

EDWARDS UNDERGROUND
WATER DISTRICT

REPORT 95-02

**REGIONAL DISTRIBUTION OF PERMEABILITY
IN THE EDWARDS AQUIFER**

PLATES





PLATE 1. STRATIGRAPHIC WELLS AND OUTCROPS
1995

by Susan D. Hovorka, Robert E. Mace, Edward W. Collins
Alan R. Dutton, Principal Investigator
Prepared for
Edwards Underground Water District
under Contract No. 93-17-FO



PLATE 2. AQUIFER TEST LOCATIONS
1995

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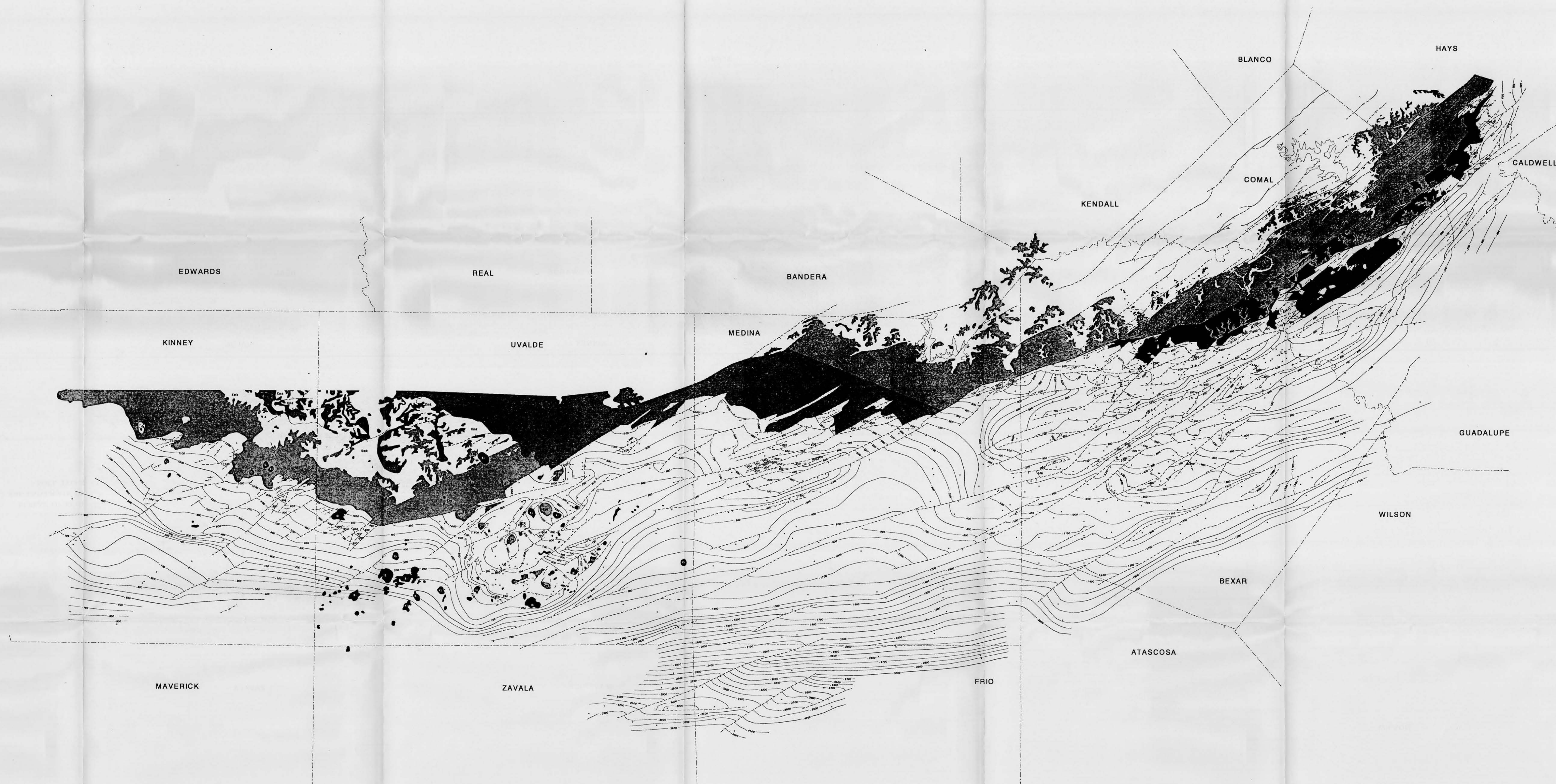


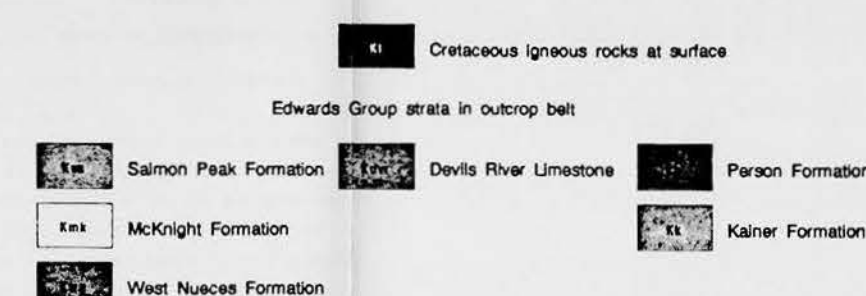
PLATE 3. STRUCTURE OF THE EDWARDS AQUIFER
1995

Geology by E. W. Collins
Cartography by Patsie A. Porter

Geology of the Edwards Group outcrop belt was compiled from a variety of sources. Outcrop belt geology from the western edge of the map to longitude 98° 00' is modified from Brown and others (1974) and Washeter and others (1977). Outcrop belt geology at the western part of Bexar County is modified from Arnow (1959), Brown and others (1974), Waddell (1977), and Stein (1983). Outcrop belt geology between longitudes 98° 30' and 98° 00' is modified from open-file quadrangle maps by E. W. Collins. Outcrop belt geology west of longitude 98° 00' is modified from Proctor and others (1974) and Grimshaw (1976).

Subsurface structure at the base of the Del Rio Formation (approximate top of the Edwards aquifer) is interpreted from about 1,000 data points and utilization of knowledge of the outcropping geologic units and thicknesses of strata overlying Edwards Group. Subsurface data base was collected by S. D. Hovorka. Erika Boghici digitized the data.

0 10 mi
0 15 km
1:250,000
Contour interval 100 ft



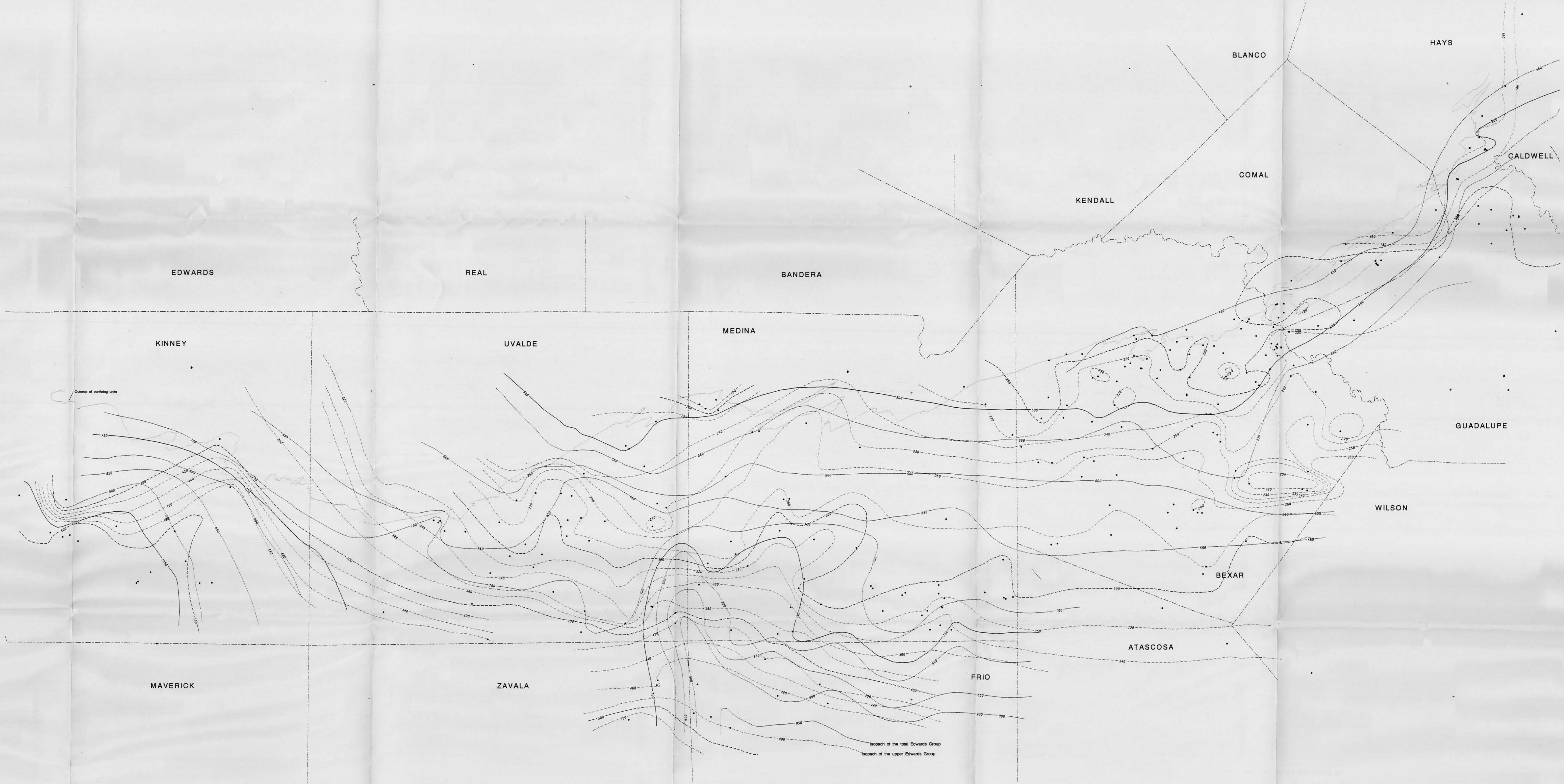
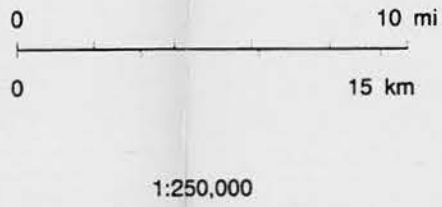


PLATE 4. ISOPACHS OF THE EDWARDS GROUP
1995

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0 10 mi
0 15 km
1:250,000
Contour interval variable



Transmissivity values (ft²/day)

TESTS WITH DRAWDOWN	ZERO-DRAWDOWN TESTS
○ 10,000,000 to 100,000,000	△ 10,000,000 to 100,000,000
○ 1,000,000 to 10,000,000	△ 1,000,000 to 10,000,000
○ 100,000 to 1,000,000	△ 100,000 to 1,000,000
○ 10,000 to 100,000	△ 10,000 to 100,000
○ 1,000 to 10,000	△ 1,000 to 10,000
○ 100 to 1,000	△ 100 to 1,000
○ 10 to 100	△ 10 to 100
○ 1 to 10	△ 1 to 10
○ 0.1 to 1	△ 0.1 to 1

PLATE 5. TRANSMISSIVITY FROM AQUIFER TESTS
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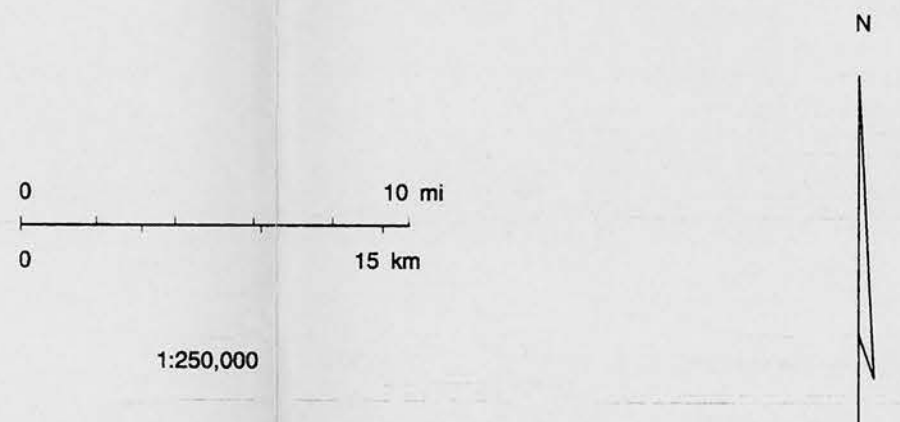
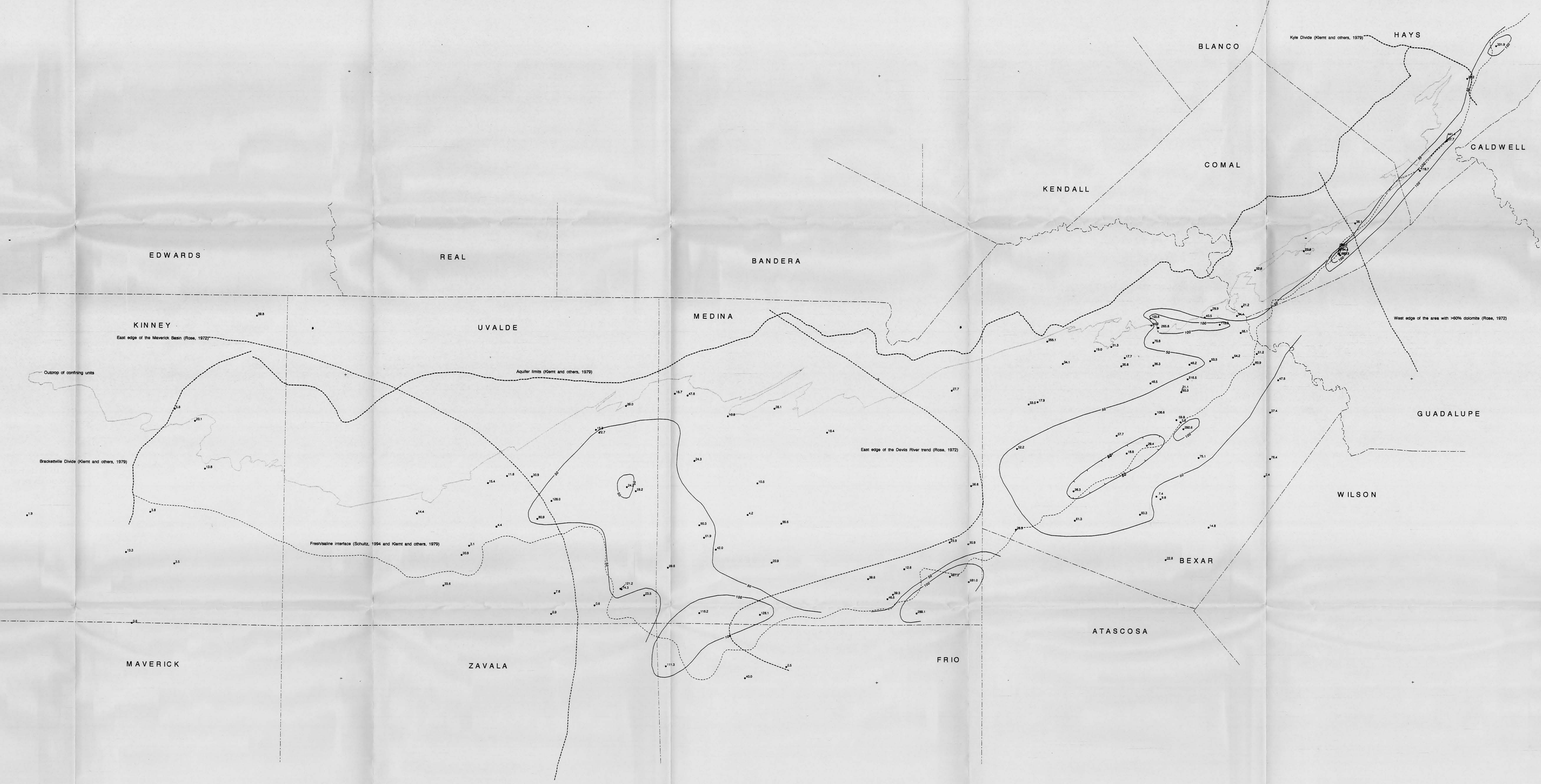


PLATE 6. MATRIX PERMEABILITY FROM WIRELINE LOGS

1995

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