UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared on behalf of the
U.S. ATOMIC ENERGY COMMISSION

PROFESSIONAL PAPER 712-C
PLATE 3

Base from U.S. Geological Survey
Caliente, Death Valley, Goldfield, and Las Vegas, 1954
100,000-foot grid based on Nevada coordinate system, central zone

SCALE 1:250 000

CONTOUR INTERVAL 200 FEET
DATUM IS MEAN SEA LEVEL

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA.—1975—REPRINTED 1982—GR/TMD

Hydrochemistry by F. J. Winograd, 1965

EXPLANATION

HYDRAULIC SYMBOLS

87-62
Test well
Well tapping pre-Tertiary hydrogeologic units; lower carbonate aquifer except well 59-58 which taps the lower clastic aquitard; number is well number

73-65
Test well or water well
Well tapping Tertiary hydrogeologic units; number is well number

91-74
Water well
Well tapping valley-fill aquifer; number is well number

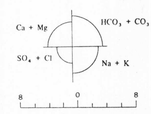
90-75
Test well or water well
Well tapping Tertiary hydrogeologic units; number is well number

5/60-10da
Spring or cavern
Spring or cavern in, or near outcrop of, lower carbonate aquifer, at Ash Meadows includes springs in lakebeds fed by upward leakage from carbonate aquifer; spring 17/53-21 taps the lower clastic aquitard; number is spring number

17/59-34a
Spring
Spring in Quaternary and Tertiary valley-fill aquifer or lakebeds; number is spring number

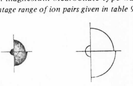
11/47-10ab
Spring
Spring in Tertiary hydrogeologic units; in Oasis Valley includes springs in valley-fill aquifer; number is spring number

CHEMICAL SYMBOLS

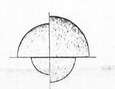


Plotting scheme for pie diagrams, and scale, in milliequivalents per liter

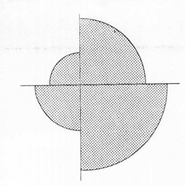
Calcium magnesium bicarbonate type water
Percentage range of ion pairs given in table 9



Sodium potassium bicarbonate type water
Perched water shown in black; percentage range of ion pairs given in table 9



Calcium magnesium sodium bicarbonate and other mixed type waters
Percentage range of ion pairs given in table 9



Playa type water

Boundary outlining areas where ground water of designated type predominates
Solid line, water from lower carbonate and valley-fill aquifers is principally of calcium magnesium bicarbonate facies; short-dashed line, water from tuff, rhyolite, and valley-fill aquifers and aquitards is principally of sodium potassium bicarbonate facies; long-dashed line, water from lower carbonate aquifer is of calcium magnesium sodium bicarbonate facies; short-dashed and small-circled line, water from valley-fill aquifer in central and northwestern Amargosa Desert is mixture of water from areas IIE, IIG, IIIA, and IIIB. Roman numerals designate enclosed areas; name and statistical summary of water chemistry of each area given in table 8

Wet playa
Water table at, or within few feet of, surface

Furnace Creek Wash-Nevares Springs area

MAP SHOWING GROUND-WATER CHEMISTRY AND HYDROCHEMICAL FACIES, NEVADA TEST SITE AND VICINITY, SOUTHERN NEVADA

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