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

PREPARED IN COOPERATION WITH THE
BUREAU OF RECLAMATION

WATER-RESOURCES INVESTIGATIONS REPORT 94–4005

River aquifer and accounting surface, Alamo Lake—PLATE 13

Wilson, Richard P., and Owen-Joyce, Sandra J., 1994, Method to identify wells that yield water that will be replaced by Colorado River water in Arizona, California, Nevada, and Utah

Base from U.S. Geological Survey
Alamo Lake, Arizona, 1:100,000, 1979

SCALE 1:100 000

1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND

EXPLANATION

GEOLOGY

QTa — OLDER ALLUVIUMS (Pleistocene, Pliocene, and Miocene)—Weakly to moderately consolidated gravel, sand, silt, and clay of local origin deposited in alluvial fans interbedded with rounded gravels, sand, silt, and clay deposited by the ancestral Colorado River. Include the Chemehuevi Formation (Pleistocene) that consists of gravel, sand, and silt deposited by the Colorado River

Tb — BOUSE FORMATION (Pliocene)—Weakly to moderately consolidated basal limestone and marl overlain by clay, silt, and sand. Marine and estuarine sediments deposited in an arm of the proto-Gulf of California

Tf — FANGLOMERATE (Pliocene and Miocene)—Moderately to firmly consolidated and cemented gravel, sand, silt, clay, and gypsum of local origin deposited on tilted and faulted bedrock. Includes the upper member of the Kinter Formation

B — BEDROCK (Precambrian, Paleozoic, Mesozoic, and Cenozoic)—Consolidated and cemented igneous, metamorphic, volcanic, and sedimentary rocks that commonly are tilted, faulted, and folded. Nearly impermeable except for some Tertiary sedimentary rocks

GEOLOGIC CONTACT

HYDROLOGY

ACCOUNTING SURFACE

340 — ACCOUNTING-SURFACE CONTOUR—Shows equal elevation of the accounting surface. Interval is 4 feet. Datum is sea level

RIVER-AQUIFER BOUNDARY—Delineates the approximate limit of the river aquifer. Isolated outcrops of bedrock less than about 0.5 square mile in area within the river-aquifer boundary are not delineated

CONVERSION TABLE

Meters	Feet
1	3.2808
2	6.5617
3	9.8425
4	13.1234
5	16.4042
6	19.6850
7	22.9659
8	26.2467
9	29.5276
10	32.8084

To convert meters to feet multiply by 3.2808

To convert feet to meters multiply by 0.3048

DECLINATION DIAGRAM

GN — MN — 14° 249 MILS — 1°24' 25 MILS

UTM grid convergence (GN) and 1978 magnetic declination (MN) at center of map
Diagram is approximate

ADJOINING MAPS

1	2	3
4		5
6	7	8

1 Needles
2 Bagdad
3 Prescott
4 Parker
5 Bradshaw Mts.
6 Blythe
7 Salome
8 Phoenix North

RIVER AQUIFER AND ACCOUNTING SURFACE IN THE LOWER COLORADO RIVER VALLEY

ALAMO LAKE, ARIZONA

By
Richard P. Wilson
1994