

EDWARDS UNDERGROUND
WATER DISTRICT

Report 93-06

PLATES

Defining the Edwards Aquifer
Freshwater/Saline-Water Interface with
Geophysical Logs and Measured Data
(San Antonio to Kyle, Texas)





PLATE 1. -- LOCATION OF STUDY AREA WELLS



NOTES:

- (1) APPROXIMATE LOCATION ONLY
- (2) VALUE AND LOCATION SHOWN REPRESENTS A COMPOSITE OF THREE WELLS IN CLOSE PROXIMITY TO EACH OTHER IN THE LULING FIELD.
- (3) 1 MICROSIEMEN PER CENTIMETER IS EQUAL TO 1 MICROMHO PER CENTIMETER AND BOTH ARE USED IN THE LITERATURE. MICROSIEMEN PER CENTIMETER (US/CM) IS A MORE RECENT TERM USED IN HYDROLOGY.

LEGEND

- FRESH/SALINE - WATER INTERFACE
- COUNTY SEAT
- WELLS WITH CALCULATED SPECIFIC CONDUCTANCE
- SELECTED WELLS WITH MEASURED SPECIFIC CONDUCTANCE OR SPECIFIC CONDUCTANCE CALCULATED FROM MEASURED TDS
- WELLS WITH BOTH CALCULATED AND MEASURED SPECIFIC CONDUCTANCE
- MULTIPLE ZONE VALUES. MAP IS CONSTRUCTED ON MINIMUM VALUES.
- NO ANALYSIS
- 1448 (-) 5008 (5400)
- 1000
- 557 (484)
- LINE OF EQUAL SPECIFIC CONDUCTANCE IN MICROSIEMENS PER CENTIMETER (3). CONTOUR INTERVAL VARIABLE
- CALCULATED AND (MEASURED) VALUES FOR SAME WELL AND/OR ZONE

PLATE 2. -- SPECIFIC CONDUCTANCE FROM GEOPHYSICAL LOGS AND MEASURED WELL DATA.



GENERAL CLASSIFICATION OF WATER BASED ON TDS
(FROM WINSLOW & KISTER, 1956)

DESCRIPTION	DISSOLVED-SOLIDS CONCENTRATION mg/L
FRESH	LESS THAN 1,000
SLIGHTLY SALINE	1,000 TO 3,000
MODERATELY SALINE	3,000 TO 10,000
VERY SALINE	10,000 TO 35,000
BRINE	GREATER THAN 35,000

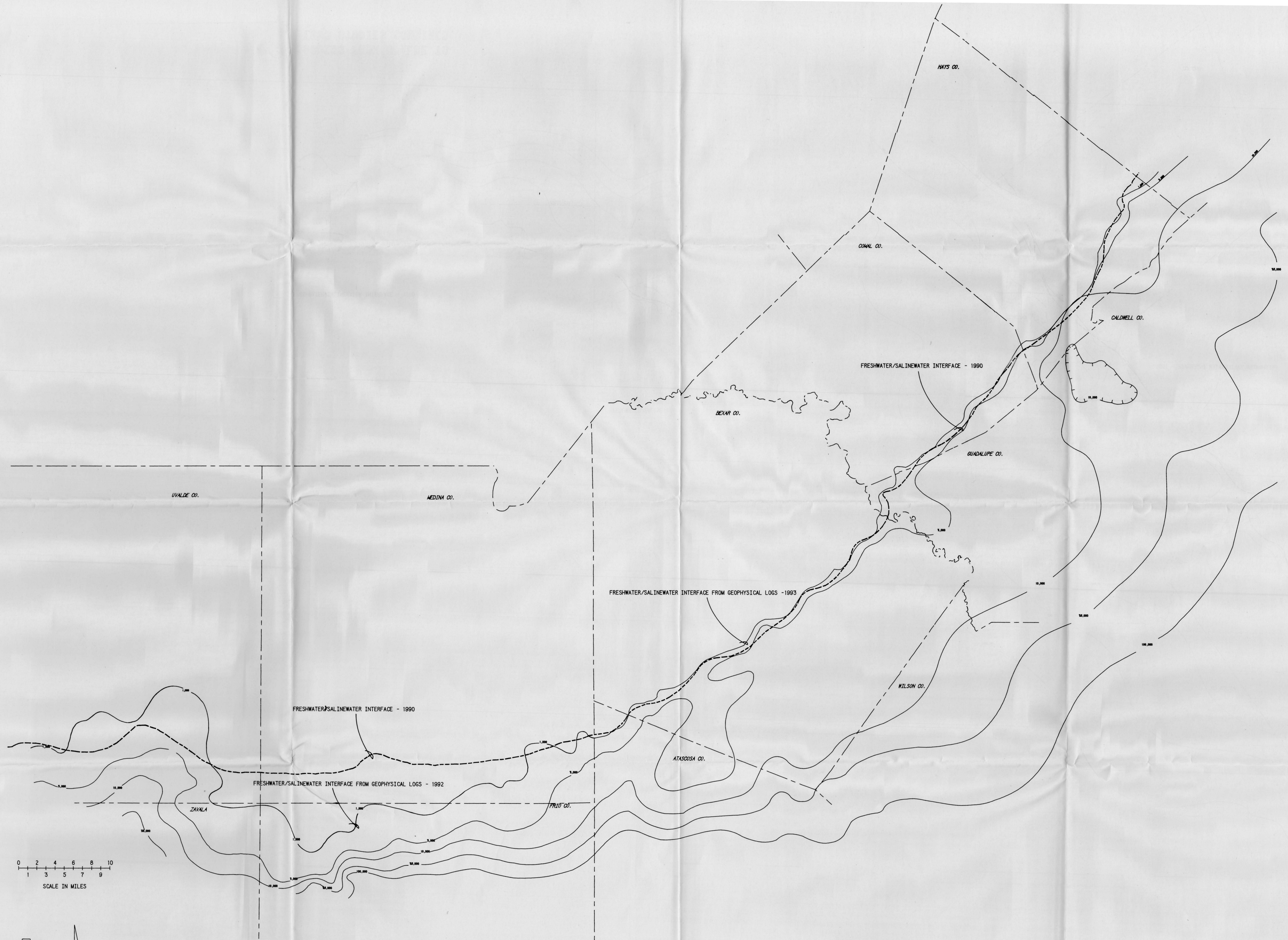
- NOTES
- (1) APPROXIMATE LOCATION ONLY.
 - (2) VALUE AND LOCATION SHOWN REPRESENTS A COMPOSITE OF THREE WELLS IN CLOSE PROXIMITY TO EACH OTHER IN THE LULING FIELD.

LEGEND

- 1990 FRESH/SALINE - WATER INTERFACE
- COUNTY SEAT
- WELLS WITH CALCULATED TOTAL DISSOLVED SOLIDS
- SELECTED WELLS WITH MEASURED TDS OR TDS CALCULATED FROM MEASURED SPECIFIC CONDUCTANCE
- WELLS WITH BOTH CALCULATED AND MEASURED TOTAL DISSOLVED SOLIDS
- MULTIPLE ZONE VALUES. MAP IS CONSTRUCTED ON MINIMUM VALUES.
- NO ANALYSIS
- LINE OF EQUAL TOTAL DISSOLVED SOLIDS IN MILLIGRAMS PER LITER. CONTOUR INTERVAL VARIABLE.
- CALCULATED AND (MEASURED) FOR SAME WELL AND/OR ZONE.

PLATE 3. -- TOTAL DISSOLVED SOLIDS CONTOUR MAP

MAY 17, 1993



0 2 4 6 8 10
1 3 5 7 9
SCALE IN MILES

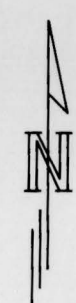
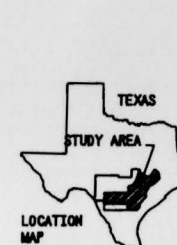


PLATE 4. -- TOTAL DISSOLVED SOLIDS FROM UVALDE TO
KYLE. 1992 AND 1993 STUDIES COMBINED.
(TDS IN MG/L.)