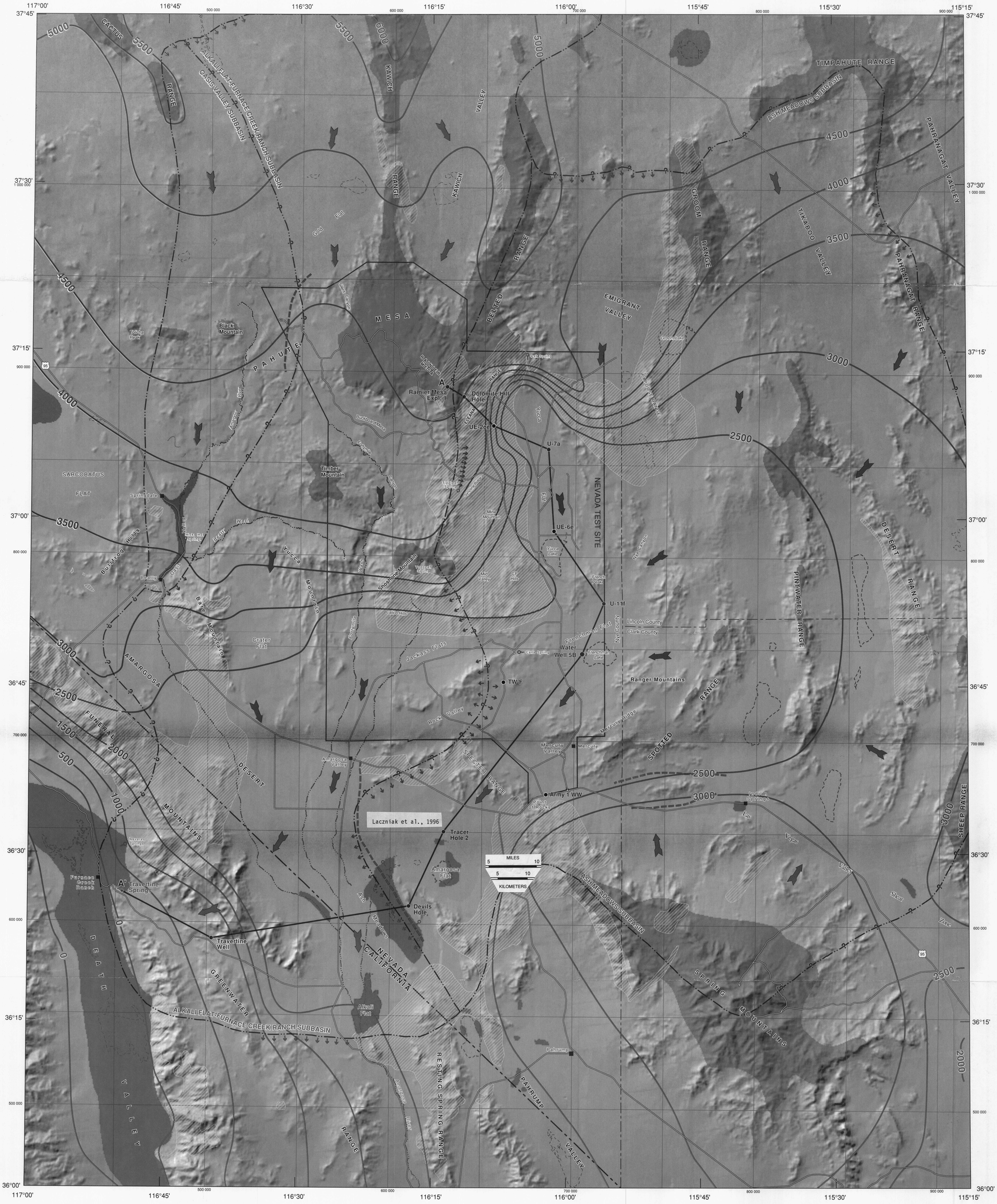
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Prepared in cooperation with the
U. S. DEPARTMENT OF ENERGY

WATER-RESOURCES INVESTIGATIONS REPORT 96-4109
Ground-water flow at Nevada Test Site (map) PLATE 1 OF 4
Laczniak and others, 1996, Summary of hydrogeologic controls on ground-water flow at the Nevada Test Site, Nye County, Nevada



EXPLANATION

Area of ground-water recharge—Delineated on basis of surface altitude and precipitation rate

Area of ground-water discharge—Delineated on basis of spring discharge and areas of evapotranspiration. Modified from Winograd and Thordarson (1975, plate 1) and Harrill and others (1988, sheet 2)

Known distribution of Eleana and basement confining units at water table—Modified from Winograd and Thordarson (1975, plate 1). See table 1 for general description of units

Inferred fault-controlled barrier—Line approximates area where ground-water flow could be impeded by fault related barrier. Modified from Blankennagel and Weir (1973, plate 1) and Winograd and Thordarson (1975, plate 1)

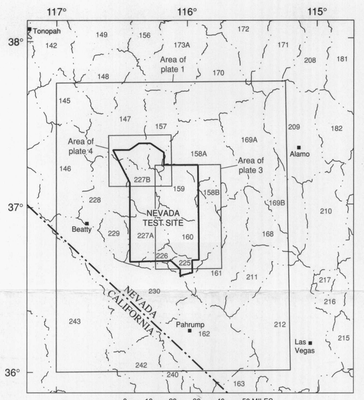
−500− **Water-level contour**—Shows altitude of regional water level. Interval 500 feet. Datum is sea level. Modified from Waddell and others (1984, plate 3)

Ground-water subbasin boundary—Arrow indicates location and direction of lateral flow across boundary. Queried where uncertain. Modified from Waddell and others (1984, plate 3), and Winograd and Thordarson (1975, plate 1)

General direction of ground-water flow

A A' **Line of section**—Symbol identifies control point. Sections are shown on plate 2

Well or test hole



HA No.	Name	HA No.	Name
141	Ralston Valley	172	Garden Valley
142	Alkali Spring Valley	173A	Railroad Valley—Southern Part
144	Lida Valley	181	Dry Lake Valley
145	Stonewall Flat	182	Delamar Valley
146	Sarcobatus Flat	208	Pahroc Valley
147	Gold Flat	209	Pahranagat Valley
148	Cactus Flat	210	Coyote Spring Valley
149	Stone Cabin Valley	211	Three Lakes Valley—Southern Part
156	Hot Creek Valley	212	Las Vegas Valley
157	Kawich Valley	215	Black Mountains Area
158A	Groom Lake Valley	216	Garnet Valley
158B	Papoose Lake Valley	217	Hidden Valley—North
159	Yucca Flat	225	Mercury Valley
160	Frenchman Flat	226	Rock Valley
161	Indian Springs Valley	227A	Jackass Flats
162	Pahrump Valley	227B	Buckboard Mesa
163	Mesquite Valley	228	Oasis Valley
168	Three Lakes Valley—Northern Part	229	Crater Flat
169A	Tikapoo Valley—Northern Part	230	Amargosa Desert
169B	Tikapoo Valley—Southern Part	240	Chicago Valley
170	Penoyer Valley	242	Lower Amargosa Valley
171	Coal Valley	243	Death Valley

Hydrographic areas (HA) and areal extent of plates 1, 3, and 4.

Base from U.S. Geological Survey digital data, 1:100,000, 1978-89; Universal Transverse Mercator projection, Zone 11. Shaded-relief base from 1:250,000-scale Digital Elevation Model; sun illumination from northwest at 30 degrees above horizon
100,000-foot grid based on Nevada State Plane coordinate system, central zone

MAP SHOWING MAJOR CONTROLS ON REGIONAL GROUND-WATER FLOW AT AND NEAR NEVADA TEST SITE, SOUTHERN NEVADA AND SOUTHEASTERN CALIFORNIA

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