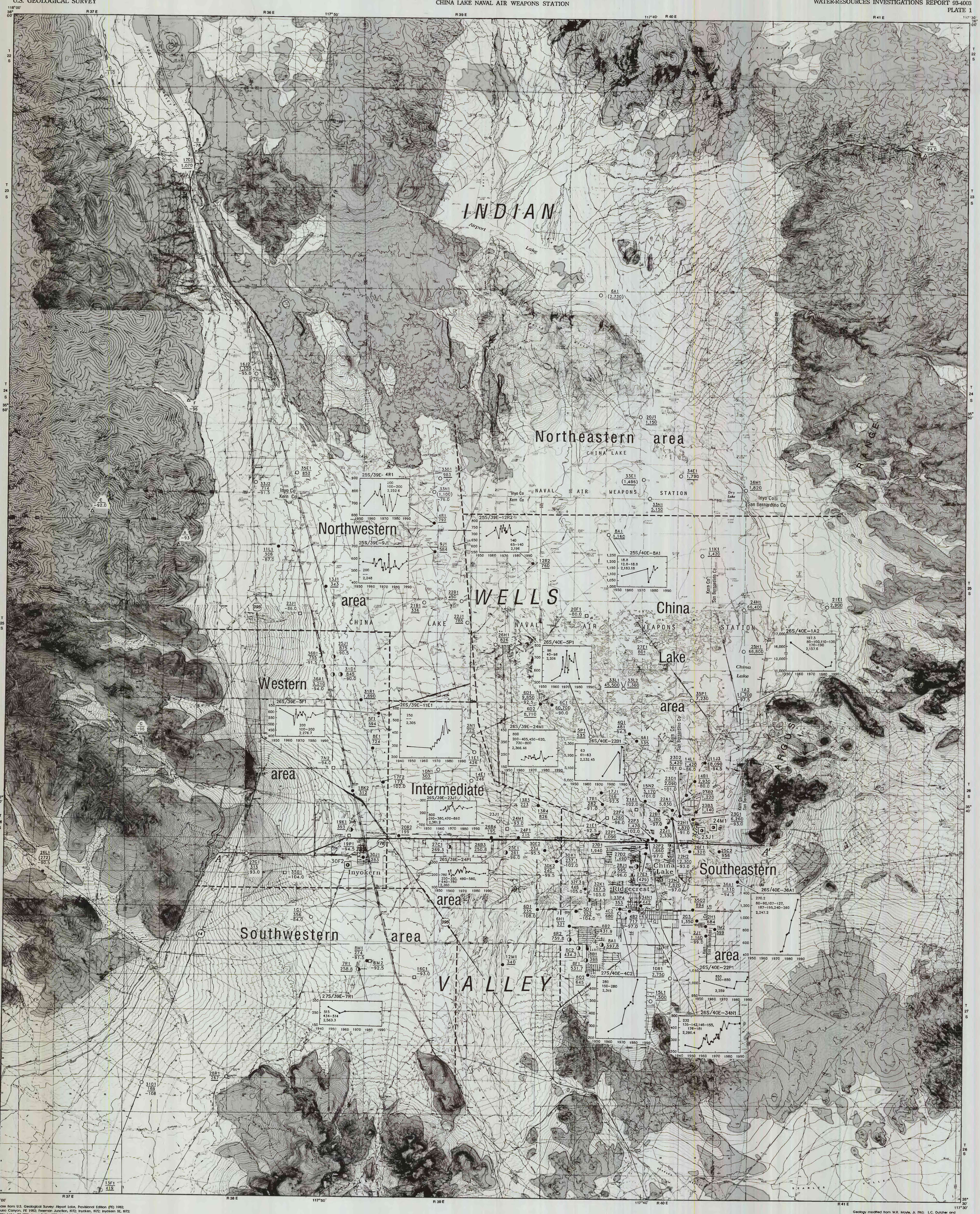
Prepared in cooperation with the
INDIAN WELLS VALLEY WATER DISTRICT AND THE U.S. DEPARTMENT OF THE NAVY
CHINA LAKE NAVAL AIR WEAPONS STATION



Base from U.S. Geological Survey: Airport Lake, Provisional Edition (PE) 1982; Burro Canyon, PE 1982; Freeman Junction, 1972; Inyokern, 1972; Inyokern SE, 1972; Little Lake, PE 1983; Lone Butte, 1973; Mountain Springs Canyon, PE 1982; Nineteen Canyon, PE 1982; Owens Peak, 1972; Pearsonville, PE 1982; Ridgecrest North, 1973; Ridgecrest South 1973; Spangler Hills West, 1973; Volcano Peak, PE 1983; White Hills, PE 1983; Scale 1:24,000

Geology modified from W.R. Moyle, Jr. 1963; L.C. Dutcher and W.R. Moyle, Jr. 1973; and R.T. Zbur, 1963

Berenbrock, Charles, and Schroeder, R.A., 1994, Ground-water flow and quality, and geochemical processes, in Indian Wells Valley, Kern, Inyo, and San Bernardino Counties, California, 1987-88; U.S. Geological Survey Water-Resources Investigations Report 93-4003

15½°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1972

1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
CONTOUR INTERVAL VARIABLE
National Geodetic Vertical Datum of 1929

STUDY AREA
Los Angeles

EXPLANATION

UNCONSOLIDATED DEPOSITS

CONSOLIDATED ROCKS

BOUNDARY OF VALLEY AREAS DISCUSSED IN TEXT

A — A' LINE OF SECTION -- See figures 16 and 17

WELL AND DATA -- Upper number is well number. Lower number, where present, is delta deuterium, in permil. Middle number is:

8M1 / 274 / -91.5 — Sum of dissolved solids, in milligrams per liter. (Parentheses indicate dissolved-solids concentration calculated from specific conductance)

Continued:
Middle number is:

8F1 / 531.7 — Residue on evaporation at 180° Celsius, in milligrams per liter

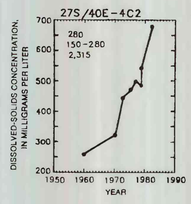
33L1 / 45,500 — Historical dissolved-solids concentration, in milligrams per liter

16C1 / -93.0 — No middle number

C / -96 — SPRING OR SURFACE-WATER SITE AND DATA -- Letter is site designation corresponding to table 2. Number is delta deuterium, in permil

24M1 — WELLS USED FOR GEOLOGIC SECTION ONLY -- See figure 17

GRAPH SHOWING DISSOLVED-SOLIDS CONCENTRATION AND DATA --



27S/40E-4C2 — Well number
280 — Depth of well, in feet
150-280 — Perforated interval, in feet below land surface
2,315 — Altitude of land surface, in feet above sea level

MAP SHOWING DISSOLVED-SOLIDS CONCENTRATION AND DELTA DEUTERIUM FOR SAMPLES FROM SELECTED WELLS AND SURFACE-WATER SITES IN INDIAN WELLS VALLEY, CALIFORNIA

By
Charles Berenbrock and Roy A. Schroeder

1994