inch casing.

An electric log will be furnished the Railroad Commission when it is available.

Based on the evidence, it is recommended that the application be approved.

Respectfully submitted,

Jerry Gross, \ Legal Examiner

JG:ml

RECOMMENDATION APPROVED:		RECOMMENDATION DENIED:
att Barback	CHIEF ENGINEER	
	CHAIRMAN	
Sel	COMMISSIONER	
	COMMISSIONER	
DCA 20-3-17-66		
EFFECTIVE		