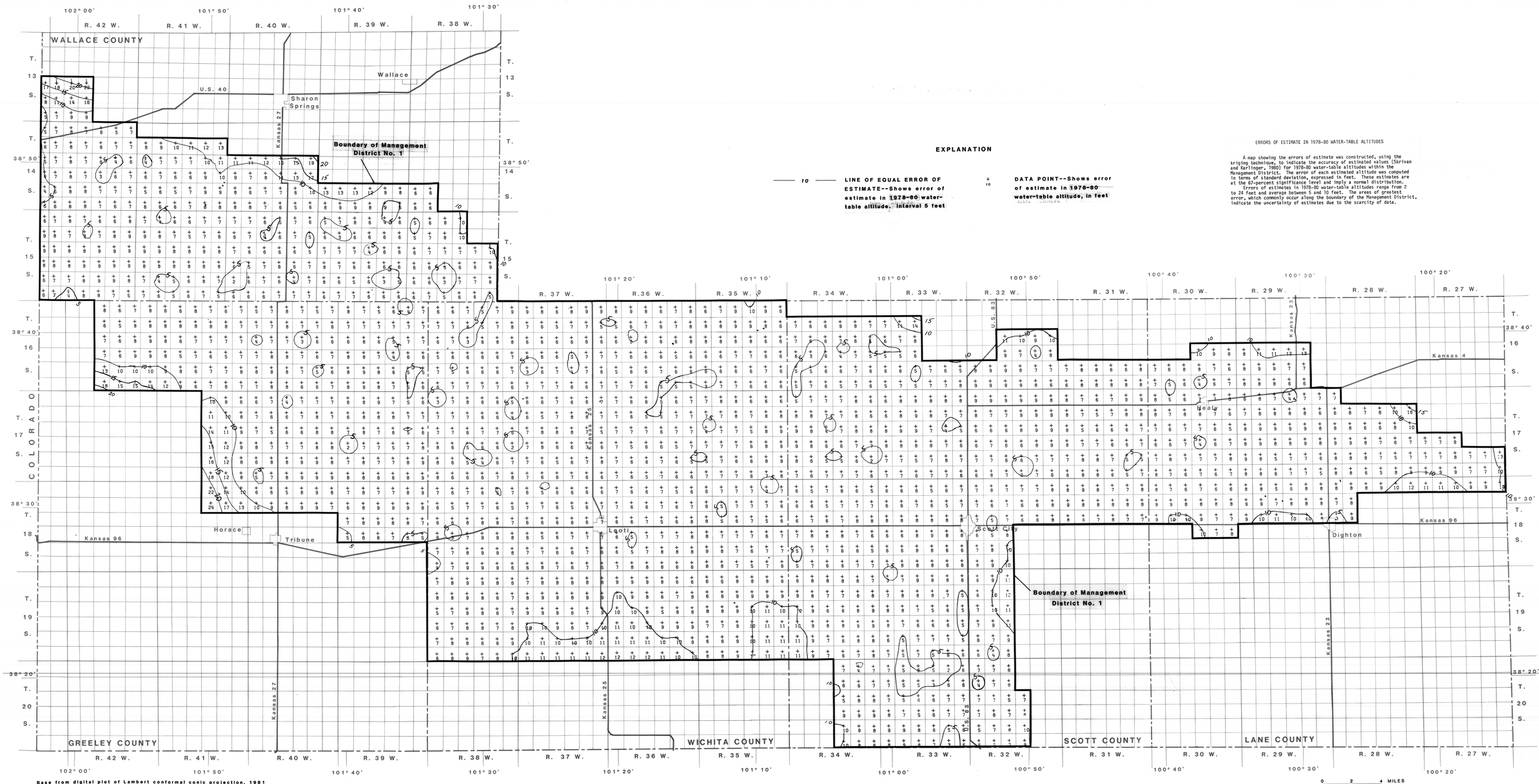
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

Prepared in cooperation with the
WESTERN KANSAS GROUNDWATER MANAGEMENT DISTRICT NO. 1

OPEN-FILE REPORT 81-908
SHEET 2 of 4



Base from digital plot of Lambert conformal conic projection, 1981

0 2 4 MILES
0 2 4 6 KILOMETERS

EXPLANATION

— 10 — LINE OF EQUAL ERROR OF ESTIMATE--Shows error of estimate in 1978-80 water-table altitude. Interval 5 feet

+10 DATA POINT--Shows error of estimate in 1978-80 water-table altitude, in feet

ERRORS OF ESTIMATE IN 1978-80 WATER-TABLE ALTITUDES

A map showing the errors of estimate was constructed, using the kriging technique, to indicate the accuracy of estimated values (Skrivan and Karlinger, 1980) for 1978-80 water-table altitudes within the Management District. The error of each estimated altitude was computed in terms of standard deviation, expressed in feet. These estimates are at the 67-percent significance level and imply a normal distribution.

Errors of estimates in 1978-80 water-table altitudes range from 2 to 24 feet and average between 5 and 10 feet. The areas of greatest error, which commonly occur along the boundary of the Management District, indicate the uncertainty of estimates due to the scarcity of data.

HYDROLOGIC MAPS OF OGALLALA AQUIFER, WEST-CENTRAL KANSAS

By

Lloyd E. Dunlap and Joseph M. Spinazola

1981