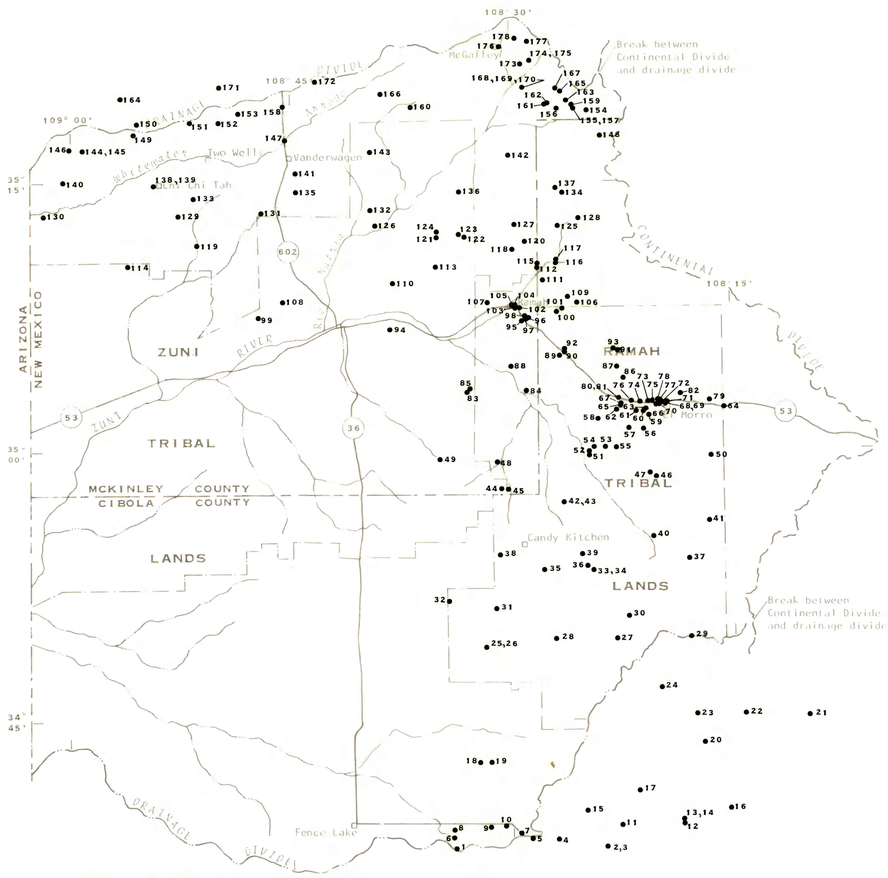
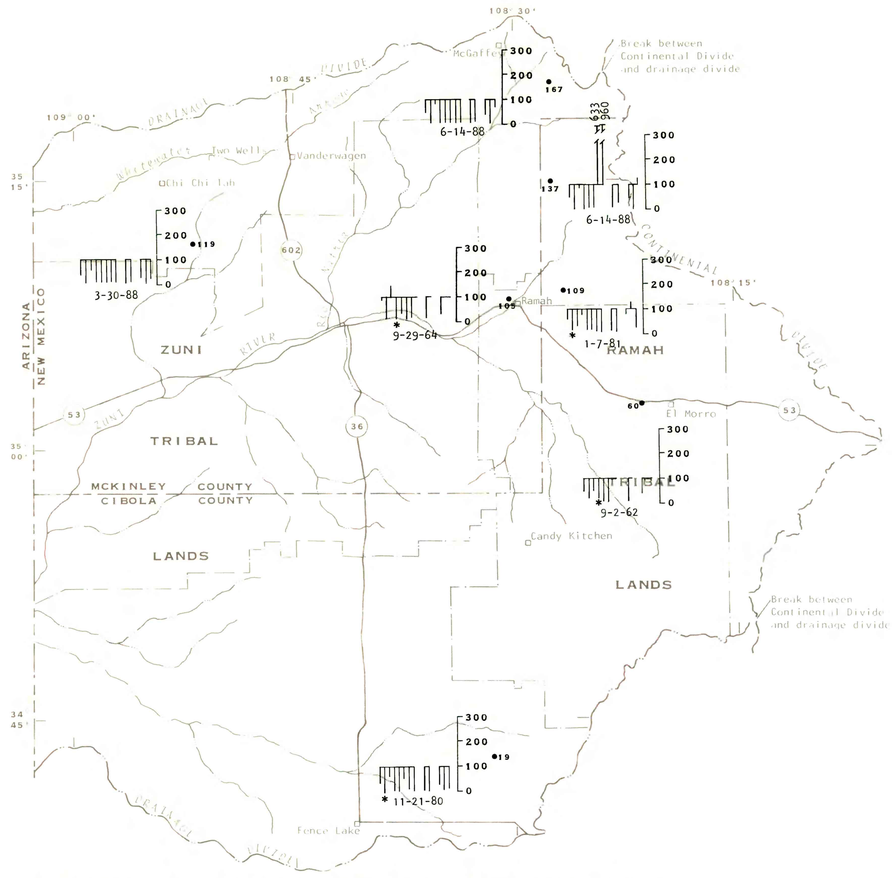
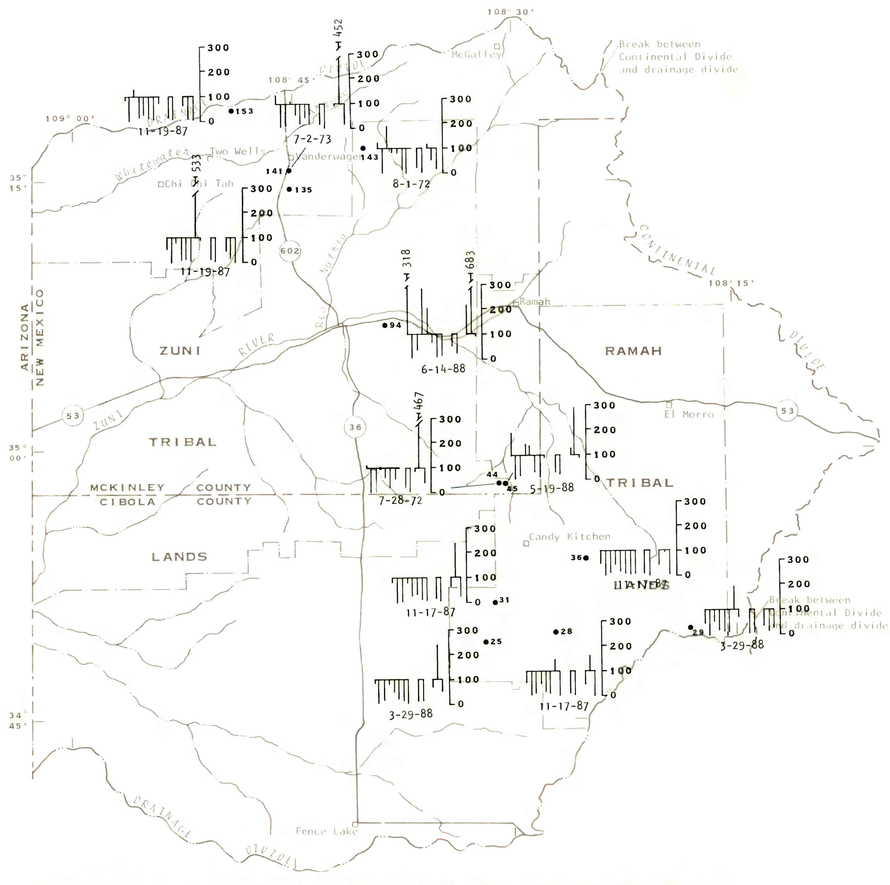


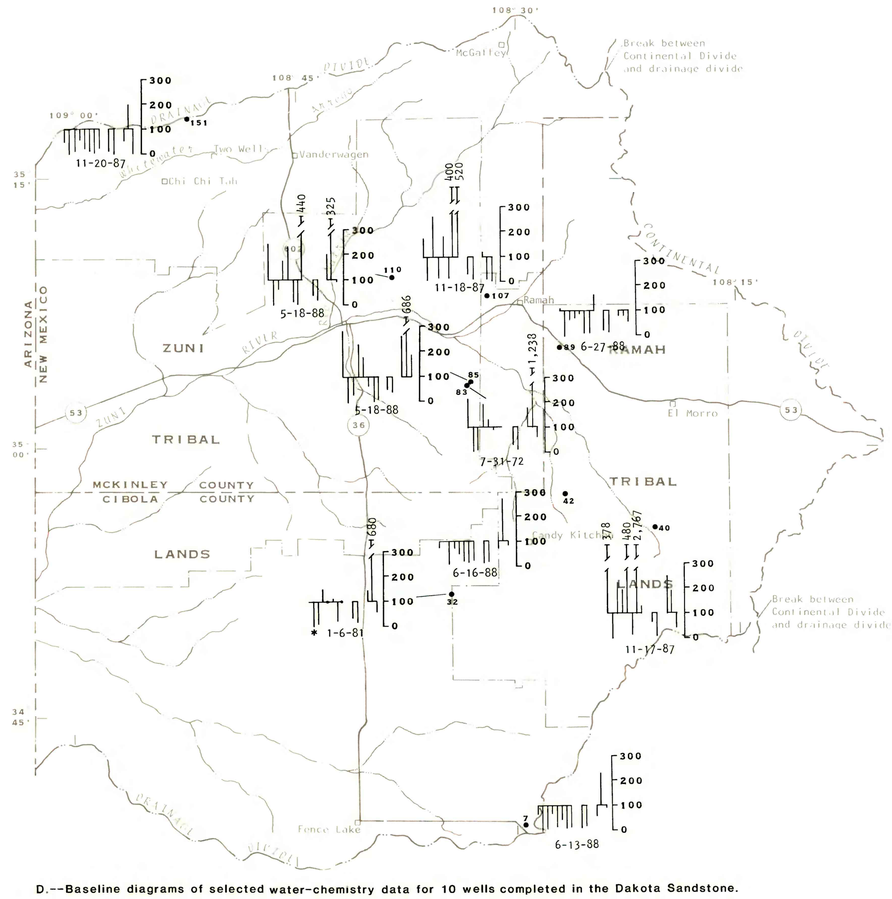
A.--Location of the selected wells.



B.--Baseline diagrams of selected water-chemistry data for 7 wells completed in the alluvium.



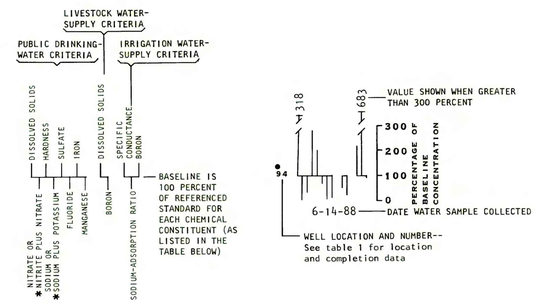
C.--Baseline diagrams of selected water-chemistry data for 12 wells completed in the Gallup Sandstone.



D.--Baseline diagrams of selected water-chemistry data for 10 wells completed in the Dakota Sandstone.

Base from U.S. Geological Survey
Fence Lake 1:100,000, 1981 and
Zuni 1:100,000, 1981

EXPLANATION



The baseline diagram is used to display water-chemistry information. The baseline (horizontal line) represents the maximum (100 percent) acceptable level of chemical-constituent concentrations in public-drinking water set by the U.S. Environmental Protection Agency (1986); in livestock-drinking water recommended by the National Academy of Sciences-National Academy of Engineering (1972); and in irrigation water recommended by the U.S. Salinity Laboratory Staff (1954) and Hem (1985). The lines extending from the baseline represent the percentage of deviation from the baseline. A missing line indicates no data available. The vertical lines below the baseline indicate constituent concentrations less than the referenced water standard whereas the lines above the baseline indicate constituent concentrations greater than the referenced water standard.

Property or constituent	Concentration at baseline
For public-drinking water:	
Dissolved solids	500 milligrams per liter
Dissolved nitrate (as N)	10 milligrams per liter
Hardness (as $CaCO_3$)	250 milligrams per liter
Dissolved sodium	200 milligrams per liter
*Dissolved sodium plus potassium	200 milligrams per liter
Dissolved sulfate	250 milligrams per liter
Dissolved fluoride	4 milligrams per liter
Dissolved iron	300 micrograms per liter
Dissolved manganese	50 micrograms per liter
For livestock-drinking water:	
Dissolved solids	3,000 milligrams per liter
Boron	5,000 micrograms per liter
For irrigation water:	
Specific conductance	1,000 microsiemens
Sodium-adsorption ratio (SAR)	For irrigation water this value needs to be as indicated below in order to be of low sodium or alkali hazard (Hem, 1985, p. 218):

At a specific conductance of	SAR needs to be
100	<10
250	< 8
750	< 6
2,250	< 4

Boron	1,000 micrograms per liter

0 5 10 MILES
0 5 10 KILOMETERS

MAPS SHOWING LOCATION OF SELECTED SHALLOW WELLS IN STRATIGRAPHIC UNITS, WITH WATER-CHEMISTRY BASELINE DIAGRAMS, ON OR NEAR NAVAJO TRIBAL LANDS IN THE ZUNI RIVER BASIN AND WHITEWATER ARROYO DRAINAGE, WEST-CENTRAL NEW MEXICO