Ground-Water Data for 1990-91 and Ground-Water Withdrawals for 1951-91, Nevada Test Site and Vicinity, Nye County, Nevada

By David B. Wood and Steven R. Reiner

U.S. GEOLOGICAL SURVEY

Open-File Report 96-475

Prepared in cooperation with the
NEVADA OPERATIONS OFFICE,
U.S. DEPARTMENT OF ENERGY, under
Interagency Agreement DE-AI08-86NV10583

Carson City, Nevada
1996

U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY
GORDON P. EATON, Director

For additional information
write to:

District Chief
U.S. Geological Survey
333 West Nye Lane, Room 203
Carson City, NV 89706-0866

Copies of this report can be
purchased from:

U.S. Geological Survey
Branch of Information Services
Box 25286
Denver, CO 80225-0046

CONTENTS

PLATE

FIGURES

TABLES

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
acre-foot (acre-ft)	1,233	cubic meter
foot (ft)	0.3048	meter
gallon (gal)	3.785	liter
inch (in.)	25.40	millimeter
mile (mi)	1.609	kilometer
million gallons	3.785	million liters
picocurie (pCi)	0.0370	becquerel
square mile (mi^2)	2.590	square kilometer

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929, formerly called "Sea-Level Datum of 1929"), which is derived from a general adjustment of the first-order leveling networks of the United States and Canada.

Water year: Comprises the 12-month period from October 1 through September 30, and is designated by the year in which the period ends.

Ground-Water Data for 1990-91 and Ground-Water Withdrawals for 1951-91, Nevada Test Site and Vicinity, Nye County, Nevada

By David B. Wood and Steven R. Reiner

ABSTRACT

The U.S. Geological Survey, in support of the U.S. Department of Energy Hydrology/Radionuclide Migration Program, collects and compiles hydrologic and geohydrologic data to aid in characterizing the regional and local ground-water flow systems underlying the Nevada Test Site. This report presents selected ground-water data collected from wells and test holes at and in the vicinity of the Nevada Test Site.

Depth-to-water measurements were made at 74 sites at and in the vicinity of the Nevada Test Site during water years 1990-91. Measured depths to water ranged from 301 to 2,215 feet below land surface and measured altitudes of the ground-water surface at the Nevada Test Site ranged from 2,091 to 6,083 feet above sea level. Depth-to-water measurements were obtained by a combination of wire-line, electric-tape, iron-horse, and steel-tape methods.

Available annual ground-water withdrawals are reported for 24 water-supply wells for calendar years 1951-91. Available historic withdrawal and depth-to-water data for ground-water supply wells have been included to show changes through time. Total annual ground-water withdrawals from the 24 reported water-supply wells at the Nevada Test Site ranged from 33 to 1,118 million gallons, including 868 million gallons for 1990 and 713 million gallons for 1991. Annual ground-water withdrawals from individual water-supply wells ranged from 0 (non-use) to 325 million gallons; with 0 (non-use) to 233 million gallons for 1990 and 0 (non-use) to 155 million gallons for 1991.

Water samples were collected and analyzed for tritium concentrations at 15 sites during water years 1990-91. Tritium concentrations in bailed water samples ranged from below detection limits to 5,550,000 picocuries per liter. Tritium concentrations in samples from three wells exceeded drinking-water standards established by the U.S. Environmental Protection Agency. All three wells are separate piezometers contained within a single test hole near an area of extensive underground nuclear testing.

INTRODUCTION

The Nevada Test Site (NTS; fig. 1) was established in 1950 as a continental proving ground for testing nuclear weapons (U.S. Congress, 1989). Atmospheric nuclear testing commenced in 1951 and underground nuclear testing commenced in 1957. Since 1962, all nuclear testing has been done underground (U.S. Department of Energy, 1988) and mostly in alluvium and volcanic rocks (U.S. Geological Survey, 1976). The United States entered into a unilateral moratorium on nuclear weapons testing on October 2, 1992 (U.S. Department of Energy, 1995). To date (1996), no nuclear tests have been made by the United States since September 1992.

The Faultless Site (fig. 1) was established to determine the suitability of using sites in central Nevada for underground nuclear tests of higher yield than was possible at NTS because of potential adverse seismic effects at Las Vegas, Nev. The Faultless nuclear test was detonated 3,199 ft below land surface in tuffaceous sediment and zeolitized tuff on January 19, 1968 (Thordarson, 1987).

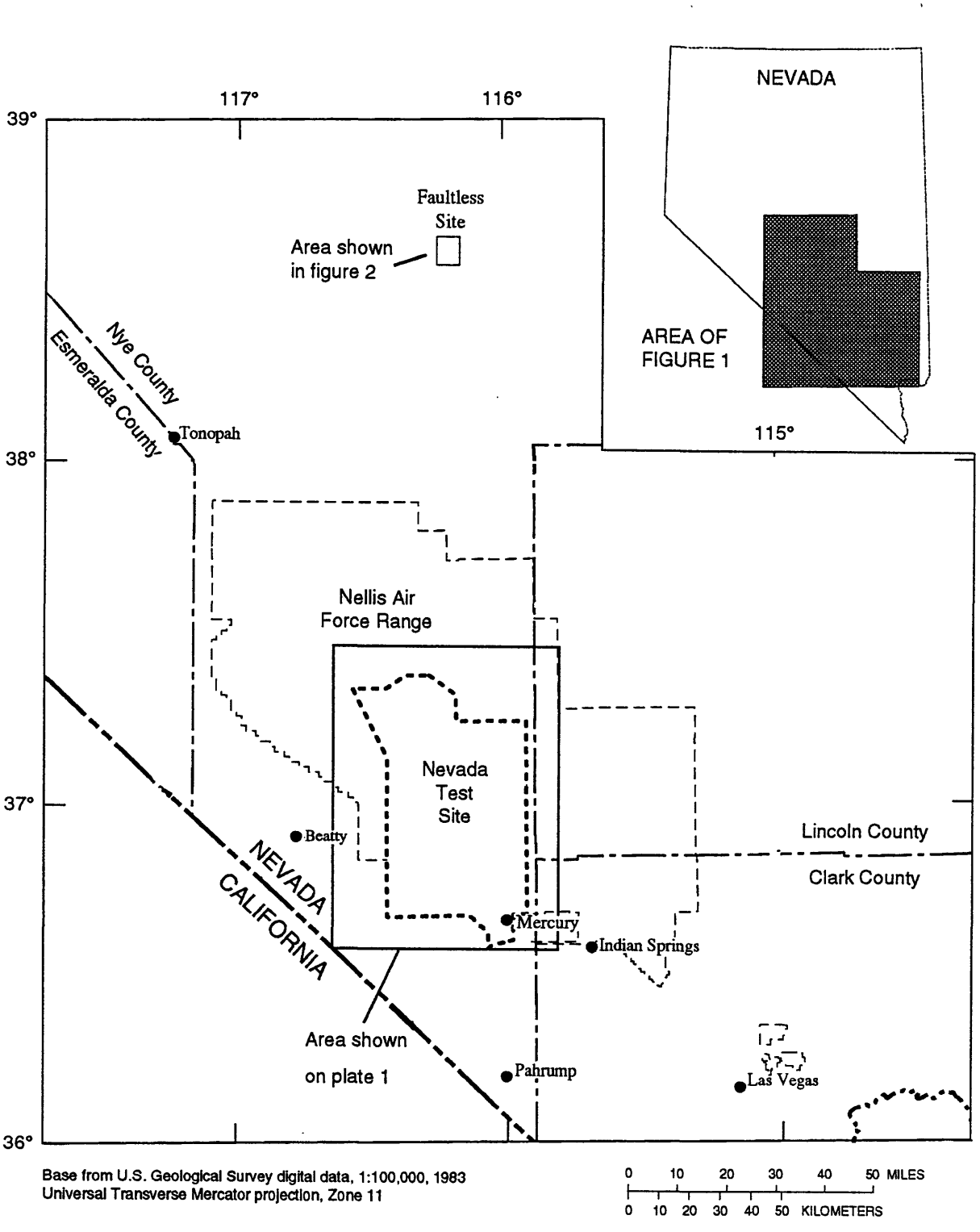


Figure 1. Location of Nevada Test Site and vicinity, including Faultless Site.

The U.S. Geological Survey (USGS), Desert Research Institute, Los Alamos National Laboratory, and Lawrence Livermore National Laboratory are the principal organizations that provide services and technical expertise to the Nevada Operations Office of the U.S. Department of Energy in support of the Hydrology/Radionuclide Migration Program[1] at NTS. The purpose of the Hydrology/Radionuclide Migration Program is to document the mechanisms by which radionuclides produced by underground nuclear tests may move through the geologic media, and the direction and extent of such movement. The specific responsibility of the USGS in support of the Hydrology/Radionuclide Migration Program is to provide the necessary hydrologic and geohydrologic data, and the interpretation of these data, to aid in characterizing the regional and local ground-water flow systems. This characterization is needed to allow the U.S. Department of Energy to manage the ground-water resources at the Nevada Test Site and to assess the potential for radionuclide migration.

The U.S. Department of Energy's Yucca Mountain Site Characterization Project collects and compiles data in and adjacent to Areas 25 and 29 of NTS (pl. 1). Selected ground-water data collected for this project are compiled and reported by USGS personnel in the following reports: Robison (1984), Waddell and others (1984), Robison and others (1988), Gemmell (1990), McKinley and others (1991), O'Brien (1991), Luckey and others (1993), Boucher (1994), La Camera and Westenburg (1994), Lobmeyer and others (1995), and Tucci and others (1996).

The NTS, subdivided into 27 administrative areas (pl. 1), is about 70 mi northwest of Las Vegas between latitudes 36 and 38 degrees north and longitudes 115 and 117 degrees west. The Faultless Site, in Hot Creek Valley (fig. 2), is about 70 mi northeast of Tonopah between latitudes 38 and 39 degrees north and longitudes 116 and 117 degrees west. Both areas are in Nye County, Nev.

Purpose and Scope

This report presents ground-water data collected at and in the vicinity of NTS from October 1, 1989, to September 30, 1991 (water years 1990 and 1991).

[1]In 1992, the Hydrology/Radionuclide Migration Program was renamed the Hydrologic Resources Management Program.

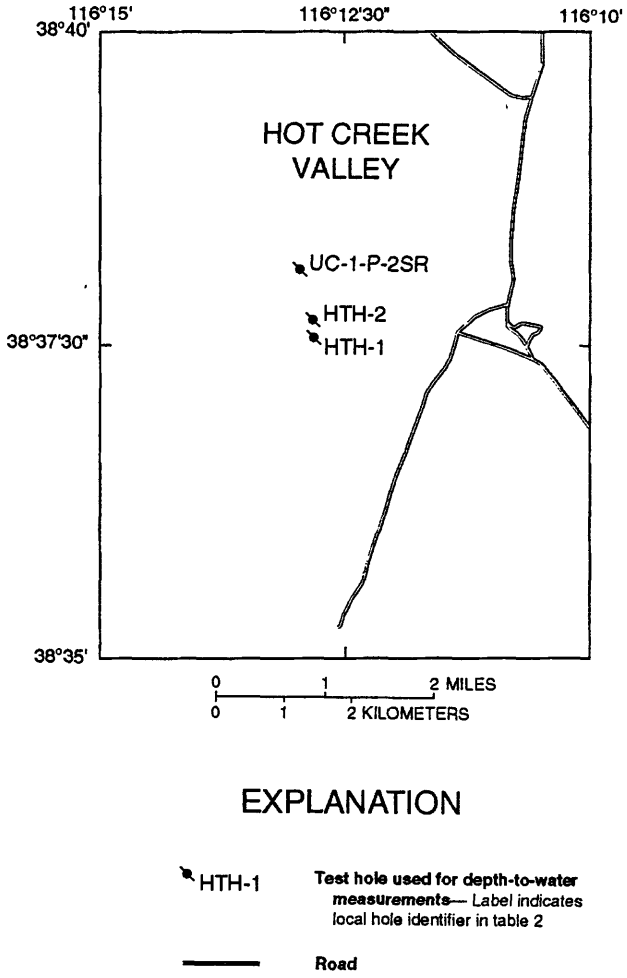


Figure 2. Location of test holes at Faultless Site, Nye County, Nevada.

Ground-water data presented in this report were collected from wells and test holes in two discrete study areas—the Nevada Test Site and the Faultless Site (fig. 1). Specifically, this report presents depth-to-water measurements collected from wells, test holes, and ground-water supply wells, withdrawals from ground-water supply wells, and tritium concentrations from wells and test holes. Available historical data on withdrawals and depth-to-water measurements (prior to October 1, 1989) for ground-water supply wells have been included to show the amount of ground-water withdrawals and changes in depth to water through time.

Geohydrologic Setting

NTS is entirely within the Great Basin region of the Basin and Range physiographic province. The region is characterized by mountain ranges with a

general north-south orientation separated by basins (valleys) that are filled by accumulations of unconsolidated to partly consolidated sedimentary deposits and underlain by consolidated rocks that also form the surrounding ranges (Stewart, 1980). The geohydrologic setting of NTS is similar to that of most of the Basin and Range province. It is characterized by localized aquifers within the basin-fill deposits and volcanic rocks. Regional aquifers are mostly within complexly folded and faulted limestones and dolomites that underlie the localized aquifers (Winograd and Thordarson, 1975), but also are within deep fractured volcanic rocks at some locations (Blankennagel and Weir, 1973). Much of the ground-water flow is interbasin; that is, deep flow is not controlled by the basin-and-range topography that defines surface-water drainage basins (Winograd and Thordarson, 1975).

NTS is contained within the Death Valley ground-water flow system (pl. 1), a regional system encompassing 15,800 mi^2 (Harrill and others, 1988, sheet 1). Ground water flows from NTS to one of four major discharge areas: (1) Alkali Flat, (2) Ash Meadows, (3) Oasis Valley, and (4) Death Valley. All ground water beneath NTS is thought to flow within one of three ground-water subbasins of the Death Valley ground-water flow system—the Alkali Flat-Furnace Creek Ranch, Ash Meadows, and Oasis Valley subbasins (Waddell and others, 1984, p. 36-39 and pl. 3; Laczniak and others, 1996, p. 16-20 and pl. 1).

Ground water at NTS flows through three principal water-yielding units: (1) Cenozoic basin-fill deposits (primarily alluvium and colluvium of Quaternary and Tertiary age), (2) Cenozoic volcanic rock (primarily welded tuffs, rhyolite lava flows, and basalt flows of Tertiary age), and (3) Paleozoic carbonate rock (primarily limestones and dolomites). Certain stratigraphic units and lithologic types (especially those that include fractured rocks) form the best water-yielding units as described by Winograd and Thordarson (1975, p. C10-11), Blankennagel and Weir (1973, p. B5-6), Waddell and others (1984, p. 17-22), and Laczniak and others (1996, p. 10-16, 23-26, and 33-37).

Site Designations

Ground-water sites are either wells or test holes. The term "well" describes cased holes drilled specifically to find ground water. All other drilled holes are termed test holes. Wells and test holes are identified herein by Nevada Test Site (NTS) hole number, by U.S. Geological Survey (USGS) standard identification, and by the latitude and longitude of the site.

The NTS hole numbers were assigned by Raytheon Services Nevada to wells and test holes according to the type of hole drilled, site location (NTS Area, pl. 1), and sequence code for the consecutive order in which the hole was drilled or redrilled. Emplacement holes for nuclear weapons tests begin with the letter "U," followed by a dash (-), NTS area number (pl. 1), and sequence code (letters "a-z, aa-az, ba-bz, ..., za-zz"). A hole drilled specifically to provide data that could not be collected from an emplacement hole is assigned incremental letters or numbers, or both. The suffix letters "ITS" indicate an integrated test system, "PS" a post-shot hole, "S" a substitute hole, and "WW" a water well. Exploratory holes follow the same naming convention, but begin with the letters "UE."

In this report, exceptions to the standard assignment procedures are Army 1 WW, HTH-1, HTH-2, J-11WW, J-12 WW, J-13 WW, PM-1, PM-2, PM-3, RNM-2S, TW-1, TW-3, TW-7, TW-B, TW-D, TW-F, UC-1-P-2SR, WW-2, WW-3, WW-4, WW-4A, WW-5A, WW-5B, WW-5C, WW-8, WW-A, WW-C, and WW-C-1. The prefix letters "HTH" indicate a hydrologic test hole, "J" Jackass Flats, "PM" Pahute Mesa, "RNM" radionuclide migration, "TW" test well, "UC" underground central Nevada, and "WW" water well. Numbers and letters following the dash in the exception represent sequence of site drilling, not NTS location.

The USGS system for site identification is based on the latitude-longitude grid. Each site is identified by a unique 15-digit number: The first six digits are the degrees, minutes, and seconds of latitude; the next seven digits are the degrees, minutes, and seconds of longitude; and the last two digits constitute the sequence number of the well or test hole within the 1-second grid of latitude and longitude. The assigned number is retained as a permanent identifier even if a more precise latitude and longitude are later determined (U.S. Geological Survey, 1989, p. 2-10). Therefore, to determine the geographic location of a well or test hole, the latitude and longitude coordinates (which are listed herein) should be used rather than the USGS standard identification.

Acknowledgments

Several organizations under contract with the Nevada Operations Office of the U.S. Department of Energy in 1991 made substantial contributions, including field inventory of wells and test holes and other hydrologic work. These contractors were Holmes and Narver, Inc.; Raytheon Services Nevada (formerly, Fenix and Scisson of Nevada); and Atlas Wireline Services (formerly, Dresser Atlas Industries, Inc.). Reynolds Electrical and Engineering Co., Inc. (REECo) provided ground-water withdrawal data for several wells and Los Alamos National Laboratory provided ground-water withdrawal data for well RNM-2S. The Environmental Monitoring Systems Laboratory of the U.S. Environmental Protection Agency at Las Vegas analyzed water samples for tritium concentrations. On January 1, 1996, Bechtel Nevada replaced REECo as the prime contractor for the U.S. Department of Energy at NTS, and many of the organizations listed above are no longer involved at NTS.

GROUND-WATER DATA

Data presented consist of depth-to-water measurements taken from wells and test holes, ground-water withdrawals from ground-water supply wells, and tritium concentrations in water samples from wells and test holes. During water years 1990-91, depth to water was measured at 74 wells and test holes, ground-water withdrawals were compiled for 24 ground-water supply wells, and water samples were collected from 15 wells and test holes and analyzed for tritium concentration. The locations of these wells, test holes, and ground-water supply wells are shown on plate 1 and figure 2. Available historical data on withdrawals and depth-to-water measurements for ground-water supply wells have been included to show the amount of ground-water withdrawals and changes in depth to water through time. Depth-to-water data have been collected, compiled, verified, and stored in the Ground-Water Site Inventory (GWSI) data base. This is one of four subsystems that constitute the computerized National Water Information System (NWIS) of the USGS, managed in Nevada by the District Office in Carson City, Nev.

The data-collection network consists of two parts—short-term test holes and long-term observation wells and test holes. Depth to water is measured intermittently in test holes that penetrate the saturated zone. These measurements are made frequently until the measured depth to water stabilizes or the hole is destroyed or becomes inaccessible. Most test holes are short-term holes and the opportunity to measure depth to water in them is limited to a few weeks or a few months, which generally is not sufficient for stabilization of depth to water. Because most of the existing observation wells and test holes available for long-term observation were not drilled for the direct acquisition of hydrologic data, depth-to-water fluctuations that represent local (basin-fill or volcanic-rock) or regional (carbonate-rock or volcanic-rock) aquifer conditions generally are not monitored. Wells or test holes that exhibit minor fluctuations in depth to water are measured annually. Wells or test holes that exhibit large fluctuations in depth to water are measured weekly, quarterly, or continuously.

Depth to Water

The term "depth to water" is used rather than "water level" to avoid confusion with "static water level" as defined by Winograd (1970, p. 19) for NTS. Use of depth to water does not imply static conditions. Test holes drilled for nuclear-weapons tests commonly become inaccessible prior to fluid-level stabilization. Depth-to-water measurements in wells and test holes may represent elevated or depressed fluid levels because of disturbances caused by drilling or nearby nuclear detonations (Winograd, 1970, p. 20-25). Measurements may be affected by removal or injection of fluid or may represent a composite fluid level for the saturated units penetrated.

Water-level altitudes determined by subtracting depth-to-water measurements from the reported land-surface altitude may not represent actual water-level altitudes. The altitude of land surface is determined by conventional surveying techniques at each well or test hole when drilling operations have been completed. However, subsequent NTS activities may have altered the land-surface datum.

Methods

Several techniques are used to measure depth to water at NTS. Measurements in 1990-91 were made by the USGS with the wire-line, electric-tape, iron-horse, and steel-tape devices. Steel-tape measurements are used to calibrate the other devices.

Wire-Line Device

The wire-line device consists of an armored four-conductor cable mounted on a motorized reel. The cable is centered over and guided into the well or test hole with a hydraulic boom. Attached to the end of the cable is one of two probes. One probe transmits an electric current to a meter at land surface by completing an electric circuit the instant water or other fluid is contacted. The other probe contains an enclosed float. Once this probe enters the water or fluid and the float moves far enough inside the probe to break the electric circuit, the meter reflects the change. A measuring wheel, over which the cable passes, measures the length of cable passed into and withdrawn from the well or test hole. The length of cable suspended below the reference mark is corrected for stretch and adjusted to land-surface datum to determine the measured depth to water.

Electric-Tape Device

The electric-tape device consists of a weighted electrical cable with two wire conductors exposed on the leading end. When both conductors contact water, electrical continuity between the two conductors is made and a visual display, sound beeper, or both is activated. The length of tape suspended below the reference mark is corrected for stretch and adjusted to land-surface datum to determine the measured depth to water.

Iron-Horse Device

The technique for using the iron-horse device to measure depth to water has been described by Garber and Koopman (1968, p. 6-11) and by Weir and Nelson (1976). The device consists of an armored single-conductor cable mounted on a portable reel. Attached to the end of the cable is a probe that transmits an electric current to a meter at land surface the instant water or fluid is contacted. A measuring wheel, over which the cable passes, measures the length of cable passed into and withdrawn from the well or test hole. The length of cable suspended below the reference mark is corrected for stretch and adjusted to land-surface datum to determine the measured depth to water.

Steel-Tape Device

The technique used for making steel-tape measurements of depth to water greater than 1,000 ft below land surface described by Garber and Koopman (1968, p. 2-6) has been modified as described by Robison and others (1988, p. 9-10). The steel tape, which is mounted on a motor-driven reel, is suspended in the well or test hole a known distance below a reference mark so the bottom end is below the water or fluid surface. The length of wetted tape is subtracted from the suspended length below the reference mark and adjusted to land-surface datum by subtracting or adding the distance of the reference point above or below land surface to determine the measured depth to water.

The steel-tape device serves as a calibration tool to determine the stretch corrections applied to the wire-line, electric-tape, and iron-horse devices. Periodically, simultaneous measurements are taken with each device from several wells and test holes chosen to represent a range of depth to water found at NTS. Corrections for the other devices are based on the measurements made with the steel-tape device.

Measurements

Depth-to-water measurements for wells and test holes shown in table 1 represent data collected during water years 1990-91. These measurements can be compared to earlier measurements in long-term observation wells and test holes reported by Wood (1992, p. 17-49) or later measurements reported by Reiner and others (1995, p. 21-28), Robie and others (1995, p. 21-32), Clary and others (1995, p. 641-652), and Bauer and others (1996, p. 670-702). Depth-to-water measurements for ground-water supply wells shown in table 2 represent available historic data. For wells and test holes listed in tables 1 and 2, the following data are presented: NTS hole number designation, USGS standard identification, latitude and longitude coordinates, date hole completed, land-surface altitude, hole depth, top of open interval, bottom of open interval, type of open interval, measurement date, depth-to-water measurement, measurement method, and measurement site status. The wells and test holes are listed sequentially, first by NTS administrative area, then by NTS hole number designation and USGS standard identification within each area.

Some items listed in tables 1 and 2 need further clarification. "Date hole completed" is the date that borehole construction work, which may affect where water enters the casing or borehole, ceased. Types of construction work that affect completion are borehole drilling, setting or perforating casing, setting packers or plugs, and grouting the hole. Therefore, completion

dates listed in table 1 and 2 may not agree with completion dates reported by Raytheon Services Nevada (RSN). "Hole depth" is the accessible hole depth, which may be shallower than total drilled depth. Because hole depth represents the most recent available information, the present accessible hole depth may be shallower or deeper than the hole depth reported by RSN. "Depth of open intervals," top and bottom, are listed for each perforated or packer interval or borehole diameter. The bottom of the deepest open interval normally is equivalent to total drilled depth. Water may be contributed to the casing or borehole from depths greater than the accessible depth if drilled depth exceeds accessible depth. A site status of "Z" is normally listed if the first depth-to-water measurement was taken within about 1 month of the date that the hole was completed to indicate that the water level may not have stabilized within the casing or borehole. A site status of "Z" also denotes nearby nuclear events, earthquakes, or other natural or man-induced conditions that may affect the measured depth to water.

The measured depth to water ranged from 301 ft below land surface on September 12, 1991, at UE-4t 1 in Yucca Flat to 2,215 ft below land surface on September 25, 1990, at U-20be on Pahute Mesa. The measured altitude of the ground-water surface ranged from 2,091 ft above sea level on January 24, 1990, at UE-3e 4 in Yucca Flat to 6,083 ft above sea level on October 12, 1989, at UE-12t 6 on Rainier Mesa.

Ground-Water Withdrawals

Ground-water withdrawals are compiled for 24 wells at NTS. Withdrawal data included for the 1951-71 calendar years are reprinted from Claassen (1973), except for J-11 WW. Records of total ground-water withdrawals for 1972-82 are not available except for J-12 WW and RNM-2S. Withdrawal data for well RNM-2S for 1975-91 were supplied by Los Alamos National Laboratory (J.L. Thompson, written commun., 1992). All other withdrawal data for the 1983-91 calendar years were compiled from water-production reports provided by REECo.

All water-supply wells currently in use at NTS are equipped with totalizing flow meters. Each meter has a counting-wheel display (similar to an automobile odometer) with six rolling digits and either two or three fixed digits. Meters with two fixed digits are accurate to about the nearest 100 gallons and meters with three fixed digits are accurate to about the nearest 1,000 gallons. REECo personnel recorded meter readings periodically and the totals represent the difference in readings from one date to the next. REECo water-production data have been recompiled to represent average monthly and yearly totals. Withdrawals not reported due to broken flow meters were estimated by taking an average of the REECo data on ground-water withdrawals prior to and following the missing period of record. When a meter was broken for a lengthy period, trends from preceding years were considered.

Ground-water withdrawals from water-supply wells at NTS are presented in table 3. The following information is listed: NTS hole-number designation, USGS standard identification, latitude and longitude coordinates, date well completed, land-surface altitude, well depth, top of open interval, bottom of open interval, type of open interval, primary water-yielding units, ground-water subbasin, calendar year of ground-water withdrawals, ground-water withdrawals in million gallons, ground-water withdrawals in acre-feet, source of withdrawal data, and days of estimated withdrawals. Data are listed in table 3 sequentially, first by NTS administrative area, by NTS hole-number designation, then by USGS site identification number.

Total annual ground-water withdrawals at NTS ranged from about 33 million gallons (pumped from 3 water-supply wells for 1951) to about 1,118 million gallons (pumped from 14 water-supply wells for 1989). Annual ground-water withdrawals from individual water-supply wells ranged from 0 (non-use) to 325 million gallons (pumped from RNM-2S in Frenchman Flat for 1979). The total ground-water withdrawal at NTS for 1990 was 868 million gallons (pumped from 13 water-supply wells) and for 1991 was 713 million gallons (pumped from 13 water-supply wells). The maximum ground-water withdrawal from a water-supply well for 1990 was 233 million gallons and for 1991 was 155 million gallons (both pumped from RNM-2S).

Total annual ground-water withdrawals from NTS for calendar years 1951-71 and 1983-91 are shown in figure 3. No records were available for 1972-74. Only withdrawals from well RNM-2S are included for 1975-80. Only withdrawals from wells RNM-2S and J-12 WW are included for 1981-82. Water-production records of withdrawals from other active water-supply wells for 1972-82 are not available. Total monthly withdrawals for the 1983-91 calendar years from NTS part of the Alkali Flat-Furnace Creek Ranch ground-water subbasin, from the volcanic rock water-yielding unit, are shown in figure 4. Total monthly

withdrawals for calendar years 1983-91 from the NTS part of the Ash Meadows ground-water subbasin, by water-yielding unit, are shown in figure 5. No withdrawals were made for the 1983-91 calendar years from the NTS part of the Oasis Valley ground-water subbasin. Where more than one water-yielding unit was saturated, units were combined. No attempt was made to determine percent contribution by unit. If a unit was saturated and open to the well bore, it was reported.

Monthly and annual ground-water withdrawals, by water-supply well for calendar years 1983-91, are shown in figures 6-22. The graphs are grouped by geographic area and, within an area, by NTS hole-number designation. Data are compiled from flow-meter records except where noted. Consistently throughout the REECo water-production data, withdrawals were estimated for all active wells for 8 days in December 1984, 13 days for January 1985, and 7 days for December 1985. A brief description of each graph follows.

Ground-water withdrawals from well WW-8 on Buckboard Mesa (Area 18, pl. 1) are shown in figure 6. The well is in the Alkali Flat-Furnace Creek Ranch ground-water subbasin, open to Tertiary volcanic rock, and used primarily for drinking water and construction. Data are compiled from flow-meter records except as noted above, 5 days estimated for June 1989, and 23 days for July 1989.

Ground-water withdrawals from well RNM-2S in Frenchman Flat (Area 5, pl.1) are shown in figure 7. The well is in the Ash Meadows ground-water subbasin, open to Quaternary alluvium, and used for a radionuclide migration experiment. Data are compiled from flow-meter records. Pumping ceased when the experiment was completed August 29, 1991.

Ground-water withdrawals from well UE-5c WW in Frenchman Flat (Area 5, pl.1) are shown in figure 8. The well is in the Ash Meadows ground-water subbasin, open to Quaternary alluvium and Tertiary volcanic rock, and used primarily for drinking water and construction. Data are compiled from flow-meter records as noted above. The well was not pumped during April 1983, November 1986 through March 1987, May through July 1987, and April 1989 through February 1991.

Ground-water withdrawals from well WW-4 in Frenchman Flat (Area 6, pl. 1) are shown in figure 9. The well is in the Ash Meadows ground-water subbasin, open to Tertiary volcanic rock, and used primarily for drinking water and construction. Data are compiled from flow-meter records except as noted above, 19 days estimated for August 1990, and 9 days for September 1990. The well was not pumped January through March 1983.

Ground-water withdrawals from well WW-5B in Frenchman Flat (Area 6, pl. 1) are shown in figure 10. The well is in the Ash Meadows ground-water subbasin, open to Quaternary alluvium, and used primarily for drinking water and construction. Data are compiled from flow-meter records except as noted above. Pumping ceased October 1988.

Ground-water withdrawals from well WW-5C in Frenchman Flat (Area 5, pl. 1) are shown in figure 11. The well is in the Ash Meadows ground-water subbasin, open to Quaternary alluvium, and used primarily for drinking water and construction. Data are compiled from flow-meter records as noted above. The well was not pumped October through December 1985.

Ground-water withdrawals from well J-12 WW in Jackass Flats (Area 25, pl. 1) are shown in figure 12. The well is in the Alkali Flat-Furnace Creek Ranch ground-water subbasin, open to Tertiary volcanic rock, and used primarily for drinking water and construction. Data are compiled from flow-meter records except as noted above.

Ground-water withdrawals from well J-13 WW in Jackass Flats (Area 25, pl. 1) are shown in figure 13. The well is in the Alkali Flat-Furnace Creek Ranch ground-water subbasin, open to Tertiary volcanic rock, and used primarily for drinking water and construction. Data are compiled from flow-meter records except as noted above, 11 days estimated for November 1989, 3 days for December 1989, and 7 days for September 1990.

Ground-water withdrawals from well Army 1 WW in Mercury Valley (Area 22, pl. 1) are shown in figure 14. The well is in the Ash Meadows ground-water subbasin, open to Paleozoic carbonate rock, and used primarily for drinking water and construction. Data are compiled from flow-meter records except as noted above, 7 days estimated for June 1987, 14 days for November 1988, 8 days for December 1990, and 31 days for January 1991.

Ground-water withdrawals from well U-20 WW on Pahute Mesa (Area 20, pl. 1) are shown in figure 15. The well is in the Alkali Flat-Furnace Creek Ranch ground-water subbasin, open to Tertiary volcanic rock, and used primarily for construction. The well was completed in July 1985. Data are compiled from flow-meter

records except 7 days estimated for December 1985 and 7 days for August 1986. The well was not pumped June through September 1991.

Ground-water withdrawals from well UE-19c WW on Pahute Mesa (Area 19, pl. 1) are shown in figure 16. The well is in the Alkali Flat-Furnace Creek Ranch ground-water subbasin, open to Tertiary volcanic rock, and used primarily for construction. Data are compiled from flow-meter records except as noted above. The well was not pumped May 1983, January through March 1984, and January 1988.

Ground-water withdrawals from well UE-1r WW in Yucca Flat (Area 1, pl. 1) are shown in figure 29. The well is in the Ash Meadows ground-water subbasin, open to Tertiary volcanic rock and Paleozoic carbonate rock, and used primarily for construction. Data are compiled from flow-meter records except as noted above. Pumping ceased October 1988.

Ground-water withdrawals from well UE-16d WW in Yucca Flat (Area 16, pl. 1) are shown in figure 18. The well is in the Ash Meadows ground-water subbasin, open to Paleozoic carbonate rock, and used primarily for drinking water. Data are compiled from flow-meter records except as noted above.

Ground-water withdrawals from well WW-2 in Yucca Flat (Area 2, pl. 1) are shown in figure 19. The well is in the Ash Meadows ground-water subbasin, open to Paleozoic carbonate rock, and used primarily for construction. Data are compiled from flow-meter records except as noted above, 5 days estimated for June 1989, and 23 days for July 1989. The well was not pumped during May 1989. Pumping ceased December 1990.

Ground-water withdrawals from well WW-A in Yucca Flat (Area 3, pl. 1) are shown in figure 20. The well is in the Ash Meadows ground-water subbasin, open to Quaternary alluvium, and used primarily for drinking water. Data are compiled from flow-meter records except as noted above. Pumping ceased October 1988.

Ground-water withdrawals from well WW-C in Yucca Flat (Area 6, pl. 1) are shown in figure 21. The well is in the Ash Meadows ground-water subbasin, open to Paleozoic carbonate rock, and used primarily for drinking water. Data are compiled from flow-meter records except as noted above, 7 days estimated for September 1986, and 7 days for September 1990. The well was not pumped December 1987, March through May 1989, and December 1989 through January 1990.

Ground-water withdrawals from well WW-C-1 in Yucca Flat (Area 6, pl. 1) are shown in figure 22. The well is in the Ash Meadows ground-water subbasin, open to Paleozoic carbonate rock, and used primarily for drinking water. Data are compiled from flow-meter records except as noted above and 7 days estimated for September 1988.

Graphs of ground-water withdrawals are not included for the following wells because the wells are no longer used for water supply or current records are not available. Wells WW-5A and WW-3 have not been used for water supply since 1970, wells UE-19e WW, UE-19gS WW, and U-20a 2 WW have not been used since 1967, and well J-11WW has not been used since 1960. Water from well UE-15d WW was used intermittently for cleaning purposes at the U.S. Environmental Protection Agency farm until the pump failed to start and pumping ceased October 7, 1991. Well WW-4A was drilled in 1990 and was not used.

Tritium Concentrations

Water samples for determination of tritium concentrations were collected from 15 wells and test holes at NTS. The technique used to collect the samples from slightly below the water surface is described by Claassen (1982, p. 36-38) and by Wood (1976, p. 5-6). The bailer used in 1990 and 1991 was a solid plug coupled to a $1\text{-}^{9}/_{16}$-in. (inside diameter) by 6-ft stainless steel tube coupled to a 2-ft upper section containing four $^{3}/_{4}$-in. by 6-in. slots and coupled to a solid cap. Each bailed sample contained about $^{1}/_{2}$ gallon of water. Raw, unfiltered samples were collected in 500-milliliter acid-rinsed glass bottles, labeled, and delivered to the Environmental Monitoring Systems Laboratory of the U.S. Environmental Protection Agency in Las Vegas, Nev. To prevent possible cross-contamination after sampling, the bailer was rinsed twice with a 10 percent hydrochloric acid solution. The bailer then was rinsed twice with tap water or deionized water and allowed to air dry prior to the next sample collection.

The results of the tritium analyses are presented in table 4. For the 15 wells and test holes, the following information is listed: NTS hole-number designation, USGS standard identification, latitude and longitude coordinates, date hole completed, land-surface altitude, hole depth, top of open interval, bottom of open interval, type of open interval, sample date, and tritium concentration. Data are listed in table 4 sequentially, first by NTS administrative area, by NTS hole-number des-

ignation, then by USGS site identification number. Because some of the wells and test holes may not have been completely developed (pumped) prior to sample collection, some tritium concentrations may represent residual drilling fluids or other fluids introduced during drilling or pumping and water injection instead of representing water solely from the saturated zone.

Tritium concentrations ranged from below detection limits (-1 pCi/L) on September 10, 1991, at U-20ax on Pahute Mesa to 5,550,000 pCi/L on May 3, 1990, at UE-3e 4-1 in Yucca Flat. An average annual concentration of 20,000 pCi/L of tritium in drinking water is the maximum permissible limit established by the U.S. Environmental Protection Agency in Title 40, Code of Federal Regulations (1988). Tritium concentrations in samples from wells UE-3e 4-1, UE-3e 4-2, and UE-3e 4-3 exceeded this limit. These three wells are contained within a single test hole near an area of extensive underground nuclear testing. Each well is a separate piezometer open to a different depth interval.

SUMMARY

The U.S. Geological Survey, in support of the U.S. Department of Energy Hydrology/Radionuclide Migration Program, collects and compiles hydrologic and geohydrologic data at and in the vicinity of NTS to aid in characterizing the regional and local ground-water flow systems. This report presents depth-to-water measurements, ground-water withdrawals, and tritium concentrations determined for selected wells and test holes as part of this program.

Depth to water was measured at 74 wells and test holes at and in the vicinity of NTS during October 1, 1989, to September 30, 1991. The depth to water ranged from 301 ft below land surface at UE-4t 1 to 2,215 ft below land surface at U-20be. The measured altitude of the water surface ranged from 2,091 ft above sea level at UE-3e 4 to 6,083 ft above sea level at UE-12t 6. Available historic depth-to-water measurement data collected from water-supply wells are reported also. Wire-line, electric tape, iron-horse, and steel-tape devices were used to measure depth to water.

Available annual ground-water withdrawals were reported for 24 water-supply wells for calendar years 1951-91. Total annual ground-water withdrawals from the 24 reported water-supply wells at NTS ranged from 33 million gallons for 1951 to 1,118 million gallons for 1989. Annual ground-water withdrawals from individual water-supply wells ranged from 0 (non-use), for several wells during one or more years, to 325 million gallons, from RNM-2S for 1979. The total ground-water withdrawal for 1990 was 868 million gallons and for 1991 was 713 million gallons. The maximum withdrawal from a water-supply well for 1990 was 233 million gallons and for 1991 was 155 million gallons, both from RNM-2S.

Tritium concentrations in water samples collected from selected wells and test holes penetrating the saturated zone ranged from below detection limits at U-20ax to 5,550,000 pCi/L at UE-3e 4-1. Tritium concentrations in samples from wells UE-3e 4-1, UE-3e 4-2, and UE-3e 4-3 exceeded established drinking-water standards. All three wells are separate piezometers contained within a single test hole near an area of extensive underground nuclear testing.

REFERENCES CITED

Bauer, D.J., Foster, B.J., Joyner, J.D., and Swanson, R.A., 1996, Water resources data, Nevada, water year 1995: U.S. Geological Survey Water Data Report NV-95-1, 734 p.

Blankennagel, R.K., and Weir, J.E., Jr., 1973, Geohydrology of the eastern part of Pahute Mesa, Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Professional Paper 712-B, 35 p.

Boucher, M.S., 1994, Water levels in wells J-11 and J-12, 1989-91, Yucca Mountain area, Nevada: U.S. Geological Survey Open-File Report 94-303, 9 p.

Claassen, H.C., 1973, Water quality and physical characteristics of Nevada Test Site water-supply wells: U.S. Geological Survey Open-File Report USGS-474-158, 145 p.

———1982, Guidelines and techniques for obtaining water samples that accurately represent the water chemistry of an aquifer: U.S. Geological Survey Open-File Report 82-1024, 49 p.

Clary, S.L., McClary, D.R., Whitney, Rita, and Reeves, D.D., 1994, Water resources data, Nevada, water year 1994: U.S. Geological Survey Water Data Report NV-94-1, 768 p.

Code of Federal Regulations, 1988, Title 40, Section - 141, Drinking Water Regulations: Federal Register, Volume 41.

Garber, M.S., and Koopman, F.C., 1968, Methods of measuring water levels in deep wells: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 8, Chapter A1, 23 p.

Gemmell, J.M., 1990, Water levels in periodically measured wells in the Yucca Mountain area, Nevada, 1988: U.S. Geological Survey Open-File Report 90-113, 47 p.

Harrill, J.R., Gates, J.S., and Thomas, J.M., 1988, Major ground-water flow systems in the Great Basin region of Nevada, Utah, and adjacent states: U.S. Geological Survey Hydrologic Investigations Atlas HA-694-C, 2 sheets.

La Camera, R.J., and Westenburg, C.L., 1994, Selected ground-water data for Yucca Mountain region, southern Nevada and eastern California, through December 1992: U.S. Geological Survey Open-File Report 94-54, 161 p.

Laczniak, R.J., Cole, J.C., Sawyer, D.A., and Trudeau, D.A., 1996, Summary of hydrogeologic controls on ground-water flow at the Nevada Test Site, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 96-4109, 59 p.

Lobmeyer, D.H., Luckey, R.R., O'Brien, G.M., and Burkhardt, D.J., 1995, Water levels in continuously monitored wells in the Yucca Mountain area, Nevada, 1989: U.S. Geological Survey Open-File Report 93-98, 173 p.

Luckey, R.R., Lobmeyer, D.H., and Burkhardt, D.J., 1993, Water levels in continuously monitored wells in the Yucca Mountain area, Nevada, 1985-88: U.S. Geological Survey Open-File Report 91-493, 252 p.

McKinley, P.W., Long, M.P., and Benson, L.V., 1991, Chemical analyses of water from selected wells and springs in the Yucca Mountain area, Nevada and southeastern California: U.S. Geological Survey Open-File Report 90-355, 47 p.

O'Brien, G.M., 1991, Water levels in periodically measured wells in the Yucca Mountain area, Nevada, 1989: U.S. Geological Survey Open-File Report 91-178, 51 p.

Reiner, S.R., Locke, G.L., and Robie, L.S., 1995, Ground-water data for the Nevada Test Site and selected other areas in south-central Nevada, 1992-93: U.S. Geological Survey Open-File Report 95-160, 38 p.

Robie, L.S., Reiner, S.R., and Locke, G.L., 1995, Ground-water data for the Nevada Test Site, 1992, and for selected other areas in south-central Nevada, 1952-92: U.S. Geological Survey Open-File Report 95-284, 48 p.

Robison, J.H., 1984, Ground-water level data and preliminary potentiometric surface maps, Yucca Mountain and vicinity, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 84-4197, 8 p.

Robison, J.H., Stephens, D.M., Luckey, R.R., and Baldwin, D.A., 1988, Water levels in periodically measured wells in the Yucca Mountain area, Nevada, 1981-87: U.S. Geological Survey Open-File Report 88-468, 132 p.

Stewart, J.H., 1980, Geology of Nevada—A discussion to accompany the geologic map of Nevada: Nevada Bureau of Mines and Geology Special Publication 4, 136

Thordarson, William, 1987, Hydrogeology of the Faultless Site, Nye County, Nevada: U.S. Geological Survey Water-Resources Investigations Report 86-4342, 40 p.

Tucci, Patrick, O'Brien, G.M., and Burkhardt, D.J., 1996, Water levels in the Yucca Mountain area, Nevada, 1990-91: U.S. Geological Survey Open-File Report 94-111, 107 p.

U.S. Congress, 1989, The containment of underground nuclear explosions: Office of Technology Assessment Report OTA-ISC-414, 80 p.

U.S. Department of Energy, 1988, Announced United States nuclear tests, July 1945 through December 1987: Nevada Operations Office, Office of Public Affairs Report NVO-209, Revision 8, 66 p.

———1995, United States nuclear tests, July 1945 through September 1992: Nevada Operations Office, Office of External Affairs Report NVO-209, Revision 14, 97 p.

U.S. Geological Survey, 1976, Field trip to Nevada Test Site: U.S. Geological Survey Open-File Report 76-313, 64 p.

———1989, National Water Information System user's manual, volume 2, chapter 4. Ground-Water Site Inventory System: U.S. Geological Survey Open-File Report 89-587, 283 p.

Waddell, R.K., Robison, J.H., and Blankennagel, R.K., 1984, Hydrology of Yucca Mountain and vicinity, Nevada-California—Investigative results through mid-1983: U.S. Geological Survey Water-Resources Investigations Report 84-4267, 72 p.

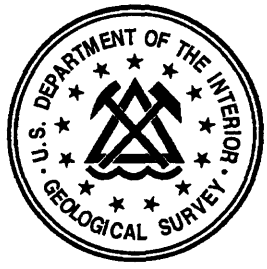
Weir, J.E., Jr., and Nelson, J.W., 1976, Operation and maintenance of a deep-well water-level measurement device, the "iron horse": U.S. Geological Survey Water-Resources Investigations 76-27, 28 p.

Winograd, I.J., 1970, Noninstrumental factors affecting measurement of static water levels in deeply buried aquifers and aquitards, Nevada Test Site: Ground Water, v. 8, no. 2, p. 19-28.

Winograd, I.J., and Thordarson, William, 1975, Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site: U.S. Geological Survey Professional Paper 712-C, 126 p.

Wood, D.B., 1992, Ground-water data collected at the Nevada Test Site and vicinity, Nye County, Nevada, water years 1988-89: U.S. Geological Survey Open-File Report 92-130, 50 p.

Wood, W.W., 1976, Guidelines for collection and field analysis of ground-water samples for selected unstable constituents: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 1, Chapter D2, 24 p.


U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BASIC DATA

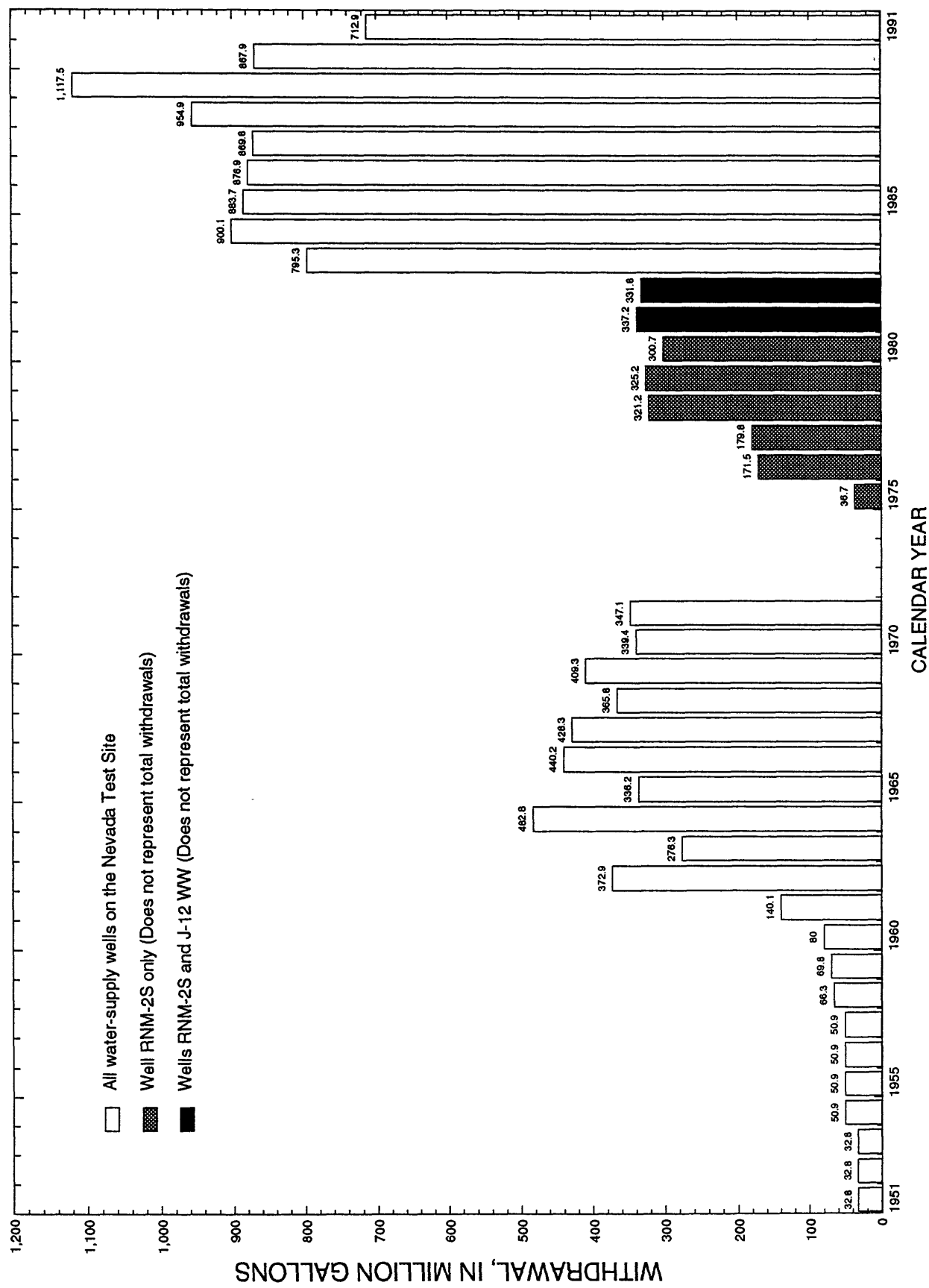


Figure 3. Annual ground-water withdrawals from the Nevada Test Site, 1951-91. No data are available for 1972-74, and only limited data are available for 1975-82.

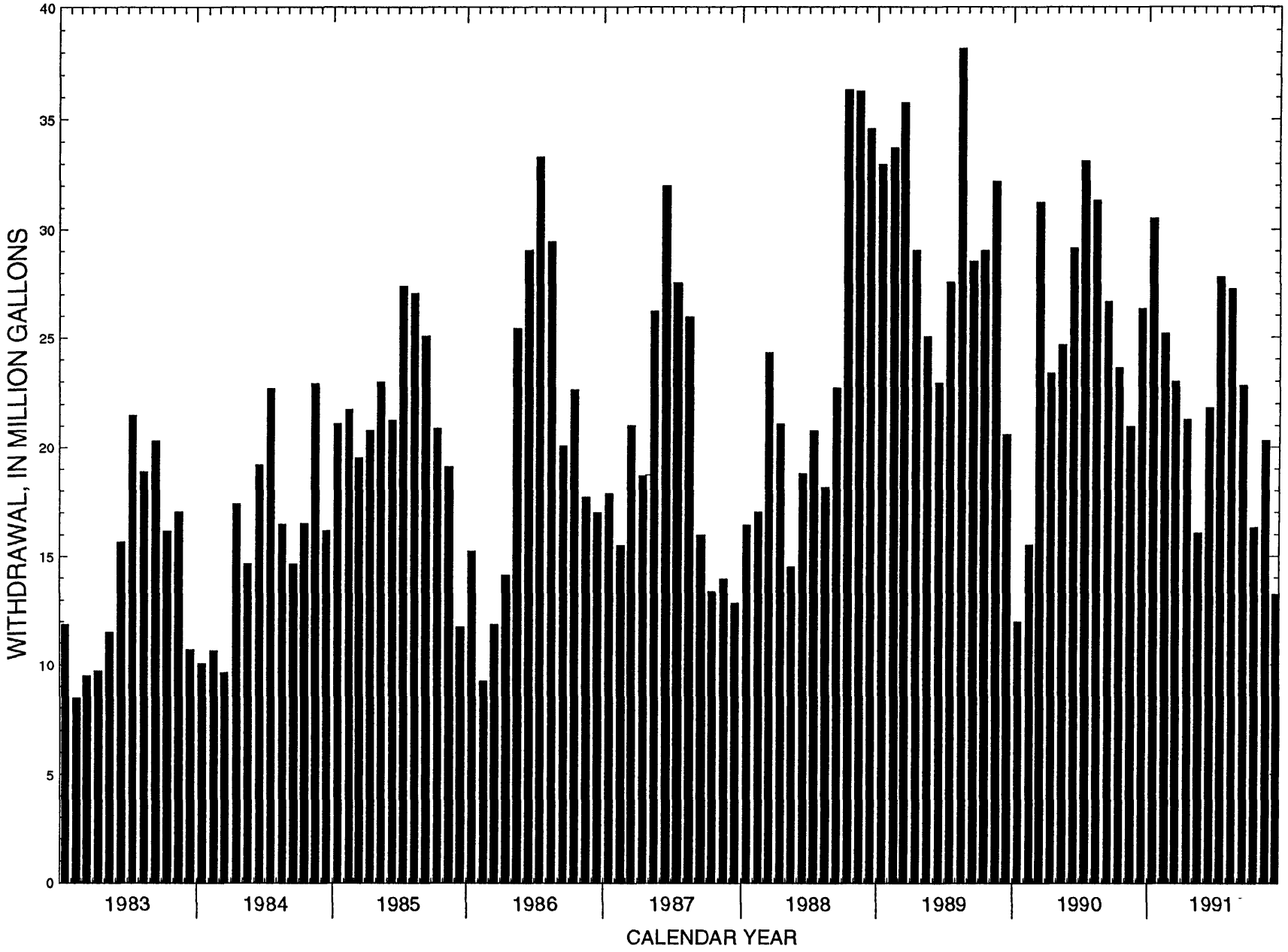


Figure 4. Monthly ground-water withdrawals from the Nevada Test Site part of the Alkali Flat-Furnace Creek Ranch ground-water subbasin, 1983-91. All withdrawals are from volcanic-rock aquifer.

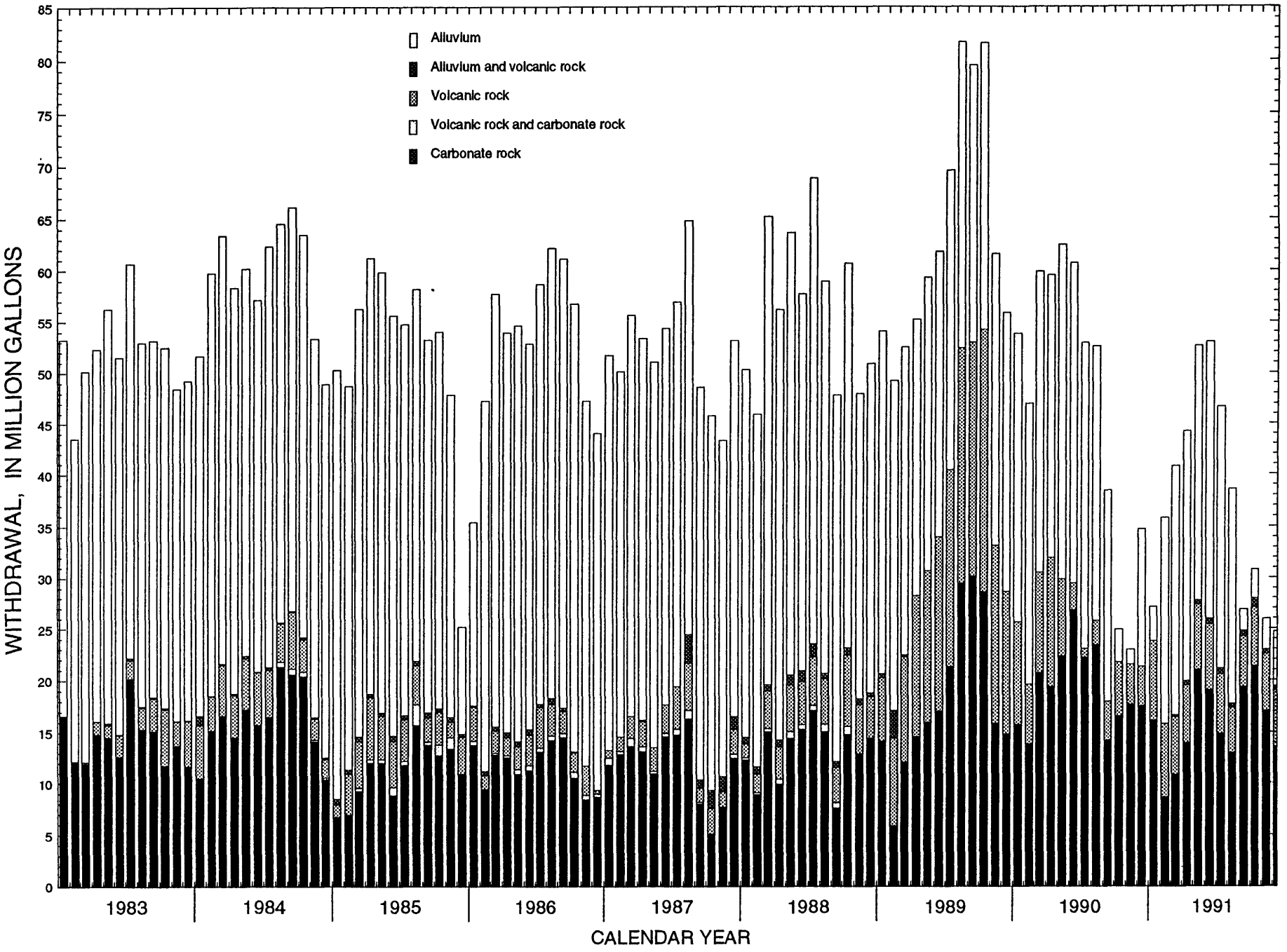


Figure 5. Monthly ground-water withdrawals from the Nevada Test Site part of the Ash Meadows ground-water subbasin, calendar year 1983-91.

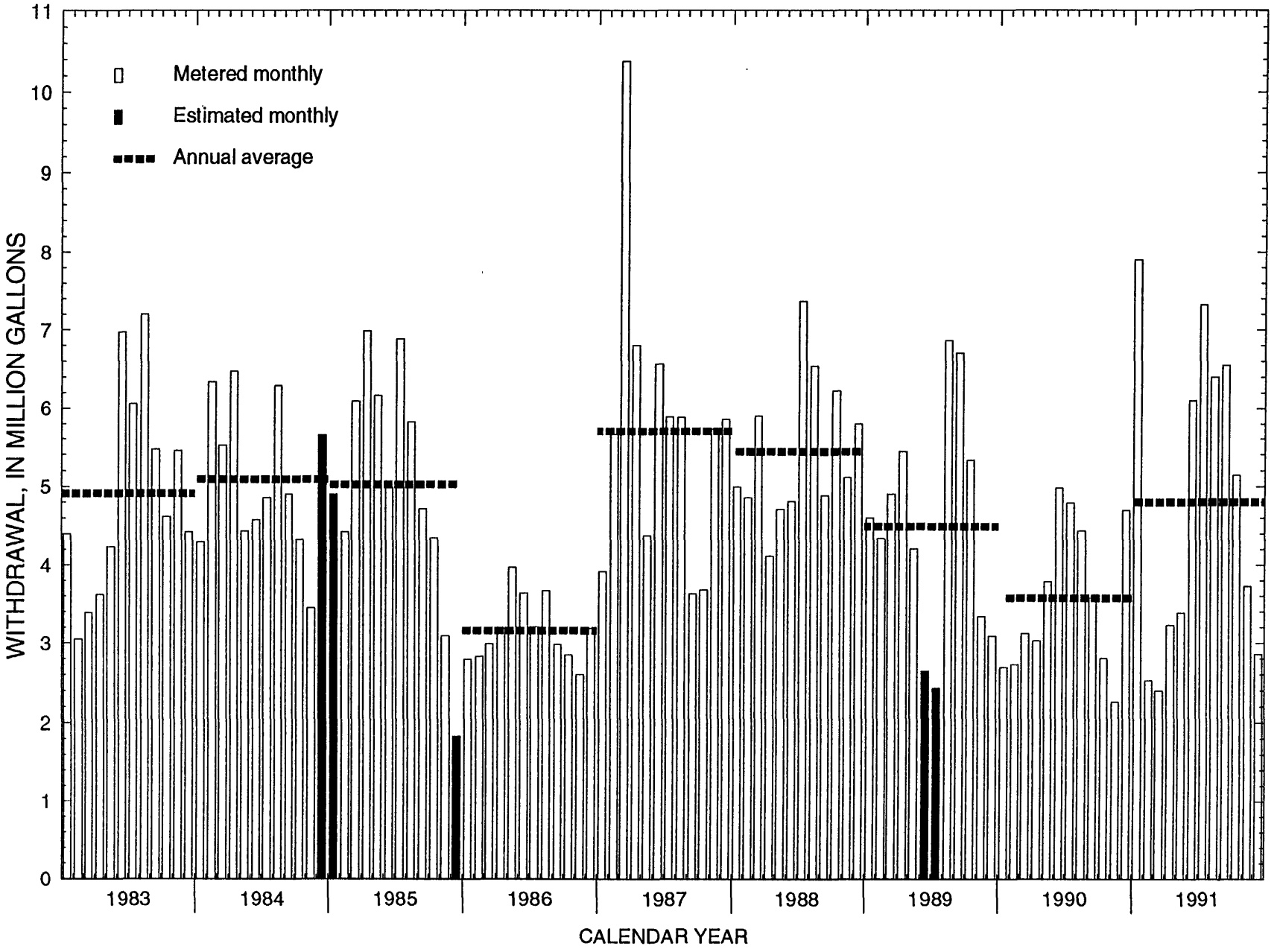


Figure 6. Monthly and annual ground-water withdrawals from well WW-8 on Buckboard Mesa, 1983-91.

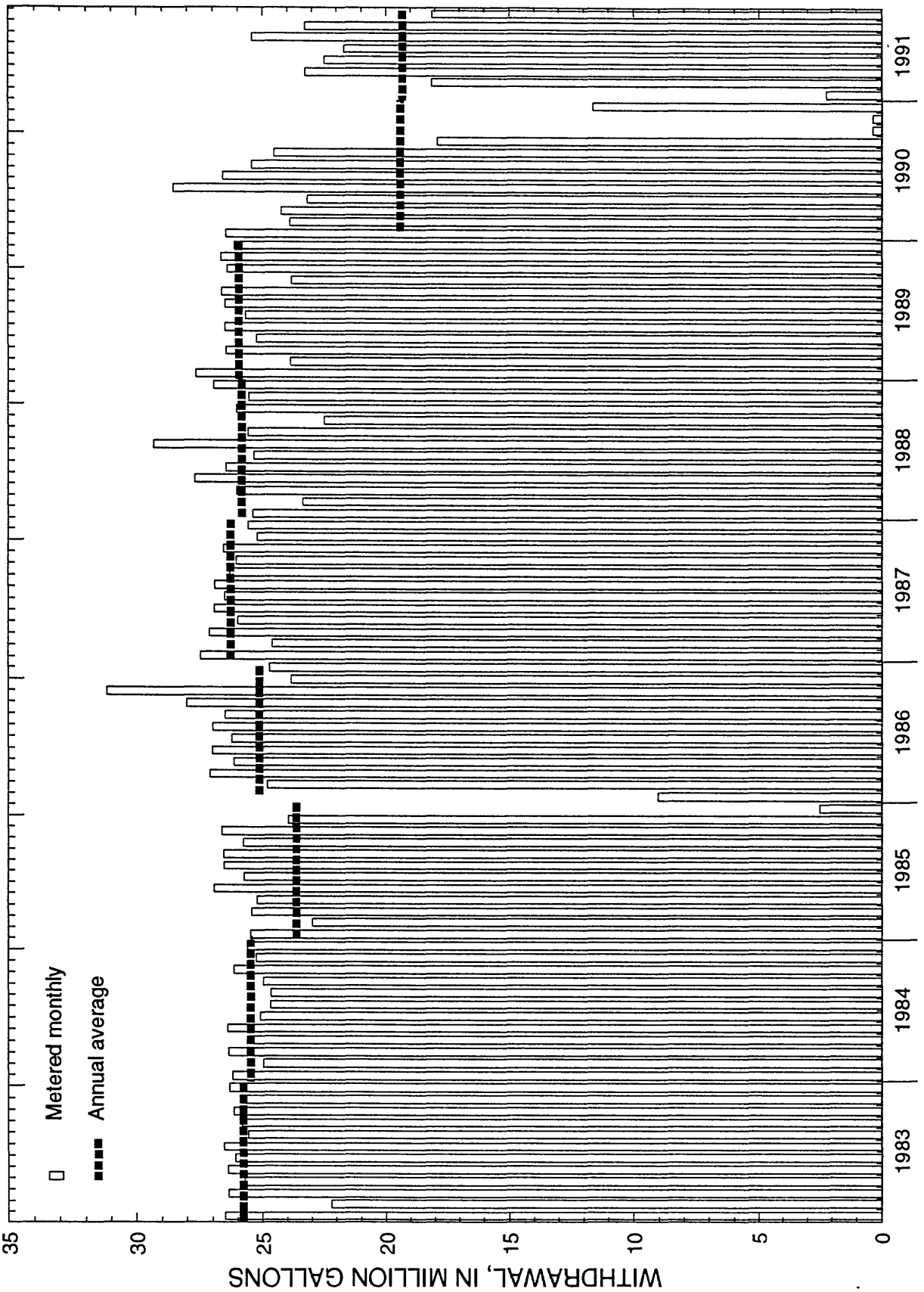


Figure 7. Monthly and annual ground-water withdrawals from well RNM-2S in Frenchman Flat, 1983-91.

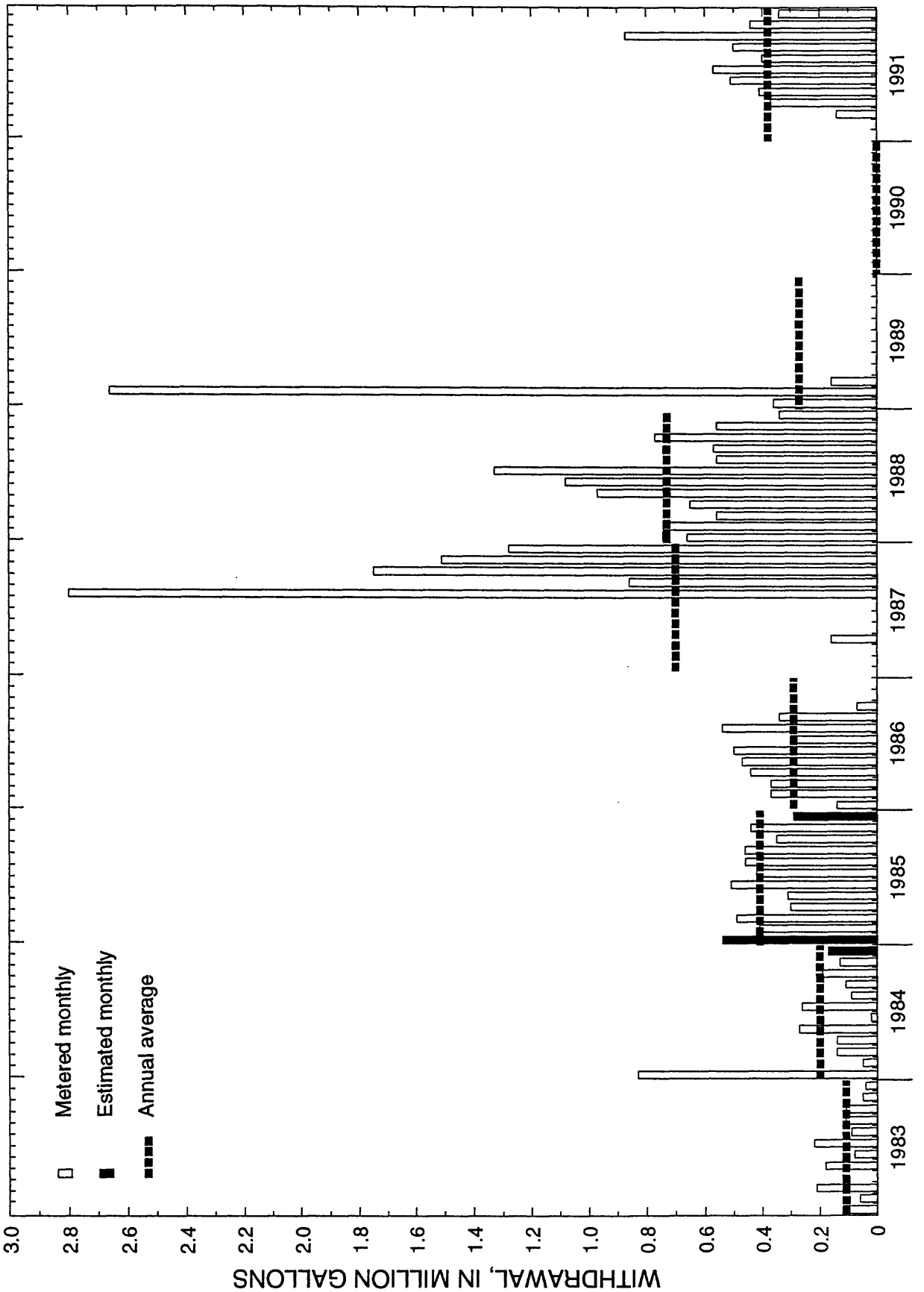


Figure 8. Monthly and annual ground-water withdrawals from well UE-5c WW in Frenchman Flat, 1983-91.

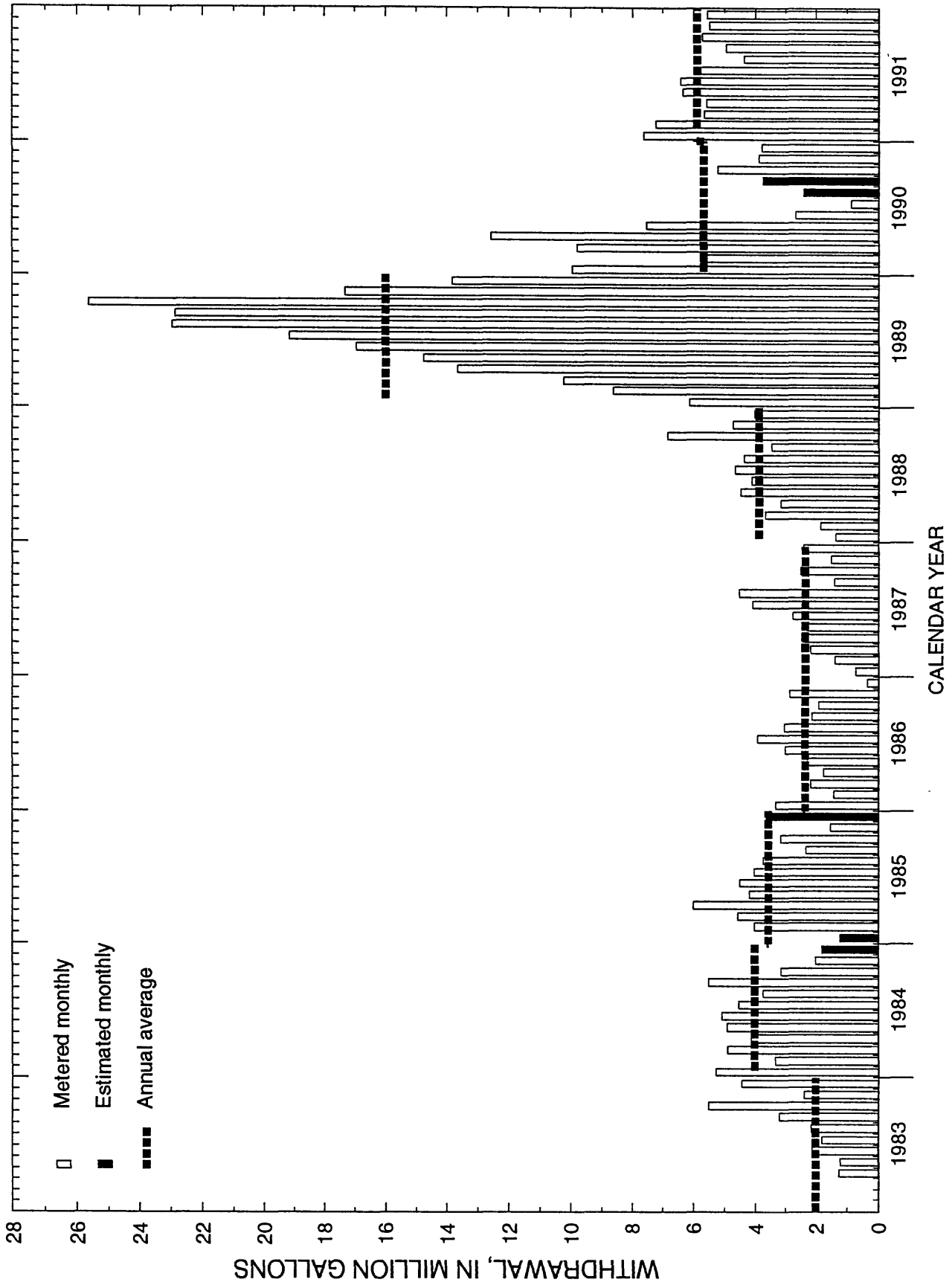


Figure 9. Monthly and annual ground-water withdrawals from well WW-4 in Frenchman Flat, 1983-91.

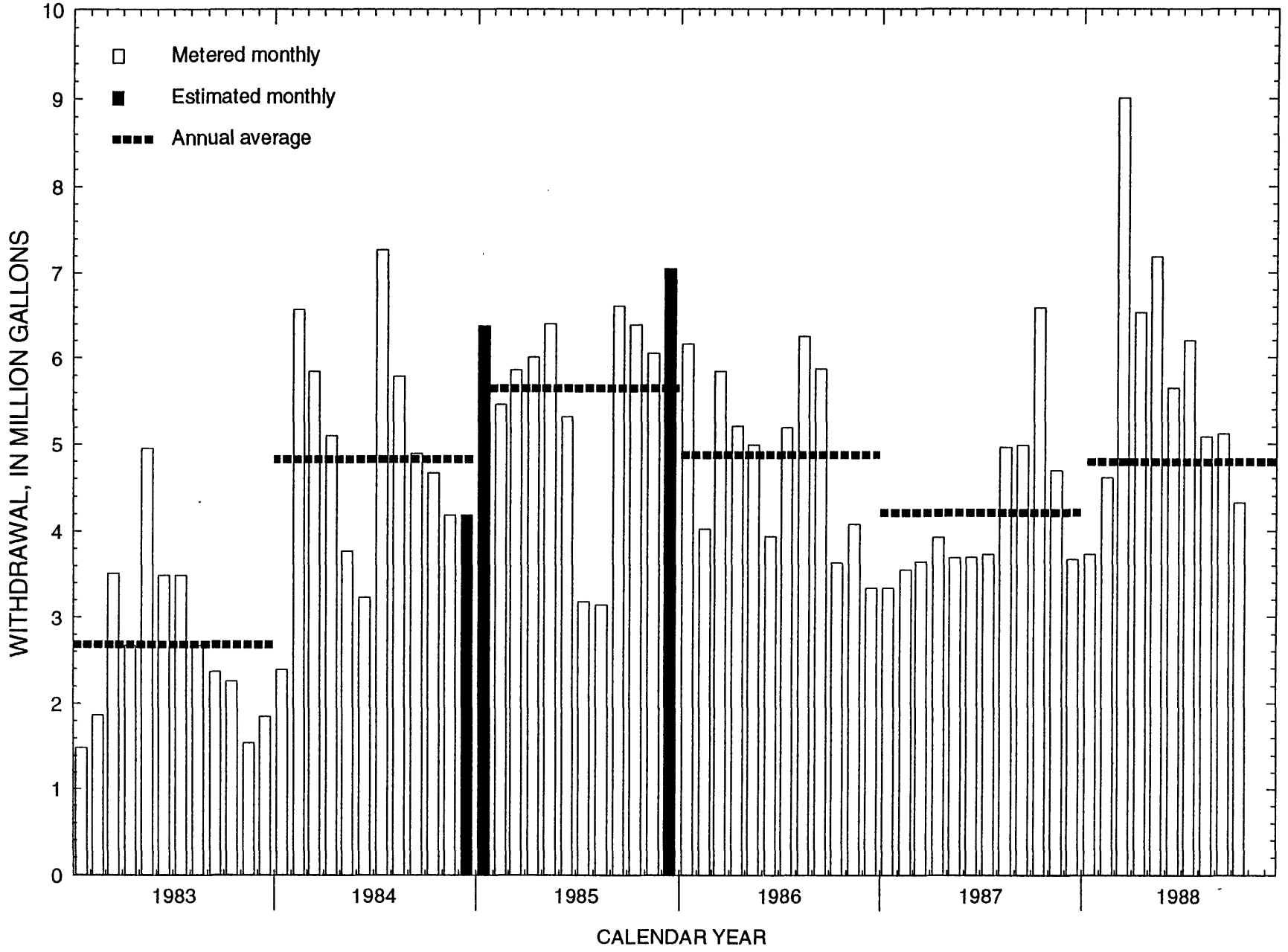


Figure 10. Monthly and annual ground-water withdrawals from well WW-5B in Frenchman Flat, 1983-88. Pumping ceased October 1988.

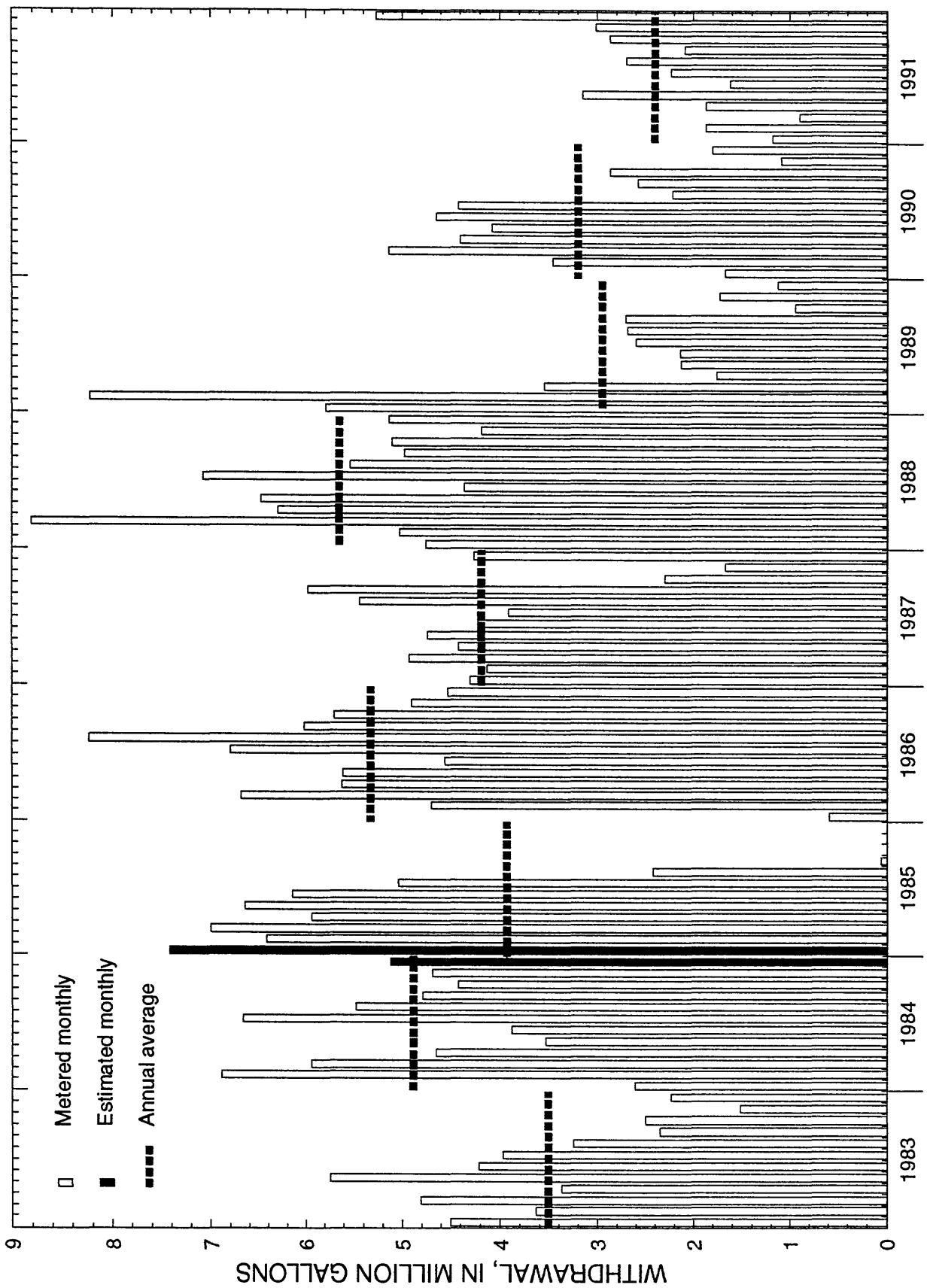


Figure 11. Monthly and annual ground-water withdrawals from well WW-5C in Frenchman Flat, 1983-91.

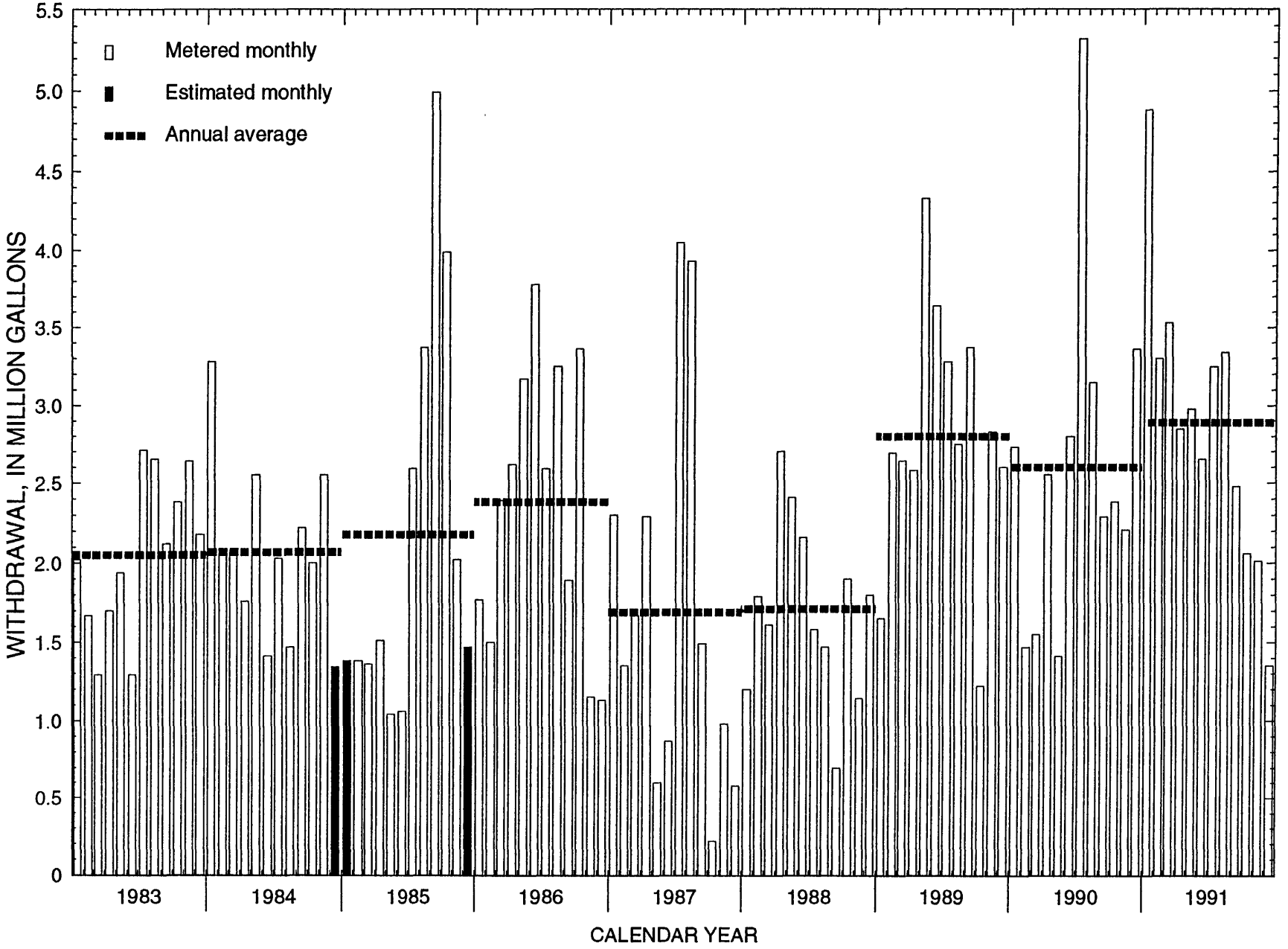


Figure 12. Monthly and annual ground-water withdrawals from well J-12 WW in Jackass Flats, 1983-91.

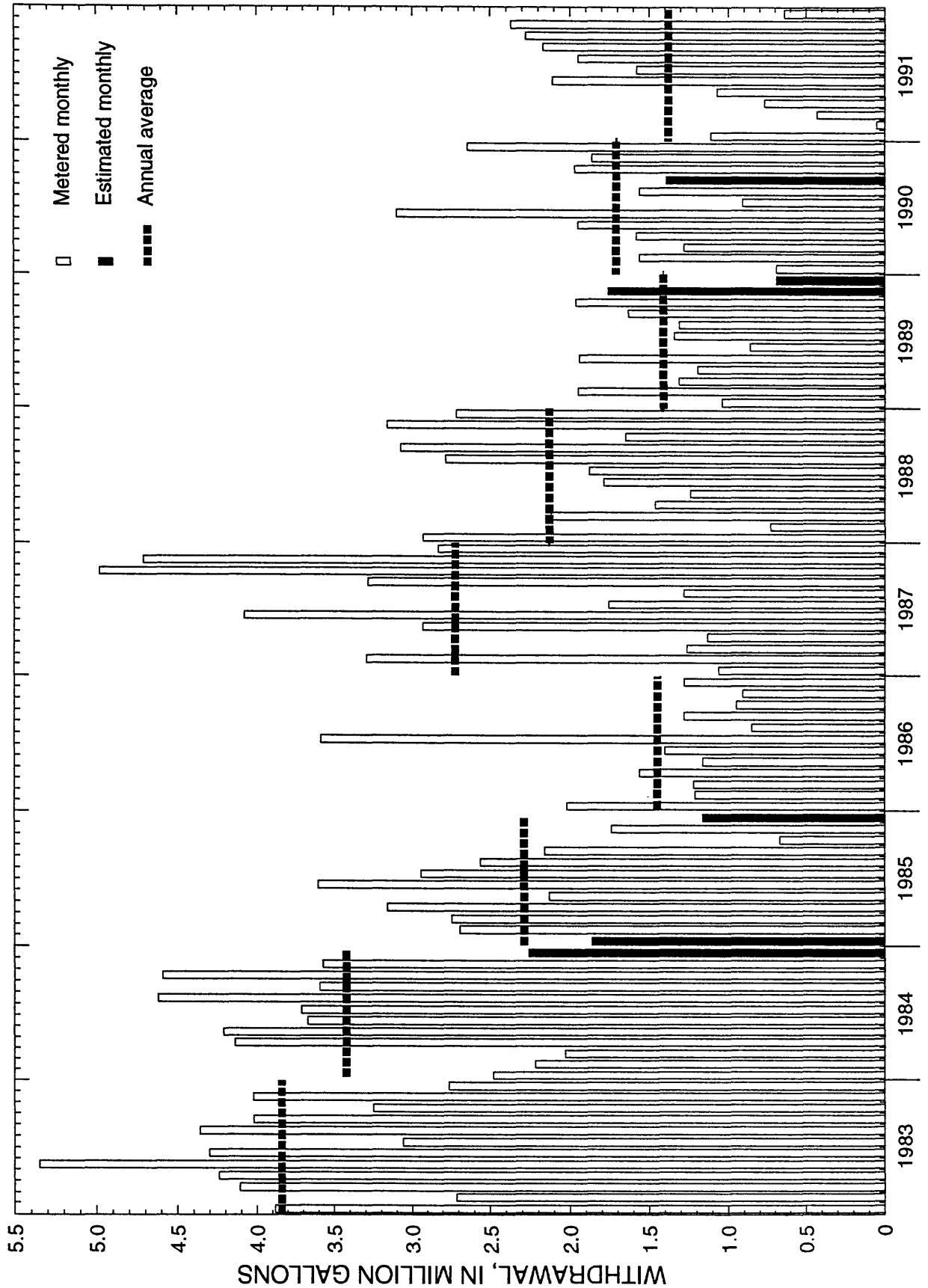


Figure 13. Monthly and annual ground-water withdrawals from well J-13 WW in Jackass Flats, 1983-91.

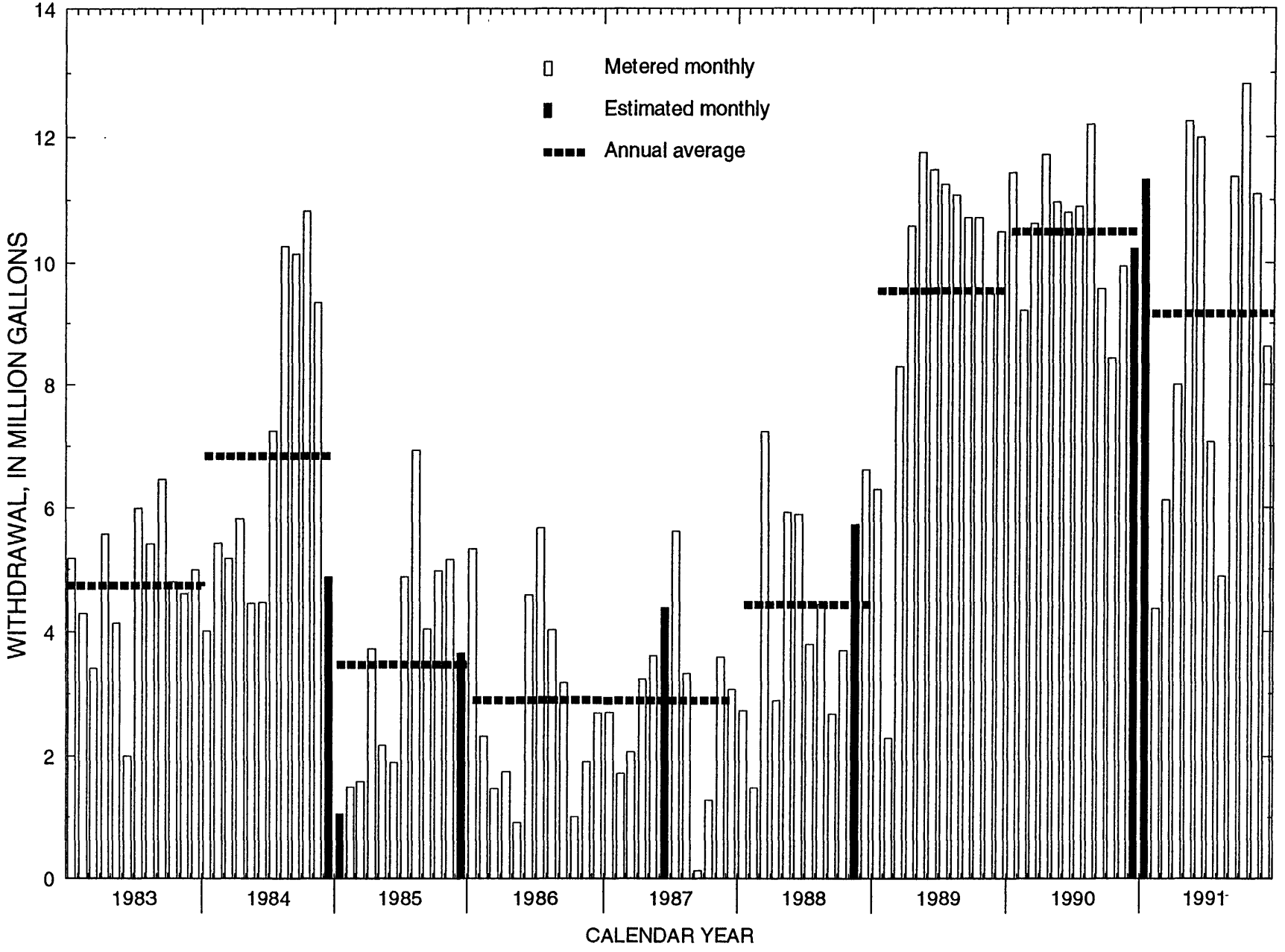


Figure 14. Monthly and annual ground-water withdrawals from well Army 1 WW in Mercury Valley, 1983-91.

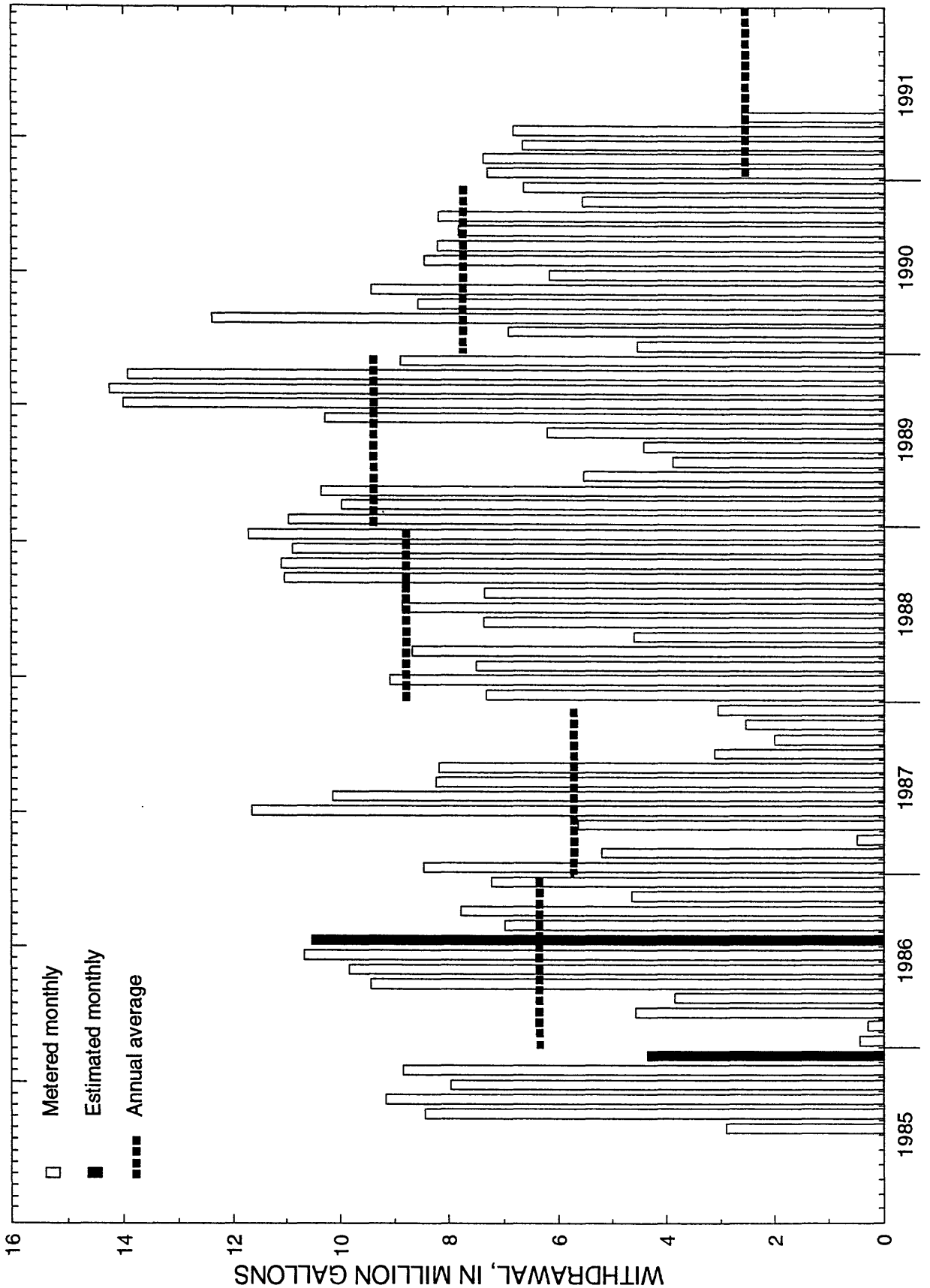


Figure 15. Monthly and annual ground-water withdrawals from well U-20 WW on Pahute Mesa, 1985-91. Well was completed in July 1985.

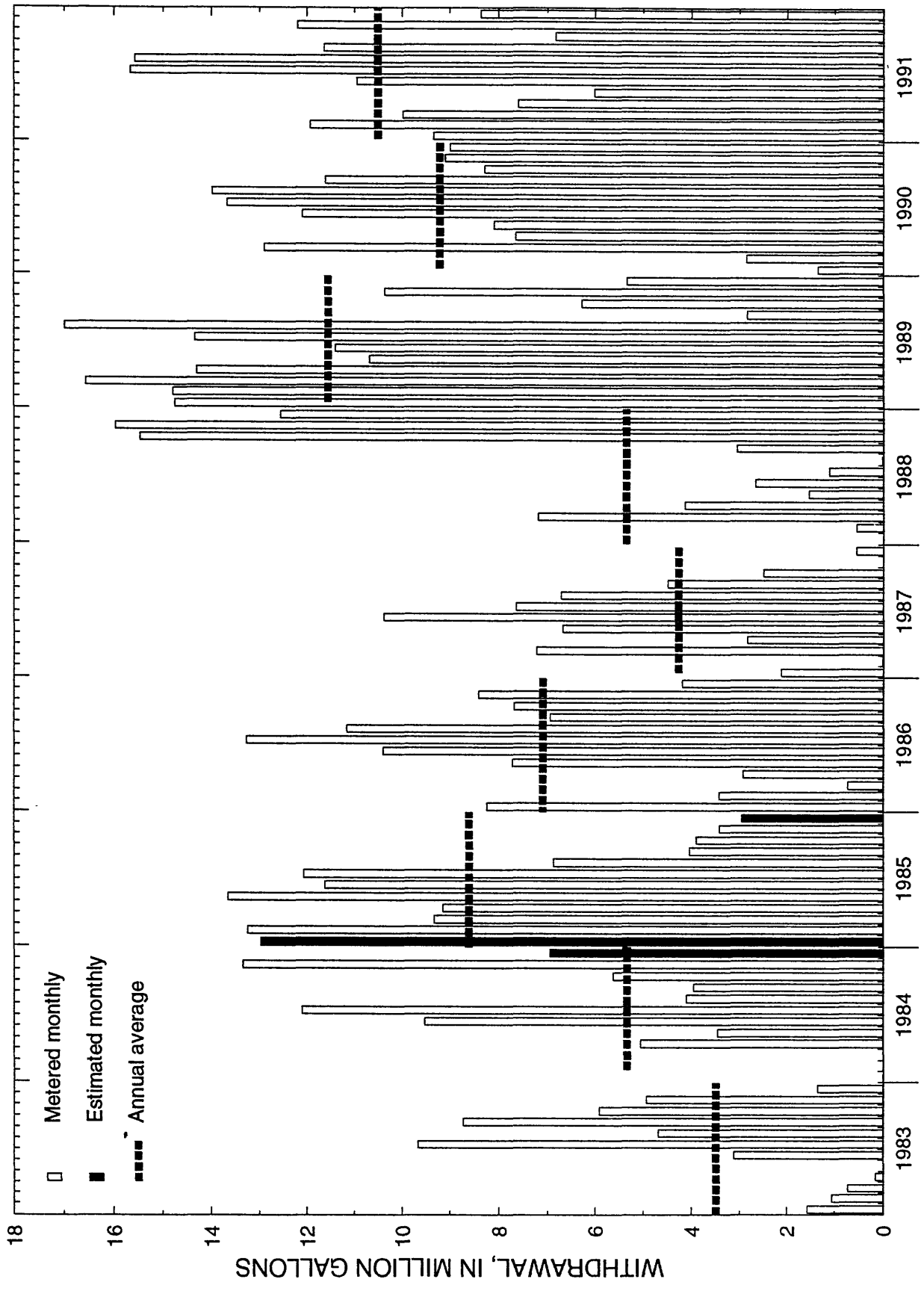


Figure 16. Monthly and annual ground-water withdrawals from well UE-19c WW on Pahute Mesa, 1983-91.

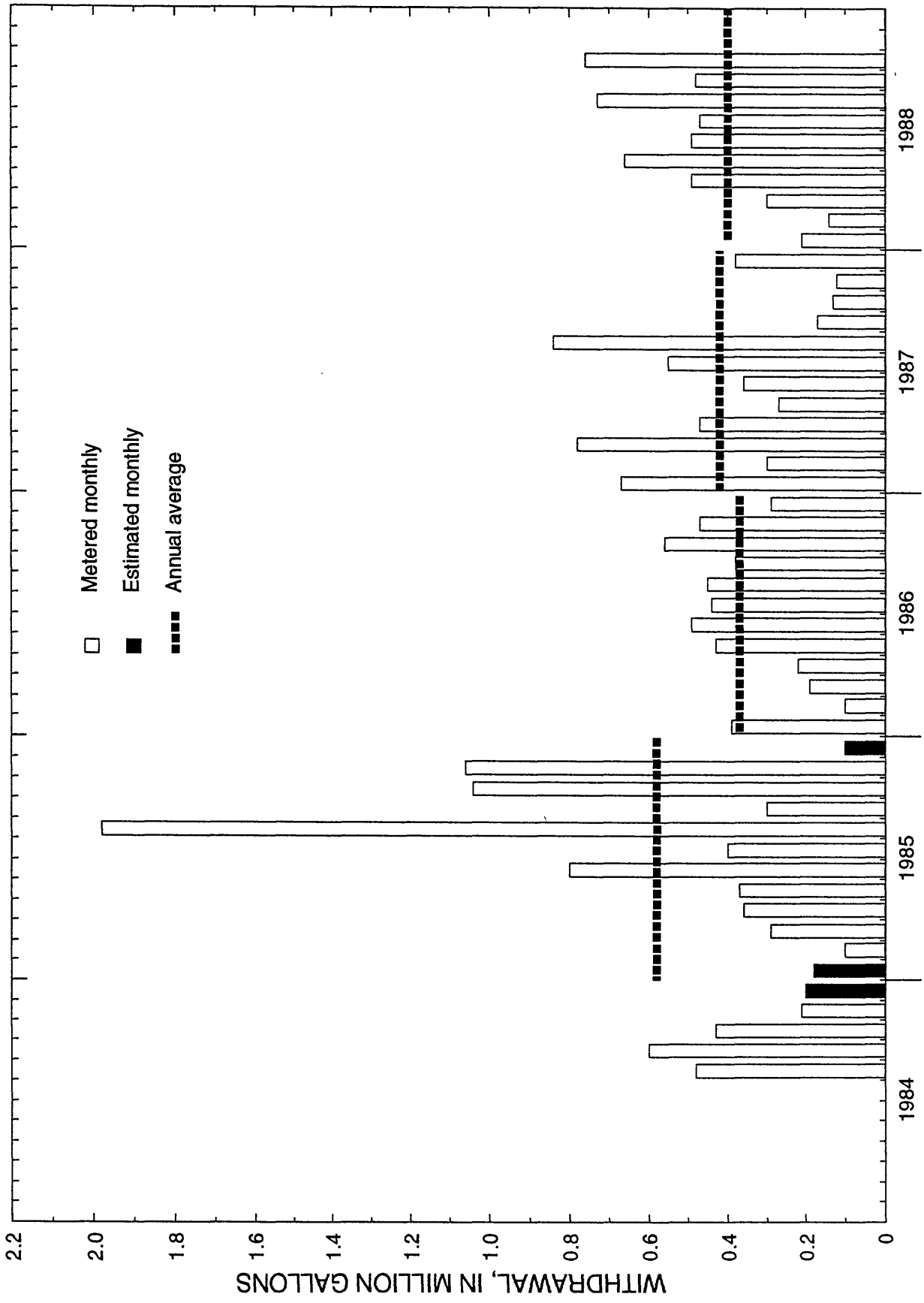


Figure 17. Monthly and annual ground-water withdrawals from well UE-1r WW in Yucca Flat, 1984-88. Pumping ceased in October 1988.

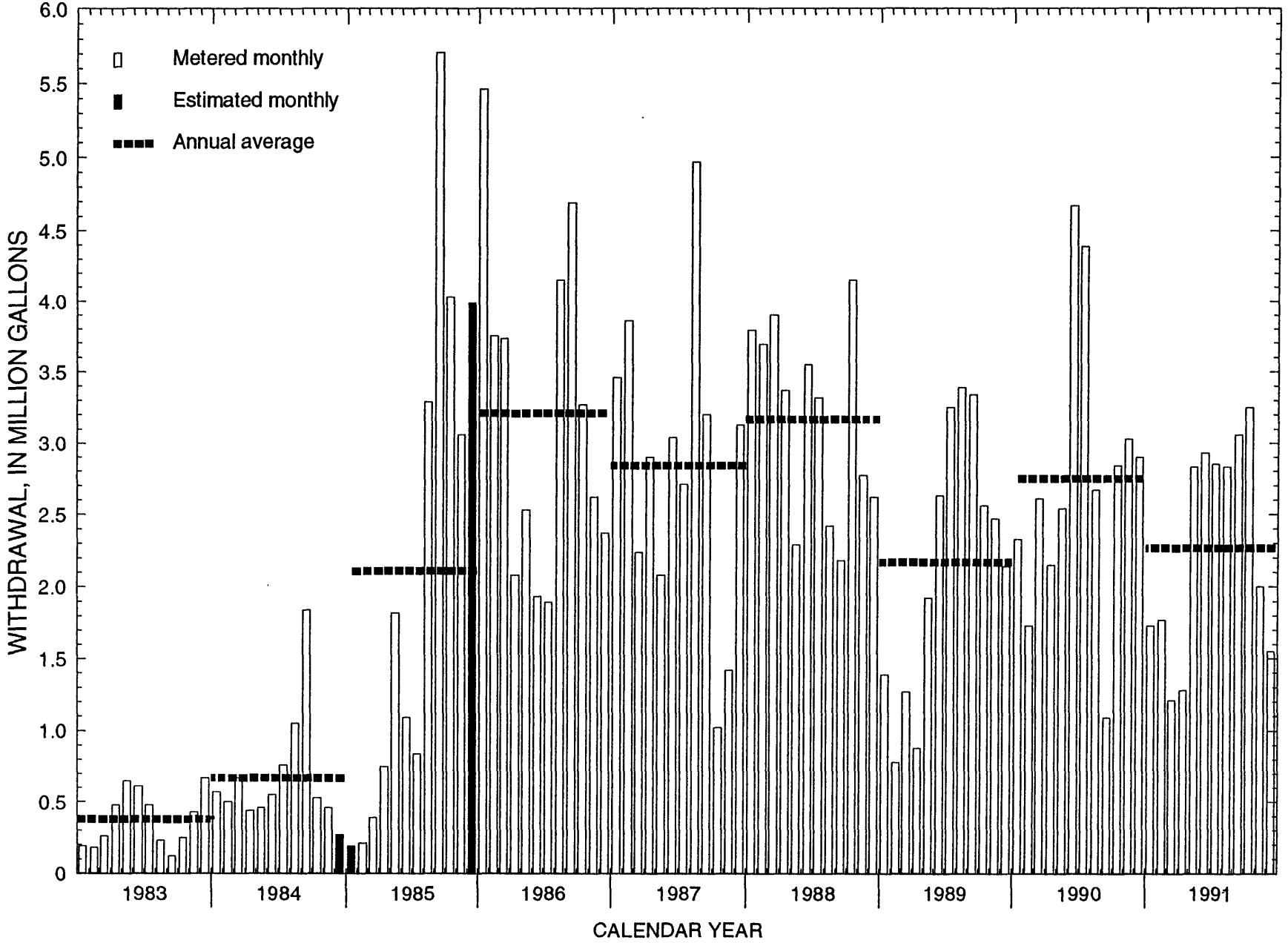


Figure 18. Monthly and annual ground-water withdrawals from well UE-16d WW in Yucca Flat, 1983-91.

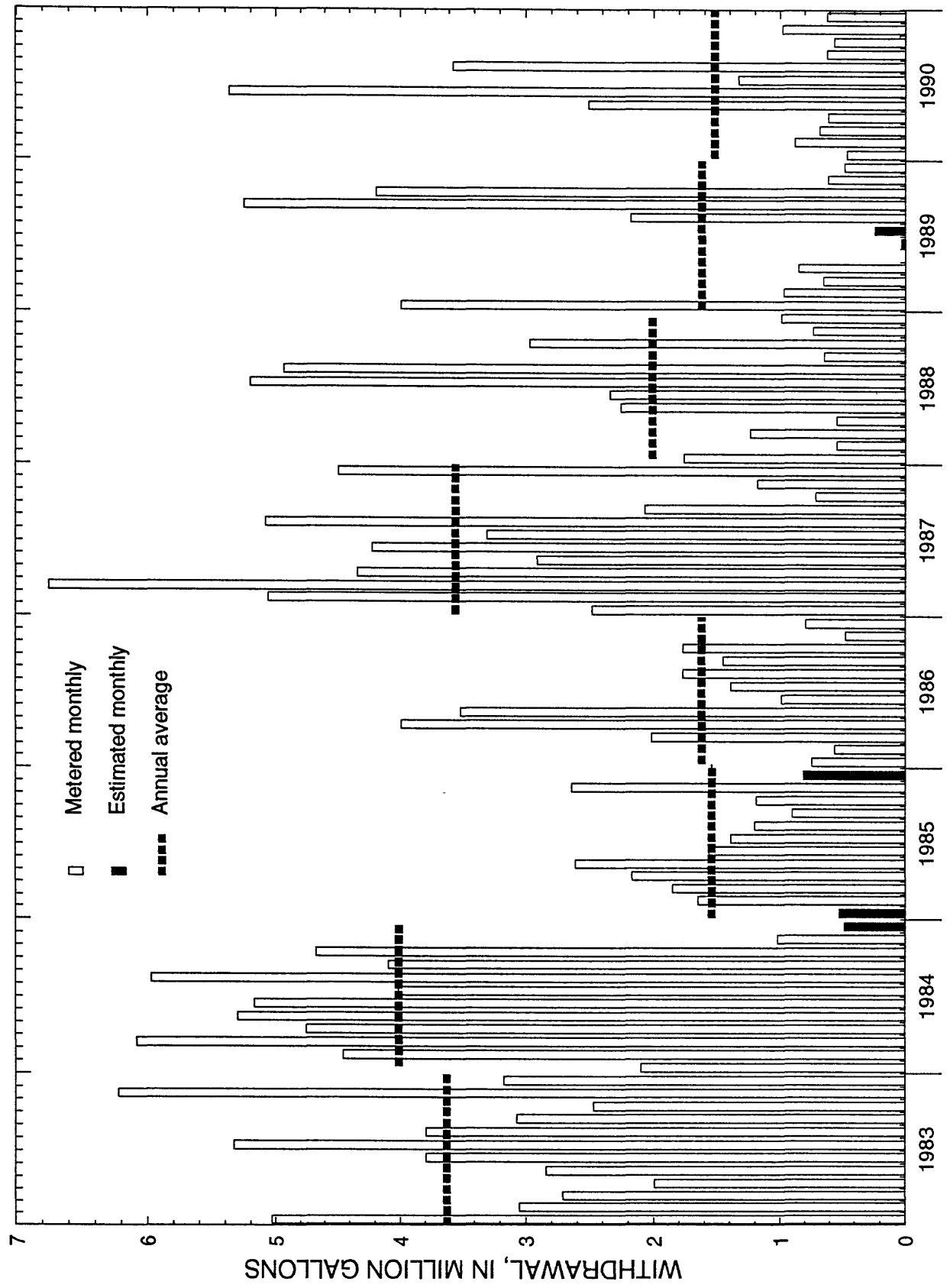


Figure 19. Monthly and annual ground-water withdrawals from well WW-2 in Yucca Flat, 1983-90. Pumping ceased December 1990.

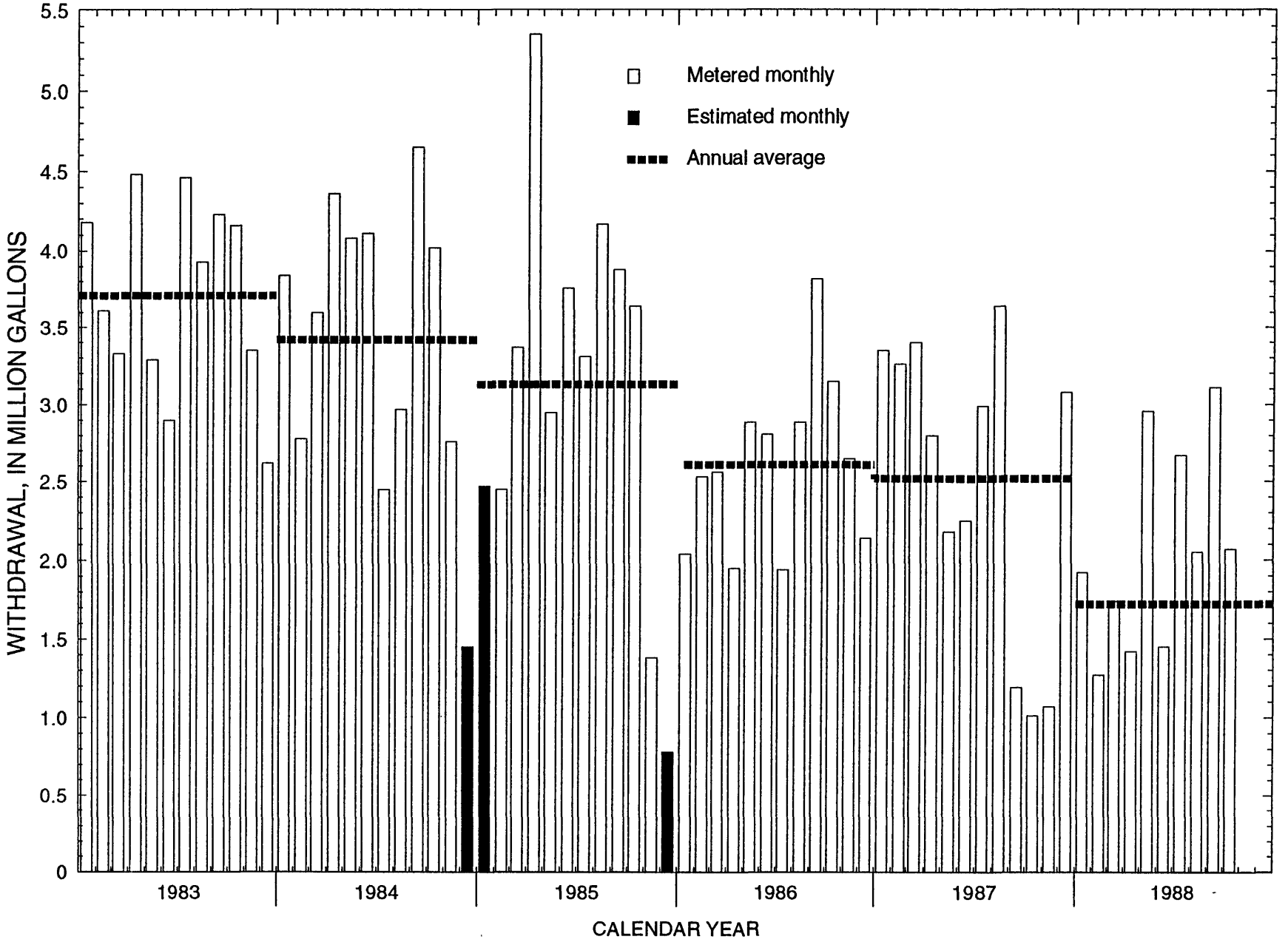


Figure 20. Monthly and annual ground-water withdrawals from well WW-A in Yucca Flat, 1983-88. Pumping ceased October 1988.

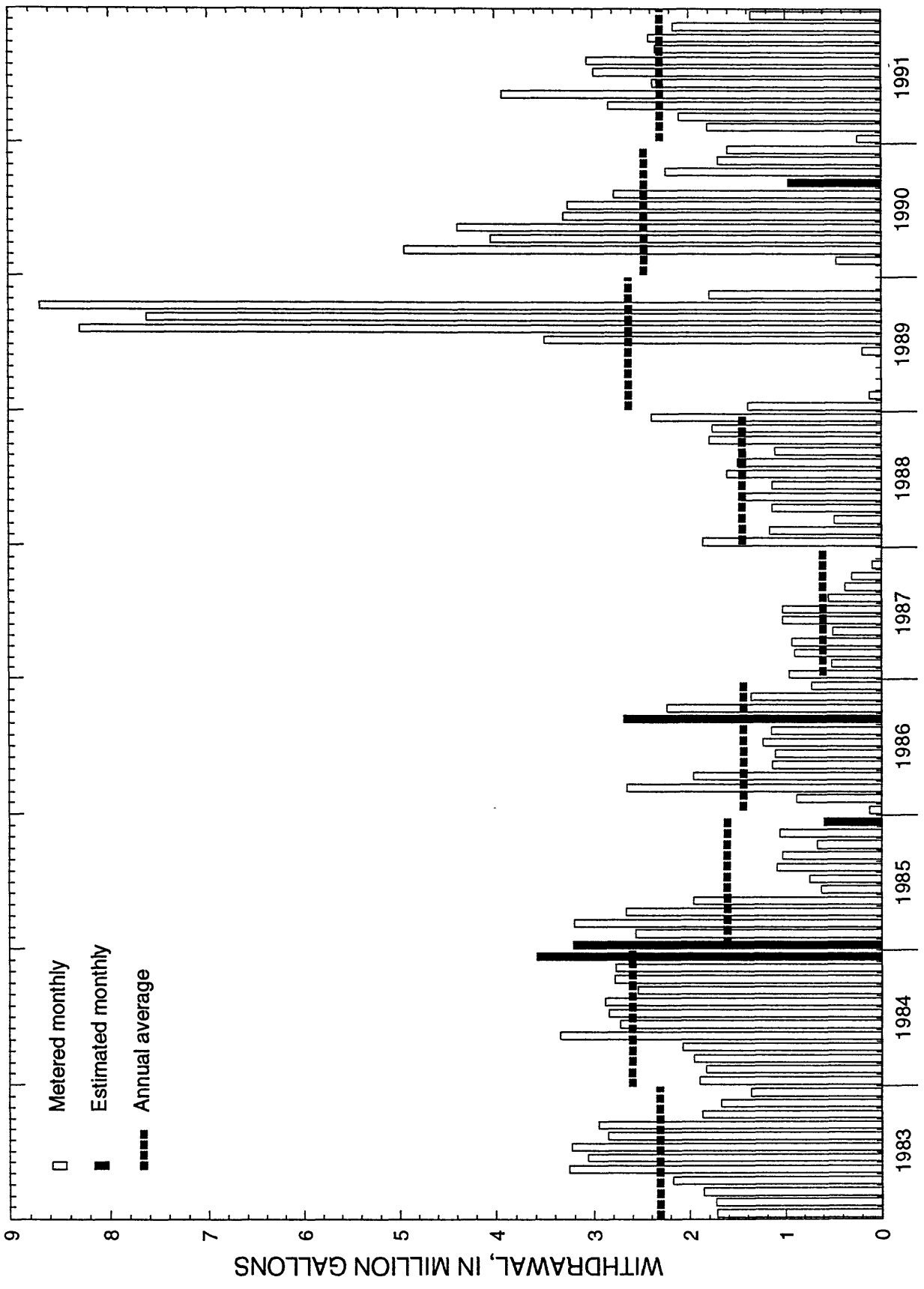


Figure 21. Monthly and annual ground-water withdrawals from well WW-C in Yucca Flat, 1983-91.

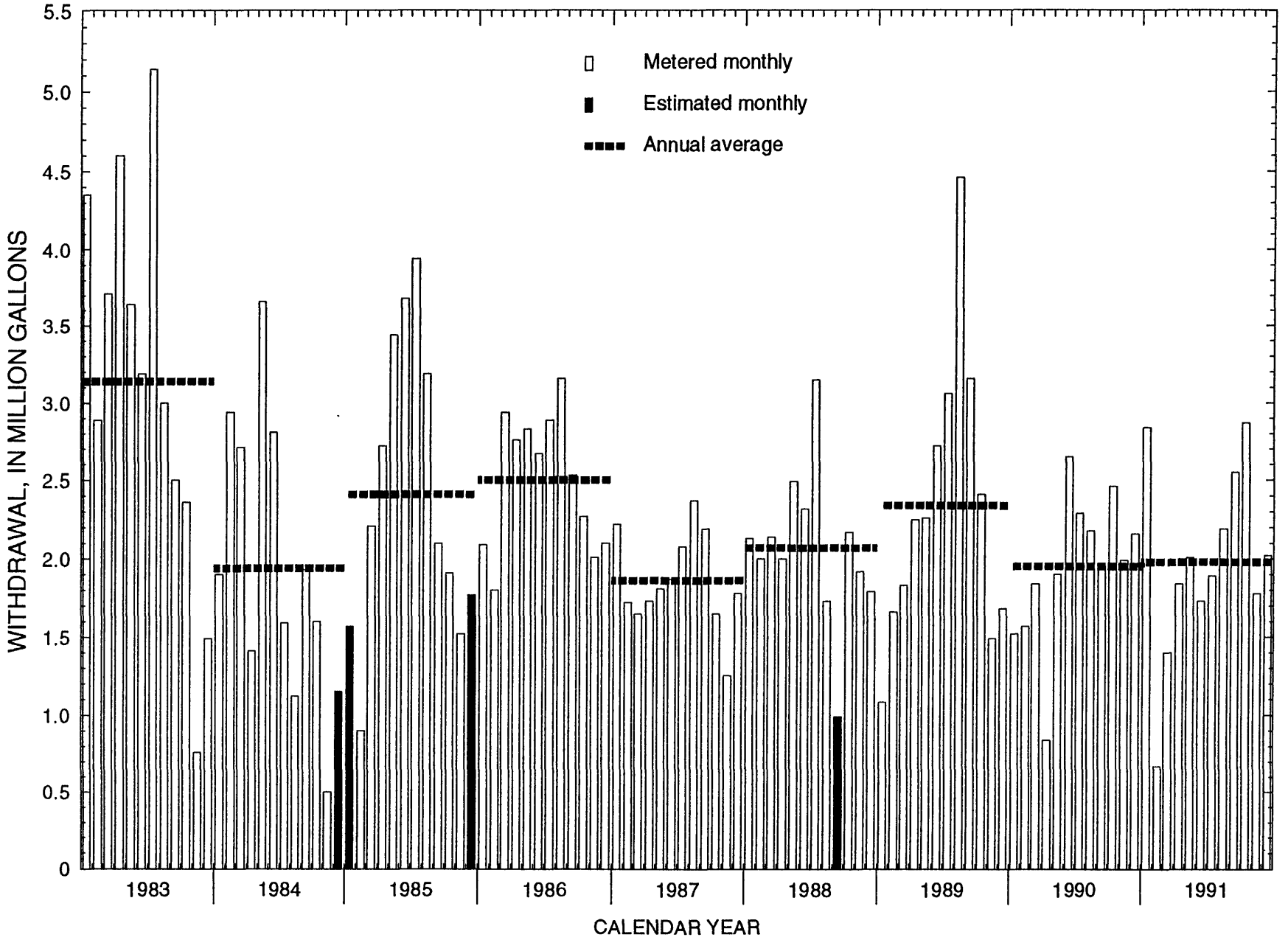


Figure 22. Monthly and annual ground-water withdrawals from well WW-C-1 in Yucca Flat, 1983-91.

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91

NTS hole number--Drill-hole number assigned by Raytheon Services Nevada; see section "Site Designations" in text.

USGS standard identification--U.S. Geological Survey site designation; see section "Site Designations" in text.

Date hole completed--Date that borehole construction work ceased; see section "Measurements" in text.

Land-surface altitude--Datum is sea level. Value may not represent current altitude; see section "Depth to Water" in text.

Hole depth--Datum is land surface. Represents most recent available accessible depth; see section "Measurements" in text.

Depth of open intervals--Datum is land surface. Bottom of deepest open interval may be deeper than present accessible hole depth; see section "Measurements" in text. **Type:** P, perforated or slotted casing; S, screen; X, open (uncased) hole.

Measurement--Datum is land surface. Value may not represent static water level; see section "Depth to Water" in text. **Method:** L, interpreted from geophysical logs; R, depth to water reported (measurement method not known); S, steel tape; T, electric tape; V, wire-line or iron-horse device. **Site status:** D, site was dry--depth to water greater than accessible hole depth; O, obstruction was encountered in hole above water surface; P, site was being pumped or swabbed; R, site was recently pumped or swabbed; S, nearby site was being pumped or swabbed; T, nearby site was recently pumped or swabbed; Z, other conditions that may affect the measured depth to water; see section "Measurements" in text.

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
					AREA 1								
UE-1a	370254116070601	37 02 54	116 07 06	02-02-64	4,303	562	78	947	X	10-26-89	545	V	-
							947	957	X	04-16-90	545	V	-
										11-07-90	546	V	-
										04-18-91	546	T	-
										09-17-91	546	T	-
UE-1b	370254116064201	37 02 54	116 06 42	02-10-64	4,273	701	76	80	X	10-26-89	645	V	-
							80	1,254	X	04-16-90	644	V	-
										11-07-90	645	V	-
										04-18-91	645	T	-
										09-17-91	645	T	-
UE-1c	370253116055201	37 02 53	116 05 52	02-11-64	4,206	1,772	74	80	X	10-26-89	1,297	V	-
							80	1,880	X	04-16-90	1,296	V	-
										11-07-90	1,297	V	-
										04-18-91	1,296	V	-
										09-17-91	1,297	V	-
UE-1h	370005116040301	37 00 05	116 04 03	07-03-68	3,995	3,228	2,134	2,349	X	10-04-89	1,557	V	-
							2,349	3,358	X	11-05-90	1,556	V	-
										04-18-91	1,556	V	-
										09-17-91	1,557	V	-
UE-1L	370254116082002	37 02 54	116 08 20	11-11-77	4,454	2,284	716	726	X	10-17-89	516	V	-
							726	2,284	X	04-13-90	515	V	-
										11-07-90	519	V	-
										04-18-91	519	T	-
										09-17-91	520	T	-
UE-1q	370337116033001	37 03 37	116 03 30	11-10-80	4,082	2,120	78	80	X	10-16-89	1,554	V	-
							80	2,437	X	04-16-90	1,553	V	-
										11-02-90	1,553	V	-
										04-18-91	1,553	V	-
										09-17-91	1,553	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
AREA 2													
UE-2ce [1]	370831116080701	37 08 31	116 08 07	01-23-77	4,764	1,649	1,384	1,624	P	10-02-89	1,449	V	-
							1,624	1,650	X	10-19-89	1,450	V	-
							1,444	1,504	P	11-07-89	1,449	V	-
							1,445	1,505	P	11-14-89	1,450	V	-
										11-28-89	1,450	V	-
										12-05-89	1,450	V	-
										12-11-89	1,450	V	-
										01-09-90	1,449	V	-
										01-23-90	1,449	V	-
										01-31-90	1,449	V	-
										02-05-90	1,449	V	-
										02-06-90	1,449	V	-
										03-02-90	1,449	V	-
										03-20-90	1,449	V	-
										05-01-90	1,448	V	-
										05-09-90	1,448	V	-
										05-17-90	1,448	V	-
										05-23-90	1,448	V	-
										05-30-90	1,448	V	-
										06-06-90	1,448	V	-
										06-15-90	1,448	V	-
										06-20-90	1,448	V	-
										06-27-90	1,448	V	-
										07-06-90	1,448	V	-
										07-11-90	1,448	V	-
										07-20-90	1,448	V	-
										07-30-90	1,448	V	-
										08-14-90	1,448	V	-
										08-27-90	1,448	V	-
										09-11-90	1,448	V	-
										09-14-90	1,448	V	-
										09-19-90	1,448	V	-
										09-19-90	1,448	V	-
										09-26-90	1,448	V	-
										10-11-90	1,448	V	-
										10-16-90	1,448	V	-
										10-25-90	1,448	S	-
										10-30-90	1,448	V	-
										10-31-90	1,448	V	-
										11-16-90	1,448	V	-
										11-30-90	1,448	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-2ce[1]	370831116080701	37 08 31	116 08 07	01-23-77	4,764	1,649	1,384	1,624	P	12-13-90	1,448	V	-
							1,624	1,650	X	01-09-91	1,448	V	-
							1,444	1,504	P	01-22-91	1,448	V	-
							1,445	1,505	P	01-24-91	1,448	V	-
										02-11-91	1,448	V	-
										02-27-91	1,447	V	-
										03-13-91	1,447	S	-
										03-26-91	1,447	V	-
										04-10-91	1,447	V	-
										05-09-91	1,447	V	-
										05-22-91	1,447	V	-
										06-05-91	1,446	V	-
										06-20-91	1,447	V	-
										07-03-91	1,447	V	-
										07-16-91	1,447	V	-
										07-30-91	1,447	V	-
										08-21-91	1,447	V	-
										08-29-91	1,447	V	-
										09-16-91	1,447	V	-
AREA 3													
TW-7[2]	370353116020201	37 03 53	116 02 02	06-27-54	4,063	2,239	1,710	1,720	P	10-16-89	1,622	V	-
							1,925	1,935	P	07-17-90	1,625	V	-
							1,970	2,014	P	08-03-90	1,625	V	-
							1,977	2,251	P	08-14-90	1,625	V	-
										08-27-90	1,625	V	-
										09-14-90	1,626	V	-
										11-15-90	1,626	V	-
										01-09-91	1,627	V	-
										01-24-91	1,627	V	-
										02-19-91	1,628	V	-
										03-18-91	1,627	V	-
										04-19-91	1,627	V	-
										05-16-91	1,627	V	-
										06-12-91	1,628	V	-
										07-10-91	1,628	V	-
										08-12-91	1,630	V	-
										09-12-91	1,629	V	-
U-3cn 5[3]	370320116012001	37 03 34	116 01 21	02-07-66	4,012	2,830	2,832	2,835	X	10-16-89	1,620	V	-
							2,835	3,028	X	04-19-90	1,620	V	-
							3,028	3,030	X	07-20-90	1,621	V	-
										11-07-90	1,620	V	-
										01-10-91	1,620	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
U-3cn 5[3]	370320116012001	37 03 34	116 01 21	02-07-66	4,012	2,830	2,832	2,835	X	01-29-91	1,620	V	-
							2,835	3,028	X	02-19-91	1,620	V	-
							3,028	3,030	X	03-18-91	1,620	V	-
										04-19-91	1,620	V	-
										05-16-91	1,620	V	-
										06-12-91	1,622	V	-
										07-10-91	1,620	V	-
										08-14-91	1,620	V	-
										09-12-91	1,620	V	-
U-3kv	370020116003701	37 00 20	116 00 37	08-27-79	3,956	1,548	117	119	X	04-17-90	1,533	V	-
							119	1,600	X	05-10-90	1,533	V	-
										07-13-90	1,534	V	-
										10-19-90	1,534	V	-
										01-28-91	1,534	V	-
										04-17-91	--	V	D
										08-13-91	--	V	D
U-3mi	370020115593001	37 00 21	115 59 30	01-20-86	4,004	1,761	372	380	X	05-01-90	1,579	V	-
							380	1,794	X	07-13-90	1,578	V	-
										11-05-90	1,577	V	-
										01-28-91	1,576	V	-
										04-17-91	1,574	V	-
										08-13-91	1,573	V	-
										09-18-91	1,573	V	-
U-3mt	370348116024301	37 03 48	116 02 43	05-31-90	4,067	1,545	110	1,550	X	07-01-90	--	L	D
										05-21-91	1,537	V	-
										05-29-91	1,537	V	-
										06-03-91	1,537	V	-
										06-11-91	1,538	V	-
										06-17-91	1,537	V	-
										06-18-91	1,537	V	-
UE-3e 4	370411116025909	37 04 11	116 02 59	01-23-90	4,082	2,300	1,436	1,442	X	01-24-90	1,991	V	R
							1,442	2,300	X	01-25-90	1,785	V	Z
										01-30-90	1,545	V	-
										01-31-90	1,545	V	-
										02-06-90	1,543	V	-
										02-26-90	1,537	V	-
UE-3e 4-1	370411116025910	37 04 11	116 02 59	03-19-90	4,082	2,181	2,150	2,171	S	03-29-90	1,083	V	Z
										03-30-90	1,080	V	-
										04-03-90	1,136	V	R
										05-09-90	1,117	V	-
										05-16-90	1,093	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-3e 4-1	370411116025910	37 04 11	116 02 59	03-19-90	4,082	2,181	2,150	2,171	S	05-23-90	1,069	V	-
										05-30-90	1,071	V	-
										06-12-90	1,104	V	R
										06-20-90	1,085	V	R
										06-27-90	1,082	V	-
										07-05-90	1,079	V	-
										07-11-90	1,090	V	-
										07-17-90	1,094	V	-
										07-20-90	1,091	V	-
										08-03-90	1,304	V	R
										08-13-90	1,087	V	-
										08-17-90	1,081	V	-
										08-28-90	1,065	V	-
										09-12-90	1,057	V	-
										09-24-90	1,065	V	-
										10-05-90	1,067	V	-
										10-23-90	1,053	V	-
										11-15-90	1,049	V	-
										11-30-90	1,048	V	-
										12-18-90	1,058	V	R
										01-07-91	1,050	V	-
										01-22-91	1,050	V	-
										02-11-91	1,045	V	-
										02-25-91	1,041	V	-
										03-14-91	1,032	V	-
										03-25-91	1,038	V	-
										04-09-91	1,038	V	-
										04-22-91	1,037	V	-
										05-08-91	1,038	V	-
										05-21-91	1,024	V	-
										06-03-91	1,026	V	-
										06-17-91	1,045	V	-
										06-19-91	1,045	V	-
										07-03-91	1,044	V	-
										07-15-91	1,046	V	-
										07-31-91	1,044	V	-
										08-12-91	1,048	V	-
										08-21-91	1,041	V	-
										08-29-91	1,042	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-3e 4-2	370411116025911	37 04 11	116 02 59	03-22-90	4,082	1,919	1,887	1,908	S	03-29-90	1,296	V	Z
										03-30-90	1,291	V	-
										03-30-90	1,290	V	-
										03-30-90	1,290	V	T
										04-03-90	1,297	V	R
										05-09-90	1,267	V	-
										05-16-90	1,264	V	-
										05-23-90	1,263	V	-
										05-30-90	1,263	V	-
										06-06-90	1,271	V	R
										06-12-90	1,270	V	-
										06-20-90	1,260	V	-
										06-27-90	1,254	V	-
										07-05-90	1,244	V	-
										07-11-90	1,239	V	-
										07-17-90	1,236	V	-
										07-20-90	1,234	V	-
										08-03-90	1,297	V	R
										08-13-90	1,269	V	-
										08-17-90	1,268	V	-
										08-28-90	1,268	V	-
										09-12-90	1,268	V	-
										09-24-90	1,269	V	-
										10-05-90	1,270	V	-
										10-23-90	1,271	V	-
										11-15-90	1,272	V	-
										11-30-90	1,273	V	-
										12-18-90	1,277	V	R
										01-07-91	1,276	V	-
										01-22-91	1,276	V	-
										02-11-91	1,278	V	-
										02-25-91	1,279	V	-
										03-14-91	1,279	V	-
										03-25-91	1,279	V	-
										04-09-91	1,280	V	-
										04-22-91	1,281	V	-
										05-08-91	1,281	V	-
										05-21-91	1,282	V	-
										06-03-91	1,283	V	-
										06-17-91	1,284	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-3e 4-2	370411116025911	37 04 11	116 02 59	03-22-90	4,082	1,919	1,887	1,908	S	07-03-91	1,286	V	-
										07-15-91	1,286	V	-
										07-31-91	1,287	V	-
										08-12-91	1,288	V	-
										08-21-91	1,288	V	-
										09-12-91	1,290	V	-
UE-3e 4-3	370411116025912	37 04 11	116 02 59	03-26-90	4,082	1,661	1,619	1,640	S	03-29-90	1,551	V	Z
										03-30-90	1,550	V	-
										04-03-90	1,551	V	-
										05-09-90	1,559	V	-
										05-16-90	1,554	V	-
										05-23-90	1,552	V	-
										05-30-90	1,552	V	-
										06-12-90	1,558	V	-
										06-20-90	1,552	V	-
										06-27-90	1,552	V	-
										07-05-90	1,552	V	-
										07-11-90	1,552	V	-
										07-17-90	1,552	V	-
										07-20-90	1,552	V	-
										08-03-90	1,560	V	R
										08-13-90	1,554	V	-
										08-17-90	1,553	V	-
										08-28-90	1,552	V	-
										09-12-90	1,552	V	-
										09-24-90	1,553	V	-
										10-05-90	1,553	V	-
										10-23-90	1,553	V	-
										11-15-90	1,552	V	-
										11-30-90	1,553	V	-
										12-18-90	1,555	V	R
										01-07-91	1,553	V	-
										01-22-91	1,553	V	-
										02-11-91	1,553	V	-
										02-25-91	1,553	V	-
										03-14-91	1,552	V	-
										03-25-91	1,552	V	-
										04-09-91	1,552	V	-
										04-22-91	1,553	V	-
										05-08-91	1,552	V	-
										05-21-91	1,552	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-3e 4-3	370411116025912	37 04 11	116 02 59	03-26-90	4,082	1,661	1,619	1,640	S	06-03-91	1,552	V	-
										06-17-91	1,553	V	-
										07-03-91	1,553	V	-
										07-15-91	1,552	V	-
										07-31-91	1,552	V	-
										08-12-91	1,552	V	-
										08-21-91	1,552	V	-
										09-12-91	1,552	V	-
					AREA 4								
TW-D	370418116044501	37 04 28	116 04 30	01-08-61	4,152	1,950	1,772	1,792	P	10-16-89	1,722	V	-
							1,792	1,812	P	04-16-90	1,722	V	-
							1,812	1,832	P	10-19-90	1,723	V	-
							1,832	1,882	P	01-28-91	1,723	V	-
							1,900	1,950	X	04-19-91	1,722	V	-
										07-26-91	1,722	V	-
										09-18-91	1,722	V	-
U-4av	370547116041103	37 05 47	116 04 11	08-18-90	4,178	1,687	117	118	X	08-28-90	1,686	V	Z
							118	119	X	09-12-90	1,679	V	-
							119	1,700	X	10-03-90	1,672	V	-
										10-19-90	1,666	V	-
										10-31-90	1,662	V	-
										11-30-90	1,652	V	-
										01-07-91	1,640	V	-
										02-04-91	1,632	V	-
										03-15-91	1,621	V	-
										04-09-91	1,614	V	-
										04-22-91	1,611	V	-
										04-22-91	1,611	V	-
										05-29-91	1,601	V	-
										06-25-91	1,595	V	-
										07-16-91	1,590	V	-
										08-20-91	1,582	V	-
U-4u PS 2A[3]	370513116025101	37 05 13	116 02 57	08-30-90	4,117	2,280	1,643	1,770	P	09-26-90	1,636	V	Z
							1,610	2,280	X	10-03-90	1,636	V	-
										10-18-90	1,637	V	-
										10-31-90	1,636	V	-
										11-15-90	1,636	V	-
										12-12-90	1,636	V	-
										01-10-91	1,636	V	-
										01-18-91	1,636	V	-
										02-04-91	1,642	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
U-4u PS 2A[3]	370513116025101	37 05 13	116 02 57	08-30-90	4,117	2,280	1,643	1,770	P	03-15-91	1,642	V	-
							1,610	2,280	X	04-09-91	1,641	V	-
										04-22-91	1,641	V	-
										05-21-91	1,641	V	-
										06-03-91	1,641	V	-
										07-09-91	1,641	V	-
										08-12-91	1,642	V	-
										09-12-91	1,641	V	-
										03-22-90	1,627	V	-
										05-01-90	1,626	V	-
										05-09-90	1,626	V	-
										05-17-90	1,626	V	-
										05-23-90	1,626	V	-
										05-30-90	1,626	V	-
										06-06-90	1,626	V	-
										06-15-90	1,626	V	-
										06-20-90	1,626	V	-
										06-27-90	1,626	V	-
										07-06-90	1,626	V	-
										07-11-90	1,626	V	-
UE-4av[4]	370547116041104	37 05 47	116 04 11	07-27-90	4,177	1,808	116	125	X	01-07-91	1,570	V	Z
							125	1,582	X	02-04-91	1,571	V	Z
							1,720	1,985	X	04-09-91	1,570	V	Z
										06-12-91	1,560	V	-
										07-16-91	1,527	V	-
										08-20-91	1,540	V	-
UE-4t[5]	370556116025404	37 05 56	116 02 54	05-05-89	4,144	1,721	1,619	1,721	X	01-24-90	888	V	-
										07-17-90	876	V	Z
										08-01-90	877	V	R
UE-4t 1	370556116025405	37 05 56	116 02 54	10-24-90	4,144	2,010	1,906	2,010	X	11-02-90	402	V	Z
							1,963	1,992	P	11-15-90	384	V	-
										11-30-90	369	V	-
										12-18-90	353	V	-
										01-07-91	346	V	-
										01-22-91	342	V	-
										02-11-91	333	V	-
										02-25-91	328	V	-
										03-14-91	323	V	-
										03-25-91	320	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-4t 1	370556116025405	37 05 56	116 02 54	10-24-90	4,144	2,010	1,906	2,010	X	04-09-91	318	T	-
							1,963	1,992	P	04-22-91	316	T	-
										05-08-91	313	T	-
										05-20-91	311	T	-
										06-06-91	309	T	-
										06-19-91	309	V	-
										07-05-91	306	T	-
										07-15-91	305	T	-
										07-29-91	304	T	-
										08-12-91	303	T	-
										08-28-91	302	T	-
										09-12-91	301	T	-
UE-4t 2	370556116025406	37 05 56	116 02 54	10-24-90	4,144	1,754	1,564	1,754	X	11-02-90	361	V	Z
							1,664	1,724	P	11-15-90	363	V	-
										11-30-90	365	V	-
										12-18-90	365	V	-
										01-07-91	371	V	-
										01-22-91	372	V	-
										02-11-91	373	V	-
										02-25-91	374	V	-
										03-14-91	375	V	-
										03-25-91	375	V	-
										04-09-91	376	T	-
										04-22-91	376	T	-
										05-08-91	377	T	-
										05-20-91	378	T	-
										06-06-91	378	T	-
										06-19-91	379	V	-
										06-19-91	378	V	-
										07-05-91	382	T	-
										07-15-91	382	T	-
										07-29-91	382	T	-
										08-12-91	383	T	-
										08-28-91	383	T	-
										09-12-91	384	T	-
AREA 5													
RNM-2S	364922115580101	36 49 21	115 58 01	04-01-74	3,133	1,120	1,038	1,119	P	09-27-90	728	V	-
							1,120	1,156	X	10-03-90	728	V	-
										10-12-90	728	V	-
										10-19-90	728	V	-
										10-26-90	728	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
RNM-2S	364922115580101	36 49 21	115 58 01	04-01-74	3,133	1,156	1,038	1,119	P	11-02-90	726	T	-
							1,120	1,156	X	11-15-90	726	V	-
										12-12-90	--	-	P
										01-10-91	738	T	-
										01-16-91	727	T	-
										01-24-91	726	T	-
										02-05-91	--	-	P
										02-21-91	--	-	P
										04-11-91	--	-	P
										04-26-91	--	-	P
										05-06-91	728	T	R
										05-17-91	--	-	P
										05-29-91	--	-	P
										06-25-91	--	-	P
										07-09-91	--	-	P
										08-16-91	--	-	P
										08-28-91	--	-	P
										09-27-91	727	T	-
UE-5f	365213115564401	36 52 13	115 56 44	06-14-65	3,301	1,100	83	90	X	02-21-91	--	V	O
							90	1,100	X				
UE-5n	364915115574101	36 49 15	115 57 41	03-01-76	3,112	1,687	720	730	P	10-26-89	706	V	-
							1,523	1,687	X	12-15-89	705	S	-
										04-13-90	705	V	-
										05-29-90	705	V	-
										10-26-90	705	S	-
										01-10-91	705	T	-
										02-21-91	705	V	-
										03-05-91	705	S	-
										04-11-91	705	T	-
										04-26-91	705	T	-
										05-17-91	704	T	-
										05-29-91	704	T	-
										06-25-91	706	T	-
										07-09-91	704	T	-
										07-19-91	704	S	-
										08-16-91	704	T	-
										08-28-91	704	T	-
										09-27-91	704	T	-
WW-5b	364805115580801	36 48 05	115 58 08	05-07-51	3,092	900	700	900	P	05-06-91	689	T	-
WW-5c	364708115574401	36 47 20	115 57 49	03-24-54	3,081	1,200	887	1,187	P	05-06-91	--	-	P
							1,187	1,200	X				

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
					AREA 6								
TW-B	365849116002101	36 58 45	116 00 49	05-14-61	3,929	1,670	1,432	1,452	P	10-26-89	1,504	V	-
							1,512	1,656	P	12-15-89	1,504	S	-
										04-17-90	1,504	V	-
										11-05-90	1,504	V	-
										01-28-91	1,504	V	-
										03-06-91	1,504	S	-
										04-17-91	1,504	V	-
										07-18-91	1,504	S	-
										09-18-91	1,504	V	-
UE-6d	365905116033201	36 59 05	116 03 32	05-01-68	3,947	3,864	2,125	2,617	X	10-04-89	1,516	V	-
							2,617	3,886	X	01-18-90	1,516	V	-
							3,886	3,896	X	04-16-90	1,515	V	-
										11-05-90	1,515	V	-
										01-28-91	1,515	V	-
										04-17-91	1,515	V	-
										07-31-91	1,515	V	-
										09-18-91	1,516	V	-
UE-6e	365905116012001	36 59 05	116 01 20	11-01-73	3,936	4,208	2,090	2,886	X	10-25-89	1,509	V	-
							2,886	4,209	X	04-16-90	1,508	V	-
										11-05-90	1,509	V	-
										04-17-91	1,507	V	-
										08-13-91	1,510	V	-
										09-18-91	1,510	V	-
WW-4	365418116012601	36 54 18	116 01 26	11-18-81	3,602	1,479	942	1,436	P	02-21-90	836	V	-
							1,438	1,479	X	02-22-90	836	V	-
										02-22-90	835	V	-
										02-23-90	836	V	P
										02-26-90	835	V	-
										09-19-90	835	V	R
										11-05-90	--	-	P
										01-14-91	835	V	-
										02-19-91	--	-	P
										03-18-91	--	-	P
										04-26-91	--	-	P
										05-06-91	--	-	P
										06-10-91	--	-	P
										07-05-91	835	T	-
										08-16-91	835	T	-
										08-28-91	--	-	P
										09-27-91	--	-	P

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
WW-4a	365412116013901	36 54 12	116 01 39	02-21-90	3,606	1,502	1,066	1,281	P	02-22-90	836	V	-
							1,365	1,457	P	02-23-90	--	-	P
							1,501	1,516	X	02-26-90	835	V	-
										05-29-90	836	V	-
										07-30-90	836	V	-
										10-26-90	835	V	-
										12-12-90	835	V	-
										01-14-91	835	V	-
										02-19-91	836	V	S
										03-18-91	835	V	-
										04-26-91	836	T	-
										05-06-91	835	T	-
										06-10-91	835	T	-
										07-05-91	836	T	-
										08-16-91	835	T	-
										08-23-91	835	T	-
AREA 7													
U-7cb	370514116000601	37 05 14	116 00 06	02-14-86	4,286	1,796	299	310	X	10-16-89	1,784	V	-
							310	1,850	X	03-07-90	1,785	S	-
										03-12-90	1,786	R	-
										03-27-90	1,785	S	-
										04-17-90	1,785	V	-
										05-10-90	1,785	V	-
										06-15-90	1,784	R	-
										06-28-90	1,785	S	-
										10-02-90	1,782	R	-
										11-17-90	1,784	R	-
										12-05-90	1,784	R	-
										01-15-91	1,784	R	-
										01-18-91	1,786	V	-
										02-27-91	1,786	V	-
UE-7nS[1]	370556116000901	37 05 56	116 00 09	07-14-76	4,370	2,205	1,995	2,199	P	10-25-89	1,969	V	-
							2,199	2,205	X	11-08-89	1,969	V	-
							1,960	2,020	P	11-14-89	1,969	V	-
							1,962	2,022	P	11-16-89	1,969	V	-
										11-17-89	1,969	V	-
										11-28-89	1,970	V	-
										12-05-89	1,969	V	-
										12-06-89	1,969	V	-
										12-12-89	1,970	V	-
										01-09-90	1,969	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-7nS[1]	370556116000901	37 05 56	116 00 09	07-14-76	4,370	2,205	1,995	2,199	P	01-23-90	1,969	V	-
							2,199	2,205	X	01-24-90	1,969	V	-
							1,960	2,020	P	01-25-90	1,969	V	-
							1,962	2,022	P	01-31-90	1,968	V	-
										02-02-90	1,969	V	-
										05-01-90	1,969	V	-
										05-09-90	1,969	V	-
										05-17-90	1,968	V	-
										05-23-90	1,968	V	-
										05-30-90	1,968	V	-
										06-06-90	1,969	V	-
										06-15-90	1,968	V	-
										06-20-90	1,969	V	-
										06-27-90	1,969	V	-
										07-06-90	1,969	V	-
										07-11-90	1,969	V	-
										07-20-90	1,969	V	-
										07-30-90	1,969	V	-
										08-14-90	1,969	V	-
										08-27-90	1,969	V	-
										09-14-90	1,969	V	-
										09-20-90	1,969	V	-
										09-20-90	1,970	V	-
										09-21-90	1,970	V	-
										09-24-90	1,970	V	-
										10-05-90	1,970	V	-
										10-11-90	1,970	V	-
										10-16-90	1,969	V	-
										10-24-90	1,969	S	-
										10-30-90	1,969	V	-
										11-16-90	1,970	V	-
										11-30-90	1,969	V	-
										12-13-90	1,969	V	-
										12-18-90	1,969	V	-
										01-09-91	1,969	V	-
										01-17-91	1,970	V	-
										02-11-91	1,969	V	-
										02-26-91	1,969	S	-
										03-06-91	1,969	S	-
										03-13-91	1,968	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-7nS[1]	370556116000901	37 05 56	116 00 09	07-14-76	4,370	2,205	1,995	2,199	P	03-26-91	1,968	V	-
							2,199	2,205	X	04-10-91	1,970	V	-
							1,960	2,020	P	05-09-91	1,969	V	-
							1,962	2,022	P	05-22-91	1,969	V	-
										06-05-91	1,968	V	-
										06-20-91	1,969	V	-
										07-03-91	1,969	V	-
										07-16-91	1,969	V	-
										07-31-91	1,969	V	-
										08-15-91	1,969	V	-
										09-16-91	1,969	V	-
AREA 11													
UE-11a	365259115571601	36 52 59	115 57 16	09-04-82	3,547	1,400	599	610	X	09-27-91	1,132	V	Z
							610	1,400	X				
AREA 12													
U-12s	371342116125102	37 13 42	116 12 51	03-15-66	6,794	1,467	12	583	X	10-11-89	941	V	-
							583	1,480	X	04-24-90	940	V	-
										06-07-90	940	V	-
										07-10-90	940	V	-
										12-11-90	940	V	-
										01-29-91	940	V	-
										05-01-91	940	V	-
										07-30-91	940	V	-
										09-23-91	940	V	-
UE-12t 6[6]	371332116112802	37 13 32	116 11 28	09-16-88	6,907	1,461	23	75	X	10-12-89	824	V	-
							416	416	P	04-24-90	833	V	-
							466	466	P	06-07-90	835	V	-
							490	490	P	07-10-90	834	V	-
							540	540	P	10-29-90	838	V	-
							570	570	P	01-29-91	841	V	-
							620	620	P	05-01-91	843	T	-
							674	1,461	X	07-30-91	844	T	-
										09-23-91	845	T	-
AREA 14													
UE-14b	365550116091101	36 55 50	116 09 11	01-30-84	4,353	3,680	2,051	2,060	X	10-17-89	1,666	V	-
							2,060	3,680	X	04-13-90	1,666	V	-
										07-13-90	1,667	V	-
										11-06-90	1,666	V	-
										05-01-91	1,666	V	-
										09-25-91	1,667	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
					AREA 16								
UE-16f	370208116092402	37 02 08	116 09 24	09-23-77	4,652	1,409	1,293	1,479	X	10-17-89	367	V	-
										04-13-90	367	V	-
										11-07-90	367	V	-
										04-18-91	367	T	-
										08-28-91	367	T	-
										09-25-91	367	T	-
					AREA 17								
TW-1	370929116132311	37 09 29	116 13 23	- -80	6,156	3,694	1,910	1,950	P	10-04-89	1,466	V	-
							2,030	2,050	P	05-08-90	1,465	V	-
							2,100	2,160	P	07-10-90	1,465	V	-
							2,230	2,270	P	10-29-90	1,465	V	-
							2,370	2,430	P	02-12-91	1,465	V	-
										05-01-91	1,464	V	-
										07-30-91	1,465	V	-
										09-23-91	1,465	V	-
UE-17a	370425116095801	37 04 25	116 09 58	09-23-76	4,696	1,207	745	825	P	10-04-89	638	V	S
							1,005	1,015	P	04-13-90	637	V	S
							1,065	1,190	P	09-13-90	637	V	S
							1,210	1,214	X	05-01-91	637	T	S
										09-23-91	637	T	-
					AREA 18								
UE-18r	370806116264001	37 08 05	116 26 41	01-24-68	5,538	4,930	1,629	1,632	X	10-12-89	1,365	V	-
							1,632	4,988	X	04-12-90	1,365	V	-
							4,988	5,004	X	11-06-90	1,365	V	-
										04-24-91	1,365	V	-
										09-25-91	1,365	V	-
UE-18t	370741116194501	37 07 41	116 19 45	10-05-78	5,201	2,600	1,896	2,600	X	10-12-89	916	V	-
										04-12-90	915	V	-
										11-06-90	916	V	-
										04-24-91	915	V	-
										09-25-91	915	V	-
					AREA 19								
U-19av	371519116223301	37 15 19	116 22 33	04-03-89	6,514	1,000	52	56	X	11-29-90	--	V	D
							56	2,144	X				
U-19az	371339116221601	37 13 39	116 22 16	12-05-88	6,753	2,130	77	79	X	10-11-89	2,079	V	-
							79	2,130	X	04-11-90	2,079	V	-
										07-02-90	2,079	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
U-19ba	371746116184601	37 17 46	116 18 46	09-11-89	7,037	2,177	69	70	X	10-02-89	2,160	V	Z
							70	2,177	X	10-10-89	2,159	V	-
										10-17-89	2,159	V	-
										10-23-89	2,158	V	-
										10-30-89	2,158	V	-
										11-09-89	2,157	V	-
										11-13-89	2,157	V	-
										11-27-89	2,157	V	-
										11-29-89	2,157	V	-
										12-04-89	2,156	V	-
										01-22-90	2,154	V	-
										02-13-90	2,155	V	-
										02-26-90	2,154	V	-
										03-08-90	2,153	V	-
										04-09-90	2,153	V	-
										05-07-90	2,153	V	-
										05-14-90	2,153	V	-
										05-22-90	2,153	V	-
										05-31-90	2,153	V	-
										06-05-90	2,153	V	-
										06-25-90	2,153	V	-
										07-03-90	2,153	V	-
										08-02-90	2,153	V	-
										12-11-90	2,152	V	-
U-19ba 1	371746116184701	37 17 46	116 18 47	09-17-90	7,038	2,183	65	2,340	X	10-10-90	--	V	D
										12-11-90		V	D
U-19ba 2	371745116184701	37 17 46	116 18 47	09-26-90	7,039	2,213	64	67	X	10-02-90	--	V	D
							67	2,340	X				
U-19ba 3	371746116184702	37 17 47	116 18 47	11-28-90	7,037	2,223	60	2,340	X	12-11-90	--	V	D
U-19bf	372046116182701	37 20 46	116 18 27	01-11-90	6,829	527	60	1,546	X	11-29-90	--	V	O
U-19bg	371621116213501	37 16 21	116 21 35	04-20-90	6,691	2,109	72	2,157	X	06-26-90	--	V	D
										08-16-90	--	V	D
										06-06-91	--	V	D
U-19bg 1	371620116213501	37 16 20	116 21 35	07-15-91	6,694	2,218	74	75	X	08-20-91	2,119	V	Z
							75	2,250	X	09-09-91	2,119	V	-
										09-24-91	2,119	V	-
U-19bh	371349116222001	37 13 49	116 22 20	06-14-91	6,768	2,148	70	72	X	06-24-91	2,140	V	Z
							72	2,148	X	07-02-91	2,135	V	-
										07-08-91	2,131	V	-
										07-26-91	2,122	V	-
										08-14-91	2,116	V	-
										09-09-91	2,108	V	-
										09-24-91	2,105	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-19h [1]	372034116222503	37 20 34	116 22 25	08-19-65	6,780	2,293	--	--	-	11-29-90	1,948	V	-
										02-12-91	1,949	V	-
										04-23-91	1,949	V	-
										07-17-91	1,951	S	-
										09-24-91	1,952	V	-
					AREA 20								
PM-1	371649116242102	37 16 49	116 24 21	05-03-64	6,558	7,731	7,543	7,550	X	01-03-90	2,100	V	-
							7,550	7,731	X	01-04-90	2,100	V	-
										01-24-90	2,099	V	-
										04-09-90	2,098	V	-
										05-08-90	2,098	V	-
										06-04-90	2,098	V	-
										06-14-90	2,099	V	-
										06-18-90	2,099	V	-
										06-25-90	2,099	V	-
										07-09-90	2,099	V	-
										08-02-90	2,099	V	-
										08-16-90	2,099	V	-
										08-29-90	2,099	V	-
										09-13-90	2,099	V	-
										11-29-90	2,099	V	-
										01-08-91	2,099	V	-
										02-20-91	2,099	V	-
										03-22-91	2,098	V	-
										04-23-91	2,097	V	-
										05-24-91	2,097	V	-
										06-24-91	2,098	V	-
										07-25-91	2,097	V	-
										08-20-91	2,097	V	-
										09-24-91	2,097	V	-
PM-2	372042116340501	37 20 42	116 34 05	05-01-66	5,586	8,782	2,500	2,520	P	10-27-89	852	V	-
							2,550	2,560	P	04-11-90	851	V	-
							2,610	2,640	P	09-13-90	852	V	-
							2,910	2,950	P	01-15-91	852	V	-
							3,450	3,460	P	04-24-91	852	V	-
							3,520	3,590	P	07-25-91	852	V	-
							3,890	3,900	P	09-30-91	852	V	-
							4,400	4,430	P				
							5,120	5,140	P				
							5,250	5,290	P				
							5,498	5,500	X				
							5,500	6,080	X				
							6,080	8,782	X				

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
U-20 WW	371505116254501	37 15 05	116 25 45	07-22-85	6,468	3,268	2,271	3,035	P	07-22-91	2,058	V	-
							3,199	3,268	X	08-20-91	2,057	V	-
										09-09-91	2,057	V	-
										09-23-91	2,057	V	-
U-20ax	371350116264701	37 13 50	116 26 47	08-21-87	6,536	2,200	62	2,200	X	10-11-89	2,173	V	-
										11-29-89	2,174	V	-
										04-09-90	2,173	V	-
										05-08-90	2,173	V	-
										06-01-90	2,173	V	-
										07-03-90	2,173	V	-
										07-31-90	2,174	V	-
										08-15-90	2,174	V	-
										09-25-90	2,174	V	-
										11-23-90	2,174	V	-
										01-30-91	2,174	V	-
										02-20-91	2,174	V	-
										03-22-91	2,174	V	-
										04-23-91	2,171	V	-
										05-24-91	2,172	V	-
										06-26-91	2,172	V	-
										07-24-91	2,171	V	-
										08-20-91	2,172	V	-
										09-10-91	2,173	V	-
U-20bb[4]	371452116293901	37 14 52	116 29 39	03-23-88	6,226	1,900	36	37	X	10-02-89	1,748	V	-
							37	1,900	X	10-10-89	1,747	V	-
										10-17-89	1,746	V	-
										10-23-89	1,746	V	-
										10-30-89	1,745	V	-
										11-01-89	1,743	V	-
										11-07-89	1,743	V	-
										11-08-89	1,743	V	-
										12-01-89	1,741	V	-
										12-18-89	1,739	V	-
U-20bb[4]	371452116293902	37 14 52	116 29 39	01-30-90	6,226	2,220	36	37	X	02-13-90	1,967	V	Z
							37	2,220	X	02-14-90	1,973	V	-
										02-16-90	1,982	V	-
										02-21-90	1,998	V	-
										03-01-90	2,009	V	-
										03-09-90	2,014	V	-
										03-22-90	2,034	V	-
										04-19-90	2,050	R	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
U-20bb 1	371452116293903	37 14 51	116 29 39	05-07-90	6,227	2,322	62	2,345	X	05-15-90	2,028	V	-
										05-16-90	2,028	V	-
										05-18-90	2,027	V	-
										05-25-90	2,027	V	-
										05-29-90	2,027	V	-
										05-31-90	2,027	V	-
										06-04-90	2,027	V	-
										06-05-90	2,027	V	-
										06-07-90	2,027	V	-
										06-11-90	2,027	V	-
										06-14-90	2,028	V	-
										06-18-90	2,028	V	-
										06-25-90	2,028	V	-
										06-29-90	2,028	V	-
										07-02-90	2,028	V	-
										07-06-90	2,028	V	-
										07-09-90	2,028	V	-
U-20bd 1	371542116251301	37 15 42	116 25 13	11-16-89	6,486	2,402	114	120	X	01-09-90	2,039	V	-
							120	2,402	X	01-29-90	2,039	V	-
										01-31-90	2,038	V	-
										03-09-90	2,038	V	-
										03-14-90	2,038	V	-
U-20bd 2	371542116251202	37 15 42	116 25 12	12-21-89	6,551	2,450	60	63	X	01-09-90	2,040	V	Z
							63	2,450	X	01-22-90	2,039	V	-
										01-31-90	2,039	V	-
										03-09-90	2,037	V	-
										03-14-90	2,038	V	-
U-20be	371332116254101	37 13 32	116 25 41	06-12-89	6,492	2,220	51	53	X	10-02-89	2,206	V	-
							53	2,220	X	10-10-89	2,207	V	-
										10-17-89	2,207	V	-
										10-23-89	2,208	V	-
										10-30-89	2,209	V	-
										11-09-89	2,210	V	-
										11-13-89	2,210	V	-
										11-27-89	2,212	V	-
										11-29-89	2,211	V	-
										12-04-89	2,211	V	-
										12-11-89	2,211	V	-
										12-18-89	2,211	V	-
										12-29-89	2,212	V	-
										01-09-90	2,212	V	-
										01-22-90	2,214	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
U-20be	371332116254101	37 13 32	116 25 41	06-12-89	6,492	2,220	51	53	X	01-29-90	2,213	V	-
							53	2,220	X	02-12-90	2,213	V	-
										04-09-90	2,213	V	-
										05-07-90	2,213	V	-
										06-01-90	2,214	V	-
										07-03-90	2,214	V	-
										07-31-90	2,214	V	-
										08-15-90	2,214	V	-
										08-29-90	2,214	V	-
										09-25-90	2,215	V	Z
										11-23-90	2,215	V	Z
										01-08-91	2,215	V	-
										04-30-91	2,215	V	-
										06-05-91	2,215	V	-
U-20bf[8]	371444116263001	37 14 44	116 26 30	08-23-89	6,522	2,140	48	49	X	10-10-89	2,131	V	-
							49	2,250	X	10-17-89	2,131	V	-
										10-24-89	2,131	V	-
										10-30-89	2,131	V	-
										11-09-89	2,131	V	-
										11-13-89	2,131	V	-
										11-27-89	2,132	V	-
										11-29-89	2,132	V	-
										12-04-89	2,132	V	-
										12-11-89	2,132	V	-
										12-18-89	2,131	V	-
										12-29-89	2,132	V	-
										01-08-90	2,132	V	-
										01-24-90	2,132	V	-
										01-29-90	2,131	V	-
										02-13-90	2,130	V	-
										04-04-90	2,132	V	-
										05-07-90	2,132	V	-
										06-01-90	2,132	V	-
										06-14-90	2,133	V	-
										06-18-90	2,133	V	-
										06-25-90	2,134	V	-
										07-02-90	2,134	V	-
										07-12-90	2,134	V	-
										07-31-90	2,134	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
U-20bf[8]	371444116263001	37 14 44	116 26 30	08-23-89	6,522	2,140	48	49	X	08-15-90	2,135	V	-
							49	2,250	X	08-29-90	2,135	V	-
										11-23-90	2,080	V	Z
										01-08-91	2,086	V	Z
										01-24-91	2,086	V	D
										01-30-91	2,086	V	D
U-20bg	371414116242901	37 14 14	116 24 29	12-19-90	6,567	2,200	58	540	X	01-08-91	2,130	V	Z
							540	2,200	X	01-14-91	2,130	V	-
										01-30-91	2,129	V	-
										02-20-91	2,129	V	-
										03-22-91	2,128	V	-
										04-23-91	2,130	V	-
										05-24-91	2,130	V	-
										06-26-91	2,130	V	-
										08-14-91	2,131	V	-
										09-10-91	2,131	V	-
										09-24-91	2,132	V	-
U-20n PS 1DD-H[3]	371425116252401	37 14 25	116 25 24	05-15-85	6,468	3,025	2,665	2,995	P	10-11-89	2,044	V	-
										04-12-90	2,043	V	-
										05-08-90	2,044	V	-
										06-04-90	2,045	V	-
										07-09-90	2,043	V	-
										11-23-90	2,046	V	-
										02-12-91	2,048	V	-
										04-30-91	2,048	V	-
										07-29-91	2,048	V	-
										09-23-91	2,048	V	-
UE-20n 1	371425116251902	37 14 25	116 25 19	06-10-87	6,461	2,834	2,282	2,323	X	10-11-89	2,035	V	-
							2,323	2,407	X	04-12-90	2,035	V	-
							2,407	2,834	X	05-08-90	2,035	V	-
										06-04-90	2,036	V	-
										07-09-90	2,035	V	-
										11-23-90	2,037	V	-
										02-08-91	2,039	V	-
										04-30-91	2,038	V	-
										07-29-91	2,040	V	-
										09-23-91	2,040	V	-
					AREA 27								
TW-F	364534116065902	36 45 34	116 06 59	06-12-62	4,143	3,400	3,150	3,379	X	10-26-89	1,735	V	-
							3,379	3,400	X	05-02-90	1,734	V	-
										04-26-91	1,735	V	-
										09-27-91	1,734	V	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
FRENCHMAN FLAT ADJACENT TO NEVADA TEST SITE													
TW-3	364830115512601	36 48 30	115 51 26	05-09-62	3,489	1,356	1,192	1,516	P	06-09-90	1,102	V	-
										11-16-90	1,103	V	-
										04-26-91	1,103	V	-
										09-27-91	1,103	V	-
PAHUTE MESA ADJACENT TO NEVADA TEST SITE													
PM-3	371421116333702	37 14 21	116 33 37	09-19-88	5,823	3,019	1,473	1,647	X	10-24-89	1,457	V	-
							1,647	3,019	X	01-05-90	1,459	V	-
										04-11-90	1,458	V	-
										07-02-90	1,458	V	-
										11-23-90	1,459	V	-
										01-15-91	1,458	V	-
										04-24-91	1,457	V	-
										07-25-91	1,458	V	-
										09-30-91	1,458	V	-
HOT CREEK VALLEY													
HTH-1	383734116124501	38 37 35	116 12 45	07-23-67	6,011	3,695	150	250	P	10-31-89	532	V	-
							250	345	P	04-05-90	531	V	-
							355	435	P	12-06-90	533	T	-
							435	510	P	04-25-91	532	T	-
							700	775	P	09-19-91	532	T	-
							775	850	P				
							950	1,050	P				
							1,050	1,150	P				
							1,400	1,500	P				
							1,660	1,720	P				
							1,850	1,980	P				
							2,200	2,300	P				
							2,400	2,460	P				
							2,640	2,710	P				
							2,950	3,010	P				
							3,590	3,665	P				
HTH-2	383734116124502	38 37 40	116 12 47	08-12-67	6,025	1,000	504	1,000	P	10-31-89	552	V	-
										04-05-90	552	V	-
										12-06-90	554	T	-
										03-06-91	553	T	-
										04-25-91	552	T	-
										06-26-91	553	T	-
										09-19-91	553	T	-

Table 1. Depth to water in wells and test holes at the Nevada Test Site (NTS) and the Faultless Site, Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open intervals			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UC-1-P-2SR	383806116125951	38 38 06	116 12 54	04-06-68	6,084	2,734	1,148	1,945	P	10-31-89	831	V	-
							1,148	2,790	P	04-05-90	817	V	-
										11-13-90	799	T	-
										12-06-90	798	T	-
										03-06-91	780	T	-
										04-25-91	788	T	-
										06-26-91	786	T	-
										09-19-91	775	T	-

[1] Depth of open intervals includes dual-access tubings.
[2] Depth of open intervals indicates multiple casings within borehole.
[3] Depth-to-water measurements corrected for borehole deviation from vertical; construction information not corrected for borehole deviation from vertical.
[4] Repeated NTS hole numbers reflect more that one depth-to-water measurement interval.
[5] Packers set from 1,610 to 1,619 feet and from 1,721 to 1,728 feet. Measurements reflect interval between packers from 1,619 to 1,721 feet.
[6] Depth of open intervals reflect casing being cut numerous times in attempt to remove casing segment from borehole.
[7] Measurements may reflect occluded water. Cement plug at 2,293 feet; 28 feet inside the casing. The casing is not perforated.
[8] Hole backfilled to 2,140 feet with Buckboard Mesa aggregate on November 5, 1990.

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91

NTS hole number--Drill-hole number assigned by Raytheon Services Nevada; see section "Site Designations" in text.

USGS standard identification--U.S. Geological Survey site designation; see section "Site Designations" in text.

Date well completed--Date that borehole construction work ceased; see section "Measurements" in text.

Land-surface altitude--Datum is sea level. Value may not represent current altitude; see section "Depth to Water" in text.

Well depth--Datum is land surface. Represents most recent available accessible depth, see section "Measurements" in text.

Depth of open intervals--Datum is land surface. Bottom of deepest open interval may be deeper than present accessible hole depth. **Type:** P, perforated or slotted casing; X, open (uncased) hole.

Measurement--Datum is land surface. Value may not represent static water level; see section "Depth to Water" in text. **Method:** A, airline; L, interpreted from geophysical logs; R, depth to water reported (measurement method not known); S, steel tape; T, electric tape; V, iron-horse or wire-line device. **Site status:** P, site was being pumped; R, site was recently pumped or swabbed; S, nearby site was being pumped or swabbed; Z, other conditions not included in standard site status codes, see section "Measurements" in text.

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
AREA 1													
UE-1r WW	370142116033301	37 01 42	116 03 33	01-16-84	4,042	3,145	2,319	2,350	X	01-17-84	1,769	L	
							2,350	4,182	X	01-18-84	1,769	L	
										01-28-84	1,626	L	-
AREA 2													
WW-2 [1,2]	370958116051501	37 09 58	116 05 15	03-24-61	4,470	2,045	1,465	2,045	X	03-28-61	1,915	R	-
WW-2[1,2]	370958116051502	37 09 58	116 05 15	05-30-61	4,470	2,373	2,121	2,373	X	--	--	-	-
WW-2[1,2]	370958116051503	37 09 58	116 05 15	06-08-61	4,470	2,535	2,121	2,535	X	06-20-61	1,958	V	-
										08-18-61	1,974	V	-
										10-04-61	1,979	V	-
										10-23-61	1,979	R	-
WW-2[1,2]	370958116051504	37 09 58	116 05 15	12-18-61	4,470	2,571	2,550	2,571	X	--	--	-	-
WW-2[1,2]	370958116051505	37 09 58	116 05 15	12-20-61	4,470	2,593	2,550	2,593	X	--	--	-	-
WW-2[1,2]	370958116051506	37 09 58	116 05 15	12-26-61	4,470	2,634	2,550	2,634	X	--	--	-	-
WW-2[1,2]	370958116051507	37 09 58	116 05 15	12-30-61	4,470	2,703	2,550	2,703	X	--	--	-	-
WW-2[1,2]	370958116051508	37 09 58	116 05 15	01-12-62	4,470	2,896	2,550	2,896	X	01-15-62	2,056	R	-
WW-2[1,2]	370958116051509	37 09 58	116 05 15	01-19-62	4,470	3,095	2,550	3,095	X	--	--	-	-
WW-2[1,2]	370958116051510	37 09 58	116 05 15	01-28-62	4,470	3,295	2,550	3,295	X	--	--	-	-
WW-2[1,2]	370958116051511	37 09 58	116 05 15	02-09-62	4,470	3,422	2,550	3,422	X	02-15-62	2,053	V	R
WW-2[1,2]	370958116051512	37 09 58	116 05 15	03-11-62	4,470	3,422	2,700	2,950	P	03-16-62	2,066	V	R
							3,164	3,412	P	03-20-62	2,064	V	R
										03-23-62	2,053	V	-
										11-21-63	--	-	P
										12-04-64	--	-	P
										04-14-69	2,056	R	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
AREA 3													
WW-A[1,2]	370142116021100	37 02 13	116 02 10	08-28-60	4,006	1,730	1,555	1,600	X	08-28-60	1,604	R	-
							1,600	1,730	X				
WW-A[1,2]	370142116021101	37 02 13	116 02 10	09-05-60	4,006	1,870	1,608	1,870	P	09-20-60	1,604	R	-
							1,555	1,600	X	11-30-60	1,602	V	-
							1,600	1,870	X	01-06-61	1,602	V	-
										01-13-61	1,602	V	-
										06-20-61	1,604	V	-
										10-04-61	--	-	P
										11-01-61	--	-	P
										11-02-61	--	-	P
										02-07-63	1,607	V	-
										06-07-63	--	-	P
										08-19-63	1,614	V	-
										09-07-63	1,614	V	-
										09-08-63	1,611	V	-
										04-10-69	1,611	R	-
										03-23-71	1,616	V	R
										11-05-71	1,617	V	R
AREA 5													
RNM-2S	364922115580101	36 49 21	115 58 01	04-01-74	3,133	1,120	1,038	1,119	P	08-02-74	720	V	-
							1,120	1,156	X	03-21-80	725	V	-
										06-13-80	726	V	-
										09-27-90	728	V	-
										10-03-90	728	V	-
										10-12-90	728	V	-
										10-19-90	728	V	-
										10-26-90	728	V	-
										11-02-90	726	T	-
										11-15-90	726	V	-
										12-12-90	--	-	P
										01-10-91	738	T	-
										01-16-91	727	T	-
										01-24-91	726	T	-
										02-05-91	--	-	P
										02-21-91	--	-	P
										04-11-91	--	-	P
										04-26-91	--	-	P
										05-06-91	728	T	R
										05-17-91	--	-	P
										05-29-91	--	-	P
										06-25-91	--	-	P
										07-09-91	--	-	P
										08-16-91	--	-	P
										08-28-91	--	-	P
										09-27-91	727	T	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
UE-5c WW[1]	365011115584701	36 50 11	115 58 47	11-03-64	3,216	2,682	1,682	2,385	X	02-17-66	825	R	-
							2,385	2,682	X				
UE-5c WW[1]	365011115584702	36 50 11	115 58 47	04-21-66	3,216	2,682	1,100	1,300	P	03-20-71	807	V	-
							1,682	2,385	X	03-23-71	805	V	-
							2,385	2,682	X	10-27-71	807	V	-
										07-30-72	806	V	-
										01-18-73	807	V	-
										08-11-87	810	V	-
WW-5a	364635115572901	36 46 35	115 57 29	03-23-51	3,093	887	642	877	P	03- -51	699	R	-
							877	910	X	01-26-59	698	A	-
										09-14-59	696	S	-
										09-23-59	696	S	-
										09-24-59	697	A	-
										10-07-59	696	S	-
										11-04-71	707	V	-
										07-27-72	705	S	-
										01-16-80	709	V	-
WW-5b	364805115580801	36 48 05	115 58 08	05-07-51	3,092	900	700	900	P	08-25-59	683	V	-
										08-25-59	683	V	-
										08-26-59	683	S	-
										08-27-59	683	S	-
										08-27-59	687	A	R
										08-29-59	684	S	-
										08-31-59	683	S	-
										12-23-60	683	S	-
										04-12-62	--	-	P
										06-07-62	681	V	-
										10-19-64	684	R	-
										03-21-69	682	R	-
										03-25-71	683	V	-
										10-29-71	683	V	-
										07-30-72	683	S	-
										01-16-80	687	V	-
										05-06-91	689	T	-
WW-5c	364708115574401	36 47 20	115 57 49	03-24-54	3,081	1,200	887	1,187	P	04-26-54	693	A	-
							1,187	1,200	X	04-03-59	694	S	-
										09-09-59	692	S	-
										09-14-59	692	S	-
										12-13-60	700	S	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
WW-5c	364708115574401	36 47 20	115 57 49	03-24-54	3,081	1,200	887	1,187	P	12-30-60	698	S	-
							1,187	1,200	X	01-13-61	696	S	-
										01-20-61	695	S	-
										01-27-61	694	S	-
										02-03-61	693	S	-
										02-16-61	692	S	-
										03-03-61	691	S	-
										03-24-61	690	S	-
										04-14-61	690	S	-
										05-04-61	689	S	-
										04-12-62	792	S	P
										08-07-62	955	V	P
										10-04-62	938	V	-
										10-02-64	713	V	-
										10-20-64	700	V	-
										03-20-69	725	R	R
										03-22-71	715	V	-
										10-29-71	721	V	-
										07-30-72	710	V	-
										01-16-80	730	V	-
										05-06-91	--	--	P
					AREA 6								
WW-3[1]	365942116032900	36 59 43	116 03 29	02-10-51	3,969	1,575	1,209	1,575	X	02-10-51	1,530	R	-
WW-3[1]	365942116032901	36 59 43	116 03 29	03-05-52	3,969	1,800	1,535	1,765	P	03- -52	1,545	R	-
							1,765	1,800	X	12-01-58	1,572	A	-
										12-02-58	1,573	A	-
										01-20-59	1,625	A	R
										09-19-59	1,572	V	-
										09-30-59	1,571	V	
										10-02-59	1,580	A	-
										10-04-59	1,630	A	R
										10-05-59	1,574	A	R
										02-04-60	1,569	V	R
										11-22-60	1,572	V	-
										06-28-61	1,574	V	-
										12-14-64	1,585	V	-
										04-16-69	1,595	R	-
										04-08-71	1,580	V	-
										10-25-71	1,578	V	-
										08-09-72	1,573	V	-
										01-19-73	1,568	V	-
										01-10-80	1,544	V	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
WW-4	365418116012601	36 54 18	116 01 26	11-18-81	3,602	1,479	942	1,436	P	02-24-83	830	V	-
							1,438	1,479	X	02-21-90	836	V	-
										02-22-90	836	V	-
										02-22-90	835	V	-
										02-23-90	--	-	P
										02-26-90	835	V	-
										09-19-90	835	V	R
										11-05-90	--	-	P
										01-14-91	835	V	-
										02-19-91	--	-	P
										03-18-91	--	-	P
										04-26-91	--	-	P
										05-06-91	--	-	P
										06-10-91	--	-	P
										07-05-91	835	T	-
										08-16-91	835	T	-
										08-28-91	--	-	P
										09-27-91	--	-	P
WW-4a	365412116013901	36 54 12	116 01 39	02-21-90	3,606	1,502	1,066	1,281	P	02-22-90	836	V	-
							1,365	1,457	P	02-23-90	--	-	P
							1,501	1,516	X	02-26-90	835	V	-
										05-29-90	836	V	-
										07-30-90	836	V	-
										10-26-90	835	V	-
										12-12-90	835	V	-
										01-14-91	835	V	-
										02-19-91	836	V	S
										03-18-91	835	V	S
										04-26-91	836	T	S
										05-06-91	835	T	S
										06-10-91	835	T	S
										07-05-91	836	T	-
										08-16-91	835	T	-
										08-23-91	835	T	-
WW-C[1]	365508116003501	36 55 08	116 00 35	03-30-61	3,921	1,650	1,571	1,679	P	06-20-61	1,541	V	-
										09-13-61	1,544	R	-
										11-01-61	1,543	V	-
										01-03-62	1,543	V	-
										01-29-62	1,541	V	-
										06-13-62	1,545	R	-
										06-16-62	1,537	V	S-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
WW-C[1]	365508116003502	36 55 08	116 00 35	04-30-67	3,921	1,624	1,560	1,624	P	04-11-69	1,542	R	-
							1,624	1,701	X	03-29-71	1,544	V	-
										10-25-71	1,545	V	-
										08-06-72	1,545	V	-
										03-18-73	1,544	V	-
										10-18-75	1,544	L	-
WW-C-1[3]	365500116003901	36 55 00	116 00 39	06-09-62	3,921	1,707	1,536	1,650	P	10-05-62	1,548	R	-
							1,650	1,707	X	11-05-62	1,547	R	-
										01-25-63	1,544	V	-
										06-06-63	1,544	V	-
										06-07-63	1,544	V	-
										08-20-63	1,543	V	-
										09-07-63	1,543	V	-
										09-08-63	1,544	V	-
										10-08-63	1,542	V	-
										10-08-63	1,544	V	-
										10-10-63	1,543	V	-
										04-11-69	1,542	R	-
										03-29-71	1,545	V	-
										08-06-72	1,546	V	-
AREA 15													
UE-15d WW[1,3]	371230116021500	37 12 33	116 02 29	03-06-62	4,586	6,001	1,735	6,001	X	03-26-62	673	V	-
										03-27-62	669	R	R
										03-28-62	668	V	-
UE-15d WW[1,3]	371230116021501	37 12 33	116 02 29	04-17-62	4,586	6,001	5,400	6,001	X	10-02-63	667	V	-
										12-03-63	675	V	-
										05-20-80	694	V	-
										01-13-83	686	V	-
AREA 16													
UE-16d WW[1]	370406116095600	37 04 12	116 09 51	05-23-77	4,684	830	80	830	X	05-23-77	752	V	Z
UE-16d WW[1]	370412116095101	37 04 12	116 09 51	03-03-81	4,684	2,020	1,145	1,310	P	03-04-81	753	L	R
AREA 18													
WW-8	370956116172101	37 09 56	116 17 21	01-07-63	5,695	1,862	1,250	1,300	P	01-09-63	1,068	V	Z
							1,450	1,500	P	01-10-63	1,068	V	Z
							1,630	1,780	P	03-21-71	1,076	V	-
										03-24-71	1,076	V	-
										10-25-71	1,077	V	-
										08-07-72	1,078	V	-
										06-29-78	1,078	L	-
										02-17-82	1,076	V	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
AREA 19													
UE-19c WW[1]	371608116191001	37 16 08	116 19 10	04-29-64	7,033	4,520	2,421	2,604	X	04-30-64	2,345	V	-
							2,604	4,520	X				
UE-19c WW[1]	371608116191002	37 16 08	116 19 10	06-30-75	7,033	8,489	2,421	3,209	X	12-23-74	2,337	L	-
							3,209	8,489	X	06-26-75	2,315	L	-
										07-28-75	2,347	L	P
										01-05-76	2,314	L	-
										01-22-76	2,314	L	-
										03-15-76	2,333	L	-
										12-12-84	2,344	V	-
										10-15-85	2,336	V	-
UE-19e WW	371750116195901	37 17 50	116 19 59	08-22-64	6,919	6,005	2,475	6,005	X	09-03-64	2,218	V	-
										01-13-65	2,217	V	-
										04-21-65	2,218	R	-
										06-26-75	2,228	L	-
UE-19gS WW[1]	371830116215300	37 18 30	116 21 53	03-22-65	6,719	4,508	2,650	4,508	X	03-24-65	2,043	R	-
UE-19gS WW[1]	371830116215301	37 18 30	116 21 53	05-04-65	6,719	7,506	4,349	4,508	X	05-06-65	2,045	R	-
							4,508	7,500	X				
UE-19gS WW[1,4]	371830116215303	37 18 30	116 21 53	05-09-65	6,719	7,506	2,650	4,113	X	03-20-71	2,044	V	-
							4,350	4,508	X	01-13-76	2,032	L	-
							4,508	7,500	X				
AREA 20													
U-20 WW	371505116254501	37 15 05	116 25 45	07-22-85	6,468	3,268	2,271	3,035	P	07-25-85	2,034	V	-
							3,199	3,268	X	07-22-91	2,058	V	-
										08-20-91	2,057	V	-
										09-09-91	2,057	V	-
										09-23-91	2,057	V	-
U-20a 2 WW[1]	371434116251601	37 14 34	116 25 16	02-17-64	6,472	4,500	860	896	X	03-30-64	2,065	R	-
							896	4,500	X				
U-20a 2 WW[1]	371434116251602	37 14 34	116 25 16	06-30-64	6,472	4,500	2,353	4,500	X	02-11-65	2,066	R	-
U-20a 2 WW[1]	371434116251603	37 14 34	116 25 16	04-14-66	6,472	4,500	2,356	4,500	X	10-23-75	2,058	L	-
AREA 22													
Army 1 WW	363530116021401	36 35 30	116 02 14	07-15-62	3,154	1,953	800	1,050	P	07-17-62	786	V	Z
							1,368	1,370	X	07-17-62	785	V	R
							1,370	1,684	X	09-11-62	784	V	-
							1,684	1,953	X	01-25-63	784	V	-
										11-07-63	785	V	-
										04-22-69	787	R	-
										03-18-71	788	V	R
										10-26-71	787	V	R
										08-12-72	791	V	R
										10-15-87	784	V	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
AREA 25													
J-11 WW	364706116170601	36 47 06	116 17 06	07-19-57	3,443	1,327	1,075	1,095	P	03-15-61	1,042	V	-
							1,242	1,298	P	03-15-61	1,042	V	-
										03-22-61	1,042	V	-
										04-10-61	1,041	V	-
										08-16-62	1,040	V	-
										11-27-63	1,041	V	-
										02-19-64	1,040	R	-
										02-19-64	1,040	R	-
										07-16-64	1,042	V	-
										10-06-64	1,041	V	-
										11-04-71	1,041	V	-
										08-06-72	1,040	V	-
										01-23-73	1,042	V	-
										03-22-73	1,041	V	-
										02-12-90	1,040	S	-
										07-10-90	1,041	S	-
										07-20-90	1,041	S	-
										07-27-90	1,041	S	-
										07-31-90	1,041	S	-
										08-09-90	1,041	S	-
										08-15-90	1,040	S	-
										08-21-90	1,041	S	-
										08-27-90	1,041	S	-
										09-14-90	1,041	S	-
										10-19-90	1,040	S	-
										11-19-90	1,040	S	-
										12-13-90	1,040	S	-
										01-24-91	1,040	S	-
										02-28-91	1,040	S	-
										03-27-91	1,040	S	-
										04-19-91	1,041	S	-
										05-07-91	1,041	S	-
										06-10-91	1,041	S	-
										07-23-91	1,041	S	-
										08-22-91	1,041	S	-
										09-16-91	1,041	S	-
J-12 WW[1]	364554116232400	36 45 54	116 23 24	10-09-57	3,128	887	793	868	P	10-31-57	734	R	-
										01-29-58	739	R	-
										01-27-60	741	R	-
										08-22-62	744	R	-
										07-25-68	743	R	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
J-12 WW[1]	364554116232401	36 45 54	116 23 24	08- -68	3,128	1,139	793	868	P	08-24-68	742	R	-
							887	1,139	X	04-21-69	742	R	-
										03-26-71	742	T	-
										04-26-74	741	V	-
										04-27-74	742	V	-
										04-28-74	742	V	-
										04-28-74	742	V	-
										04-29-74	742	V	-
										04-30-74	742	V	R
										04-30-74	742	V	-
										05-01-74	742	V	-
										05-01-74	742	V	R
										05-28-80	740	V	-
										02-03-81	739	V	-
										12-05-83	742	V	-
										01-25-90	740	S	-
										02-08-90	740	S	-
										03-09-90	740	S	-
										04-17-90	740	S	-
										05-30-90	740	S	-
										06-18-90	740	S	-
										07-10-90	740	S	-
										08-20-90	740	S	-
										09-14-90	740	S	-
										10-29-90	740	S	-
										11-27-90	740	S	-
										12-13-90	740	S	-
										02-25-91	740	S	-
										04-24-91	740	S	-
										05-14-91	740	S	-
										06-10-91	740	S	-
										07-23-91	740	S	-
										08-21-91	740	S	-
										09-12-91	740	S	-
J-13 WW[1]	364828116234000	36 48 28	116 23 40	12-27-62	3,318	1,481	996	1,301	P	12-30-62	927	V	-
							1,301	1,386	P	01-01-63	927	V	R
J-13 WW[1]	364828116234001	36 48 28	116 23 40	01-06-63	3,318	3,488	996	1,301	P	02-04-63	928	V	-
							1,301	1,386	P	02-04-63	928	V	-
							2,690	3,312	P	11-27-63	928	V	-
							3,385	3,488	X	12-17-63	928	V	-
										12-19-63	929	V	-
										02-04-64	928	V	-
										02-07-64	928	V	-
										02-18-64	928	R	-
										03-31-64	925	V	-
										03-11-67	929	V	-

Table 2. Depth to water in ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Measurement			
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Depth to water (feet)	Method	Site status
J-13 WW[1]	364828116234001	36 48 28	116 23 40	01-06-63	3,318	3,488	996	1,301	P	04-21-69	930	R	-
							1,301	1,386	P	03-26-71	928	T	-
							2,690	3,312	P	08-20-80	926	V	-
							3,385	3,488	X	10-31-83	929	V	-
										09-11-86	928	S	-
										03-24-87	928	S	-
										05-08-87	928	S	-
										12-09-87	928	S	-
										03-04-88	928	S	-
										07-07-88	928	S	-
										10-26-88	928	S	-
										01-18-89	928	S	-
										02-22-89	928	S	-
										03-22-89	928	S	-
										05-30-89	928	S	-
										07-21-89	928	S	-
										08-14-89	928	S	-
										11-21-89	928	S	-
										12-20-89	928	S	-
										01-25-90	928	S	-
										02-09-90	928	S	-
										03-09-90	928	S	-
										04-20-90	928	S	-
										05-23-90	928	S	-
										06-20-90	928	S	-
										07-10-90	928	S	-
										08-15-90	928	S	-
										09-14-90	928	S	-
										10-29-90	928	S	-
										11-27-90	928	S	-
										12-13-90	928	S	-
										01-31-91	928	S	-
										02-25-91	928	S	-
										03-27-91	928	S	-
										04-24-91	927	S	-
										05-16-91	928	S	-
										06-10-91	928	S	-
										07-25-91	928	S	-
										08-22-91	928	S	-
										09-16-91	928	S	-

[1] Repeated NTS hole numbers reflect more than one depth-to-water measurement interval.
[2] Depth-to-water measurements corrected for borehole deviation from vertical; construction information not corrected for borehole deviation from vertical.
[3] Measurement not corrected for borehole deviation from vertical.
[4] Section of casing left in hole from 4,114 feet to 4,350 feet.

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91

NTS hole number--Drill-hole number assigned by Raytheon Services Nevada; see section "Site Designations" in text.

USGS standard identification--U.S. Geological Survey site designation; see section "Site Designations" in text.

Date well completed--Date that borehole construction work ceased; see section "Measurements" in text.

Land-surface altitude--Datum is sea level. Value may not represent current altitude; see section "Depth to Water" in text.

Well depth--Datum is land surface. Represents most recent available accessible depth , see section "Measurements" in text.

Depth of open intervals--Datum is land surface. Bottom of open interval may be deeper than present accessible well depth. **Type:** P, perforated or slotted casing; X, open (uncased) hole.

Primary water-yielding units--A, alluvium; C, carbonate rock; V, volcanic rock.

Ground-water subbasin--AFFCR, Alkali Flat-Furnace Creek Ranch; AM, Ash Meadows.

Ground-water withdrawals--Source: E, Reynolds Electrical and Engineering Company, Inc. (REECo) water production reports and includes estimated values; L, Los Alamos National Laboratory; M, REECo water production reports; R, Claassen (1973); Z, estimated average from Claassen (1973).

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
AREA 1																
UE-1r WW	370142116033301	37 01 42	116 03 33	01-16-84	4,042	3,145	2,319	2,350	X	V,C	AM	1984	1.9	6	E	8
							2,350	4,182	X			1985	7.0	21	E	20
												1986	4.4	14	M	
												1987	5.0	15	M	
												1988	4.7	15	M	
												1989	0.0	0	M	
												1990	0.0	0	M	
												1991	0.0	0	M	
AREA 2																
WW-2[1]	370958116051512	37 09 58	116 05 15	03-11-62	4,470	3,422	2,700	2,950	P	C	AM	1962	9.7	30	R	
							3,164	3,412	P			1963	23.1	71	R	
												1964	24.2	74	R	
												1965	35.0	107	R	
												1966	46.7	143	R	
												1967	51.4	158	R	
												1968	51.7	159	R	
												1969	70.7	217	R	
												1970	57.3	176	R	
												1971	36.5	112	R	
												1983	43.4	133	M	
												1984	48.1	148	E	8
												1985	18.5	57	E	20
												1986	19.4	60	M	
												1987	42.6	131	M	

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
WW-2[1]	370958116051512	37 09 58	116 05 15	03-11-62	4,470	3,422	2,700	2,950	P	V,C	AM	1988	24.1	74	M	
							3,164	3,412	P			1989	19.5	60	E	28
												1990	18.2	56	M	
												1991	0.0	0	M	
AREA 3																
WW-A[1]	370142116021101	37 02 13	116 02 10	09-05-60	4,006	1,870	1,608	1,870	P	A	AM	1961	13.4	41	R	
							1,555	1,600	X			1962	49.1	151	R	
							1,600	1,870	X			1963	32.3	99	R	
												1964	52.7	162	R	
												1965	46.1	141	R	
												1966	43.0	132	R	
												1967	26.9	83	R	
												1968	19.7	60	R	
												1969	31.6	97	R	
												1970	24.6	75	R	
												1971	31.4	96	R	
												1983	44.5	137	M	
												1984	41.1	126	E	8
												1985	37.5	115	E	20
												1986	31.4	96	M	
												1987	30.2	93	M	
												1988	20.6	63	M	
												1989	0.0	0	M	
												1990	0.0	0	M	
												1991	0.0	0	M	
AREA 5																
RNM-2S[2]	364922115580101	36 49 21	115 58 01	04-01-74	3,133	1,120	1,038	1,119	P	A	AM	1975	36.7	113	L	
							1,120	1,156	X			1976	171.5	526	L	
												1977	179.8	552	L	
												1978	321.2	986	L	
												1979	325.2	998	L	
												1980	300.7	923	L	
												1981	300.0	921	L	
												1982	312.9	960	L	
												1983	309.5	950	L	
												1984	305.9	939	L	
												1985	283.8	871	L	
												1986	301.7	926	L	
												1987	315.3	968	L	
												1988	310.2	952	L	
												1989	311.6	956	L	
												1990	233.1	715	L	
												1991	154.6	474	L	

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
UE-5c WW	365011115584702	36 50 11	115 58 47	04-21-66	3,216	2,682	1,100	1,300	P	A,V	AM	1983	1.3	4	M	
							1,682	2,385	X			1984	2.4	7	E	8
							2,385	2,682	X			1985	5.0	15	E	20
												1986	3.5	11	M	
												1987	8.4	26	M	
												1988	8.8	27	M	
												1989	3.2	10	M	
												1990	0.0	0	M	
												1991	4.5	14	M	
WW-5a	364635115572901	36 46 35	115 57 29	03-23-51	3,093	887	642	877	P	A	AM	1951	9.7	30	Z	
							877	910	X			1952	9.7	30	Z	
												1953	9.7	30	Z	
												1954	9.7	30	Z	
												1955	9.7	30	Z	
												1956	9.7	30	Z	
												1957	9.7	30	Z	
												1958	7.2	22	R	
												1959	9.8	30	R	
												1960	12.7	39	R	
												1961	19.5	60	R	
												1962	34.5	106	R	
												1963	23.8	73	R	
												1964	19.5	60	R	
												1965	9.8	30	R	
												1966	16.6	51	R	
												1967	14.7	45	R	
												1968	16.2	50	R	
												1969	5.7	17	R	
												1970	3.5	11	R	
												1971	0.0	0	R	
WW-5b	364805115580801	36 48 05	115 58 08	05-07-51	3,092	900	700	900	P	A	AM	1951	20.3	62	Z	
												1952	20.3	62	Z	
												1953	20.3	62	Z	
												1954	20.3	62	Z	
												1955	20.3	62	Z	
												1956	20.3	62	Z	
												1957	20.3	62	Z	
												1958	26.3	81	R	
												1959	17.9	55	R	
												1960	21.7	67	R	

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yieiding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
WW-5b	364805115580801	36 48 05	115 58 08	05-07-51	3,092	900	700	900	P	A	AM	1961	37.2	114	R	
												1962	66.1	203	R	
												1963	23.3	72	R	
												1964	30.8	95	R	
												1965	23.2	71	R	
												1966	35.9	110	R	
												1967	9.0	28	R	
												1968	10.4	32	R	
												1969	6.8	21	R	
												1970	23.6	72	R	
												1971	8.1	25	R	
												1983	32.2	99	M	
												1984	57.9	178	E	8
												1985	67.8	208	E	20
												1986	58.5	180	M	
												1987	50.5	155	M	
												1988	57.5	176	M	
												1989	0.0	0	M	
												1990	0.0	0	M	
												1991	0.0	0	M	
WW-5c	364708115574401	36 47 20	115 57 49	03-24-54	3,081	1,200	887	1,187	P	A	AM	1954	18.1	56	Z	
							1,187	1,200	X			1955	18.1	56	Z	
												1956	18.1	56	Z	
												1957	18.1	56	Z	
												1958	20.2	62	R	
												1959	12.8	39	R	
												1960	19.6	60	R	
												1961	22.1	68	R	
												1962	72.9	224	R	
												1963	69.5	213	R	
												1964	48.3	148	R	
												1965	58.0	178	R	
												1966	56.6	174	R	
												1967	43.6	134	R	
												1968	59.5	183	R	
												1969	39.9	122	R	
												1970	41.1	126	R	
												1971	44.2	136	R	
												1983	42.1	129	M	
												1984	58.7	180	E	8

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
WW-5c	364708115574401	36 47 20	115 57 49	03-24-54	3,081	1,200	887	1,187	P	A	AM	1985	47.1	145	E	20
							1,187	1,200	X			1986	64.0	196	M	
												1987	50.3	154	M	
												1988	67.8	208	M	
												1989	35.4	109	M	
												1990	38.4	118	M	
												1991	28.8	88	M	
						AREA 6										
WW-3[3]	365942116032900	36 59 43	116 03 29	02-10-51	3,969	1,575	1,209	1,575	X	A,V	AM	1951	2.8	9	Z	
WW-3[3]	365942116032901	36 59 43	116 03 29	03-05-52	3,969	1,800	1,535	1,765	P	A,V	AM	1952	2.8	9	Z	
							1,765	1,800	X			1953	2.8	9	Z	
												1954	2.8	9	Z	
												1955	2.8	9	Z	
												1956	2.8	9	Z	
												1957	2.8	9	Z	
												1958	12.6	39	R	
												1959	17.2	53	R	
												1960	11.2	34	R	
												1961	13.0	40	R	
												1962	22.0	68	R	
												1963	21.8	67	R	
												1964	20.2	62	R	
												1965	16.1	49	R	
												1966	18.2	56	R	
												1967	14.9	46	R	
												1968	7.4	23	R	
												1969	6.8	21	R	
												1970	1.8	6	R	
												1971	0.0	0	R	
WW-4	365418116012601	36 54 18	116 01 26	11-18-81	3,602	1,479	942	1,436	P	V	AM	1983	24.1	74	M	
							1,438	1,479	X			1984	48.4	149	E	8
												1985	42.9	132	E	20
												1986	28.2	86	M	
												1987	28.2	87	M	
												1988	46.7	143	M	
												1989	192.0	589	M	
												1990	68.2	209	E	28
												1991	70.7	217	M	
WW-4a[4]	365412116013901	36 54 12	116 01 39	02-21-90	3,606	1,502	1,066	1,281	P	V	AM	--	--	--	-	
							1,365	1,457	P							
							1,501	1,516	X							

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
WW-C[3]	365508116003501	36 55 08	116 00 35	03-30-61	3,921	1,650	1,571	1,679	P	C	AM	1961	4.9	15	R	
												1962	37.4	115	R	
												1963	43.0	132	R	
												1964	56.9	175	R	
												1965	30.9	95	R	
												1966	34.0	104	R	
WW-C[3]	365508116003502	36 55 08	116 00 35	04-30-67	3,921	1,624	1,560	1,624	P	C	AM	1967	28.9	89	R	
							1,624	1,701	X			1968	81.0	249	R	
												1969	95.6	293	R	
												1970	62.4	191	R	
												1971	83.4	256	R	
												1983	27.7	85	M	
												1984	31.2	96	E	8
												1985	19.4	59	E	20
												1986	17.3	53	E	7
												1987	7.2	22	M	
												1988	17.4	53	M	
												1989	31.6	97	M	
												1990	29.7	91	E	7
												1991	27.7	85	M	
WW-C-1	365500116003901	36 55 00	116 00 39	06-09-62	3,921	1,707	1,536	1,650	P	C	AM	1962	16.2	50	R	
							1,650	1,707	X			1963	31.5	97	R	
												1964	70.6	217	R	
												1965	39.1	120	R	
												1966	76.0	233	R	
												1967	34.0	104	R	
												1968	26.9	83	R	
												1969	36.4	112	R	
												1970	18.3	56	R	
												1971	20.4	63	R	
												1983	37.6	115	M	
												1984	23.3	72	E	8
												1985	29.0	89	E	20
												1986	30.1	92	M	
												1987	22.3	69	M	
												1988	24.8	76	E	7
												1989	28.1	86	M	
												1990	23.3	72	M	
												1991	23.8	73	M	

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
AREA 15																
UE-15d WW[1,5]	371230116021501	37 12 33	116 02 29	04-17-62	4,586	6,001	5,400	6,001	X	C	AM	1966	17.1	52	R	
												1967	37.3	114	R	
												1968	40.3	124	R	
												1969	37.7	116	R	
												1970	37.4	115	R	
												1971	27.0	83	R	
AREA 16																
UE-16d WW	370412116095101	37 04 12	116 09 51	03-03-81	4,684	3,000	1,145	1,310	P	C	AM	1983	4.6	14	M	
												1984	8.1	25	E	8
												1985	25.4	78	E	20
												1986	38.5	118	M	
												1987	34.0	104	M	
												1988	38.1	117	M	
												1989	26.0	80	M	
												1990	32.9	101	M	
												1991	27.3	84	M	
AREA 18																
WW-8	370956116172101	37 09 56	116 17 21	01-07-63	5,695	1,862	1,250	1,300	P	V	AFFCR	1963	5.3	16	R	
							1,450	1,500	P			1964	111.9	343	R	
							1,630	1,780	P			1965	32.3	99	R	
												1966	36.2	111	R	
												1967	57.5	176	R	
												1983	58.9	181	M	
												1984	61.1	188	E	8
												1985	60.2	185	E	20
												1986	37.9	116	M	
												1987	68.4	210	M	
												1988	65.3	200	M	
												1989	53.9	165	E	28
												1990	42.9	132	M	
												1991	57.6	177	M	
AREA 19																
UE-19c WW	371608116191002	37 16 08	116 19 10	06-30-75	7,033	8,489	2,421	3,209	X	V	AFFCR	1983	41.8	128	M	
							3,209	8,489	X			1984	64.1	197	E	8
												1985	103.2	317	E	20
												1986	85.1	261	M	
												1987	51.1	157	M	

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
UE-19c WW	371608116191002	37 16 08	116 19 10	06-30-75	7,033	8,489	2,421	3,209	X	V	AFFCR	1988	64.3	197	M	
							3,209	8,489	X			1989	138.6	425	M	
												1990	110.6	339	M	
												1991	126.1	387	M	
UE-19e WW	371750116195901	37 17 50	116 19 59	08-22-64	6,919	6,005	2,475	6,005	X	V	AFFCR	1965	11.2	34	R	
												1966	6.3	19	R	
												1967	10.2	31	R	
UE-19gS WW[6]	371830116215303	37 18 30	116 21 53	05-09-65	6,719	7,506	2,650	4,113	X	V	AFFCR	1967	21.0	64	R	
							4,350	4,508	X							
							4,508	7,500	X							
						AREA 20										
U-20 WW	371505116254501	37 15 05	116 25 45	07-22-85	6,468	3,268	2,271	3,035	P	V	AFFCR	1985	41.6	128	E	7
							3,199	3,268	X			1986	76.2	234	E	7
												1987	68.7	211	M	
												1988	105.4	324	M	
												1989	112.6	345	M	
												1990	92.9	285	M	
												1991	30.8	94	M	
U-20a 2 WW[3]	371434116251602	37 14 34	116 25 16	06-30-64	6,472	4,500	2,353	4,500	X	V	AFFCR	1964	17.0	52	R	
												1965	9.1	28	R	
U-20a 2 WW[3]	371434116251603	37 14 34	116 25 16	04-14-66	6,472	4,500	2,356	4,500	X	V	AFFCR	1966	6.3	19	R	
												1967	22.8	70	R	
						AREA 22										
Army 1 WW	363530116021401	36 35 30	116 02 14	07-15-62	3,154	1,953	800	1,050	P	C	AM	1962	4.2	13	R	
							1,368	1,370	X			1963	2.7	8	R	
							1,370	1,684	X			1964	30.7	94	R	
							1,684	1,953	X			1965	25.4	78	R	
												1966	47.3	145	R	
												1967	56.1	172	R	
												1968	52.7	162	R	
												1969	78.1	240	R	
												1970	69.4	213	R	
												1971	96.1	295	R	
												1983	56.8	174	M	
												1984	82.1	252	E	8
												1985	41.6	128	E	20
												1986	34.9	107	M	
												1987	34.7	107	E	7

Table 3. Annual withdrawals from ground-water supply wells at the Nevada Test Site (NTS), Nye County, Nevada, calendar years 1951-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date well completed (month, day, year)	Land-surface altitude (feet)	Well depth (feet)	Depth of open interval			Primary water-yielding units	Ground-water subbasin	Ground-water withdrawal				
							Top (feet)	Bottom (feet)	Type			Calendar year	Million gallons	Acre-feet	Source	Days estimated
Army 1 WW	363530116021401	36 35 30	116 02 14	07-15-62	3,154	1,953	800	1,050	P	C	AM	1988	53.1	163	E	14
							1,368	1,370	X			1989	114.4	351	M	
							1,370	1,684	X			1990	126.0	387	E	7
							1,684	1,953	X			1991	109.9	337	E	31
							AREA 25									
J-11 WW	364706116170601	36 47 06	116 17 06	07-19-57	3,443	1,327	1,075	1,095	P	V	AFFCR	1959	12.1	37	M	
							1,242	1,298	P			1960	14.8	45	M	
J-12 WW[3]	364554116232400	36 45 54	116 23 24	10-09-57	3,128	887	793	868	P	V	AFFCR	1961	30.0	92	R	
												1962	60.8	187	R	
J-12 WW[3]	364554116232401	36 45 54	116 23 24	08- -68	3,128	1,139	793	868	P	V	AFFCR	1981	37.2	114	M	
							887	1,019	X			1982	18.7	57	M	
												1983	24.6	75	M	
												1984	24.8	76	E	8
												1985	26.2	80	E	20
												1986	28.6	88	M	
												1987	20.3	62	M	
												1988	20.5	63	M	
												1989	33.6	103	M	
												1990	31.2	96	M	
												1991	34.7	106	M	
J-13 WW	364828116234001	36 48 28	116 23 40	01-06-63	3,318	3,488	996	1,301	P	V	AFFCR	1983	46.0	141	M	
							1,301	1,386	P			1984	41.1	126	E	8
							2,690	3,312	P			1985	27.4	84	E	20
							3,385	3,488	X			1986	17.4	54	M	
												1987	32.6	100	M	
												1988	25.5	78	M	
												1989	17.0	52	E	14
												1990	20.5	63	E	7
												1991	16.5	51	M	

[1] Measurements not corrected for borehole deviation from vertical.
[2] Pumping ceased August 29, 1991.
[3] Repeated NTS hole numbers reflect more than one hole completion.
[4] New well, not currently in use.
[5] Intermittent use for cleaning purposes at the U.S. Environmental Protection Agency farm until the pump failed to start on October 7, 1991.
[6] Section of casing left in hole fom 4,114 feet to 4,350 feet.

Table 4. Tritium concentrations in water samples collected from test holes at the Nevada Test Site (NTS), Nye County, Nevada, water years 1990-91

NTS hole number--Drill-hole number assigned by Raytheon Services Nevada; see section "Site Designations" in text.

USGS standard identification--U.S. Geological Survey site designation; see section "Site Designations" in text.

Date hole completed--Date that borehole construction work ceased; see section "Measurements" in text.

Land-surface altitude--Datum is sea level. Value may not represent current altitude; see section "Depth to Water" in text.

Hole depth--Datum is land surface. Represents most recent accessible depth; see section "Measurements" in text.

Depth of open interval--Datum is land surface. Bottom of deepest open interval may be deeper than present accessible hole depth. **Type:** P, perforated or slotted casing; S, screen; X, open (uncased) hole.

Water sample--Water samples are analyzed by Environmental Monitoring Systems Laboratory of U.S. Environmental Protection Agency.

Tritium concentration--Analytical results and associated uncertainties are in pCi/L (picocuries per liter). Laboratory analyses are reported as most probable value ±2 standard deviations counting error. Negative value of tritium concentration indicates that activity of sample was less than blank used in calibration procedures.

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open interval			Water sample	
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Tritium (picocuries per liter)
					AREA 3						
U-3mt	370348116024301	37 03 48	116 02 43	05-31-90	4,067	1,545	110	1,550	X	06-18-91	17 ± 4
UE-3e 4-1	370411116025910	37 04 11	116 02 59	03-19-90	4,082	2,181	2,150	2,171	S	05-03-90	5,550,000 ± 5,370
										06-19-91	3,150,000 ± 3,920
UE-3e 4-2	370411116025911	37 04 11	116 02 59	03-22-90	4,082	1,919	1,887	1,908	S	06-19-91	104,000 ± 754
UE-3e 4-3	370411116025912	37 04 11	116 02 59	03-26-90	4,082	1,661	1,619	1,640	S	06-19-91	779,000 ± 1,960
					AREA 4						
U-4av	370547116041103	37 05 47	116 04 11	08-18-90	4,178	1,687	117	118	X	09-12-90	6 ± 6
							118	119	X		
							119	1,700	X		
U-4u PS 2A [1]	370513116025101	37 05 13	116 02 51	08-30-90	4,117	2,280	1,643	1,770	P	06-18-91	17,500 ± 385
							1,610	2,280	X		
UE-4t [2]	370556116025404	37 05 56	116 02 54	05-05-89	4,144	1,721	1,619	1,721	X	08-01-90	2 ± 5
UE-4t 1	370556116025405	37 05 56	116 02 54	10-24-90	4,144	2,010	1,906	2,010	X	06-19-91	224 ± 6
							1,963	1,992	P		
UE-4t 2	370556116025406	37 05 56	116 02 54	10-24-90	4,144	1,754	1,564	1,754	X	06-19-91	26 ± 4
							1,664	1,724	P		

Table 4. Tritium concentrations in water samples collected from test holes at the Nevada Test Site (NTS), Nye County, Nevada, water years 1990-91--Continued

NTS hole number	USGS standard identification	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Date hole completed (month, day, year)	Land-surface altitude (feet)	Hole depth (feet)	Depth of open interval			Water sample	
							Top (feet)	Bottom (feet)	Type	Date (month, day, year)	Tritium (picocuries per liter)
					AREA 19						
U-19bh	371349116222001	37 13 49	116 22 20	06-14-91	6,768	2,148	70	72	X	07-02-91	4 ± 4
							72	2,148	X	07-08-91	2 ± 3
										07-26-91	256 ± 7
										09-09-91	78 ± 5
					AREA 20						
U-20ax	371350116264701	37 13 50	116 26 47	08-21-87	6,536	2,200	62	2,200	X	09-10-91	-1 ± 3
U-20bb 1	371452116293903	37 14 52	116 29 39	05-07-90	6,227	2,322	60	62	X	05-15-90	2 ± 7
							62	2,345	X		
U-20bd 1	371542116251301	37 15 42	116 25 13	11-16-89	6,486	2,402	114	120	X	01-08-90	0 ± 6
							120	2,402	X		
U-20bd 2	371542116251202	37 15 42	116 25 12	12-21-89	6,551	2,450	60	63	X	01-09-90	2 ± 6
							63	2,450	X		
U-20bg	371414116242901	37 14 14	116 24 29	12-19-90	6,567	2,200	58	540	X	09-10-91	167 ± 6
							540	2,200	X		

[1] Construction information not corrected for borehole deviation from vertical.
[2] Packers set at 1,619 and 1,721 feet. Sample reflects interval between packers.