

# **GEOHYDROLOGY AND WATER QUALITY OF STRATIFIED-DRIFT AQUIFERS IN THE SACO AND OSSIPPEE RIVER BASINS, EAST-CENTRAL NEW HAMPSHIRE**

**By Richard Bridge Moore and Laura Medalie**

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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
cubic foot ( $\text{ft}^3$ )	0.02832	cubic meter
cubic foot per second ( $\text{ft}^3/\text{s}$ )	0.02832	cubic meter per second
cubic foot per day per square foot times foot of aquifer thickness or	0.09290	cubic meter per day per square meter times meter of aquifer thickness
foot squared per day [ $(\text{ft}^3/\text{d}^2)/\text{ft}$ or $(\text{ft}/\text{d}^2)$ ]	0.09290	meter squared per day
cubic foot per second per square mile [ $(\text{ft}^3/\text{s})/\text{mi}^2$ ]	0.01093	cubic meter per second per square kilometer
foot (ft)	0.3048	meter
foot per day (ft/d)	0.3048	meter per day
foot per mile (ft/mi)	0.1894	meter per kilometer
foot per second (ft/s)	0.3048	meter per second
gallon (gal)	3.785	liter
gallon per minute (gal/min)	0.06309	liter per second
inch (in.)	25.4	millimeter
mile (mi)	1.609	kilometer
million gallons (Mgal)	3,785	cubic meter
inch per hour (in/hr)	25.4	millimeter per hour
million gallons per day (Mgal/d)	0.04381	cubic meter per second
square mile ( $\text{mi}^2$ )	2.590	square kilometer

**Sea level:** In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

## ABBREVIATED WATER-QUALITY UNITS USED IN REPORT

In this report, chemical concentration in water is expressed in milligrams per liter (mg/L) or micrograms per liter ( $\mu\text{g}/\text{L}$ ). Milligrams per liter is a unit expressing the concentration of chemical constituents in solution as weight (milligrams) of solute per unit volume (liter) of water; 1,000  $\mu\text{g}/\text{L}$  (micrograms per liter) is equivalent to 1 mg/L (milligrams per liter). Water temperature in degrees Celsius ( $^{\circ}\text{C}$ ) can be converted to degrees Fahrenheit ( $^{\circ}\text{F}$ ) by use of the following equation:

$$^{\circ}\text{F} = 1.8(^{\circ}\text{C}) + 32$$

Specific conductance of water is expressed in microsiemens per centimeter at 25 degrees Celsius ( $\mu\text{S}/\text{cm}$ ). This unit is equivalent to micromhos per centimeter at 25 degrees Celsius ( $\mu\text{mho}/\text{cm}$ ), formerly used by the U.S. Geological Survey.

The ionic concentration in water is expressed in milliequivalents per liter (meq/L). Milliequivalents per liter is the concentration in mg/L of an ion multiplied by the charge of the ion and divided by the atomic weight of the ion.

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*By Richard Bridge Moore and Laura Medalie*

## Abstract

The U.S. Geological Survey, in cooperation with the New Hampshire Department of Environmental Services, Water Resources Division, has assessed the geo-hydrology and water quality of stratified-drift aquifers in the Saco and Ossipee River Basins in east-central New Hampshire. Stratified-drift aquifers discontinuously underlie 152.5 square miles of the Saco and Ossipee River Basins, which drains 869.4 square miles and consists of sorted coarse-grained sediments deposited by glaciation. Saturated thicknesses of stratified drift in the study area are locally greater than 280 feet but generally are less. Transmissivity locally exceeds 8,000 feet squared per day but is generally less. Approximately 93.6 square miles (or 10.8 percent of the study area) have transmissivities greater than 1,000 feet squared per day.

Characteristics of stratified-drift materials that affect ground-water storage and flow are related to the original glaciofluvial or glaciolacustrine environments in which they were deposited. Deglaciation by a systematic process of stagnation zone retreat resulted in the formation of deltas and other lake deposits, primarily along the central parts of the Saco and Ossipee River Valleys. Glacial outwash and alluvium covered much of the earlier valley-fill deposits. Glacial lakes were present at the time of deglaciation in the Saco and Ossipee River Basins and their presence greatly affected deglaciation and the depositional processes that formed many of the stratified-drift aquifers in the study area.

The geohydrologic investigation of stratified-drift aquifers focused on basic aquifer properties including aquifer boundaries; recharge, discharge, and direction of ground-water flow; saturated thickness and storage; and transmissivity. Surficial geologic mapping assisted in the determination of aquifer boundaries. Data from 1,848 wells, test borings, and springs were collected, and stored in the U.S. Geological Survey's Ground Water Site Inventory (GWSI) data base. Over 1,130 of these sites were from areas covered by stratified drift. These data were used to produce maps of water-table configuration, saturated thickness, and transmissivity of stratified drift. A total of 13.3 miles of seismic-refraction profiling (at 61 locations) and 13.7 miles of seismic-reflection profiling were used to aid in preparing the water-table and saturated-thickness maps. Seismic-reflection data also were collected and interpreted along 13.7 miles of the shores of Ossipee Lake and 7 other water bodies in the study area. These data aided in the preparation of the saturated-thickness maps.

The Ossipee Lake aquifer in the towns of Ossipee, Freedom, Effingham, Madison, and Tamworth was analyzed by use of transient simulations and a two-dimensional, finite-difference flow model to determine ground-water availability. The available water, after a 180-day period of pumping from four hypothetical wells open to the aquifer, was 7.72 million gallons per day, 31.6 percent of the water pumped came from ground-water storage and 68.4 percent came from combined induced infiltration and ground water captured before discharge to surface-water bodies.

Results of the analysis of water samples from 25 test wells and 4 springs indicate that water in the stratified-drift aquifers generally meets U.S. Environmental

Protection Agency primary and secondary drinking-water regulations. Sites of known ground-water contamination in the aquifers were not sampled. Elevated concentrations above background levels of chloride and sodium, iron and manganese, and fluoride were the exceptions.

## INTRODUCTION

The population of communities in the Saco and Ossipee River Basins increased by about 93 percent between 1970 and 1990 (U.S. Bureau of the Census, 1991). Recreational and second-home development has been especially rapid in this area, which includes parts of the Lakes Region in east-central New Hampshire and the White Mountains. This growth has steadily increased demands for water. In 1990, the total withdrawal from stratified-drift aquifers for municipal supply was about 2.7 Mgal/d (F. H. Chormann Jr., New Hampshire Department of Environmental Services, Water Resources Division, written commun., 1991). In addition, large ski areas in the mountains rely heavily on water resources to make snow to augment the natural snow cover. Also, stringent U.S. Environmental Protection Agency (USEPA) primary and secondary drinking-water regulations on the treatment requirements of surface-water supplies have prompted municipalities to look closely at the ground-water resources. Of the 19 towns in the Saco and Ossipee River Basins, 6 have municipal-water systems of which 2 use only ground water, 3 use surface water from the basin, and 1 uses ground and surface water. Most of these towns need to expand their water-supply capabilities. The rural areas of the towns in the study area rely on private wells.

The U.S. Geological Survey (USGS), in cooperation with the New Hampshire Department of Environmental Services, Water Resources Division (NHDES-WRD), has done a series of ground-water studies in New Hampshire that provide the detailed geohydrologic information necessary for determining optimal use of available water supplies and for the development of new water supplies. The study described in this report encompasses the Saco and Ossipee River Basins (fig. 1). For most of the studies, watershed basin divides were selected as study-area boundaries because they are the natural subdivision of the hydrologic system; only a few stratified-drift aquifers in New Hampshire extend across major surface-water divides. Completed studies and reports include the Nashua Regional Planning

Commission area (Toppin, 1987); the Exeter, Lamprey, and Oyster River Basins (Moore, 1990); the lower Merrimack and coastal River Basins (Stekl and Flanagan, 1992); the Bellamy, Cocheco, and Salmon Falls River Basins (Mack and Lawlor, 1992); the middle Merrimack River Basin (Ayotte and Toppin, 1995); the lower Connecticut River Basin (Moore and others, 1994); the Contoocook River Basin (Harte and Johnson, 1995) and the Pemigewasset River Basin (Cotton and Olimpio, in press).

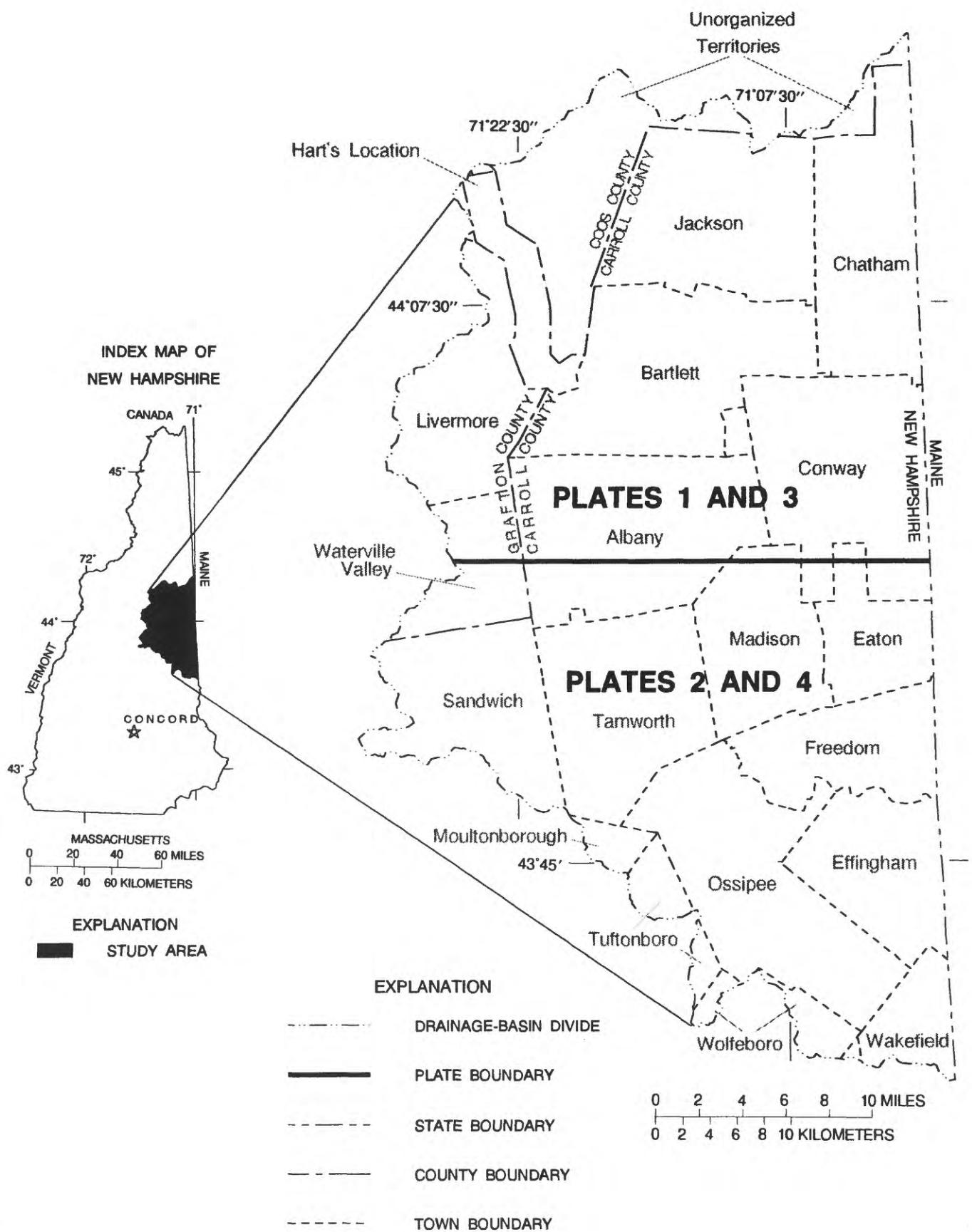
## Purpose and Scope

The purpose of this report is to (1) describe the hydrologic and geologic characteristics of the stratified-drift aquifers in the Saco and Ossipee River Basins, including areal extent of the stratified-drift aquifers, ground-water levels, general directions of ground-water flow, saturated thickness, and transmissivities; (2) present a technique for the evaluation and estimation of ground-water availability, and (3) assess the general quality of water in the stratified-drift aquifers.

The study generally was limited to the collection, compilation, and evaluation of data from the stratified-drift aquifers underlying the study area. Yield of a large portion of the largest of the aquifers, in the area surrounding Ossipee Lake, was evaluated with a drawdown modeling-simulation technique to illustrate how this technique can be used to provide estimates of ground-water availability after 180 days of pumping.

## Previous Studies

Previous studies in the area include a basic data report of geohydrologic and surface-water data for the Saco River valley-fill aquifer from Bartlett, New Hampshire to Fryeburg, Maine by Johnson and others (1987). An accompanying interpretive report on the hydrogeology, water quality, and effects of pumping was written by Tepper and others (1990). A reconnaissance map of the availability of ground water in the Saco River Basin was presented by Cotton (1975) on a map at a scale of 1:125,000. Surficial-geologic maps in the study area had been produced at a scale of 1:62,500 with accompanying reports. Goldthwait (1968) mapped and reported on surficial deposits in the Wolfeboro 15-minute quadrangle, and Newton (1974) mapped and reported on surficial deposits in the Ossipee Lake 15-minute quadrangle.



**Figure 1.** Location of the Saco and Ossipee River Basin study area.

## Description of the Study Area

The Saco and Ossipee River Basins encompass about 869 mi<sup>2</sup> in the glaciated Appalachian ground-water region in east-central New Hampshire. The two basins cover an area 48.5 mi long north to south and about 27.4 mi wide east to west (fig. 2). The mountainous northern part is in the White Mountain section of the New England physiographic province and the southern part is in the New England upland section (Fenneman, 1938; Raiz, 1954). There are 19 towns and 9 grants or unorganized territories that are either partly or entirely in the study area.

Surface altitude of the basins ranges from just under 400 ft above sea level, at two sites where the Saco and Ossipee Rivers flow into the State of Maine, to 6,288 ft above sea level at the summit of Mount Washington, the highest point in the Northeastern United States.

The Ossipee River originates at Ossipee Lake, 407 ft above sea level, and drains eastward into the State of Maine. Major tributaries to Ossipee Lake are the north-flowing Pine River, the east-flowing Bearcamp River, and the south flowing Chocorua River. The Ossipee River is named from the Native American word "Awoss-sebi" meaning river on the other side (Piotrowski, 1977). The Saco River originates at a small water body called Saco Lake, 1,887 ft above sea level in Crawford Notch. Major tributaries of the Saco River, in the study area, are the north-flowing Pequawket Brook, the east-flowing Swift River, and the south-flowing Rocky Brook, Ellis River, and East Branch of the Saco River (fig. 2). The word "Saco" is derived from the Native American word "Sokook" meaning at the southern place (or from the south side) (Piotrowski, 1977).

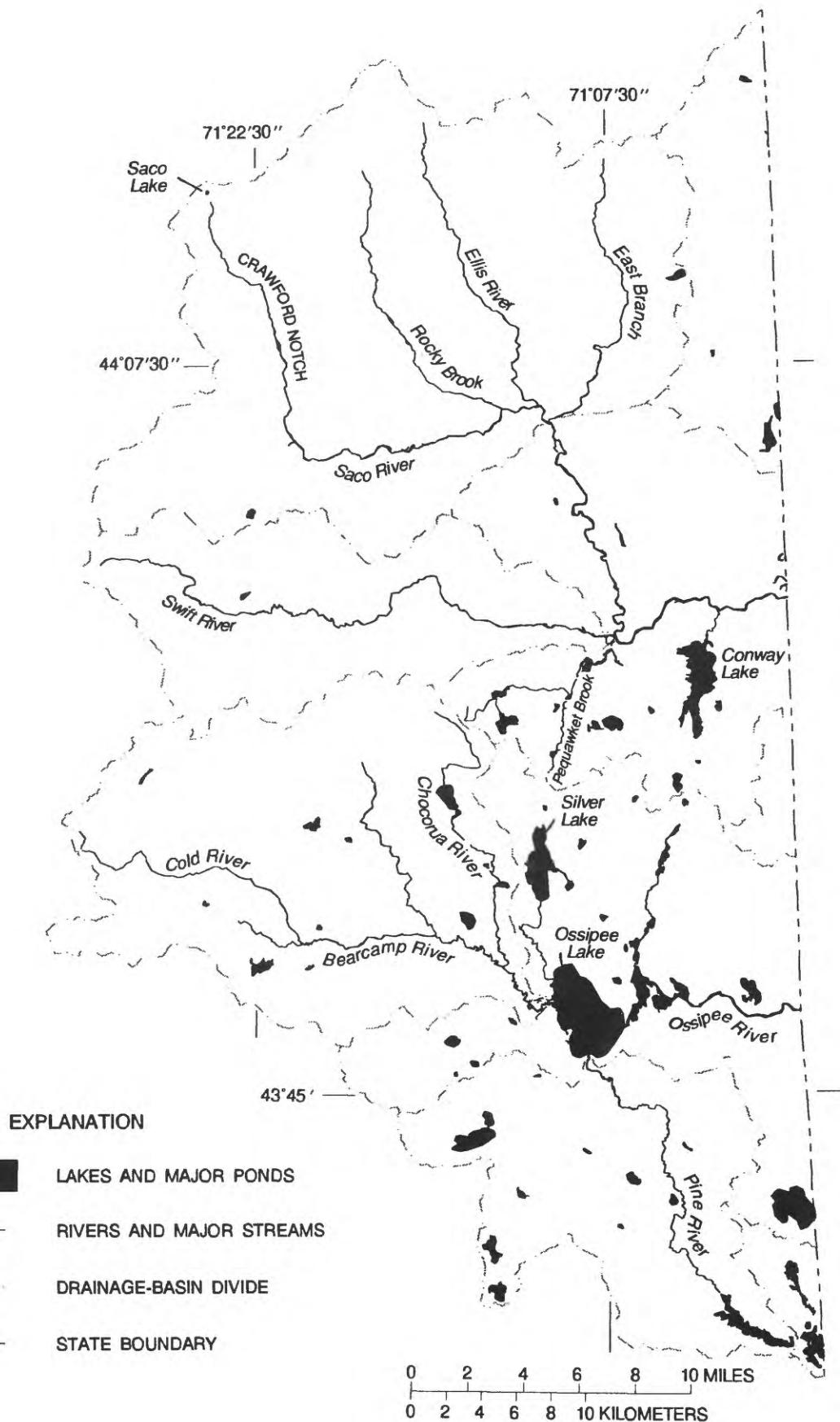
Average annual precipitation ranges from about 40 in. in the southern part of the basin to more than 60 in. in the northern headwaters. Average annual runoff in the basin ranges from about 20 to 50 in. (Knox and Nordenson, 1955). Average annual runoff for the Ossipee River Basin upstream of the gage on the Ossipee River at Effingham, is about 28 in/year. Average annual runoff for the Saco River Basin, upstream of the gage on the Saco River at Conway, is about 33 in/year (Toppin and others, 1991).

## Water Use in the Study Area

Eight municipal water-supply systems in the Saco and Ossipee River Basins are water users registered with the NHDES-WRD because they withdraw more than 20,000 gal of water on an average day (table 1). All water-use data discussed here is from Frederick H. Chormann Jr., New Hampshire Department of Environmental Services, Water Resources Division (written commun., 1994). The largest system, Wolfeboro Water Works, provides water service to over 5,000 residents of Wolfeboro. This system is noteworthy because withdrawals from Upper Beech Pond, in the southwestern corner of the Ossipee River Basin (pl. 2), are exported for use in the Winnipesaukee River Basin. Thus, over 0.7 Mgal are exported or lost from the study area on an average day. Water that is withdrawn from the remaining sources listed in table 1 is almost entirely used within the study area.

Four of the water-supply systems use surface-water sources, three of the water-supply systems withdraw water from stratified-drift aquifers, and one of the water-supply systems (in Madison) withdraws water from both stratified-drift and bedrock aquifers. The Lower Bartlett Water Precinct, the Conway Village Fire District, and the North Conway Water Precinct all withdraw water from the Saco River Valley stratified-drift aquifer. In 1990, total withdrawal by these three systems was 1.68 Mgal/d. This amount of withdrawal decreased slightly during 1991-93. In addition to the large systems listed in table 1, several small community water-supply systems (for mobile-home parks, developments, and condominium associations) in Albany, Bartlett, Conway, Freedom, Madison, Ossipee, Tamworth, and Wakefield pump water from stratified-drift aquifers. These small water-supply systems do not normally install meters on wells, so withdrawals must be estimated on the basis of the number of people served.

In addition to water-supply system data, the State water-use data base contains information on other registered water users in the basin. In 1993, total withdrawals from surface water for snowmaking in Bartlett, Conway, Jackson (1990 data), and Madison were 1.330 Mgal/d. Some ground water (0.003 Mgal/d) was also withdrawn in Bartlett for snowmaking. Ground-water withdrawal in Tamworth for biomass power production was 0.360 Mgal/d in 1993. Surface-water withdrawal for mining operations in Ossipee and Madison was 0.283 Mgal/d, for golf-course irrigation in Conway



**Figure 2.** Location of major lakes, rivers, and surface-water divides in the Saco and Ossipee River Basins study area, east-central New Hampshire.

**Table 1.** Registered municipal water-supply systems and ground- and surface-water source data for towns in the Saco and Ossipee River Basins, east-central New Hampshire

[Source and withdrawal data from the New Hampshire Department of Environmental Services, Water Resources Division (1990); population data from the New Hampshire Department of Environmental Services, Water Supply and Pollution Control Division (Rene Pelletier, written commun., 1993); Mgal/d, million gallons per day; --, not applicable; GPW, gravel-packed well; BRW, bedrock well]

Town	Water-system name	Surface-water body or local well name	Well number	Type of well	Average daily withdrawals in Mgal/d	Population served
Bartlett	Bartlett Village Water Precinct	Albany Brook	--	--	0.099	625
Bartlett	Lower Bartlett Water Precinct	Saco River Intervale #1 Saco River Intervale #2	BCW 17 BCW 114	GPW GPW	.055 .052	1,000
Conway	Conway Village Fire District	Swift River Well	CWW 102	GPW	.680	1,937
Conway	North Conway Water Precinct	GPW #1 GPW #2 GPW #3	CWW 99 CWW 100 CWW 101	GPW GPW GPW	.026 .311 .557	4,000
Jackson	Jackson Water Precinct	Ellis River	--	--	.037	500
Madison	Village District of Eidelweiss	Grachen Well Field Muddy Beach Well Field New gravel-packed well	MBW 72 <sup>1</sup> MBW 58 <sup>2</sup> MBW 145 <sup>3</sup> MBW 249 <sup>4</sup>	GPW BRW BRW GPW	.027 .052	725
Ossipee	Ossipee Water Department	Danhole River	--	--	.087	850
Wolfeboro	Wolfeboro Water Works	Upper Beach Pond	--	--	.725	5,405
<b>Total</b>					<b>2.692</b>	<b>15,042</b>

<sup>1</sup>MBW 72 represents five gravel-packed wells, four of which are inactive.

<sup>2</sup>MBW 58 represents two bedrock wells, both of which are inactive because of high radioactivity levels in the water

<sup>3</sup>MBW 145 represents two bedrock wells.

<sup>4</sup>MBW 249 was drilled in 1993 to supplement pumpage from existing well fields.

was 0.060 Mgal/d, and for fish farming in Ossipee was 0.044 Mgal/d (1990 data). Industrial withdrawals in 1993 were 0.001 Mgal/d each in Madison (ground water) and in Ossipee (surface water). The amount of water used for snowmaking, mining, irrigation, and fish farming are average daily withdrawals based on an entire calendar year; the values would be larger if they were presented as averages only during the season of

actual use. In addition, instream use for hydroelectric power generation in Ossipee was 8.105 Mgal/d (on the basis of 8 months of reported data in 1993).

### Methods of Study

The following methods were used in this study:

1. Areal extent of stratified-drift deposits was mapped. Soil maps (Diers and Vieira, 1977; and digitized U.S. Soil Conservation Service data on file with Complex Systems Research Center, University of New Hampshire, Durham, N.H.) and surficial-geologic maps (Goldthwait, 1968, and Newton, 1974) were used as an aid in determining the contact between stratified drift and till. These data were supplemented by field mapping done specifically for this study.
2. Available subsurface data on ground-water levels, saturated thickness, and stratigraphy of stratified-drift aquifers were compiled and data were reviewed for deficiencies. These data were obtained from published and unpublished sources of the USGS and the NHDES-WRD. Additional data were obtained from bridge borings of the New Hampshire Department of Transportation (NHDOT), well-drilling contractors, engineering consultants, municipalities, and local residents.
3. The location of production wells, test wells, and test borings were plotted on base maps at a scale of 1:24,000 and the data was added to the USGS Ground-Water Site-Inventory (GWSI) data base. Wells and borings were cross-referenced by an identification number and owner, as well as other locational and well construction information, water levels, and lithologic logs. All latitudes and longitudes are referenced to the North American Datum of 1927. The site locations are shown on plates 1 and 2 and information from these sites appears in appendixes 1 and 2.
4. Seismic-refraction profiling, a surface-geophysical technique, was applied at 61 locations in the study area to determine depths to the water table and depths to the bedrock surface. These surveys ranged from 350 to 4,100 ft in length. Locations of the profiles are shown on plates 1 and 2. Results are given in appendix 3. A 12-channel, signal-enhancement seismograph was used to measure time-of-travel for a sound wave from a shot point to 12 geophone locations. Altitudes of geophones and shot points were determined by leveling to a common datum. The seismic-refraction data were interpreted by use of a time-delay, ray-tracing computer program developed by Scott and others (1972). Data from nearby wells and test holes were used to verify the interpretations.
5. Seismic-reflection profiling, another surface-geophysical technique, was used to determine depths to bedrock and to infer the sediment type of the aquifers that lie beneath Ossipee Lake and seven other surface-water bodies in the study area. The methods used in data collection and interpretation are discussed in detail by Haeni (1986 and 1988b), Reynolds and Williams (1988), and Morrissey and others (1985).
6. Test borings were made at 38 locations to improve definition of the thickness and geohydrologic characteristics of the stratified-drift aquifers. Locations of the test borings are shown on plates 1 and 2. Split-spoon samples of the subsurface sediments collected at specific depths were used to evaluate the grain-size characteristics and identify the stratigraphic sequence of materials composing the aquifers. Thirty-two test borings were finished as observation wells with a 2-inch inside-diameter polyvinyl chloride casing and slotted well screen. Wells were developed by use of a cycling-pneumatic pump. Water levels were measured periodically in these wells, and water samples were collected from selected wells.
7. Data collected as described in items 1 through 6 were used to prepare maps showing the water-table altitudes and saturated thicknesses of the stratified-drift aquifers.
8. Hydraulic conductivities of aquifer materials were estimated from field descriptions of the grain-size-distributions of samples from the test borings. Field descriptions were compared to descriptions of 454 sieved samples from previous ground-water studies in New Hampshire (Moore and others, 1994; Ayotte and Toppin, 1995). Transmissivities were estimated from the logs of test borings by assigning hydraulic conductivities to specific intervals, multiplying the hydraulic conductivities by the saturated thickness of the interval, and summing the results. Additional transmissivities were obtained from reports by geohydrologic consultants or from analysis of

unpublished aquifer-test data. This information was used to prepare maps showing the distribution of transmissivity of the stratified-drift aquifers (pls. 3 and 4). Drillers logs from wells and test borings not drilled by the USGS, in the areas of stratified drift, were examined during the preparation of these maps.

9. The aquifer boundary, water table, saturated thickness, and transmissivity maps were digitized from 1:24,000 and 1:25,000 scale-stable mylar quadrangle maps and entered into a Geographic Information System (GIS) computer data base. The digitized quadrangle maps then were merged into one study-wide GIS coverage for each map feature. GIS coverages include well, test boring, and spring locations; seismic-refraction and seismic-reflection profile locations; water-table configurations; saturated thicknesses; and transmissivities of the stratified drift.
10. Surface-water-discharge measurements (appendix 4) were made at 36 sites during low flow when the surface water is primarily ground-water discharge. These low-flow measurements indicate quantities of ground water potentially available from aquifers.
11. A large part of the aquifer surrounding Ossipee Lake was selected to demonstrate a technique for estimating water availability by use of a ground-water-flow model developed by McDonald and Harbaugh (1988) and modified by Orzol and McGrath (1992). Model-input data were generated by use of the GIS computer data-base coverages discussed in method number 9.
12. Samples of ground water from 25 test wells and 4 springs were collected and analyzed for physical characteristics (specific conductivity, pH, temperature) and concentrations of selected organic and inorganic constituents. The data provided by these analyses (appendix 5) were used to assess the water quality of the stratified-drift aquifers. The data were also entered and stored in the National Water Information System (NWIS) computerized data base.

## Numbering System for Wells, Borings, and Springs

Local numbers assigned to wells, test borings, and springs entered into GWSI consist of a two-letter town code (table 2), a supplemental letter designation ("A" for borings done for hydrologic purposes with no casing set, "B" for borings done primarily for constructional purposes, "S" for springs, and "W" for all wells in which a casing was set), and a sequential number in each town. For example, the first well in the town of Albany is ADW 1.

## Acknowledgments

The authors thank the State and Federal agencies, municipalities, well-drilling contractors, and consulting firms who provided data for this study. Included are personnel from the New Hampshire Department of Environmental Services, Water Resources Division, Kenneth Stern, Frederick Chormann Jr., Richard Schofield and Kevin Riel. Appreciation is also expressed to Complex Systems Research Center at the University of New Hampshire for providing digitized soils and hydrography data. Thanks are also given to the residents and land owners in the study area who graciously allowed access to their land for purposes of data collection, and to Robert Newton, Fredrick Chormann, Jr. and Richard Schofield for providing reviews of this report.

**Table 2.** Two-letter town codes used as prefixes in the numbering system for wells, borings, and springs in the Saco and Ossipee River Basins, east-central New Hampshire

Town	Two-letter Code	Town	Two-letter Code
Albany	AD	Jackson	JA
Bartlett	BC	Madison	MB
Chatham	CK	Ossipee	OX
Conway	CW	Sandwich	SE
Eaton	EC	Tamworth	TA
Effingham	EF	Tuftonboro	TZ
Freedom	FL	Wakefield	WA
Harts Location	HJ	Wolfeboro	WR

## GEOHYDROLOGIC SETTING

Ground water underlies the land surface throughout the Saco and Ossipee River Basins. Subsurface formations that have sufficient saturated permeable materials that yield significant quantities of water to wells are termed aquifers. Even aquifers with low productivity may yield enough water to wells for domestic users.

The three types of aquifers present in the study area are: (1) stratified drift, which is the major source of ground water for municipalities (fig. 3); (2) till, which locally can supply ground water for domestic use; and (3) bedrock, which yields a variable supply but is a major source of ground water for private domestic needs and small businesses (U.S. Geological Survey, 1985).

### Postglacial Redistribution of Glacial Deposits

Modification and redistribution of glacial deposits in the study area has been significant. These processes include erosion and redeposition of material by rivers, by streams, and, to a lesser extent, perhaps by wind. Postglacial down cutting by the Saco and Ossipee Rivers and their tributaries has resulted in erosional channels, alluvial fans, stream terraces, flood-plain deposits, and modern deltas.

Alluvial fans are an integral part of many stratified-drift-aquifer systems because fan deposits can increase potential yield of the aquifers by increasing the infiltration or recharge from tributary streams. Typically, alluvial-fan deposits form under extreme flood conditions, and where a stream emerges from the till uplands, flows out onto flatter areas of stratified drift, and deposits coarse material (largely gravel and sand). Under conditions of low streamflow, alluvial fans enhance infiltration from streams as they flow out onto the areas of stratified drift, which can dry up the river. The Dry River, in Hart's Location (plate 1), is named for this reason. The formation of alluvial-fan deposits may have been most active immediately following deglaciation from redeposition of the newly exposed land surface. Deposition of alluvial fans has continued until the present day.

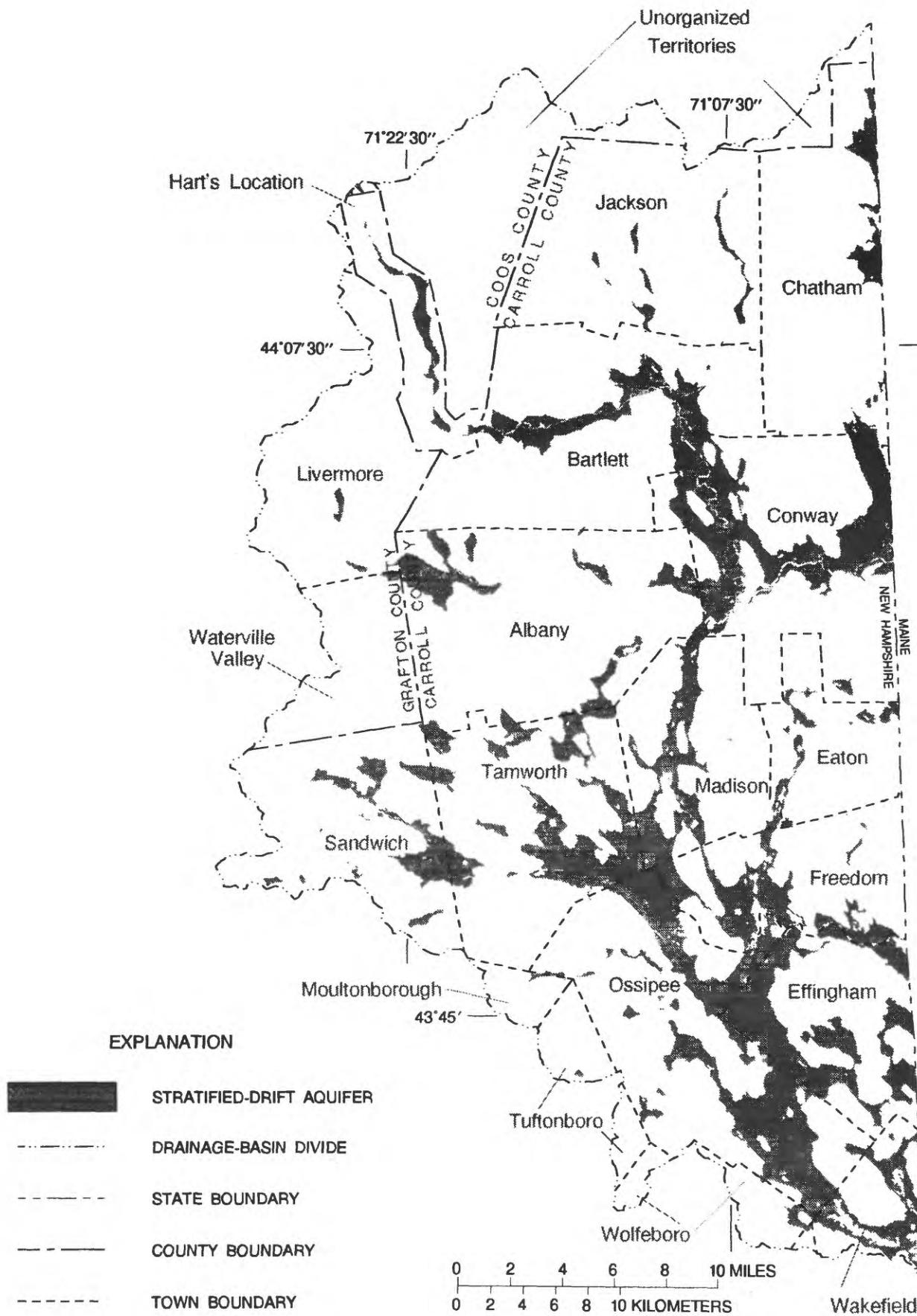
Alluvial fans are found at numerous sites throughout the study areas. Fans are especially prevalent in the northern more mountainous part of the study area. A

partial list of alluvial-fan sites include: a site along the west side of Province Lake in Effingham (Goldthwait, 1968); the west side of Crystal Lake in Eaton, and where the Chocorua River emerges from the steep slopes of Mt. Chocorua in Albany (Newton, 1974); where streams emerge onto the valley fill, where the Mill, Charles, Chandler, McDonough, Langdon and Weeks Brooks emerge in Chatham; where Avalanche, Davis and Nancy Brooks, and the Sawyer and Dry Rivers emerge in Hart's Location where the Razor, Meadow, Albany, Bartlett, and Mountain Brooks and Rocky Branch, Ellis, and East Branch Rivers emerge in Bartlett; the Miles Brook and the Ellis and Wildcat Rivers in Jackson; Oliverian Brook in Albany; Swift River in Livermore; Whiteface River at Whiteface Intervale, Wonalancet River at Wonalancet Intervale, and the Cold River in Sandwich (pls. 1 and 2).

Postglacial redeposition of sediments also includes modern deltas built out into Ossipee Lake, such as the Bearcamp River delta, the Pine River delta, the Lovell River delta, and the Chocorua River delta. Along the southeast shore of Ossipee Lake, post-glacial migration of the lake outlet is the result of redeposition of sediment by beach processes and long-shore currents (Newton, 1974, p. 38).

### Stratified Drift

Stratified-drift aquifers, the focus of this study, consist of stratified, sorted, dominantly coarse-grained sediments (sands and gravels) deposited by glacial meltwater at the time of deglaciation. Alluvial and windblown deposits, younger than the stratified drift, in contact with stratified drift, are included as part of the stratified-drift aquifers. Distributions of the stratified-drift aquifers in the study area are shown in figure 3. Hydraulic characteristics of these sediments that affect ground-water storage and flow are related to the glaciofluvial and glaciolacustrine environments in which the sediments were deposited. Stratified-drift deposits are composed of distinct layers of sediments with different grain-size distributions, sorted according to the depositional environment. For example, fast-moving meltwater streams are apt to deposit coarse-grained sediments with large pore spaces between grains. If saturated, these materials generally form aquifers that transmit ground water readily. Slow-moving meltwater in streams, lakes, and ponds are apt to deposit fine-grained materials (which consist of very



**Figure 3.** Location of stratified-drift aquifers underlying the Saco and Ossipee River Basins study area, east-central New Hampshire.

fine sand, silt and clay). These fine-grained deposits do not transmit water as readily as the coarse-grained deposits.

The size and arrangement of voids or pore spaces between sediment particles determine the capacity of the aquifer material to store and transmit ground water. Large, interconnected pore spaces readily transmit ground water and provide a large volume of ground-water storage. The ratio of total volume of pore space to the total volume of sediment is a measure of the porosity or space available for ground-water storage. Specific yield, the ratio of the volume of water that can be drained by gravity to the total volume of the sediment, is used to measure the amount of water stored in an aquifer. Total volume of pore space per total volume of sediment and specific yield are not equal because some water is held on the grain surfaces by tensional forces and will not drain by gravity. These characteristics are related to the original depositional environment of the sediments, and, thus, the term "stratified-drift aquifer" refers to several different types of aquifers, depending on the mode of deposition.

The deglaciation process, and the location of glacial lakes during deglaciation, had a pronounced effect on the types of stratified-drift aquifers in the study area. Throughout New England, deglaciation is believed to have occurred by a systematic process of retreat with minor localized readvances (Koteff and Pessl, 1981). As the active glacial-ice margin receded to the north, zones of stagnant ice were left in contact with the active ice margin. Numerous features throughout the southern part of the study area are associated with stagnant ice and characterize this northward retreat of a stagnant-ice zone in front of the active glacier (Newton, 1974). Examples of segmented eskers and deltas fed by eskers support this style of deglaciation and are among the most potentially productive aquifers.

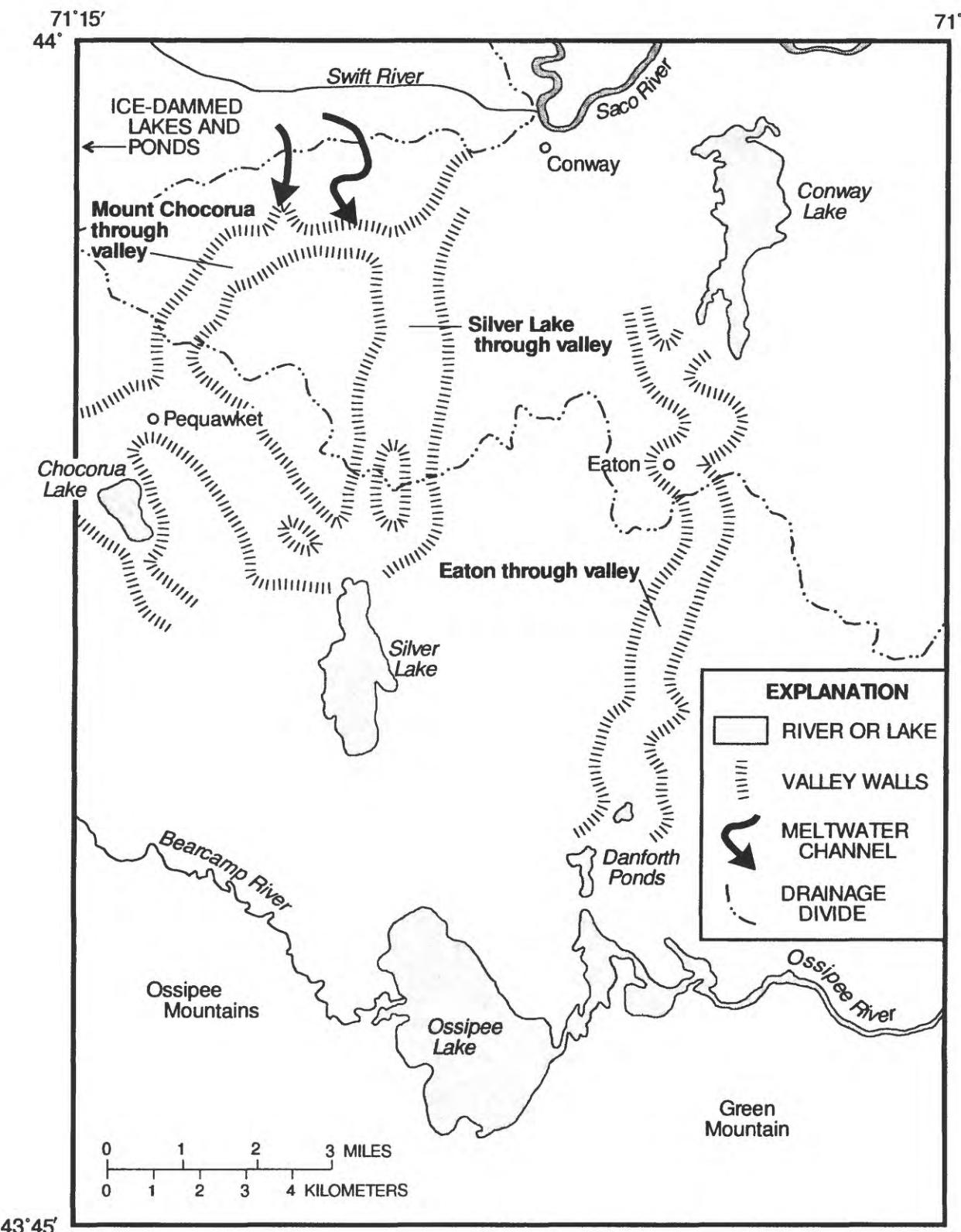
Stratified-drift aquifers underlying the study area include ice-contact eskers and deltas, outwash deltas deposited by meltwater streams flowing in front of the glacier, collapsed outwash, kames, deposits from glacial-ice-dam-break flood deposits (alluvial fans and deltas), and alluvial fans and deltas fed by streams resulting from precipitation falling directly on the initially barren land surface. In certain cases, exposed till and other glacial sediments were eroded and redeposited.

The stratified-drift aquifers in the Saco and Ossipee River Valleys and in valleys of the major tributaries include a through valley that connects the two basins. Fine-grained, stratified-drift deposits in parts of these valleys typically are overlain by thick deposits of sand and gravel. Some potentially productive stratified-drift aquifers are discontinuous; however, others in the study area are connected and form the largest potentially productive stratified-drift aquifer in New Hampshire. This continuous stratified-drift aquifer extends 37.3 mi northward from Wakefield to Bartlett N.H. and eastward into Maine.

Three valleys, called "through valleys", cut north to south across the hilly zone between the Saco and Ossipee River drainage basins (Newton, 1974) (fig. 4). The forms of the valleys are maintained as one through valley crosses a low divide such that streams south of the divide flow south and streams north of the divide flow north. These valleys are filled with glacial-ice-stagnation features such as eskers, kames, kame terraces, and kame fields. The three through valleys are referred to as the Eaton, Silver Lake, and Chocorua through valleys (Newton, 1974). These valleys are the result of erosion by several glaciations during the Pleistocene Epoch, however, the stratified-drift aquifers in the Saco and Ossipee River Basins were deposited by the most recent glaciation.

### Glacial-Lake Deposits

During the earliest stages of deglaciation of the study area, the natural drainage to the north in the Pine River Basin, in the southern part of the study area, was obstructed by the ice margin, forcing the melt water to drain south. The drainage divide acted as a dam and formed a series of lakes between it and the glacier, similar to the Contoocook River Basin, another northwardly draining basin in New Hampshire, (Moore, 1993; Moore, in Harte and Johnson, 1995; Hildreth and Moore, in press). At least one and perhaps two spillways formed in the sand and gravel of the divide between Pine River Pond and Stump Pond (altitude 600 ft above sea level) (pl. 2). As the ice margin continued to melt back to the north, the first lake expanded until a lower lake outlet was exposed northwest of White Pond and the first lake drained rapidly to the levels of the newly exposed outlet of the second lake (altitude 560 ft above sea level). Further melting back of the ice margin caused the lake to merge with a third



**Figure 4.** Ossipee Lake Quadrangle showing the location of the three "through valleys," east-central New Hampshire (Modified from Newton, 1974).

lake, only slightly lower in altitude, that extended beyond the study area into Maine. Continued melting northward of the ice margin exposed another, lower outlet to the north of Green Mountain (altitude 460 ft above sea level) and the lake drained rapidly to the levels of the newly exposed outlet. Next the outlet shifted to a position 0.6 mi to the north where the Ossipee River is presently.

In the Saco River Basin, lake deposits are also found in the Conway area. These may have been deposited in a single large lake (Leavitt and Perkins, 1935, p. 94; Thompson, 1986; Tepper and others, 1990, p. 10-11), or it is also possible that with the rapid infilling of sediment, dams formed and several smaller lakes were created instead of one large one (Tepper and others, 1990, p. 10-11).

The formation of glacial lakes was enhanced by the underlying bedrock surface—scoured and plucked by glacial ice during multiple glaciations during the Pleistocene Epoch. For example, the underlying bedrock surface surrounding Ossipee Lake was deeply eroded into a trough-shaped basin. The center of the glacial lake, where Ossipee Lake is presently, was at least 280 ft deeper than the lowest point of its rim in the eastern part of the lake where the Ossipee River now flows eastward from Berry Bay. This natural "bowl" in the bedrock surface was an important factor in the formation of a glacial lake during deglaciation. Sediment deposition during deglaciation rapidly filled in most of this lake, and post-glacial lowering of the lake level was the result of erosion at the outlet. Ossipee Lake is essentially a remnant of the previous glacial lake.

Glacial-lake environments thus dominated the central portions of the Ossipee and the Saco River Basins during deglaciation. The largest amounts of stratified drift were deposited in glacial lakes that were being filled with outwash and fine-grained sediments. The coarsest stratified-drift deposits formed in these areas are ice-contact eskers and deltas. Some of the deltas may have been fed by sediment in meltwater flowing from the esker channels in or beneath the glacial ice. Locally, the coarse-grained stratified drift, deposited as subaqueous fans and deltas, is found beneath fine-grained stratified drift. Typically the deltas prograded out over fine-grained deposits and resulted in a lithologic sequence that coarsens upward. The eskers and deltas constitute the primary aquifers found in areas where glacial lakes were present.

Confined aquifers beneath glacial-lake silts and clays are not well documented within the study area. This may be a result of the absence of confined aquifers or may simply reflect a limitation of the available documentation. When installing a bedrock well, local well drillers may not notice a layer of aquifer material between fine sediment and the bedrock. Alternatively, when installing a well in stratified drift, drillers often find an adequate source of water above the silts and clays and have no reason to drill further.

The surfaces defining previous levels of glacial lakes throughout New Hampshire have been uplifted in response to the removal of the glacial ice (isostatic rebound). The uplift is greater further to the north-northwest. Projections of these previous lake-level surfaces now slope to the south-southeast. The exact slope of these projected lake surfaces in the Ossipee River Basin have not yet been determined. In western New Hampshire in the Connecticut River Valley, a stabilized lake-level surface of glacial Lake Hitchcock is indicated by numerous ice-contact deltas and numerous other deltas that have not been modified by collapse and have topset-foreset contacts along a single plane. This stabilized lake-level surface indicates that the postglacial uplift of New England, which resulted from the melting of the continental ice sheet, was delayed by at least 5,000 years (Koteff and Larsen, 1989). After the post-glacial uplift the lake-level surface now slopes about 4.8 ft/mi downward in the direction of about S. 21° E. (Koteff and Larsen, 1989). The projected lake-level surfaces of glacial lakes to the east in the Merrimack River Valley (glacial Lakes Tyngsboro, Merrimack, and Hooksett) now slope 4.7-4.9 ft/mi downward to the south-southeast (Koteff and others, 1984). Similarly to the southeast, the projected sea-level surface, onto which numerous glaciomarine deltas were deposited, now slopes about 4.5 ft/mi downward in the direction of S. 28.5 ° E. (Koteff and others, 1993). From this information, glacial lakes in the study area also are assumed to have had previous lake-level surfaces that now slope to the south-southeast.

### Eskers

Eskers are long ridges of sand and gravel deposited either in meltwater channels in the zone of ice stagnation during deglaciation, or at the ice margin where the glacier retreats in contact with a standing water body. In the second case, sand and gravel is deposited where a

meltwater channel empties into a water body. Steady retreat of the ice margin causes deposition at locations progressively further up the meltwater channel. Thus, a ridge that follows the course of the previous channel is created. Eskers are numerous in the southern part of the study area (Goldthwait, 1968; Newton, 1974). Eskers are also found in Tamworth, Albany, Madison, Freedom, Eaton, and Conway (Newton, 1974). In the northern part of the study area, however, eskers are short, scarce, and not well documented.

The most notable group of esker segments is the Pine River Esker, which contains the largest esker deposits in New Hampshire. These esker segments extend from Wakefield northward through Ossipee, and Effingham. Train loads of sand and gravel from this esker are transported, on a daily basis, to Massachusetts. Much of the esker in Ossipee has already been mined above the water table. Many subparallel lower ridges are found on either side of a main esker and specific ridges become braided, suggesting that different water courses were melted in the ice during different periods of time (Goldthwait, 1968, p. 33). The segmented nature of the eskers, with relatively narrow ridges leading up to broader areas, indicate that the esker system was developed in sequential stages. The broader areas, such as northwest of Pine River Pond and at White Pond, are probably areas where the ice channels opened up at or near the temporary ice margins.

Eskers in the study area have also been differentiated into two groups (Newton, 1974), on the basis of their orientation to the valleys—valley-side eskers and valley-bottom eskers. Valley-side eskers are oriented approximately at right angles to the valley walls, whereas valley-bottom eskers are parallel to the axis of the valley walls.

Eskers with significant saturated thickness easily store and readily transmit water. In New Hampshire, eskers often formed where an ice margin melted into a glacial lake in front of the glacier. In these areas, eskers formed before, or simultaneously with, the removal of ice from that area and the simultaneous inundation by the glacial lake. As a result, coarse-grained stratified drift (the esker deposit) locally is buried beneath fine-grained stratified drift (the lake-bottom sediments). Given this history and mode of deglaciation, subaqueous fans and distal ends of deltas are also locally buried

beneath fine-grained lake-bottom deposits. The location of confined aquifers composed of these buried deposits, may be undetected in areas lacking subsurface data.

### Through-Valley Deposits

Through-valley deposits in the three through valleys in the Saco and Ossipee River Basins (fig. 4) grade to the level of the glacial lakes. Deglaciation resulted in the formation of eskers, kames, kame terraces, and outwash deposits. These deposits compose the stratified-drift aquifers of these areas. Examples of these aquifers are found in Albany, Conway, Eaton, Freedom, and Madison. On the north and west sides of the Chocorua through valley and the Silver Lake through valley, glacial meltwater formed channels that slope down to the valley fill (fig. 4) (Newton, 1974). Given the severity of the erosion and the large size of the boulders carried by the meltwater, these channels were likely caused by glacial-ice-dam-break floods from water ponded between the ice and the drainage divide for the Swift River Basin (fig. 4). Similar features have been observed in south-central New Hampshire, in the Contoocook River Basin (Moore, 1993; Moore, in Harte and Johnson, 1995; Hildreth and Moore, in press). Sediment-laden meltwater was carried in these channels to the valleys below, and, thus was a source for some sediment of the through-valley deposits. Meltwater emerging directly from the glacial ice, as evidenced by the eskers, was another source of sediments.

### Till

Till is an unsorted mixture of rock debris ranging in size from clay to boulders that was deposited directly by glacial ice. Within the study area, till is the dominant surficial material. Beneath flowing ice, compact lodgement till was deposited discontinuously on the bedrock surface. In some areas, a large amount of lodgement till was deposited on north- and northwest-facing bedrock-hill slopes that locally blocked the flow of the debris-laden ice. As a result, the thickness of till can exceed 200 ft. Much of this thick lodgement till is believed to be from the previous Illinoian glaciation over 133,000 years ago, rather than from the most recent glaciation, the Wisconsinan (B. Stone, in Davis and others, 1993, p. EE-4). This lower till, of the Illinoian glaciation, is typically much less permeable than the upper till deposited during the Wisconsinan glaciation.

Ablation till, which discontinuously overlies compact till or bedrock, formed as residual deposits on the melting (wasting) ice surface and gradually settled on the underlying surface as the ice melted. Ablation till is less compact than lodgement till, is slightly stratified in places, and can contain lenses of stratified material. Because ablation till with stratified lenses may grade laterally into stratified drift, the distinction between till and stratified drift is uncertain. Generally, till directly overlies bedrock. In the Saco and Ossipee River Basins, however, till directly overlies stratified drift in Chatham at well CKW 35 (pl. 1). The mode of deposition of the stratified drift, buried beneath till, has not been determined.

Till is not considered to be a major source of ground water because of generally low hydraulic conductivity. Nonetheless, till, composing an aquifer, is important for domestic water supply. Water-level fluctuations in till can be large enough (several feet) to dry shallow dug wells during dry seasons.

## Bedrock

Bedrock in the Saco and Ossipee River Basins consists of metamorphic, plutonic, and volcanic rocks. The metamorphic bedrock underlies about 27 percent of the study area (Lyons and others, 1986). Metasediments of Silurian age comprise about 16.4 percent of the total study area; whereas younger metasediments of Devonian age, largely of the Littleton Formation, comprise about 10.5 percent of the total study area. Plutonic and associated volcanic bedrock underlies the remaining 73 percent of the study area (Lyons and others, 1986). From oldest to youngest, the Devonian bedrock, of the New Hampshire Plutonic Suite, constitute about 9 percent of the study area. Located in the more mountainous northern half, Mississippian bedrock compose about 22 percent, and Jurassic bedrock, of the White Mountain Plutonic Suite, compose about 35.4 percent of the study area. The Cretaceous bedrock compose about 5.8 percent of the study area and underlies two of the highest areas in the southern half of the study area. These rocks constitute the classic ring-dike complex of the Ossipee Mountains (Wilson, 1969) and they underlie Green Mountain.

Metamorphic and plutonic rocks are generally hard and compact and contain recoverable water only in open fractures (secondary porosity). The size, distribu-

tion, and degree of interconnection of these open fractures are highly variable and their numbers generally decrease with depth. Thus, the capacity of bedrock to store water is variable but generally small. Bedrock wells commonly yield dependable supplies of acceptable water quality for domestic and small commercial uses, however, there have been instances where bedrock wells could not supply domestic needs.

Zones where bedrock is extensively fractured can yield large quantities of water. For example, a municipal well open to bedrock in Madison provides an average daily yield of 0.052 Mgal/d (table 1). Six municipalities in New Hampshire, all outside the study area, have wells open to crystalline bedrock and three of these are reported to yield approximately 0.5 Mgal/d. Systematic exploration may allow location of production wells in fractured zones (Cotton and Hammond, 1985).

Weathered bedrock, perhaps remnant from Tertiary weathering or at least weathering before the last glaciation, was identified in numerous well logs in the study area, especially in Albany, Bartlett, Conway, and Jackson (appendix 2). Deeply weathered granite, called "rotten rock", on the lee side of hills, was apparently protected from the glacial erosion that scoured the bedrock surface down to fresh solid rock (Davis and others, 1993, p. EE-13). In these areas where weathering of granitic gneiss has produced numerous small fractures between mineral grains, the weathered rock can be water bearing. There are numerous bedrock wells in these areas of rotten rock with reported well yields in excess of 40 gal/min (0.058 Mgal/d) (appendices 1 and 2).

## GEOHYDROLOGY OF STRATIFIED-DRIFT AQUIFERS

The geohydrology of the stratified-drift aquifers was described by identifying (1) aquifer boundaries, (2) direction of ground-water flow from recharge to discharge areas, (3) aquifer thickness and storage, and (4) aquifer transmissivity. Data sources in this investigation include surficial-geologic maps, records of wells, test borings and springs, seismic-refraction profiles, and seismic-reflection profiles. Results of the geohydrologic investigation are presented on plates 1-4

and in the text that follows. Plates 1 and 3 are for the northern half of the study area, and plates 2 and 4 are for the southern half.

### Delineation of Aquifer Boundaries and Water Table

Stratified-drift aquifers underlying the study area are composed of fine- to coarse-grained sands and gravels deposited by glacial meltwaters; these deposits, in part, are now sufficiently saturated to yield significant quantities of water to wells and springs. Locations of the lateral boundaries of the aquifers are defined as the contacts between the stratified drift and till and (or) bedrock. The position of the contact was determined by use of surficial geologic maps, soil maps, test-boring logs, and field mapping done specifically for this study. The bottom boundary is the contact of the stratified drift with the till and (or) bedrock surface and was determined by use of data from seismic refraction, seismic reflection, test borings, and domestic water wells. Water-table altitudes were also determined from wells, surface-water bodies, and geophysical data.

### Areal Extent of Stratified-Drift Aquifers

The areal extent of coarse-grained stratified-drift aquifers is shown on plates 1 and 2 and in figure 3. Also shown are the locations of glaciolacustrine lake-bottom sediments. A source of data for delineating aquifer boundaries was 1:62,500-scale, surficial-geologic maps (Goldthwait, 1968; Newton, 1974), and previous 1:24,000 scale aquifer maps for the Conway area (Tepper and others, 1990). Aquifer boundaries for the majority of the study area were updated or specifically mapped at the 1:24,000-scale. The aquifer-boundary maps shown on plates 1 and 2 are simplified surficial-geologic maps. These aquifer maps show the areal extent of the stratified-drift deposits that contain sufficient saturated permeable material to yield significant quantities of water to wells and springs. Surficial-geologic maps show several additional features not included on the aquifer-boundary maps, such as swamps that can conceal aquifer boundaries.

Aquifer boundaries are shown in plates 1 and 2 as solid, dashed, or dotted lines. In the explanation for the plates, solid lines represent boundaries that are "approximately located," dashed lines represent "inferred" boundaries, and dotted lines represent "concealed"

boundaries. A solid line contact on a 1:25,000-scale USGS map implies about a  $\pm$  80-feet horizontal accuracy. In most areas, the solid-line boundaries probably are plotted with nearly this accuracy.

### Stratigraphic Position of Lithologic Units and Altitude of Water Table

The stratigraphic position of lithologic units and altitude of water table were determined by use of data stored in the GWSI data base and from the seismic-refraction and seismic-reflection surveys.

### Ground-Water-Site Inventory

Subsurface data from wells, bore holes, and springs were inventoried and plotted on plates 1 and 2. Geohydrologic data for 1,848 locations have been added to the USGS computerized GWSI data base (appendices 1 and 2). Data on 1,473 new wells (drilled since 1984) in the study area came from the New Hampshire Water Well Board data base. About 1,130 of the 1,848 total sites are in the areas mapped as stratified drift.

The data assembled in the GWSI data base were used to produce the plates that accompany this report. The following sections of this report present the methods used in plate production. Data and contoured interpretive information also can be transferred automatically to the State of New Hampshire's GIS data base and the data analyzed relative to other geographic features. Applications of the USGS GWSI data base are discussed by Mercer and Morgan (1981).

### Seismic Refraction

Seismic-refraction surveys, totaling 13.3 mi, were completed at 61 locations in the study area to determine depths to the water table and bedrock (pls. 1 and 2). A 12-channel, signal-enhancement seismograph was used to record the arrival times of compressional waves generated by a sound source. The data were collected according to procedures described by Haeni (1988b). Interpretive seismic-refraction profiles, made by use of a computer program (Scott and others, 1972), are given in appendix 3. Seismic velocities estimated for the materials under investigation and used in the seismic interpretations are 900 to 1,500 ft/s for unsaturated stratified drift, about 5,000 ft/s for saturated stratified

drift, and about 10,000 to 20,000 ft/s for bedrock. Estimated depths were generally in agreement with data for nearby wells and observations of outcrops, springs and brooks, and with shallow auger-hole data collected during the refraction surveys. Vertical scales of the seismic-refraction cross sections (appendix 3) are exaggerated and non-uniform.

Altitude of the land surface (appendix 3) in feet above sea level, was estimated by leveling the geophone locations relative to one another, and tying that information to sea level datum by use of information from USGS topographic quadrangle maps. Altitudes of the land surface shown in appendix 3 are assumed to be accurate to half a contour interval or about 10 ft.

Estimated altitude of the water table in stratified drift, as determined by interpretation of the seismic-refraction data, is shown in appendix 3. The altitude is accurate to within a little over 10 ft and represents the water table at the time the seismic-refraction data were collected in the summer and fall of 1991 and 1992.

Estimated altitude of the bedrock surface is shown in appendix 3. The estimation of the altitude of the bedrock surface is not as accurate as that of the water table because errors in the interpretation are cumulative. If the depths to the water table, estimated by the interpretation of the seismic-refraction data, are erroneously shallow, the estimated position of the bedrock will be low by an even greater margin than the water table. Additional error will result if the relief of the bedrock surface differs considerably over distances less than the 50- or 100-feet geophone spacing used in profiling, or if a thick layer of till overlies the bedrock. Where till is present in significant thickness and is not accounted for in the interpretation of seismic data, the computed depth to the bedrock is slightly less than the actual depth. In general, accuracy of the altitude of the bedrock surface probably averages plus or minus 10 percent of the depth to bedrock but may be greater in some places.

#### **Seismic-Reflection Surveys at Eight Selected Lakes or Ponds**

High-resolution, continuous seismic-reflection surveys were completed and interpreted along 13.7 mi of 8 lakes or ponds in the study area. Seismic-reflection data were used to map the depth to the bedrock below the water surface and to define the bulk aquifer stratig-

raphy. This information was used to interpolate between the survey locations beneath the water bodies and points on land.

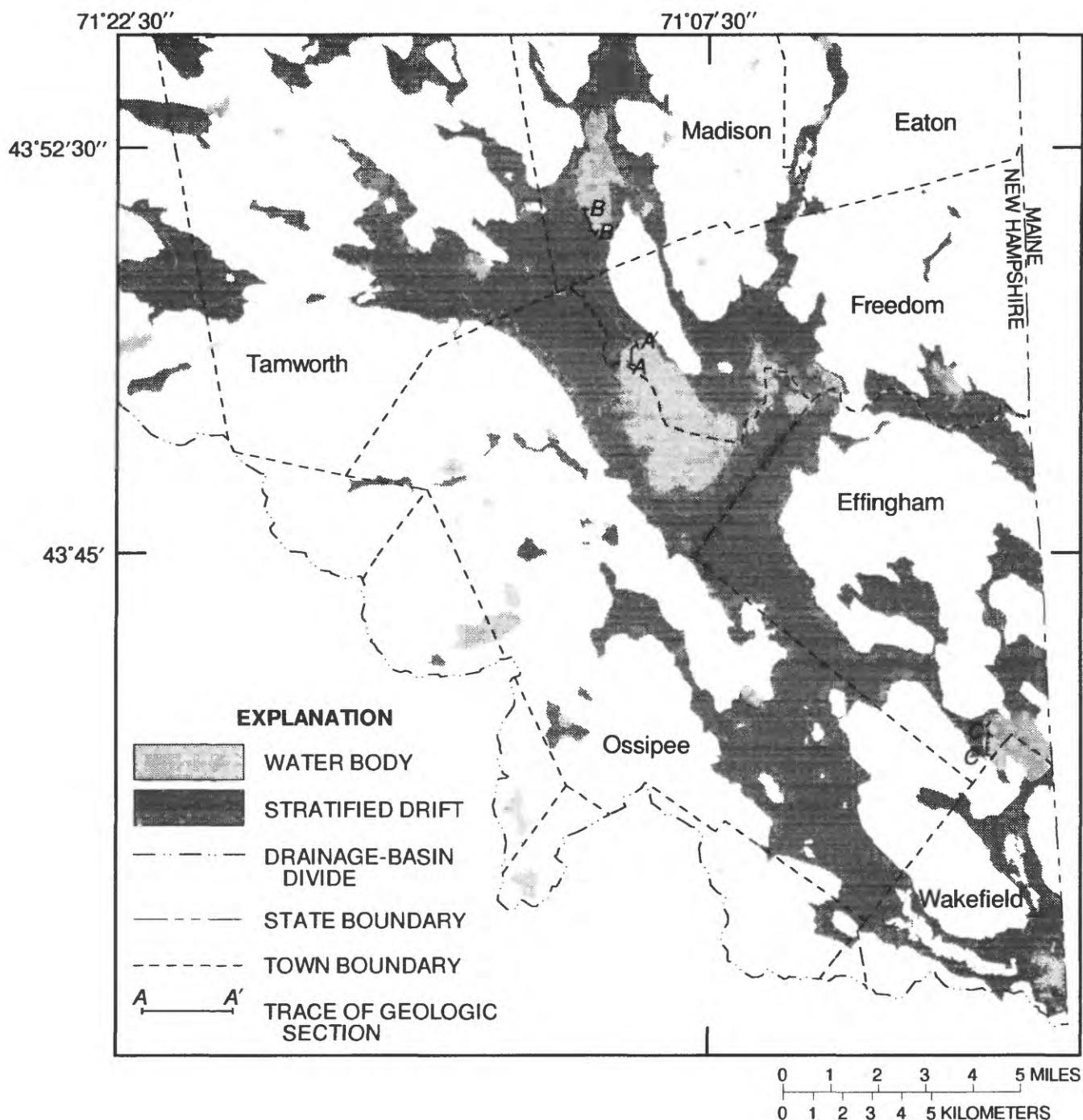
During data collection, a sound source and array of hydrophone receivers were towed behind or along side a boat that traveled slowly along the lake shoreline. Compressional sound waves, generated by a source, traveled through the water column and penetrated the materials beneath the lake and were reflected back to the water surface in response to the physical differences in geologic strata. The reflected sound waves were received by the array of hydrophones, converted to an electrical signal, amplified, filtered, and displayed on a graphic recorder.

Locations where the seismic-reflection surveys provided useable data are shown on plate 2. Also, the locations of three selected surveys are shown in figure 5. The accompanying seismic-reflection records and interpreted geology from these three selected surveys are shown in figures 6-8. The lake bottom, the bedrock or till surface, and the type of unconsolidated deposits are indicated.

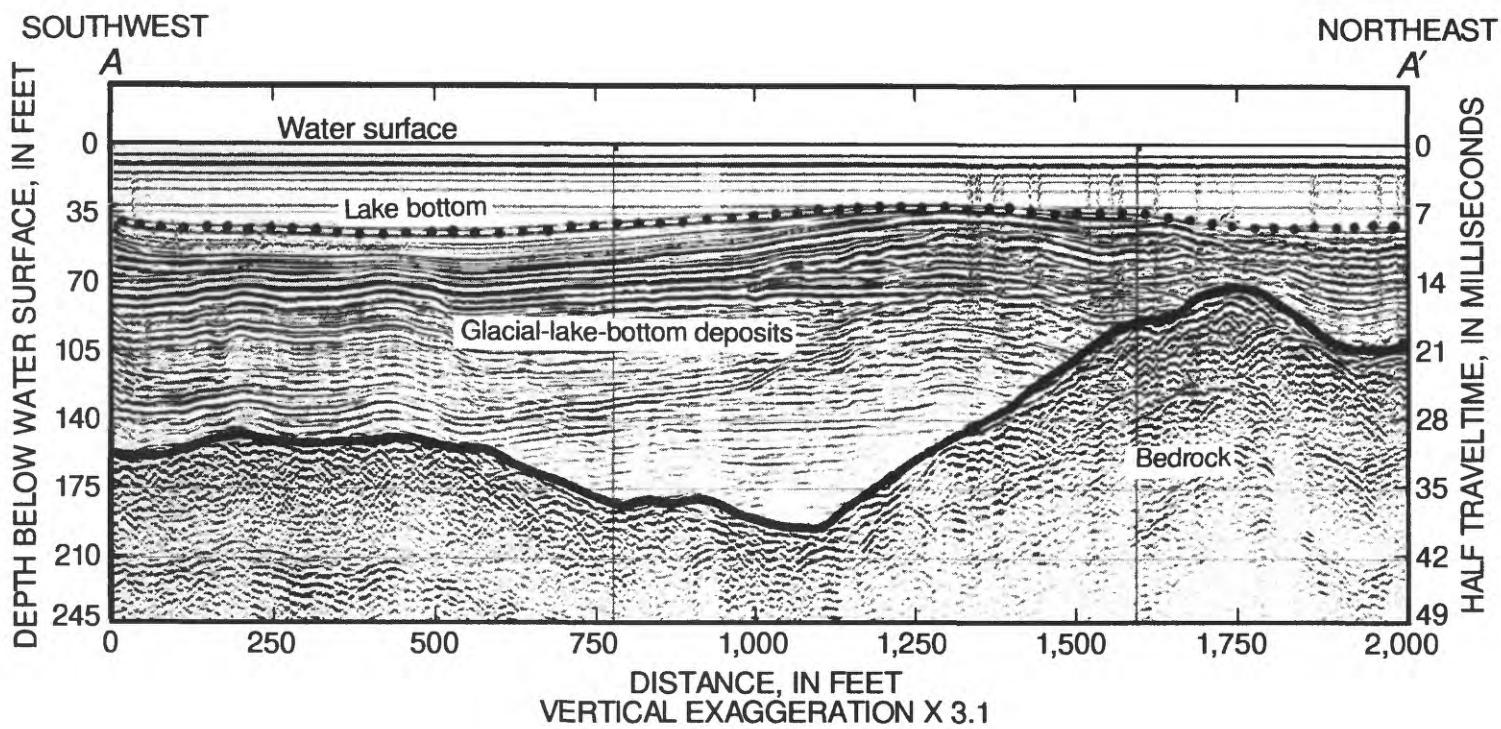
#### **Recharge, Discharge, and Direction of Ground-Water Flow**

Ground-water recharge is the water that is added to the saturated zone of an aquifer. Natural recharge is the difference between total precipitation and the amount of water that is lost, before reaching the water table, as surface runoff and evapotranspiration. Vegetation and soil permeability affect the quantity of recharge to aquifers. Sandy soil covered by mature forests can absorb up to about 1 in. of rainfall per hour and silty, clayey soil covered by mature forests may absorb less than 0.1 in/hr (Heath, 1983). In August through October 1977, Hill (1979, p. 87) estimated that one third of the rainfall that fell on the surface of the Newmarket Plains aquifer in southeastern New Hampshire reached the water table. In other parts of the Northeast, estimated recharge to stratified-drift aquifers has been as much as one-half of the annual precipitation (MacNish and Randall, 1982; Plukowski and Kantrowitz, 1964).

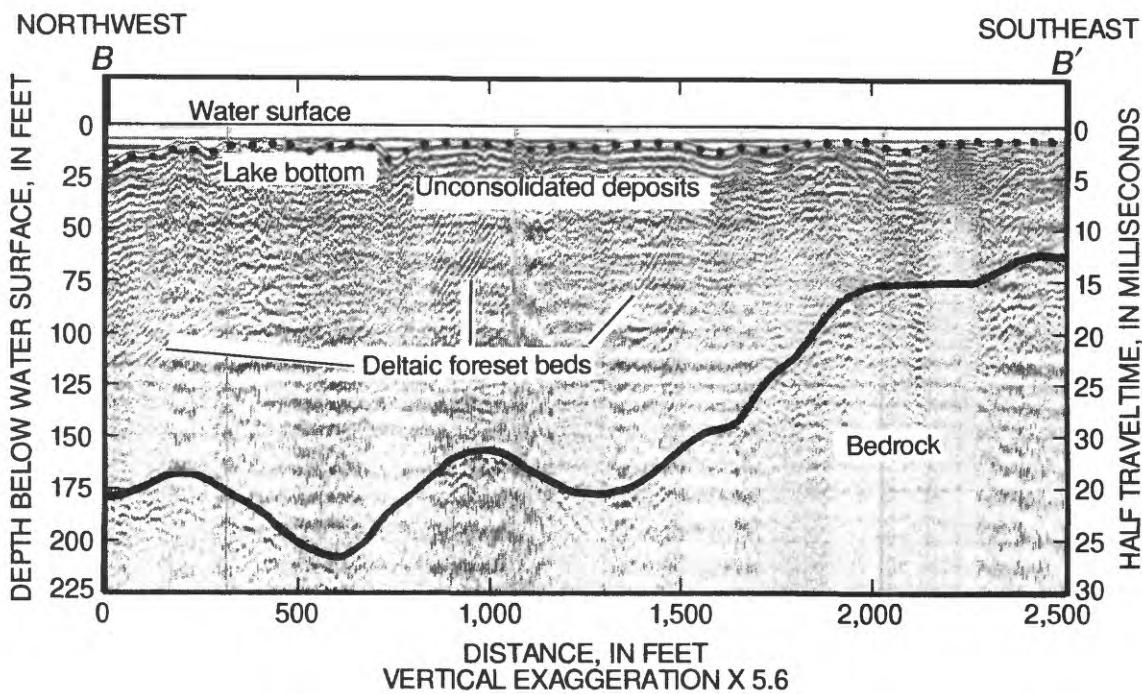
Recharge to the stratified-drift aquifers also comes from the adjacent till-covered bedrock uplands. Morrissey (1983) estimated that the average annual lateral inflow of ground water from upland areas to a stratified-



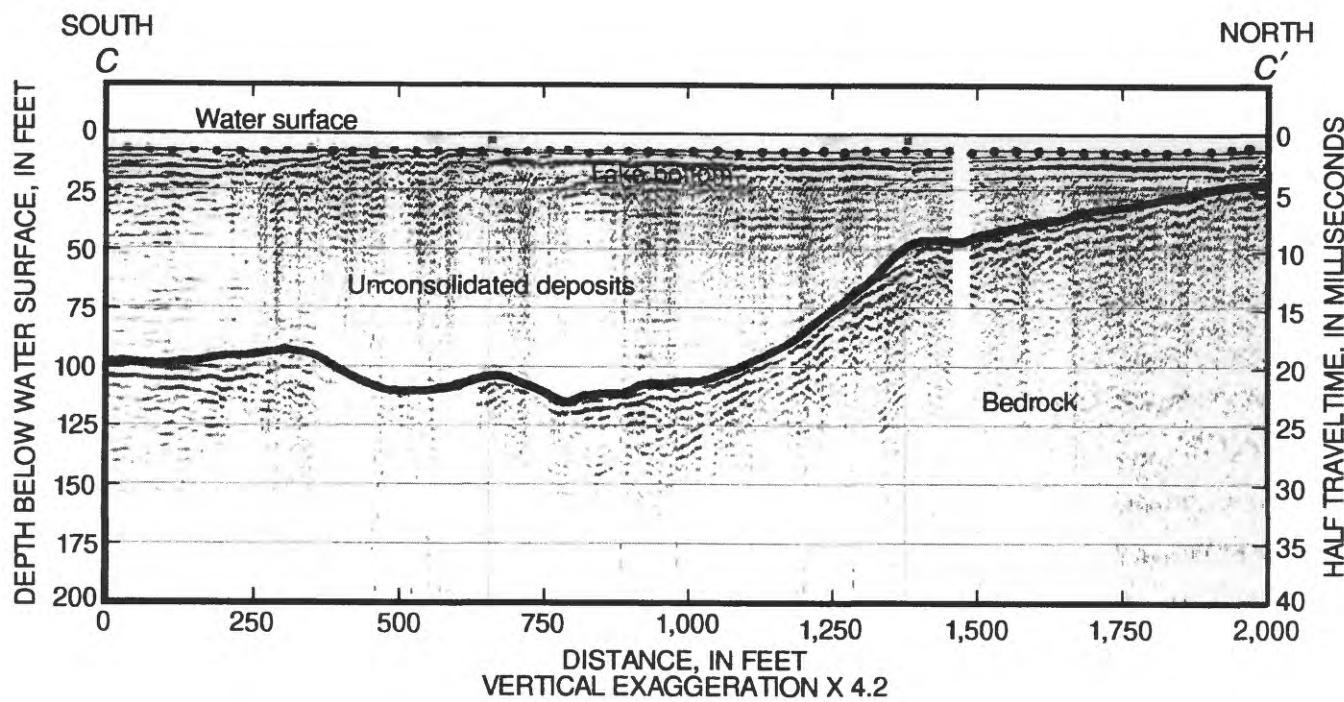
**Figure 5.** Location of geologic sections interpreted from seismic-reflection data in the Ossipee River Basin, east-central New Hampshire.



**Figure 6.** Geologic section interpreted from seismic-reflection data for Freedom line A-A' in the Ossipee River Basin. Location of section shown on figure 5.



**Figure 7.** Geologic section interpreted from seismic-reflection data for Madison line B-B' in the Ossipee River Basin, east-central New Hampshire. Location of section shown of figure 5.



**Figure 8.** Geologic section interpreted from seismic-reflection data for Effingham line C-C' in the Ossipee River Basin, east-central New Hampshire. Location of section shown on figure 5.

drift aquifer in Maine is  $0.5 \text{ (ft}^3/\text{s})/\text{mi}^2$ . Flow from the adjacent till uplands increases in the spring and decreases during the summer.

Ground water recharges through permeable streambeds where streams draining the uplands cross stratified-drift aquifers (Randall, 1978). Numerous examples of this have been observed throughout the study area, where small streams enter the aquifer outcrop areas. During summer, when the water table falls below the water level in the streams, flow from the streams discharges into the aquifer until, in many cases, flow ceases at a certain point downstream and the streambeds are dry.

Natural ground-water discharge from the aquifers includes seepage to streams, lakes, and wetlands, and ground-water evapotranspiration. During periods of low streamflow, usually in late summer and early fall and after extended periods without rainfall, streamflow consists almost entirely of ground-water discharge. Artificial discharge from the aquifers is from pumping.

Artificial sources of recharge or discharge to an aquifer complicate the preparation of water-table maps that are intended to represent natural conditions. Major withdrawals of ground water affect the direction of

ground-water flow in several aquifers in the study area. Except for a few gravel-wash operations, artificially recharged aquifers are not identified in the study area.

In general, ground water flows from the uplands towards the Saco and Ossipee Rivers and their tributaries. The horizontal component of ground-water flow is interpreted to be directly downgradient at right angles to the contour lines shown on plates 1 and 2.

### Water Levels

Periodic water-level measurements were made at 29 wells in the study area during 1992 and 1993. The data from these wells support the conclusions reached for other parts of New Hampshire (Cotton, 1987; Moore, 1990) that natural water-level fluctuations in the coarse-grained stratified-drift aquifers are usually less than 5 ft but can be as much as 10 ft. This conclusion is also supported by the data collected between 1984 and 1986 at four observation wells with continuous recorders in Conway and Bartlett (Johnson and others, 1987, p. 45-46). For water-table altitudes under nonpumping conditions in the coarse-grained, stratified-drift aquifer, a 20-foot contour interval is reasonable for a generalized water-table map that is produced by use of levels from different times of the year. Water levels in wells

screened in till tend to have larger fluctuations than water levels in wells screened in coarse-grained stratified drift.

The altitude of the water table in the stratified-drift aquifers is shown on plates 1 and 2. Water-table contours were drawn to represent water levels during the summer season. Maps of the water-table altitude are based on water-level data derived from (1) altitudes of streams, ponds, and rivers as shown on USGS 1:24,000-scale topographic maps; (2) well records in the GWSI data base (including the 29 observation wells); and (3) geophysical seismic-refraction profiles (appendix 3).

Water-level altitudes were mapped for unconfined aquifers in the stratified drift but not for confined aquifers. The altitude of the water table is controlled locally by the stratigraphy, which differs from place to place. In areas where the gradient is steep, the water table was difficult to contour. In some areas, water-level data were not available, thus contours were not drawn.

Water-table contours generally indicate natural sources of recharge to and discharge from aquifers. A water-table contour that intersects a gaining stream forms a "V" with the pointed end facing upstream and water is flowing from the aquifer to the stream. In some locations, the opposite occurs. This is especially true where small tributary streams enter areas underlain by stratified drift along steep till slopes and during dry periods when the water table is low. A water-table contour that intersects a losing stream forms a "V" that points downstream and water is flowing from the stream to the aquifer. The water-table maps (pls. 1 and 2) were drawn in a manner where streams initially flowing over the stratified drift are drawn as losing streams, but in all other locations the streams are depicted as gaining streams.

## Aquifer Characteristics

The geohydrology of stratified-drift aquifers shown on plates 3 and 4 is based on aquifer characteristics that include saturated thickness, storage, and hydraulic conductivity. Estimates of saturated thickness and hydraulic conductivity were used to calculate transmissivity (pls. 3 and 4). These characteristics can be used to assess the water-supply potential of stratified-drift aquifers. The saturated thicknesses are related to the hydrogeologic setting, and characteristics of

selected aquifers in the Saco and Ossipee River Basins are discussed in the section "Characteristics of Selected Aquifers."

## Saturated Thickness and Storage

Saturated thickness of an unconfined, stratified-drift aquifer is the vertical distance between the water table and the base of the aquifer. For many stratified-drift aquifers, the base is the contact between the stratified-drift deposits and till or bedrock. For other aquifers, the bottom is the contact between upper coarse-grained deposits and underlying fine-grained deposits. However, saturated thickness of underlying fine-grained stratified drift commonly is unknown, so that the thickness contours shown on plates 3 and 4 include the total stratified-drift thickness. The saturated thickness and specific yield of an unconfined aquifer determines the amount of ground water that can be released from storage.

The storage coefficient of an aquifer is defined as the volume of water released from or taken into storage per unit surface area of the aquifer per unit change in head (Theis, 1938, Heath, 1983). In an unconfined aquifer, the storage coefficient approximately equals the specific yield—the amount of water that can be obtained by gravity drainage from a unit volume of the aquifer. Laboratory tests on 13 unconsolidated sediment samples from southern New Hampshire that ranged from fine-grained lacustrine sands to coarse-grained sands and gravels indicate that specific yields range from 0.14 to 0.34 with an average of 0.26 (Weigle and Kranes, 1966). A value of 0.2 commonly is used to estimate specific yield in stratified-drift aquifers in New England.

Saturated-thickness maps can be used to estimate the total amount of ground water stored in an aquifer. The saturated volume of an unconfined aquifer is approximately equal to the sum of the products of the areas between successive pairs of saturated-thickness contours multiplied by the average saturated thickness for each area. The volume of ground water stored in the aquifer can then be estimated as the product of the saturated volume multiplied by the storage coefficient.

Saturated-thickness maps shown on plates 3 and 4 were prepared by use of data from surficial-geologic maps, seismic-refraction profiles, seismic-reflection profiles, test drilling, and records from the GWSI data

base. A 40-foot-contour interval was used to show saturated thicknesses of stratified drift. Saturated thicknesses exceeded 280 ft and may not be entirely aquifer material. Layers of saturated silts and clays that lie above, below, or interfinger with the aquifer are included in the saturated thicknesses contours shown. Areas of contact between stratified drift and till, bedrock outcrops, and areas adjacent to the outcrops indicate zero saturated thickness.

Seismic-refraction profiles show the depth to the water table and depth to bedrock, but usually do not show depth to till deposits unless the till is thick and has a seismic velocity that is significantly faster than the seismic velocity of saturated stratified drift. For the purpose of preparing the maps presented in this study, till was assumed to be thin (less than 15 ft thick) unless there was evidence to the contrary. The assumption that till, if present beneath stratified drift, is generally thin was tested by use of the GWSI data base. Statewide, 220 sites were identified as having known thickness of till overlying bedrock and underlying stratified drift. Saturated thickness of these 220 sites ranged from 0.5 to 140 ft, the median was 7 ft, and the third quartile was 15 ft (Moore and others, 1994).

In some areas, saturated thickness of subsurface materials was determined from test-boring and split-spoon sampling data. Samples were usually collected every 5 or 10 ft. Values for saturated thickness are the distances from points where the test borings first encountered the water table down to the top of the till or, in cases where till was not encountered, down to the top of the bedrock.

Well and test-hole data stored in the GWSI data base were the final source of information used in the preparation of the saturated-thickness maps (pls. 3 and 4). Unfortunately, many sites lacked information on the depth to the bottom of the stratified drift and depth to the water table. For example, logs of wells penetrating bedrock usually provide data about the bottom of the stratified drift but not depth to the water table. Conversely, logs of shallow dug wells usually provide information about the depth to the water table but not the depth to the bottom of the stratified drift. At specific sites where depth to water table was unavailable from direct measurements, the water-table altitude was obtained from the water-table maps (pls. 1 and 2). Depths to the

bottom of stratified-drift deposits were assumed to be indicated by one of the following factors in the priority shown.

1. Depth to top of till, if known. Till is assumed not to overlie stratified drift except in a few areas where evidence is available to the contrary;
2. depth to top of bedrock, if known;
3. length of well casing minus 10 ft, if the well is known to penetrate bedrock. Depth to bedrock is assumed to be about 10 ft above the bottom of the casing. This approximation applies to wells that penetrate crystalline bedrock in New Hampshire.

If a well penetrated stratified drift and was terminated by refusal before till or bedrock was clearly reached, the depth to the bottom of the stratified drift was equal to or greater than the depth to refusal. Saturated thickness was then assumed to be greater than or equal to the difference between the water-table depth and the refusal depth. If a well penetrated stratified drift, and neither till, bedrock, nor refusal was reached, the depth to the bottom of the well was assumed to be above the bottom of the stratified drift. Saturated thickness was assumed to be greater than the difference between the water-table depth and the depth to the bottom of the well (pls. 3 and 4).

#### **Relation of Aquifer Thickness to Geohydrologic Setting**

The relation of aquifer thickness to geohydrologic setting involves the underlying bedrock. Areas where the saturated thickness is greatest are where the surface of the bedrock has been the most deeply eroded. Overdeepened pockets of valleys eroded by glacial plucking and scouring of the bedrock surface, subsequently were filled with stratified drift. Glaciers must have been the primary source of this erosion because the bedrock in the valleys was locally eroded to altitudes lower than any bedrock-controlled base level that would limit the downward erosion by rivers and streams. The largest and deepest of these pockets is centered around Ossipee Lake.

Certain types of bedrock were eroded more than other types and underlie the thickest parts of the stratified-drift aquifers in the study area. For example, the Mississippian-aged binary granite of the Effingham pluton (Lyons and others, 1986) was eroded the most,

resulting in saturated thicknesses that exceed 200 ft near and under Ossipee Lake (pl. 4). Other geologic formations that were locally eroded deeply and subsequently filled in with stratified drift with saturated thicknesses greater than 160 ft include the Conway Granite in the North Conway area; the Mount Osceola Granite; and the Littleton Formation. In contrast, Mount Washington, the highest peak in the study area (and the highest in the Northeastern United States) is also underlain by the Littleton Formation (Lyons and others, 1986). This illustrates the wide areal variation in the competence or resistance to erosion of the Littleton Formation.

### Transmissivity

Transmissivity is defined as the rate at which water at the prevailing kinematic viscosity can be transmitted through a unit width of an aquifer under a unit hydraulic gradient (Lohman and others, 1972). The transmissivity ( $T$ ) of an aquifer is equal to the saturated thickness ( $b$ ), in feet, multiplied by the horizontal hydraulic conductivity ( $K$ , a directional measure of the permeability), in  $\text{ft}/\text{d}$ , and is expressed in feet squared per day ( $\text{ft}^2/\text{d}$ ); thus,

$$T = K(b). \quad (1)$$

Transmissivity at a specific site was derived from estimates of hydraulic conductivity of lithologic units in the aquifers. Hydraulic conductivity, in turn, was estimated from grain-size distributions of samples of aquifer materials by use of the regression equation developed by Olney (1983). Hydraulic conductivity, however, which has a vertical and a horizontal vector component, is not accounted for by this equation. In this relation, an effective grain size ( $D_{10}$ , in phi units) was used to estimate hydraulic conductivity ( $K$ , in feet per day) with the equation:

$$K = 2,100 \times 10^{-0.655(D_{10})}. \quad (2)$$

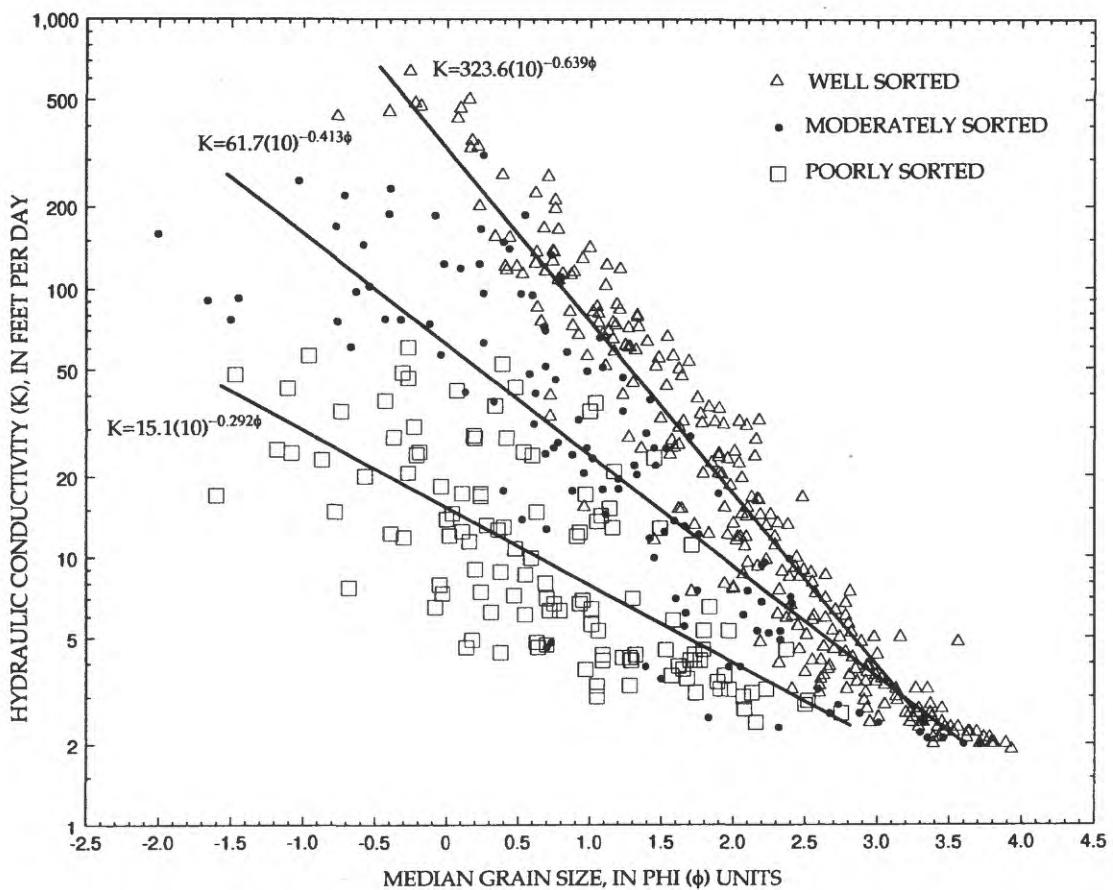
The effective grain size ( $D_{10}$ ) is a controlling factor for the hydraulic conductivity of stratified drift in New Hampshire and is defined as that grain size where 10 percent of the sample consists of smaller grains and 90 percent of the sample consists of larger grains. Olney (1983) developed this relation from results of permeameter tests of stratified-drift samples from Massachusetts. Moore (1990) found that this relation yielded results that fall within the range of results from

other relations that have been developed between grain-size distribution and hydraulic conductivity (Krumbein and Monk, 1942; Bedinger, 1961; and Masch and Denney, 1966). Comparisons with aquifer-test data, however, indicate that applying equation 2 may not give accurate results for very coarse-grained sand and (or) gravel. Estimates of hydraulic conductivity for aquifers comprised of coarse sands and gravels were, in part, based on comparisons to aquifer-test data for similar deposits. Hydraulic conductivity (and transmissivity) based on grain-size relations are only estimates and may differ from results of aquifer-test analyses. Additionally, transmissivities calculated from aquifer-test data may be affected by hydrologic boundaries such as rivers or valley walls.

Hydraulic conductivity was estimated for 454 samples of stratified drift from southern New Hampshire by means of equation 2. The samples were collected in the Exeter and Lamprey River Basins (Moore, 1990); in the seacoast area and the Lower Merrimack River Basin (Flanagan and Stekl, 1990); in the Bellamy, Cocheco, Salmon Falls River Basins (Mack and Lawlor, 1992); in the Lower Connecticut River Basin (Moore and others, 1994); in the Contoocook River Basin (Harte and Johnson, 1995), and in the Middle Merrimack River Basin (Ayotte and Toppin, 1995). The grain-size distribution and the effective grain size ( $D_{10}$ ) were determined for these 454 samples.

Hydraulic conductivities calculated from equation 2 were plotted with median grain size in phi groups, and the resultant plot was divided into three categories of degree of sorting (fig. 9). These relative categories are used to describe the types of stratified-drift-aquifer deposits found in New Hampshire. The degree of sorting was based on the standard deviation of each specific sample.

If standard deviations were greater than 1.75 phi, the stratified-drift samples were considered poorly sorted; if standard deviations were 1.25 phi to 1.75 phi, the samples were considered moderately sorted; and if standard deviations were less than 1.25 phi, the samples were considered well sorted. A regression equation was developed for each of the three categories to determine the relation between hydraulic conductivity and median grain size (fig. 9). The coefficient of determination ( $R^2$ ) was 0.93 for the well-sorted samples, 0.72 for the moderately sorted samples, and 0.54 for the poorly sorted samples. The calculated hydraulic conductivity,



**Figure 9.** Relation between estimated hydraulic conductivity, median grain size, and degree of sorting of stratified drift in New Hampshire (from Ayotte and Toppin, 1995).

grouped by ranges of median grain size and by ranges of standard deviation (degree of sorting), is shown in table 3.

Grain-size distribution descriptions were used to characterize the transmissivities (pls. 3 and 4) at the test wells drilled for this study from the stratigraphic logs (appendix 2) and data from table 3. Transmissivity at each test hole was calculated by multiplying the estimated horizontal hydraulic conductivity and the saturated thickness of the corresponding interval of the stratigraphic log and summing the products.

The transmissivities shown on plates 3 and 4 are based on saturated thicknesses and estimates of hydraulic conductivity and rely mainly on grain-size-distribution data from geologic and drillers' logs from test borings and wells. Saturated silts and clays were excluded from the transmissivity estimates because their contribution to transmissivity was assumed to be negligible. Also rough estimates of transmissivity were calculated from logs of drillers, where the grain-size

distributions were not described in detail. In a few cases transmissivities were estimated from results of aquifer tests. Several test wells for which grain-size distributions were determined in New Hampshire are adjacent to wells where aquifer tests were conducted. Transmissivities computed by grain-size distributions at these wells were within 50 percent of values computed by use of the aquifer-test data but usually were lower than values computed with the aquifer-test data.

Other factors that affect aquifer transmissivities include viscosity of the water, compaction of the sediment, and the interconnection of pore spaces. Transmissivity can be extremely variable over short distances because of the heterogeneous nature of stratified-drift deposits. Because of the variability associated with estimates of transmissivity, the values shown on plates 3 and 4 should be considered generalized estimates.

#### Characteristics of Selected Stratified-Drift Aquifers

The most extensive and most productive (or poten-

tially productive) aquifers are discussed below. The stratified-drift aquifers encompass 152.5 mi<sup>2</sup>, or 17.5 percent of the study area and underlie valleys throughout the study area. Aquifers are discussed from north to south.

**Table 3.** Relation of mean hydraulic conductivity to median grain size and degree of sorting of stratified drift in New Hampshire

[<, less than; >, greater than; --, no data. Data from Ayotte and Toppin, 1995, and Moore and others, 1994]

Median grain size (phi units)	Median grain description	WELL SORTED (standard deviation <1.25 phi)	MODER- ATELY SORTED (standard deviation 1.25 phi to 1.75 phi)		POORLY SORTED (standard deviation >1.75 phi)
			Mean hydraulic conductivity (K), in feet per day <sup>1</sup>		
-1.75	Granules	--	320	49	
-1.25	Granules	--	200	35	
-.75	Very coarse sand	970	120	25	
-.25	Very coarse sand	470	78	18	
.25	Coarse sand	220	48	13	
.75	Coarse sand	110	30	9	
1.25	Medium sand	51	19	7	
1.75	Medium sand	25	12	5	
2.25	Fine sand	12	7	3	
2.75	Fine sand	6	4	2	
3.25	Very fine sand	3	3	--	
3.75	Very fine sand	2	2	--	

<sup>1</sup>Hydraulic conductivity calculated by use of methods described by Olney (1983).

#### North Chatham Aquifer in Chatham, N.H.

North Chatham aquifer (fig. 10) underlies the valley of the Cold River in the Saco River Basin in the northern part of Chatham and extends beyond the study area into Maine (pl. 1). The stratified drift in the valley was deposited from several sources including deposition from meltwater during the melting of the last con-

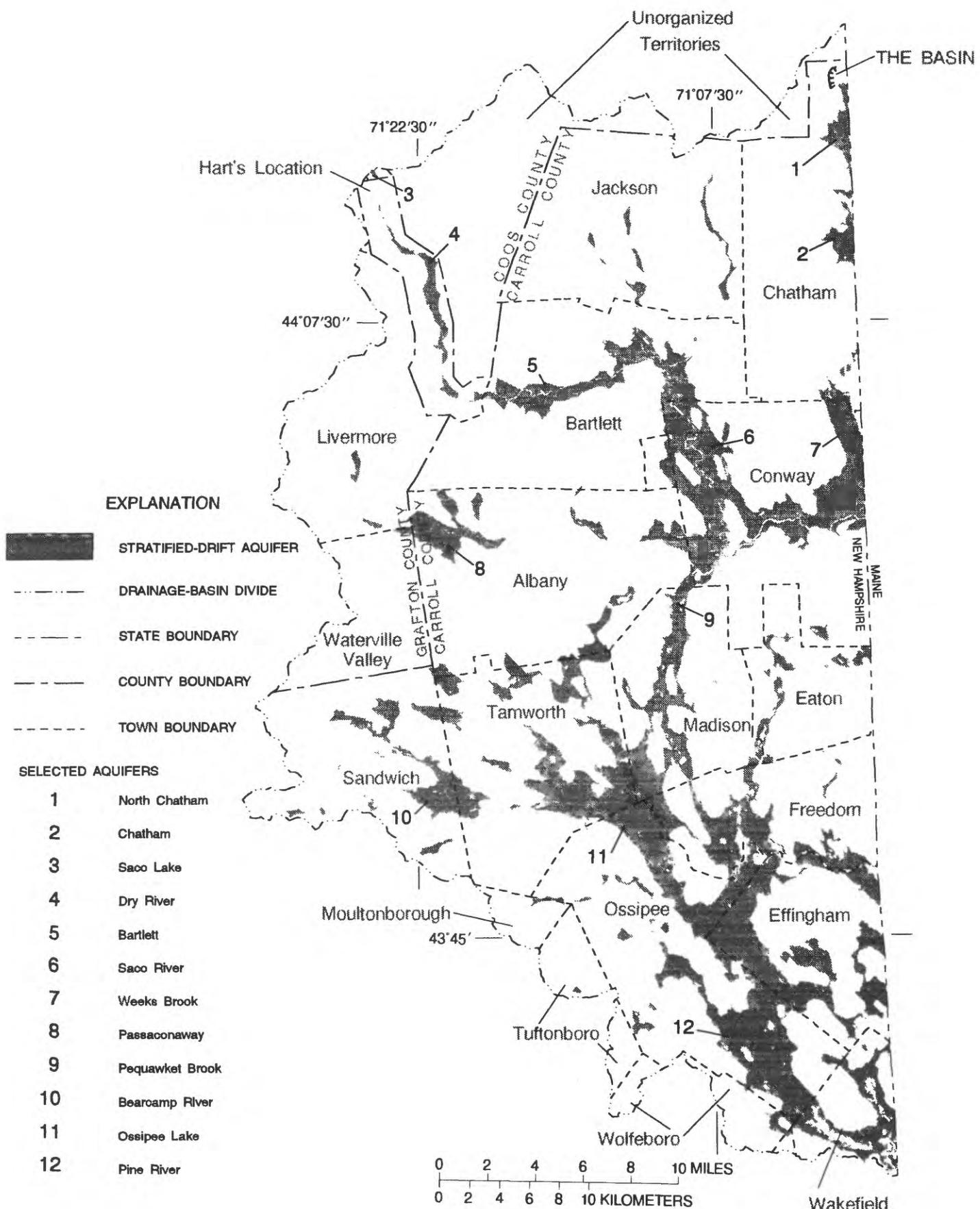
tinental glacier. A braided esker ridge of sand and gravel extends eastward out of a cirque at the northern end of this aquifer, perhaps indicating that some late-Wisconsinan alpine-glacial ice was present in the cirque. Additional sources of sediment include extensive, more recent, alluvial deposits from the Charles and Mill Brooks (pl. 1).

Water-table altitudes in the North Chatham aquifer (fig. 10) range from about 420 to above 720 ft above sea level (pl. 1). Areas where the gradients are steep indicate areas of low transmissivity (or at least low vertical hydraulic conductivity) within the alluvial-fan deposits. Areas of low transmissivity may be the result of low hydraulic conductivity in the aquifer or a small saturated thickness of an upper aquifer overlying material of low conductivity, such as till-covered bedrock. Saturated thicknesses of stratified drift for the North Chatham aquifer range from 0 to over 120 ft. The thickest sections of aquifer are near the Cold River in the southern part of the aquifer. The underlying bedrock type beneath this thick section is the binary granite of the Sebago and Effingham plutons (Lyons and others, 1986). Transmissivities range from 0 to between 4,000 ft<sup>2</sup>/d and 8,000 ft<sup>2</sup>/d with the highest transmissivity in the southern part where the aquifer is thickly saturated.

#### Chatham Aquifer in Chatham, N.H.

The Chatham aquifer (fig. 10) underlies the valley of the Cold River in the Saco River Basin in the central part of Chatham near the village center and extends beyond the study area into Maine (pl. 1). The stratified drift in this area was deposited mainly during deglaciation of the last continental glacier. Additional sources of sediment include alluvial deposits from Langdon and McDonough Brooks (pl. 1). Sand and gravel overlying silt and clay layers are found in the aquifer and indicate that a water body was present during deglaciation and filled with sediment. Silt and clay layers, for example, are found at depths between 68 and 84 ft below the land surface at well CKW 11.

Water-table altitudes at the Chatham aquifer (fig. 10) range from slightly less than 460 ft to greater than 580 ft above sea level (pl. 1). Saturated thicknesses of stratified drift for the Chatham aquifer range from 0 to greater than 40 ft. The thickest sections of



**Figure 10.** Selected aquifers in the Saco and Ossipee River Basins study area, east-central New Hampshire.

stratified drift are near the village center with transmissivities that range from 0 to between 1,000 ft<sup>2</sup>/d and 2,000 ft<sup>2</sup>/d.

#### Saco Lake Aquifer in Carroll, N.H.

Saco Lake aquifer (fig. 10) is at the head of the Saco River in Carroll, N.H. The drainage divide in the central part of the valley is composed of stratified drift that was deposited at the ice margin. Outwash from the glacier completely filled in the valley between the glacier and the previous till and bedrock divide 0.6 mi to the south. Stratified-drift deposits grade to a V-shaped notch carved out of the bedrock at the southern end of the aquifer. Meltwater from the glacier carved this notch into a previously carved glacial U-shaped valley located at the previous divide. As a result, the drainage divide shifted to the north by deposition of sediments at the ice margin and slightly enlarged the Saco River Basin (see cover illustration).

Water-table altitudes in the Saco Lake aquifer (fig. 10, pl. 1) are from 1,880 and 1,900 ft above sea level (pl. 1). Currently, water levels in the Saco River headwaters and the aquifer are controlled by the same V-shaped notch that controlled the glacial meltwater during deglaciation. Saturated thicknesses of stratified drift for the Saco Lake aquifer exceed 80 ft as indicated by seismic-refraction profiles (appendix 3). Transmissivities range from 0 to between 4,000 ft<sup>2</sup>/d and 8,000 ft<sup>2</sup>/d (pl. 4).

#### Dry River Aquifer in Hart's Location, N.H.

Dry River aquifer (fig. 10) underlies the main valley of the Saco River in Crawford Notch in Hart's Location. In addition to the glacially derived sediments, a huge alluvial-fan deposit is present in the northern part of this aquifer. The alluvial fan formed under extreme flood conditions where the Dry River emerges from the till uplands, and flows out onto flat areas of stratified drift. Very coarse material (largely gravel and sand including large boulders) were deposited. The alluvial fan enhances infiltration from the aptly named Dry River, which dries up much of the year where it flows onto the valley fill.

Water-table altitudes at the Dry River aquifer (fig. 10) range from about 840 to 1,280 ft above sea level (pl. 1). Absence of subsurface data in the area of the Dry River alluvial fan prevented the contouring of

the saturated thickness and transmissivity values. Just to the south, however, saturated thicknesses of stratified drift exceed 160 ft, in the center of the valley (pl. 3). The underlying bedrock beneath the thickest section is the Conway Granite (Lyons and others, 1986). Transmissivities are greater than 8,000 ft<sup>2</sup>/d in the southern part where the aquifer is comprised of thick, saturated deposits.

#### Bartlett Aquifer in Bartlett, N.H.

Bartlett aquifer (fig. 10) underlies the Saco River Valley in Bartlett. It is the northern part of a large stratified-drift aquifer that extends 37.3 mi from Bartlett to Wakefield N.H. and into Maine. The stratified drift in this area was deposited from several sources including deposition from meltwater during the melting of the last continental glacier. Alluvial-fan deposits from Albany, Bartlett, Meadow, and Razor Brooks (pl. 1) added to the deposits composing the aquifer, as well as considerable deposition of alluvial sands and gravels by the Saco River. A boulder gravel from this deposition by previous channels of the Saco River is found near the surface of much of the central part of the valley.

Water-table altitudes in the Bartlett aquifer (fig. 10) range from about 580 to 760 ft above sea level (pl. 1). Saturated thicknesses of stratified drift for the Bartlett aquifer exceed 80 ft near the center of the valley. The underlying bedrock beneath the thickest section is the Conway Granite (Lyons and others, 1986). Transmissivities range from 0 to between 4,000 ft<sup>2</sup>/d and 8,000 ft<sup>2</sup>/d with the highest transmissivity occurring in the central and western part of the aquifer (pl. 3).

#### Saco River Aquifer in Conway and Bartlett, N.H.

The Saco River aquifer (fig. 10) is in the main Saco River Valley in Conway and in the eastern part of Bartlett. The aquifer continues down valley from the Bartlett aquifer, and is part of the large stratified-drift aquifer that extends from Bartlett to Wakefield. The stratified drift that fills the valley here includes glacial-lake deposits and outwash. Alluvial-fan deposits from the Rocky Branch, the East Branch, and the Ellis River (pl. 1) added to the deposits composing the aquifer. The Saco River has also deposited and reworked the deposits of sands and gravels. A boulder gravel is found near

the surface in the northern part of the aquifer, especially where previous channels of the Ellis River enter the main valley of the Saco River.

Water-table altitudes in the Saco River aquifer (fig. 10, pl. 1) range from less than 420 ft to greater than 640 ft above sea level (pl. 1). Saturated thicknesses of stratified drift for the Saco River aquifer exceed 180 ft near the confluence of the Saco and Ellis Rivers in the northern part of the aquifer. The underlying bedrock type beneath the thickest stratified drift is the Mount Osceola Granite, whereas other thick sections in Conway are underlain by the Conway Granite (Lyons and others, 1986). Transmissivities exceed 8,000 ft<sup>2</sup>/d in the central and northern parts where the aquifer is coarse grained and thickly saturated. More detailed description of this aquifer is given in Tepper and others (1990).

#### **Weeks Brook Aquifer in Chatham and Conway, N.H.**

Weeks Brook aquifer (fig. 10) is in a tributary valley to the Saco River in the southern part of Chatham and northeastern part of Conway (pl. 1). The stratified drift composing this aquifer was deposited mainly during deglaciation of the last continental glacier and includes glacial-ice-contact deposits, glacial-lake deposits, deltaic deposits, and alluvial fans. An ice-contact ridge of sand and gravel deposits and alluvial fan at Weeks Brook lead into southerly dipping deltaic beds about 400 ft west of wells CWW 69 and 70 (pl. 1). Interfingering of the deltaic sands and gravels with glaciocustrine silts and clays are apparent from the logs of CWW 67, 69 and 70 (appendix 2). Weeks Brook also deposited alluvial sediments over the glacial-lake sediments.

Water-table altitudes in the Weeks Brook aquifer (fig. 10) range from less than 400 ft to greater than 520 ft above sea level (pl. 1). Areas where the gradients are steep reflect areas of low transmissivity (or at least low vertical hydraulic conductivity) in the alluvial fan. Saturated thicknesses of stratified drift for the Weeks Brook aquifer exceed 120 ft near the Cold River in the north-central part of the valley. The bedrock type underlying the entire aquifer is Conway Granite (Lyons and others, 1986). Transmissivities range from 0 to between 4,000 ft<sup>2</sup>/d and 8,000 ft<sup>2</sup>/d with the highest transmissivity in the north-central part where the aquifer is coarse grained and thickly saturated (pl. 3).

#### **Passaconaway Aquifer in Albany and Waterville Valley, N.H.**

Passaconaway aquifer (fig. 10) underlies the valley of the Swift River in the northwestern part of Albany and the northeastern corner of Waterville Valley (pl. 1). The stratified-drift aquifer fills a pocket in the bedrock surface that was glacially eroded. Very fine sand and silt layers at well ADW 14 indicate some ponding of glacial meltwater during deglaciation. However, the aquifer is composed of predominantly coarse-grained ice-contact, outwash, and alluvial deposits. The Swift River and Oliverian Brook are the source of most of the alluvial deposition.

Water-table altitudes in the Passaconaway aquifer (fig. 10) range from less than 1,220 to slightly greater than 1,280 ft above sea level (pl. 1). Saturated thicknesses of stratified drift for the Passaconaway aquifer exceed 80 ft (pl. 3). The bedrock type underlying this aquifer is the Conway Granite (Lyons and others, 1986). Transmissivities range from 0 to between 2,000 ft<sup>2</sup>/d and 4,000 ft<sup>2</sup>/d with the highest transmissivity in the central parts where the aquifer is coarse-grained and thickly saturated (pl. 3).

#### **Pequawket Brook Aquifer in Madison, Albany, and Conway, N.H.**

Pequawket Brook aquifer (fig. 10) is in the through valley that extends from the southwest corner of Conway, through the southeast corner of Albany and south to Silver Lake in Madison (pls. 1 and 2). The stratified drift composing this aquifer was deposited mainly from meltwater during the melting of the last continental glacier. Depositional ice-contact features include eskers, kames, and kame terraces. A meltwater channel on the slopes of the valley is at an altitude higher than the altitude of the valley fill and leads down to a kame terrace on the western side of the valley fill in the northern part of Madison (Newton, 1974). Glacial-ice-dam-break floods, from water ponded between the ice and the drainage divide for the Swift River Basin, probably emerged onto an alluvial fan and kame terrace with some deltaic bedding. Prominent esker ridges of sand and gravel are present in the through valley including the northernmost esker that extends as a peninsula into Pequawket Pond in the southeast corner of Conway (pl. 2). A similar ridge of sand and gravel is to the east of Ledge Pond. Ledge Pond in Madison is on the western side of the valley between the valley wall of till and

bedrock. This ridge of sand and gravel broadens into a large deposit towards the southeast end of the pond. The lithologic log for well MBW 56 indicates that this deposit may be deltaic with coarse-grained beds interfingering at depth with very fine sands and silts. Ledge Pond is approximately 57 ft higher in altitude than Pequawket Brook about 1,000 ft to the east. Additional esker ridges are present throughout the central part of the valley and extend southward to the north end of Silver Lake. There the ridges split into two series of eskers; one series, including Big Island, is along the east shore and the other series is along the west shore.

Water-table altitudes in the Pequawket Brook aquifer (fig. 10, pls. 1 and 2) range from 457 to 520 ft above sea level. Saturated thicknesses of stratified drift for the Pequawket Brook aquifer exceed 80 ft southeast of Ledge Pond and near the center of the aquifer (pl. 3). The bedrock type underlying the thickest stratified drift is the binary granite of the Sebago and Effingham plutons (Lyons and others, 1986). Transmissivities exceed 8,000 ft<sup>2</sup>/d in the northern part of the aquifer where there is thickly saturated sand and gravel in the center of the valley (pl. 4).

#### **Bearcamp River Aquifer in Sandwich and Tamworth, N.H.**

Bearcamp River aquifer (fig. 10) underlies the valley of the Bearcamp River in eastern Sandwich and western Tamworth (pl. 2). The stratified drift in this valley was deposited in a glacial lake. A major source of the sediment deposition was from meltwater approximately following the course of the Cold River. The large boulders (the maximum size of the gravel carried by the meltwater) indicate erosion and redeposition caused by glacial-ice-dam-break floods. The coarse-grained deposits in the northern part of the aquifer grade into finer glacial-lake deposits in the southern part of the aquifer. Flow in the Bearcamp and Cold Rivers have reworked some of the deposits. Alluvial deposits cover most of the central part of the aquifer.

Water-table altitudes in the Bearcamp River aquifer (fig. 10) range from less than 580 to greater than 720 ft above sea level (pl. 2). Saturated thicknesses of stratified drift for the Bearcamp River aquifer exceed 120 ft just east of the Cold River in the southern part of the aquifer. The bedrock type underlying this aquifer is the Winnipesaukee Quartz Diorite of the New Hampshire Plutonic Suite. Transmissivities range from 0 to

between 4,000 ft<sup>2</sup>/d and 8,000 ft<sup>2</sup>/d with the highest transmissivity in the central part of the aquifer where it is thickly saturated near the source of coarse-grained sediment (pl. 4).

#### **Ossipee Lake Aquifer in Tamworth, Madison, Ossipee, Freedom, and Effingham, N.H.**

Ossipee Lake aquifer (fig. 10) is in the main valley of the Bearcamp, Ossipee, and Pine Rivers in the towns of Tamworth, Madison, Ossipee, Freedom, and Effingham (pl. 2). It is the central part of the largest stratified-drift aquifer in the State that extends from Bartlett to Wakefield. Stratified drift in the main valley was primarily deposited into a glacial-lake basin during deglaciation. Depositional features in the valley include eskers, kames, deltas, outwash (largely topset beds), fine-grained glacial-lake-bottom beds, alluvial, and beach deposits. The lake basin, eroded out of bedrock, was greater than 280 ft below the present surface of Ossipee Lake and greater than 300 ft below present land surface at its deepest point. The basin filled rapidly with sediment as the ice margin receded northward. Silver and Ossipee Lakes are relicts of the previous glacial lake. The lakes are located where ice blocks of the former glacier persisted the longest and prevented deposition. A large outwash fan is present just southwest of Silver Lake (Newton, 1974). Seismic-reflection data from the southwest shore of the lake, however, indicate northwest-dipping deltaic foreset beds (fig. 8). Presumably, these foreset beds were fed by the sediment-laden meltwater flowing through the esker system on the east side of the lake.

Water-table altitudes in the Ossipee Lake aquifer (fig. 10) range from above 407 to above 580 ft above sea level (pl. 2). Saturated thicknesses of stratified drift for the Ossipee Lake aquifer exceed 280 ft just northwest of Ossipee Lake (pl. 4). The bedrock type underlying the thickest stratified drift is the binary granite of the Sebago and Effingham plutons (Lyons and others, 1986). Transmissivities exceed 8,000 ft<sup>2</sup>/d in the thickly saturated ice-contact esker, kame, and deltaic deposits (pl. 4).

#### **Pine River Aquifer in Ossipee, Effingham, and Wakefield, N.H.**

Pine River aquifer (fig. 10) underlies the main valley of the Pine River in the towns of Ossipee, Effingham, and Wakefield (pl. 2). The Pine River aquifer is

the southern part of the large stratified-drift aquifer that extends from Bartlett to Wakefield. The stratified drift that fills the valley here was also deposited into a glacial lake but at a higher altitude than the Ossipee Lake aquifer. The outlet to this lake was controlled by spillways cut into the sand and gravel at the divide between the Pine River subbasin and the Little Ossipee River subbasin (pl. 2). Depositional features in the subbasins include the largest esker system in the State (the Pine River Esker) as well as kames, deltas, outwash, fine-grained glacial-lake-bottom beds, and alluvial deposits. At White Pond and just north of Pine River Pond (pl. 2), the Pine River Esker merges with areas of broad sand and gravel deposition (presumably deltaic). These areas indicate ice-marginal positions consistent with the morphosequence concept presented by Koteff and Pessl (1981).

Water-table altitudes in the Pine River aquifer (fig. 10) are from below 420 to above 680 ft above sea level (pl. 2). Saturated thicknesses of stratified drift for the Pine River aquifer exceed 80 ft in the central part of the area (pl. 4). The bedrock type underlying the thickest stratified drift is the binary granite of the Sebago and Effingham plutons (Lyons and others, 1986). Transmissivities exceed 8,000 ft<sup>2</sup>/d in the thickly saturated parts of the Pine River Esker and associated deposits (pl. 4).

### Estimation of Ground-Water Availability in the Ossipee Lake Aquifer

The Ossipee Lake aquifer was selected to estimate potential water availability by use of a numerical flow model to simulate ground-water flow. Parts of Effingham, Freedom, Ossipee, Madison, and Tamworth are included in the modeled area (fig. 11). Ice-contact, outwash, and glacial-lake deposits including eskers and deltaic deposits constitute the areally extensive aquifer. The model area of the aquifer encompasses 47.3 mi<sup>2</sup>, parts of 5 towns, and the maximum saturated thickness of the aquifer exceeds 280 ft. The saturated volume of the aquifer in the model area is about 105 billion ft<sup>3</sup> (0.71 mi<sup>3</sup>). A relatively large model area was selected because the Ossipee Lake aquifer is extensive, and pumping from any part of the aquifer can possibly affect the outflow to the Ossipee River. The Ossipee River is the eventual discharge point for all the water in the aquifer minus the water that is returned to the atmosphere by evaporation and transpiration.

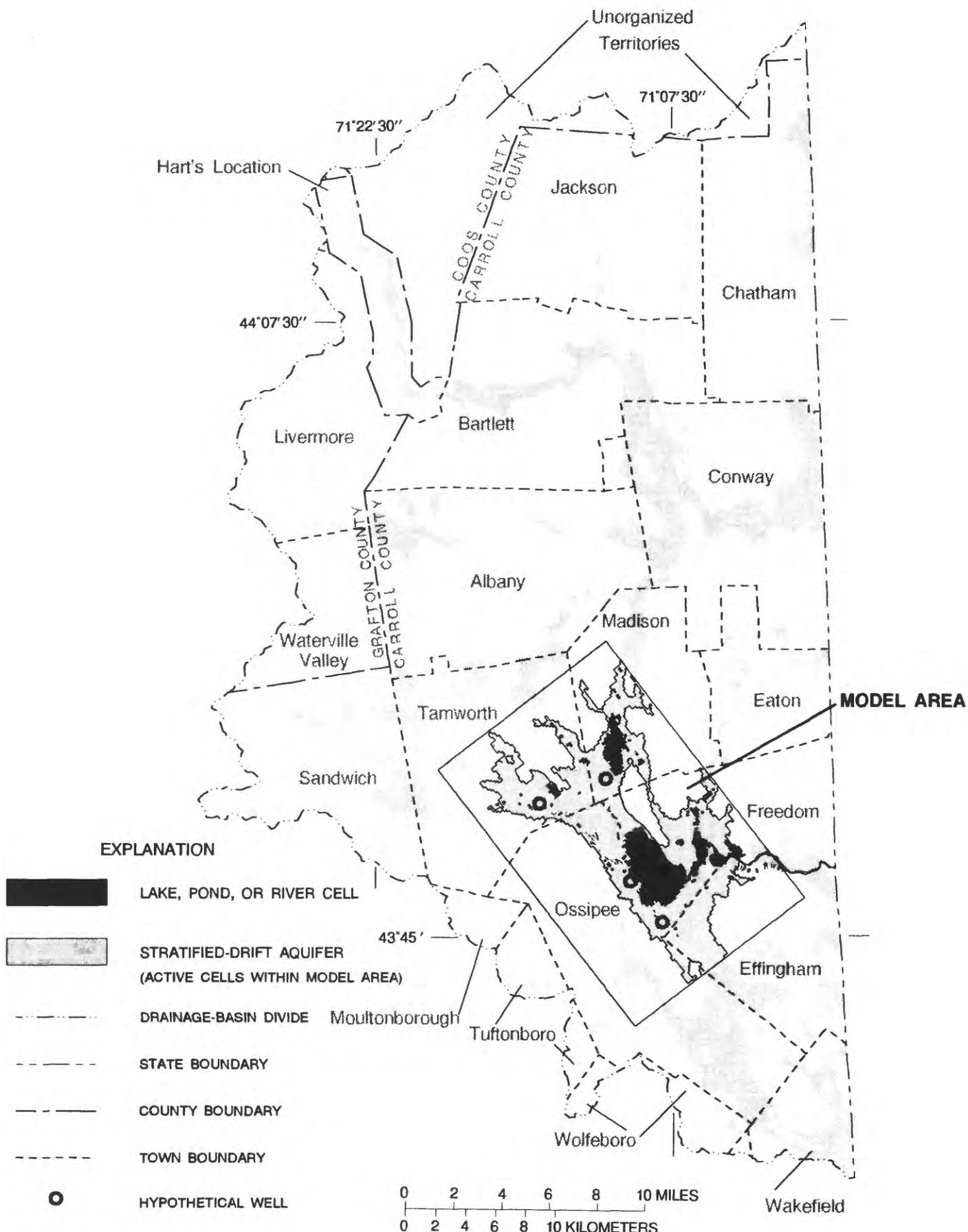
### Description of Estimation Technique

In this study, a numerical finite-difference model, MODFLOW (McDonald and Harbaugh, 1988), was used to determine water availability from the Ossipee Lake aquifer. The numerical model was used to simulate more closely the geometry and hydraulics of the aquifer (pl. 4) than possible with an analytical model. This simulation is a modification of techniques presented by Lapham (1988) for similar aquifers in Massachusetts and by Moore (1990) for similar aquifers in southeastern New Hampshire. The numerical model allows simulation of the areal variation of the saturated thickness and hydraulic conductivity of the aquifer and the location and characteristics of rivers and lakes overlying the aquifer. Ground-water availability was simulated by simultaneously pumping from hypothetical production wells.

### Generalizations

To numerically simulate this aquifer, it was necessary to make generalizations and assumptions. Five major generalizations of this aquifer include the following.

1. The principle of superposition is applied by reducing the complex ground-water-flow equations into simpler components. Drawdown in the aquifer is approximated by the drawdown calculated for a simpler hypothetical aquifer with characteristics similar to the actual aquifer but initially simulated with a flat water table and no recharge. Initially, all heads in the hypothetical aquifer are set equal to 0, so that the aquifer is simulated with a flat water table and no flow. Heads change only in response to simulated pumping stresses. Sources of water during these pumping simulations include water from storage and induced infiltration of streamflow. The principle of superposition is thus applied. Water flowing in the actual aquifer, which is captured by pumping wells before reaching the stream, is included in the simulation as part of the induced infiltration.
2. Ground-water availability was estimated over 180 days of continuous pumping at constant rates. Recharge from induced infiltration from the streams was simulated. In studies by Mazzaferro and others (1979) and Toppin



**Figure 11.** Location of Ossipee Lake ground-water availability model area, east-central New Hampshire.

(1987), a pumping period of 180-days with no areal recharge was used because the period approximates the growing season during which evapotranspiration is high and areal recharge to the aquifers is assumed to be low. It is also assumed that areal recharge to the aquifer during the rest of the year is sufficient to allow continuous pumping at the simulated pumping rate. During this 180-day period, water may recharge the aquifer areally and from adjacent till or bedrock. However, additional areal recharge or lateral recharge from adjacent till or bedrock, caused by the pumping, will not be simulated in the model.

### Assumptions

The following simplifying assumptions about the ground-water-flow system were made in developing the model.

- 1. Aquifer and streambed properties are representative of the natural ground-water-flow system.** Transmissivity and saturated thickness, shown on plate 4, and the streambed properties used are assumed to be a reasonable representation of the natural system.
- 2. Two-dimensional flow is adequate to represent the flow system.** In the actual system, ground-water flow is horizontal and vertical but predominantly horizontal. Vertical gradients are generally downward in areas of ground-water recharge and upward in areas of ground-water discharge, such as to rivers. Strong vertical gradients result near discharging wells, but for unconfined aquifers, the magnitude of the vertical-flow gradients near a pumped well decreases rapidly with distance from the well. The error associated with simulating ground-water availability by considering only two-dimensional horizontal flow is negligible.
- 3. Ground water is withdrawn from wells that are fully penetrating and 100-percent efficient.** Wells used for supply are generally not fully penetrating and are commonly screened in the bottom 25 percent of the aquifer. In addition, these wells are not 100-percent efficient. Increased drawdown in the well results from energy loss between the aquifer and the well.

This increased drawdown is a function of well design and construction. The effect of this simplifying assumption is that less drawdown is simulated in the well than would be found in a real well.

- 4. There is no additional flow of ground water between till and (or) bedrock and the stratified-drift aquifer induced by pumping.** The model area includes a stratified-drift aquifer in a till-covered bedrock valley. In an aquifer where horizontal and vertical gradients result between the stratified drift and the underlying till and (or) bedrock, ground water flows between the aquifer and the surrounding geologic units. For application of the model, it is assumed that the ground-water flow between till and (or) bedrock and the stratified-drift aquifer will not be increased in response to the pumping from the stratified-drift aquifer.
- 5. Finite-difference approximation of the non-linear, partial-differential equations governing three-dimensional ground-water flow result in reasonable estimates of yield for an aquifer.** Flow simulated in the numerical model is described by linear differential equations that are solved numerically on the basis of a finite-difference approximation. The aquifers are discretized in space or divided into discrete blocks (cells) in which hydraulic properties are assumed to be constant. For unconfined aquifers, the linear equations are not strictly applicable because changes in the potentiometric surface (water table) affect the transmissivity and changes in the transmissivity with time result in a non-linear aquifer response. This non-linearity is accounted for in the model, in part, and values of transmissivity are readjusted as a result of the declining water table for each of the 20 time steps (specified by the user) in the simulation. Because the changes in transmissivity are small throughout most of the aquifer, inaccuracies that result from this approximation are small. Exact solutions to the linear differential equations are impossible; therefore, solutions are determined by solving the series of linear equations through iteration until the greatest change in the solution is less than some specified limit. For example, a limit

of 0.01 ft was used to end the iteration process in this model. When head changes between iterations for all cells in the model no longer exceed 0.01 ft, the simulation for a given time step is complete.

### Grid and Boundary Conditions

The grid used to discretize the aquifer consists of 264 rows and 184 columns of variably spaced cells. Cell widths at the four hypothetical well sites are 1 ft on each side to approximate the size of a well. Cell widths were doubled in width for each cell along columns or rows away from the well site until a distance of 250 ft from the well was reached. At this point, a uniform spacing of 100 ft was used for the next 1,000 ft. Beyond 1,250 ft from the well, for the remainder of the model, the widths of the columns and rows were set to 500 ft. All numerical calculations were between nodes centered in each of the 26,190 active cells. Model boundaries on the east and west sides, and most of the northern boundary, coincided with the stratified drift-till boundary and were simulated as "no-flow" boundaries. With these boundaries, it is assumed that pumping will not induce additional flow across the boundaries. The southern and the remainder of the northern boundary were also simulated as "no-flow" boundaries because the effects of pumping do not extend that far.

### Input Parameters

Model input parameters consist of data on (1) the altitude of the water table, (2) the saturated thickness, (3) the hydraulic conductivity, (4) the specific yield, (5) and streambed hydraulic conductivity. Data was entered into the model by use of GIS files, and the MODFLOWARC program (Orzol and McGrath, 1992).

#### Saturated Thickness and Hydraulic Conductivity

The saturated-thickness data for the Ossipee Lake aquifer were taken directly from plate 4. The saturated-thickness contours were overlain on the model grid and the appropriate saturated thickness ( $b$ ) was assigned to each cell. The saturated thickness was discretized by averaging saturated thickness when node centers were between contours. For example, cells with node centers that fell between the aquifer boundary and the 40-foot

contour were assigned a saturated thickness of 20 ft; cells with node centers that fell between the 40- and 80 foot contours were assigned a thickness of 60 ft.

Transmissivity was discretized by assigning the average transmissivity for a given zone shown on plate 4. Cells with node centers that fell in a given transmissivity zone were assigned the average value ( $T$ ) for that zone. Hydraulic conductivity ( $K$ ) at each cell was then calculated by the equation  $K = T / b$ .

#### Specific Yield

The specific yield of the Ossipee Lake aquifer was not measured for the model area. Johnson (1967) summarized the results of specific yield for sediments from many studies. He reported that the average specific yield for fine sands was 0.21, for coarse sands was 0.27, and for coarse gravel was 0.22. Ayotte and Toppin (1995) found that for data collected in a shallow, coarse-grained sand and gravel aquifer in south-central New Hampshire, specific yield ranged from 0.21 to 0.29. A value of 0.2 was used for the aquifer simulated in this model as a conservative estimate of specific yield.

#### Infiltration From the Streams, Ponds, and Lakes

Infiltration from the streams and other surface-water bodies is simulated with the leaky streambed module of the MODFLOW model (McDonald and Harbaugh, 1988). Cells with node centers that fell on surface-water bodies were simulated as river (or lake) nodes covering the entire area of the cell. Intermittent streams were not simulated in the model. The vertical hydraulic conductivity of all streambed and lake-bottom material was assumed to be 2 ft/d, a value similar to that used by numerous other studies (Haeni, 1978; Lapham, 1988; Harte and Mack, 1992; Ayotte and Toppin, 1995). The rivers were simulated with a uniform average depth of 3 ft and Silver and Ossipee Lakes were assigned a uniform average depth of 20 ft (on the basis of field observations). Stream and lake beds were assigned a thickness of 2 ft.

#### Ground-Water Availability

Ground-water availability was determined with four hypothetical wells (fig. 11) in high transmissivity zones (pl. 4). The rate of withdrawal was adjusted so that the total drawdown at the well was not more than

70 percent of the total saturated thickness of the aquifer at each well site. At the end of 180 days, 31.6 percent or 7.72 Mgal/d (11.9 ft<sup>3</sup>/s) of the water withdrawn from the wells came from ground-water storage. The remaining 68.4 percent or 5.28 Mgal/d (8.17 ft<sup>3</sup>/s) of water withdrawn from wells came from induced infiltration and ground water captured before discharging to surface-water bodies. This amount of induced infiltration and captured ground water is below 11 ft<sup>3</sup>/s, the minimum daily flow for the period of record (1943-90) of the Ossipee River and below the 99.9-percent flow duration of 82 ft<sup>3</sup>/s; the 95.0-percent flow duration of 157 ft<sup>3</sup>/s, or the 90.0-percent flow duration of 179 ft<sup>3</sup>/s. Flow in the Ossipee River should be reduced, for example, by less than 10 percent 99.9 percent of the time at the simulated level of withdrawal. Of the 7.72 Mgal/d withdrawn by the hypothetical wells, 1.2 Mgal/d was withdrawn from the well in Tamworth, 2.17 Mgal/d was withdrawn from the well in Madison, 1.28 Mgal/d was withdrawn from the northern well in Ossipee, and 3.06 Mgal/d was withdrawn from the southern well in Ossipee.

#### Sensitivity Analysis of the Ground-Water Availability Estimate

Sensitivity analyses were performed to assess the effects of uncertainty of the ground-water availability estimate in the following model parameters: horizontal hydraulic conductivity, streambed (or lake bed) vertical hydraulic conductivity, and stream (or lake) depth. Input data for these parameters were doubled, increased by one half, and reduced by one half, in a series of model runs. The same drawdown criteria were used for each model run, such that drawdown at each well was not more than 70 percent of the total saturated thickness of the aquifer at each well site.

The effects of changes in the input data on the model results, in terms of combined withdrawal from the four wells are shown in table 4. Results indicate that combined withdrawal from the four hypothetical wells is not sensitive to the stream (or lake) depths or streambed vertical hydraulic conductivity. However, the combined withdrawals are sensitive to the estimated horizontal hydraulic conductivity of the aquifer.

#### WATER QUALITY

Samples of water from 25 test wells and 4 springs, col-

lected in August and September 1992, were analyzed for inorganic and organic compounds in order to evaluate the water quality of the stratified-drift aquifers in the Saco and Ossipee River Basins study area (fig. 12). During the sampling phase of this study, areas with known ground-water contamination were generally avoided. Sample analyses from an additional 49 sites in the study area, in Bartlett and Conway, are presented by Johnson and others (1987).

**Table 4.** Results of sensitivity tests with combined withdrawal of four hypothetical wells in stratified drift for the ground-water availability estimates, east-central New Hampshire

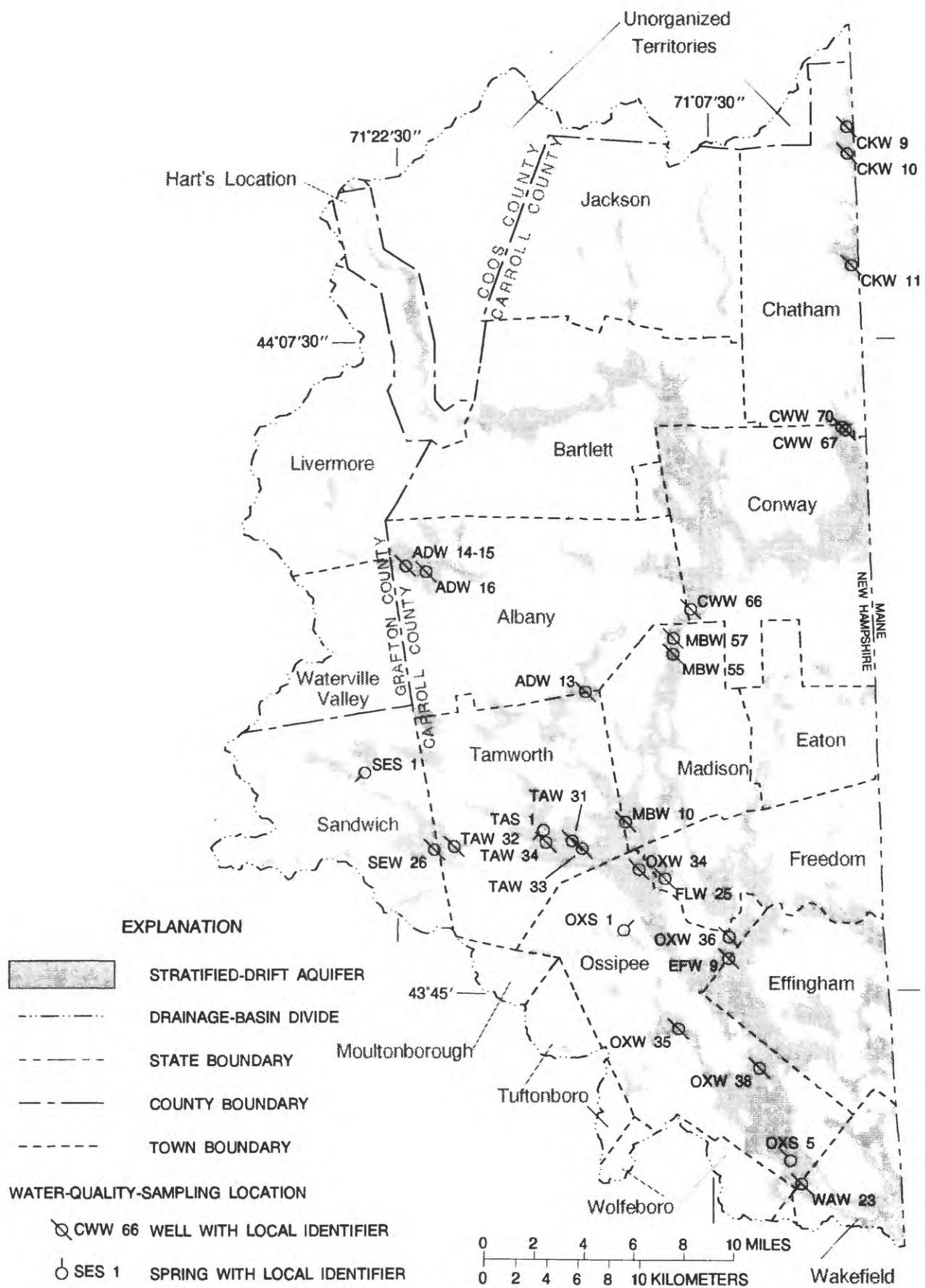
[All withdrawals are reported in million gallons per day]

Amount of change of input parameters (in percent)	Hydraulic conductivity	Streambed conductivity	Stream depth
-50	3.96	7.68	7.71
50	11.4	7.74	7.72
100	15.1	7.75	7.72

All water samples were analyzed by the USGS National Water Quality Laboratory (NWQL) in Arvada, Colo. Samples were collected and analyzed according to procedures described by Fishman and Friedman (1989).

Results of the analysis of water samples are presented in appendix 5. A statistical summary of the chemical analysis of the ground-water samples, (table 5) is included for comparison with the USEPA (1991a, 1991b, 1992) drinking-water regulations. Results of the sample analyses indicate that water from the stratified-drift aquifers is generally suitable for drinking and other domestic or municipal uses with the following exceptions.

1. One well (CKW 11) contained water with elevated concentrations of chloride and sodium;
2. four of the wells contained water with elevated concentrations of iron and manganese (a common and presumably natural phenomenon in New Hampshire). Another four wells contained water with elevated manganese concentrations without the elevated iron; and



**Figure 12.** Water-quality-sampling location in the Saco and Ossipee River Basins study area, east-central New Hampshire.

**Table 5.** Statistical summary of water-quality analyses of ground-water samples from the Saco and Ossipee River Basins, east-central New Hampshire

[ $\mu\text{S}/\text{cm}$ , microsiemens per centimeter at 25 degrees Celsius; A less than symbol "<" precedes a value whenever the concentration was below reporting level; mg/L, milligrams per liter;  $\text{NO}_2$ , nitrite;  $\text{NO}_3$ , nitrate;  $\mu\text{g}/\text{L}$ , micrograms per liter; --, not applicable]

Water-quality constituent	MCL <sup>1</sup>	SMCL <sup>2</sup>	Number of samples	Minimum	First quartile	Median	Third quartile	Maximum
Specific conductance, field ( $\mu\text{S}/\text{cm}$ at 25 degrees Celsius)	--	--	29	16	31.5	48	66	1,190
pH, field (standard units)	--	6.5-8.5	29	5.3	5.8	6.0	6.45	7.3
Temperature, water, in degrees Celsius	--	--	29	7.0	7.75	9.0	10.0	14.5
Dissolved Oxygen, (mg/L as $\text{O}_2$ )	--	--	25	0	3.3	9.5	11.3	11.8
Hardness, total (mg/L as $\text{CaCO}_3$ )	--	--	29	3	7	12	19	33
Acidity, total (mg/L as H)	--	--	29	<.1	<.1	.1	.2	.9
Calcium, dissolved (mg/L as Ca)	--	--	29	.8	2.0	3.8	5.6	11
Magnesium, dissolved (mg/L as Mg)	--	--	29	.11	.30	.47	.90	2.7
Sodium, dissolved (mg/L as Na)	--	20-250	29	1.5	2.85	4.4	6.6	220
Potassium, dissolved (mg/L as K)	--	--	29	.3	.5	.9	1.25	3.6
Sulfate, dissolved (mg/L as $\text{SO}_4$ )	--	250	29	<.1	1.65	2.6	3.6	55
Chloride, dissolved (mg/L as Cl)	--	250	29	.3	.5	2.2	9.1	300
Fluoride, dissolved (mg/L as F)	4	2	29	<.1	<.1	.2	1.0	2.9
Solids, sum of constituents, dissolved (mg/L)	--	--	28	18	30	42	50.5	612
Nitrogen, Nitrite, dissolved (mg/L as N)	1	--	21	<.01	<.01	<.01	<.01	<.01
Nitrogen, $\text{NO}_2+\text{NO}_3$ , dissolved (mg/L as N)	10	--	21	<.05	<.05	.18	.365	1.30
Nitrogen, Ammonia, dissolved (mg/L)	--	--	21	<.01	<.01	.01	.01	.09
Nitrogen, Ammonia-plus-Organic, dissolved (mg/L)	--	--	21	<.2	<.2	<.2	<.2	<.2
Phosphorus, dissolved (mg/L as P)	--	--	21	<.01	<.01	.01	.02	.17
Phosphorus, ortho, dissolved (mg/L as P)	--	--	21	<.01	<.01	<.01	<.01	.04

**Table 5.** Statistical summary of water-quality analyses of ground-water samples from the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Water-quality constituent	MCL <sup>1</sup>	SMCL <sup>2</sup>	Number of samples	Minimum	First quartile	Median	Third quartile	Maximum
Silica, dissolved (mg/L as SiO <sub>2</sub> )	--	--	29	6.4	9.75	12	16	40
Barium, dissolved (μg/L as Ba)	2,000	--	29	5	6	7	10.5	40
Beryllium, dissolved (μg/L as Be)	--	4	29	<.5	<.5	<.5	<.5	.9
Cadmium, dissolved (μg/L as Cd)	5	--	29	<1	<1	<1	<1	4
Cobalt, dissolved (μg/L as Co)	--	--	29	<3	<3	<3	<3	4
Copper, dissolved (μg/L as Cu)	--	1,000	29	<10	<10	<10	<10	<10
Iron, dissolved (μg/L as Fe)	--	300	29	<3	<3	4	33	8,700
Lead, dissolved (μg/L as Pb)	50	0	29	<10	<10	<10	<10	<10
Lithium, dissolved (μg/L as Li)	--	--	29	<4	<4	<4	<4	17
Manganese, dissolved (μg/L as Mn)	--	50	29	<1	3	20	62.5	720
Molybdenum, dissolved (μg/L as Mo)	--	--	29	<10	<10	<10	<10	10
Strontium, dissolved (μg/L as Sr)	--	--	29	8	18	27	41.5	81
Vanadium, dissolved (μg/L as V)	--	--	29	<6	<6	<6	<6	10
Zinc, dissolved (μg/L as Zn)	--	5,000	29	<3	<3	4	5.5	50

<sup>1</sup> MCL (Maximum Contaminant Level) is an enforceable, health-based maximum level (concentration) for contaminants in public drinking-water supplies as defined in the national primary and secondary drinking-water regulations established by the U.S. Environmental Protection Agency (1992).

<sup>2</sup> SMCL (Secondary Maximum Contaminant Level) is a non-enforceable, maximum level (concentration) for contaminants in public drinking-water supplies as defined in the national primary and secondary drinking-water regulations established by the U.S. Environmental Protection Agency (1992).

3. one well (ADW 14) contained water with an elevated concentration of fluoride.

The sampling procedure varied with the source of the water sampled. The four springs maintain constant flow, therefore, additional evacuation before sampling was unnecessary. The USGS wells were developed with a pneumatic pump several weeks before sampling. At the time of sampling, the USGS wells were pumped until at least three times the volume of water in the well was evacuated and until the temperature, specific con-

ductance, and dissolved oxygen stabilized. These procedures ensured that the water sampled was water from the aquifer and not stagnant.

### pH

The pH of water is a measure of the hydrogen ion concentration ( $H^+$ ) in solution. Water with a pH of seven is considered to be neutral, less than seven is acidic, and greater than seven is basic. The pH of most ground water in the United States ranges from about 6.0 to 8.5 (Hem 1985). The range of pH in stratified-drift

aquifers sampled across New Hampshire (Moore and others, 1994) varied from 5.26 to 8.48 with a median value of 6.12. In this study, the most acidic water with a value of 5.3 was obtained from well ADW 15. The most acidic water was below the recommended regulation shown in table 5. The most basic water was taken from spring SES 1 with a near neutral pH of 7.3.

### Specific Conductance

Specific conductance—a measure of the ability of water to conduct electrical current—ranged from 16  $\mu\text{S}/\text{cm}$  in water from well CKW 9 to 1,190  $\mu\text{S}/\text{cm}$  from well CKW 11 (appendix 5). The water from CKW 11 was the only sample that exceeded the recommended limit of 500  $\mu\text{S}/\text{cm}$  established by the New Hampshire Water Supply and Pollution Control Commission (1984) for public drinking water. The median for all water samples in the study (48  $\mu\text{S}/\text{cm}$ ) was less than the median (132  $\mu\text{S}/\text{cm}$ ) for public supply wells completed in stratified-drift aquifers for the entire State (Morrissey and Regan, 1987).

### Dissolved Solids

Dissolved solids in water include all ionized and un-ionized dissolved solids in solution. The concentrations of all water samples from the stratified-drift aquifers ranged from 18 to 612 mg/L with a median of 42 mg/L. Only water from well, CKW 11, was above the recommended limit for drinking water of 500 mg/L established by the New Hampshire Water Supply Engineering Bureau (written commun., 1990) for public drinking water. The relatively low concentration of dissolved solids in stratified-drift aquifers is attributed to the low solubility of the aquifer matrix and the relatively short time water is in contact with the aquifer (Morrissey and Regan, 1987). The well with the highest concentration of dissolved solids (CKW 11) also had the highest concentration of chloride and sodium.

### Dissolved Oxygen

Oxygen is supplied to ground water through recharge and by movement of air through unsaturated material above the water table. The concentration of dissolved oxygen (DO) in water that is in contact with air is a function of temperature and pressure, and to a lesser degree, the concentration of other solutes (Hem, 1985, p. 155). Dissolved-oxygen concentrations in water from 25 samples ranged from 0 mg/L (well

TAW 31) to 11.8 mg/L (well WAW 23); the median was 9.5 mg/L (table 5). Water containing measurable amounts of dissolved oxygen may flow long distances in the ground-water system, if little reaction results with aquifer material.

### Calcium, Magnesium, and Hardness

Calcium and magnesium are common elements of alkaline-earth minerals. Calcium and magnesium are also the predominate cations in most natural ground water (Hem, 1985). Concentrations of dissolved calcium in 29 samples ranged from 0.8 to 11 mg/L; the median was 3.8 mg/L. Concentrations of dissolved magnesium in 29 water samples from the stratified-drift aquifers ranged from 0.11 to 2.7 mg/L; the median was 0.47 mg/L. The USEPA has not assigned a drinking-water regulation for calcium or magnesium concentrations.

Hardness of water—a property of water that produces a residue when mixed with soap and (or) when heated—is the result of the presence of several different cations, particularly calcium and magnesium, and is expressed in an equivalent quantity of milligrams per liter  $\text{CaCO}_3$  (calcium carbonate) (Hem 1985). The hardness of water in all 29 samples ranged from 3 mg/L to 33 mg/L  $\text{CaCO}_3$ . Water that is less than 60 mg/L  $\text{CaCO}_3$  is considered soft (Hem, 1985). The median for all the samples was 12 mg/L and the median for public supply wells completed in stratified-drift aquifers in the entire State of New Hampshire (Morrissey and Regan, 1987) was 37 mg/L.

### Sodium and Chloride

Sodium ( $\text{Na}^+$ ) and chloride ( $\text{Cl}^-$ ) can be introduced into ground water from natural and manmade sources. The major natural source of chloride is atmospheric precipitation and dry fallout, and contributes about 0.5 mg/L to the New Hampshire land surface (Hall, 1975). The major manmade source of both sodium and chloride is salt ( $\text{NaCl}$ ) used in road deicing. Based on limited data, Hall estimated that in 1975 towns and cities in New Hampshire used at least 33,000 tons of  $\text{NaCl}$  per year. Hall suggests that heavy metals such as hexavalent chromium, which is toxic to humans, may be released by the corrosion of car bodies. He also suggests that dissolved salt coupled with pH ranges of 5.5 to 7.5 could pose an additional health threat as a result of the corrosion of iron, zinc and cadmium from plumb-

ing systems. During the period, from the winter of 1982-83 to the winter of 1992-93, the State of New Hampshire used an average of 152,000 tons/yr of NaCl to deice state highways and roads (Robert Hogan, New Hampshire Department of Transportation, oral commun., 1993) that contributed to an increase in concentrations of sodium and chloride in ground water statewide.

Water samples from well CKW 11 in the stratified-drift aquifer had concentrations of sodium and chloride of 220 mg/L (8.5 meq/L) and 300 mg/L (9.5 meq/L), respectively. The ratio of these milliequivalents suggests that NaCl could be a major contributor to both constituents. The water from well CKW 11 was the only sample with concentrations higher than the U.S. Environmental Protection Agency (1992) Secondary Maximum Contaminant Level (SMCL)<sup>1</sup> of 250 mg/L of chloride and higher than the Health Advisory Level of 20 mg/L for sodium. Well CKW 11 is downgradient from a NHDOT road deicing salt storage site. The SMCL for chloride was established as a taste threshold and the Health Advisory Limit for sodium was established as a recommended limit for people with heart, hypertension or kidney problems who are on sodium-restricted diets. The median concentrations of sodium (6.0 mg/L) and of chloride (6.8 mg/L) were below these regulations. The median concentration for sodium in ground water from public supply wells completed in stratified-drift aquifers in New Hampshire is 11.0 mg/L (Morrissey and Regan, 1987).

## Nitrogen

Nitrogen is present in many forms in natural waters depending on the source of nitrogen and the degree of decomposition. Nitrogen is present in water as nitrite ( $\text{NO}_2^-$ ) or nitrate ( $\text{NO}_3^-$ ) anions, as ammonium ( $\text{NH}_4^+$ ) cations, and at intermediate oxidation states as a part of organic solutes (Hem, 1985, p. 124). The predominant form of inorganic nitrogen in natural water is nitrate, from the oxidation of nitrogenous compounds. High levels of nitrate in ground water can originate from fertilizer application, leachate from sewage systems (such as septic tanks, sewage lagoons, or cesspools), or wastes

<sup>1</sup>SMCL (Secondary maximum contaminant level) is a non-enforceable, maximum level (concentration) for contaminants in public drinking-water supplies as defined in the national primary and secondary drinking-water regulations established by the U.S. Environmental Protection Agency (1992).

from farm animals. High levels of nitrate (greater than 10 mg/L as nitrogen or greater than 44 mg/L as nitrate) in drinking water has been linked to methemoglobinemia in small children, or blue-baby syndrome (Hem, 1985, p. 125). Dissolved nitrite-plus-nitrate (as N) concentrations in 21 water samples ranged from less than 0.05 to 1.3 mg/L; the median was 0.18 mg/L. Water from well MBW 55 in Madison had a concentration of nitrogen (1.3 mg/L), which is elevated from background levels but is below the USEPA's (1992) primary drinking-water standard (10 mg/L) for nitrogen (appendix 5).

## Phosphorus

Although phosphorus is a common element in igneous rocks and is abundant in soils, concentrations of phosphorus in ground water are generally low. Many inorganic compounds of phosphorus have low solubility in water and can be used as fertilizer (Hem, 1985). Manmade sources of phosphorus in ground water can come from waste disposal through septic tanks and sewage lagoons, and from chemical fertilizer applications. Six of 21 samples analyzed for dissolved phosphorus and 18 of 21 water samples analyzed for dissolved orthophosphate had concentrations below the minimum reporting level. The highest concentration for dissolved phosphorus (0.17 mg/L) was detected in water from well CWW 67 in Conway. The highest concentration for dissolved orthophosphate (0.04 mg/L) was detected in water from spring SES 1 in Sandwich (appendix 5). At present, the USEPA has not set a drinking-water regulation concentration for phosphorus.

## Sulfate

Sulfur is widely distributed in reduced form in igneous, sedimentary, and metamorphic rocks as metallic sulfide minerals such as pyrite (Hem, 1985). Evaporite minerals, such as gypsum and anhydrite, also contain sulfur, but these minerals are generally absent in stratified-drift aquifers in New Hampshire. However, oxidation of sulfur by human activities, such as combustion of fuels and smelting of ores and resultant atmospheric deposition, is a major source of sulfate ( $\text{SO}_4^{2-}$ ). Under reducing conditions, sulfate can be reduced by anaerobic bacteria to hydrogen sulfide ( $\text{H}_2\text{S}$ ) gas, which can be detected by smell at concentrations of only a few tenths of a milligram per liter (Hem, 1985). Concentra-

tions of dissolved sulfate in 28 water samples ranged from less than 0.1 to 55 mg/L, and the median was 2.6 mg/L (table 5). None of the samples exceeded the USEPA's (1992) secondary drinking water regulation (250 mg/L) for sulfate.

### Iron and Manganese

Elevated concentrations of iron and manganese were the most common water-quality problems found during this study. Iron is the fourth most abundant element in the Earth's outer crust and is an essential element to plant and animal metabolism. If present in high concentrations in residential water supplies, however, iron forms red oxyhydroxide precipitates that stain clothes and plumbing fixtures. Manganese, also an abundant metallic element, is an undesirable impurity in water as a result of its tendency to deposit black oxide stains (Hem, 1985). Both iron and manganese are common in minerals of bedrock and stratified drift in the study area. The water from 4 of the 29 sites sampled had iron concentrations that exceeded the SMCL of 300 µg/L and water from 8 sites had manganese concentrations that exceeded the SMCL of 50 µg/L. Water from well OXW 36 had the highest concentrations of iron, 8,700 µg/L with other high concentrations as follows: CWW 67, 7,100 µg/L; TAW 33, 5,300 µg/L; and OXW 34, 890 µg/L. The median value for iron was 4 µg/L. Water from these same wells, as well as four others, had high concentrations of manganese. The median manganese concentration of 20 µg/L is lower than the SMCL. Three of the four wells contained water with elevated iron concentrations, OXW 36, OXW 34 and TAW 33, also contained water with low concentrations of dissolved oxygen (appendix 5). Iron as Fe<sup>+2</sup>, is highly soluble in water with low concentrations of oxygen and elevated concentrations of iron can result.

### Silica

The element silicon (Si<sup>+4</sup>) is the second most abundant element (after oxygen) in the Earth's crust (Hem, 1985). Crystalline silica (SiO<sub>2</sub>) as quartz is a major constituent of many igneous and metamorphic rocks. Feldspars, amphiboles, and other minerals that also contain silica, are widely distributed in igneous and metamorphic rocks. These silica-rich minerals are found in sediments from stratified-drift aquifers in New Hampshire. Concentrations of silica, however, are generally

low in natural waters. Dissolved silica concentrations in water from the 29 sites ranged from 6.4 to 40 mg/L with a median of 12 mg/L (table 5). At present (1994), there is no USEPA drinking-water regulation for silica.

### Trace Elements

Trace elements are elements that nearly always occur in concentrations less than 1.0 mg/L in natural waters (Hem, 1985). Water samples collected from USGS wells in the Saco and Ossipee River Basins and analyzed for fluoride, beryllium, boron, cadmium, cobalt, copper, molybdenum, zinc, lead, lithium, and vanadium generally contained concentrations that ranged from less than detection level to a few micrograms per liter. Trace elements with concentrations consistently above detection level, but less than 1.0 mg/L, were barium (less than 5 to 40 µg/L with a median of 7 µg/L) and strontium (8 to 81 µg/L with a median of 27 µg/L). None of the water samples exceeded the USEPA's primary drinking-water standard of 2,000 µg/L for barium (1992). Strontium is a common element that replaces calcium or potassium in minor amounts in igneous-rock minerals, such as minerals in granite (Hem, 1985). There is no USEPA drinking-water regulation for strontium. Water from well ADW 14, had a concentration of fluoride (2.9 mg/L) in excess of the USEPA's secondary drinking-water standard of 2 mg/L (USEPA, 1992). Fluorine is an element found in several minerals including fluorite (CaF<sub>2</sub>), apatite, Ca<sub>5</sub>(Cl, F, OH), and amphiboles and may be present naturally in the water in a wide variety of geologic terranes (Hem, 1985).

### SUMMARY AND CONCLUSIONS

Population growth and economic development have increased demands for water in the Saco and Ossipee River Basins in east-central New Hampshire. The Saco and Ossipee River Basins drain 869.4 mi<sup>2</sup> and contains 152.5 mi<sup>2</sup> of stratified-drift aquifers. In 1990, 2.30 Mgal/d were withdrawn from the stratified-drift aquifers by the three largest users of ground water in the study area (Wolfeboro Water Works, North Conway Water Precinct, and Conway Village Fire District). As the need for water increases, the need for information increases to ensure optimal use of available resources. This report provides geohydrologic information on stratified-drift aquifers in the Saco and Ossipee River

Basins drainage area. The report also describes geohydrologic characteristics, presents a technique for assessing ground-water availability, and the quality of water in the stratified-drift aquifers is assessed.

Most of the stratified-drift aquifers in the Saco and Ossipee River Basins consist of stratified, sorted, principally coarse-grained sediments (sands and gravels) deposited by glacial meltwater at the time of deglaciation. Interconnected voids or pore spaces between sediment particles provide space through which stored ground water can flow. Characteristics of the sediments that affect ground-water storage and flow are related to the glaciofluvial environment in which they were deposited. The presence of glacial lakes resulted in the formation of deltas and other lake deposits. The deglaciation process also resulted in eskers, kames, kame terraces, and outwash deposits. These coarse-grained stratified-drift deposits formed in contact with glacial ice tend to have a high capacity to store and transmit water.

Aquifer boundaries were delineated from available maps of surficial geology or were specifically mapped as part of this study. Thicknesses of saturated stratified drift were contoured with the aid of the surficial mapping, seismic-refraction profiling, seismic-reflection profiling, test drilling, and available well data. Saturated thickness is related to the geohydrologic setting in which the aquifers were formed. Layers of saturated silts and clays that lie above, below, or interfinger with the aquifer are included in the saturated thicknesses depicted. Saturated thicknesses of stratified drift in the study area are locally greater than 280 ft, but generally are less.

Hydraulic conductivity of the stratified drift was estimated from field descriptions of the grain-size distributions of samples collected during test drilling, and sieve analysis data. Aquifer transmissivity was calculated from the estimates of hydraulic conductivity and from aquifer-thickness data. Geologic and drillers' logs were examined during this process, and saturated silts and clays were excluded from the transmissivity estimates because their contribution is negligible. Estimated transmissivity values, in the study area, range from nearly 0 to greater than 8,000 ft<sup>2</sup>/d.

The Ossipee Lake aquifer in Ossipee, Freedom, Effingham, Madison, and Tamworth was selected for analysis of ground-water availability. A two-

dimensional, numerical finite-difference flow model and transient simulations were used to simulate the aquifer. The objective was to estimate the yield to 4 hypothetical wells after a 180-day period of pumping. The results show that the Ossipee Lake aquifer supplied 7.72 Mgal/d to the 4 wells of which 31.6 percent of the water pumped came from ground-water storage and 68.4 percent came from combined induced infiltration and ground water captured before discharge to surface-water bodies.

Ground-water quality in water from 25 test wells and 4 springs in the stratified-drift aquifers generally meets U.S. Environmental Protection Agency primary and secondary drinking-water regulations. Known areas of ground-water contamination were not sampled. Water samples from one well had elevated concentrations of chloride and sodium. Water samples from four sites had elevated iron and manganese concentrations (which occurs naturally in many parts of New Hampshire) and water samples from four other sampling sites had elevated manganese only. Water samples from one well had elevated concentrations of fluoride.

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## GLOSSARY

- Ablation Till:** Loosely consolidated rock debris, formerly carried by glacial ice, that accumulated in places as the surface ice was removed by melting, evaporation, or other processes.
- Aquifer:** A geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable materials to yield significant quantities of water to wells and springs. Where water only partly fills an aquifer, the upper surface of the saturated zone is free to rise and fall.
- Aquifer boundary:** A geologic or hydrologic feature that limits the extent of an aquifer.
- Bedrock:** Solid rock, locally called "ledge," that forms the earth's crust. It may be exposed at the surface but more commonly is buried beneath a few inches to more than 100 ft of unconsolidated deposits.
- Cone of depression:** A depression produced in a water table or other potentiometric surface by the withdrawal of water from an aquifer; in cross section, shaped like an inverted cone with its apex at the pumped well.
- Confined Aquifer:** An aquifer saturated with water and bounded above and below by material having a distinctly lower hydraulic conductivity than the aquifer.
- Contact:** A plane or irregular surface between two different types or ages of rocks or unconsolidated sediments.

**Cubic feet per second (ft<sup>3</sup>/s):** A unit expressing rate of discharge. One cubic foot per second is equal to the discharge of a stream 1-foot wide and 1-foot deep flowing at an average velocity of 1 foot per second.

**Cubic feet per second per square mile [(ft<sup>3</sup>/s)/mi<sup>2</sup>]:** A unit expressing average number of cubic feet of water flowing per second from each square mile of area drained.

**Darcy's Law:** An equation relating the factors controlling ground-water flow. Darcy's law is  $Q = KA \left( \frac{dh}{dl} \right)$ , where  $Q$  is the quantity of water per unit of time;  $K$  is the hydraulic conductivity, which depends on the size and arrangement of the water-transmitting openings (pores and fractures) and on the dynamic characteristics of the fluid (water) such as kinematic viscosity, density, and the strength of the gravitational field;  $A$  is the cross-sectional area, at a right angle to the flow direction, through which the flow occurs; and  $dh/dl$  is the hydraulic gradient.

**Deposit:** Earth material that has accumulated by natural processes.

**Dissolved solids:** The residue from a clear sample of water after evaporation and drying for 1 hour at 180°C; consists primarily of dissolved mineral constituents, but may also contain organic matter and water of crystallization.

**Drainage area:** The area or tract of land, measured in a horizontal plane, that gathers water and contributes it ultimately to some point on a stream channel, lake, reservoir, or other water body.

**Drawdown:** The lowering of the water table or potentiometric surface caused by the withdrawal of water from an aquifer by pumping; equal to the difference between the static water level and the pumping water level.

**Drumlin:** A low, smoothly rounded, elongated oval-shaped hill of glacial till built under the margin of glacial ice and shaped by its flow; its longer axis is parallel to the direction of flow of the ice.

**Effective grain size:** The grain size at which 10 percent of the sample consists of smaller grains and 90 percent consists of larger grains.

**Esker:** A long ridge of sand and gravel that was deposited by water flowing in tunnels within or beneath glacial ice.

**First quartile:** For a set of measurements arranged in order of magnitude, that value where 25 percent of the measurements are lower in magnitude and 75 percent of the measurements are higher in magnitude.

**Flow duration (of a stream):** The percentage of time during which specified daily discharges are equaled or exceeded within a given time period.

**Fluvial:** Pertaining to the flow of liquid water in the natural environment.

**Fracture:** A break, crack, or opening in bedrock along which water may move.

**Glacial lake:** A body of water that formed from the melting of glacial ice.

**Glaciofluvial:** Pertaining to the flow of meltwater streams from glacial ice and to the landforms produced by such streams, including kames, kame terraces, and outwash plains.

**Glaciolacustrine:** Deposits in glacial lakes; especially deposits such as deltas and varved sediments, composed of material deposited by meltwater streams flowing into lakes adjacent to the glacier.

**Gneiss:** A coarse-grained metamorphic rock with alternating bands of granular and micaceous minerals.

**Granite:** A coarse-grained, light-colored, igneous rock.

**Gravel:** Unconsolidated rock debris composed principally of particles larger than 2 millimeters in diameter.

**Ground water:** Water beneath the water table in soils or geologic formations that are fully saturated and under pressure equal to or greater than atmospheric pressure.

**Ground-water discharge:** The discharge of water from the saturated zone by (1) natural processes such as ground-water seepage into stream channels and ground-water evapotranspiration and (2) discharge through wells and other manmade structures.

**Ground-water divide:** A hypothetical line on a water table on each side of which the water table slopes downward in a direction away from the line. In the vertical dimension, a plane across which ground water does not flow.

**Ground-water evapotranspiration:** Ground water discharged into the atmosphere in the gaseous state either by direct evaporation from the water table or by the transpiration of plants.

**Ground-water recharge:** Water that is added to the saturated zone of an aquifer.

**Ground-Water Site-Inventory (GWSI) data base:** A computerized file maintained by the U.S. Geological Survey that contains information about wells and springs collected throughout the United States.

**Head, static:** The height of the surface of a water column above a standard datum that can be supported by the static pressure of a given point.

**Hydraulic conductivity (K):** A measure of the ability of a porous medium to transmit a fluid that can be expressed in unit length per unit time. A material has a hydraulic conductivity of 1 foot per day if it will transmit in 1 day, 1 cubic foot of water at the prevailing kinematic viscosity through a 1-foot square cross section of aquifer, measured at right angles to the direction of flow, under a hydraulic gradient, of 1-foot change in head over 1-foot length of flow path.

**Hydraulic gradient:** The change in static head per unit of distance in a given direction. If not specified, the direction is generally understood to be that of the maximum rate of decrease in head.

**Hydrograph:** A graph showing stage (height), flow velocity, or other property of water with respect to time.

**Ice-contact deposits:** Stratified drift deposited in contact with melting glacial ice. Landforms include eskers, kames, kame terraces, and grounding-line deltas.

**Igneous:** Descriptive term for rocks or minerals solidified from molten or partially molten material, that is, from a magma, such as basalt or granite.

**Induced infiltration:** The process by which water infiltrates an aquifer from an adjacent surface-water body in response to ground-water withdrawal from that aquifer.

**Kame:** A ridge, mound, or hummock that may be irregular and is composed of stratified sand and gravel deposited by glacial meltwater; the precise mode of formation is uncertain.

**Kame terrace:** A ridge consisting of stratified sand and gravel deposited in a glaciofluvial environment between a melting glacier or stagnant ice lobe and a high valley wall. The deposit has a terrace appearance after the ice has retreated.

**Lacustrine:** Pertaining to lake environments. As described in this report, it refers to areas associated with glacial-lake environments.

**Lodgement till:** A firm, compact clay-rich till deposited beneath a moving glacier, containing abraded stones oriented, in general, with their long axes parallel to the direction of ice movement.

**Median:** The middle value of a set of measurements that are ordered from lowest to highest, 50 percent of the measurements are lower than the median and 50 percent are higher than the median.

**Metamorphic:** Descriptive term for rocks such as gneiss and schist that have formed, in the solid state, from other rocks due to changes in temperature and pressure.

**Micrograms per liter ( $\mu\text{g/L}$ ):** A unit expressing the concentration of chemical constituents in solution as the mass (micrograms) of a constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

**Milligrams per liter (mg/L):** A unit for expressing the concentration of chemical constituents in solution as the mass (milligrams) of a constituent per unit volume (liter) of water.

**Outwash:** Stratified deposits chiefly of sand and gravel removed or "washed out" from a glacier by meltwater streams and deposited beyond the margin of a glacier, usually found in flat or gently sloping outwash plains.

**Outwash deltas:** Deltas formed beyond the margin of the glacier where glacial meltwater entered a water body.

**pH:** The negative logarithm of the hydrogen ion concentration. A pH of 7.0 indicates neutrality; values below 7.0 denote acidity and those above 7.0 denote alkalinity.

**Phi grade scale:** A logarithmic transformation of the Wentworth grade scale based on the negative logarithm to the base 2 of the particle diameter, in millimeters.

**Porosity:** The property of a rock or unconsolidated deposit that is a measure of the size and number of internal voids or open spaces; it may be expressed quantitatively as the ratio of the volume of its open spaces to its total volume.

**Rotten Rock (grus):** The fragmental products of in-situ granular disintegration of granite and granitic rocks.

**Runoff:** That part of the precipitation that appears in streams. It is the same as streamflow unaffected by artificial diversions, storage, or other human activities in or on the stream channels.

**Saturated thickness (of stratified drift):** Thickness of stratified drift extending down from the water table to the till or bedrock surface.

**Saturated zone:** The subsurface zone in which all open (interconnected) spaces are filled with water. Water below the water table, the upper limit of the saturated zone, is under pressure greater than atmospheric.

**Schist:** A metamorphic rock with subparallel orientation of the visible micaceous minerals, which dominate its composition.

**Sediment:** Fragmental material that originates from weathering of rocks. It can be transported by, suspended in, or deposited by water.

**Specific capacity (of a well):** The rate of discharge of water divided by the corresponding drawdown of the water level in the well. Stated in this report in gallons per minute per foot.

**Specific yield:** The ratio of the volume of water that a rock or soil will yield, by gravity drainage, after being saturated to the total volume of the rock or soil.

**Standard deviation:** A measure of the amount of variability in a sample; it is the square root of the average of the squares of the deviations about the arithmetic mean of a set of data.

**Storage coefficient:** The volume of water an aquifer releases from or takes into storage per unit surface area of the aquifer per unit change in head. In an unconfined aquifer, the storage coefficient is virtually equal to the specific yield.

**Stratified drift:** Sorted and layered unconsolidated material deposited in meltwater streams flowing from glaciers or settled from suspension in quiet-water bodies fed by meltwater streams.

**Superposition:** A principle that states: for linear systems, the solution to individual parts of a problem can be added together to solve composite problems.

**Surficial geology:** The study of or distribution of unconsolidated deposits at or near the land surface.

**Third quartile:** For a set of measurements arranged in order of magnitude, that value where 75 percent of the measurements are lower in magnitude and 25 percent of the measurements are higher in magnitude.

**Till:** A predominantly nonsorted, nonstratified sediment deposited directly by a glacier and composed of boulders, gravel, sand, silt and clay mixed in various proportions.

**Transmissivity:** The rate at which water is transmitted through a unit width of aquifer under a unit hydraulic gradient. Equal to the average hydraulic conductivity times the saturated thickness.

**Unconfined aquifer (water-table aquifer):** An aquifer only partly filled with water. In such aquifers, the water or upper surface of the saturated zone is at atmospheric pressure and is free to rise and fall.

**Unconsolidated deposit:** A sediment in which the particles are not firmly cemented together, such as sand, in contrast to sandstone.

**Unsaturated zone:** The zone between the water table and the land surface in which the open spaces are not completely filled with water.

**Water table:** The upper surface of the saturated zone. Water at the water table is at atmospheric pressure.

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**APPENDIX 1. Description of selected wells, borings,  
and springs in the Saco and Ossipee River Basins,  
east-central New Hampshire**

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**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central New Hampshire.

**Local site number:** First two characters are U.S. Geological Survey town code. Third-character codes indicates -- A, boring done for hydrologic purposes; B, boring done for constructional purposes; S, spring; W, well. The numbers are sequential numbers for each town.

**Latitude, longitude:** Accurate within 5 seconds.

**Owner or user:** NHDOT, New Hampshire Department of Transportation; USGS, U.S. Geological Survey.

**Altitude:** Altitudes are expressed in feet above sea level: Altitudes given in whole feet are interpolated from U.S. Geological Survey topographic maps and are accurate to plus or minus half the contour interval of the map (+/- 10 to 20 feet); altitudes in tenths of feet are determined by instrument.

**Depth to bottom of casing:** Depth to bottom of well casing in feet below land-surface datum.

**Casing material:** Material from which the casings are made: C, concrete; G, galvanized iron; P, plastic; R, rock or stone; S, steel; or T, tile.

**Type of finish:** Method of finish or nature of the openings that allow water to enter the well: G, gravel-pack well with a screen; O, open end (cased to the bottom of the well so water can only enter the well through the bottom of the hole); P, perforated or slotted with holes punched or slots cut into the casing to admit water; S, screen (manufactured); T, sand point for driven wells; X, open hole where the casing does not extend to the bottom of the hole (usually a bedrock well).

**Depth to bottom of open section:** Depth to the bottom of the screen or open section in which water enters the well in feet below land surface.

**Type of site:** BrW, bedrock well; Sp, spring; TH, test hole; Wells or borings in surficial deposits: Bor, bored or augered; Cbl, cable-tool well; Dug, dug well; Dvn, driven well; Wsh, drive and wash well.

**Water level:** Water level, in feet below land-surface datum; mm-dd-yy is month-day-year.

**Use:** Use of site: O, observation well drilled for water-level or water-quality observations; T, test hole. Use of water: C, commercial; H, domestic; I, irrigation; P, public; N, industrial; S, stock; T, institutional; U, unused; Z, other.

**Maximum well yield:** Discharge, in gallons per minute.

**Drawdown:** in feet, observed at a pumping well.

**Specific capacity:** In gallons per minute per foot of drawdown ((gal/min)/foot).

**Pumping period:** The length of time, in hours, that the well was pumped before the measurement of production levels.

**Remarks:** CA, chemical analysis summarized in appendix 5; USGS, well test hole drilled by the U.S. Geological Survey for this investigation; GS, well inventoried by Glen Stewart (past New Hampshire State Geologist); F, the well was flowing; R, the well had been pumped recently; pH is the negative logarithm of the hydrogen-ion concentration; Fe, iron; ppm, parts per million; hard, hardness of water.

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

[--, no data]

Local site number	Lat- itude	Long- itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>CARROLL COUNTY</b>											
<b>Albany</b>											
ADB 2	435945	712039		--	1,221.9	--	--	--	--	--	TH
ADB 5	435546	711316		--	1,430	--	--	--	--	--	TH
ADB 6	435948	711937		--	1,189.3	--	--	--	--	--	TH
ADB 7	435950	711926		--	1,220	--	--	--	--	--	TH
ADB 8	435929	711730		--	1,217.5	--	--	--	--	--	TH
ADB 9	435925	711757		--	1,247.7	--	--	--	--	--	TH
ADB 10	435955	711641		--	1,138.8	--	--	--	--	--	TH
ADB 11	440058	711914		--	651.8	--	--	--	--	--	TH
ADB 12	440003	711408		--	840	--	--	--	--	--	TH
ADW 1	435943	711253	John Clay	1991	825	6	60	S	X	--	BrW
ADW 2	435911	711208		1988	890	--	--	--	P	--	Bor
ADW 3	435914	711200		1988	830	--	--	--	P	--	Bor
ADW 4	435908	711207		1988	870	--	--	--	P	--	Bor
ADW 5	435912	711159		1988	850	--	--	--	P	--	Bor
ADW 6	435908	711200		1988	850	--	--	--	P	--	Bor
ADW 7	435607	711328	Towle	1984	670	--	284	--	X	--	BrW
ADW 8	435808	710836	Chartier	1985	470	--	99	--	S	--	--
ADW 9	435437	712131	McVicar	1985	1,140	--	9	--	--	--	Dug
ADW 10	435528	711253	Pero	1987	625	--	1	--	--	--	Dug
ADW 11	435538	711330	Casarano	1987	635	--	--	--	--	--	Dug
ADW 12	435812	710838	Smith	1989	470	--	31.5	--	S	--	--
ADW 13	435524	711326		1992	625	2	50.4	P	S	52.4	Bor
ADW 14	435948	712203		1992	1,250	2	77.5	P	S	79.5	Bor
ADW 15	435948	712203		1992	1,250	2	13.5	P	S	15.5	Bor
ADW 15	435948	712203		--	1,250	--	--	--	--	18.	
ADW 16	435936	712104		1992	1,250	2	48	P	S	50	Bor
ADW 17	435754	711024	Croteau	1985	820	--	10.5	--	X	--	BrW
ADW 18	435822	710940	Hunt	1985	800	--	262	--	X	--	BrW
ADW 19	435807	710854	Valladares	1987	540	--	39	--	X	--	BrW
ADW 20	435802	711032	Abbott	1987	830	--	30	--	X	--	BrW
ADW 21	435656	711222	Hutchinson	1987	840	--	28	--	X	--	BrW
ADW 22	435620	711338	Moulton	1987	750	--	239	--	X	--	BrW
ADW 23	435903	711006	Hatch	1988	800	--	120	--	X	--	BrW
ADW 24	435621	711337	Cunningham	1988	750	--	241	--	X	--	BrW
ADW 25	435831	711030	Pinciaro	1988	960	--	129	--	X	--	BrW
ADW 26	435806	710951	Walker	1988	810	--	127	--	X	--	BrW
ADW 27	440023	710929	Carruthers	1988	610	--	40	--	X	--	BrW
ADW 28	435814	710954	Howard	1988	760	--	21	--	--	--	Dug
ADW 29	435813	710952	Wilson	1988	770	--	19	--	--	--	Dug
ADW 30	435837	711022	Newton	1988	1,080	--	44	--	X	--	BrW
ADW 31	435925	711021	Dunham	1988	630	--	31	--	X	--	BrW
ADW 32	440017	710934	Williams	1989	580	--	40	--	X	--	BrW
ADW 33	435613	711251	Smith	1989	880	--	279	--	X	--	BrW
ADW 34	435918	710949	Waters	1989	590	--	231	--	X	--	BrW
ADW 35	440021	710935	McConarty	1989	600	--	40	--	X	--	BrW
ADW 36	435630	711235	Croteau	1990	820	--	232	--	X	--	BrW
ADW 37	435834	711029	Andersen	1989	1,010	--	80	--	X	--	BrW
ADW 38	435921	711009	Maillet	1990	640	--	211	--	X	--	BrW
ADW 39	435920	711041	Wilson	1990	700	--	29	--	X	--	BrW

# New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks				
CARROLL COUNTY												
<b>Albany</b>												
ADB 2	--	--	U	--	--	--	--					
ADB 5	--	--	U	--	--	--	--					
ADB 6	--	--	U	--	--	--	--					
ADB 7	--	--	U	--	--	--	--					
ADB 8	--	--	U	--	--	--	--					
ADB 9	--	--	U	--	--	--	--					
ADB 10	--	--	U	--	--	--	--					
ADB 11	1	04-00-84	U	--	--	--	--					
ADB 12	--	--	U	--	--	--	--					
ADW 1	--	--	H	2	--	--	--					
ADW 2	51.1	08-17-88	O	--	--	--	--	USGS Albany Landfill				
ADW 3	18.5	08-17-88	O	--	--	--	--	USGS Albany Landfill				
ADW 4	25.7	08-10-88	O	--	--	--	--	USGS Albany Landfill				
ADW 5	80.5	08-17-88	O	--	--	--	--	USGS Albany Landfill				
ADW 6	--	--	O	--	--	--	--	USGS Albany Landfill				
ADW 7	--	--	H	3.5	--	--	.5					
ADW 8	2	03-28-85	H	40	--	--	.5					
ADW 9	4	10-03-85	H	50	--	--	8					
ADW 10	8	03-17-87	H	25	--	--	--					
ADW 11	--	--	H	35	--	--	--					
ADW 12	12	08-17-89	H	25	--	--	2					
ADW 13	2.7	08-11-92	O	--	--	--	--	USGS				
ADW 14	--	--	O	--	--	--	--	USGS				
ADW 15	6.3	08-06-92	O	--	--	--	--	USGS				
ADW 15	6.3	08-06-92	O	--	--	--	--					
ADW 16	9.9	08-06-92	O	--	--	--	--	USGS				
ADW 17	--	--	H	3.5	--	--	.8					
ADW 18	100	09-09-85	H	0.5	--	--	1					
ADW 19	38	04-30-87	H	4	--	--	1					
ADW 20	20	08-05-87	H	6.5	--	--	.5					
ADW 21	--	--	H	2.5	--	--	1					
ADW 22	40	11-03-87	P	100	--	--	.5					
ADW 23	--	--	H	25	--	--	1					
ADW 24	--	--	H	10	--	--	1					
ADW 25	10	04-10-88	H	0.7	--	--	1					
ADW 26	45	10-01-88	H	5.5	--	--	.5					
ADW 27	--	--	H	1	--	--	1					
ADW 28	11	08-27-88	H	--	--	--	--					
ADW 29	11	08-31-88	H	--	--	--	--					
ADW 30	--	--	H	3.5	--	--	1					
ADW 31	--	--	H	6	--	--	1					
ADW 32	--	--	H	20	--	--	1					
ADW 33	170	08-01-89	H	6	--	--	1					
ADW 34	100	12-08-89	H	4	--	--	1					
ADW 35	60	10-05-89	H	1	--	--	1					
ADW 36	105	01-04-90	H	12	--	--	.5					
W 37	--	--	H	5	--	--	1					
ADW 38	--	--	H	10	--	--	1					
ADW 39	10	10-31-90	H	30	--	--	.5					

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-itude	Owner or user	Year com-pleted	Alt-i-tude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Albany--Continuned</b>											
ADW 40	435739	711125	S. George	1991	700	--	40	--	X	--	BrW
ADW 41	435629	711235	Saxby	1991	830	--	271	--	X	--	BrW
ADW 42	440003	710954	Smith	1991	640	--	39	--	X	--	BrW
ADW 43	435943	711253	Clay	1991	820	--	60	--	X	--	BrW
ADW 44	435746	711021	Ferris	1991	730	--	59	--	X	--	BrW
ADW 45	435948	710945	Diceo	1991	600	--	39	--	X	--	BrW
ADW 46	435919	711004	Schreiber	1991	650	--	189	--	X	--	BrW
ADW 47	435805	710845	Harrow	1991	470	--	80	--	X	--	BrW
ADW 48	435724	711239	Wiggin	1992	730	--	92	--	X	--	BrW
ADW 49	435950	711023	Hardiss	1991	620	--	139	--	X	--	BrW
ADW 50	435947	711020	Howland	1991	620	--	127	--	X	--	BrW
ADW 51	435936	710928	Darcy	1991	550	--	37	--	X	--	BrW
ADW 52	435932	710924	Hanson	1991	530	--	19	--	X	--	BrW
ADW 53	435938	710934	Avignone	1991	560	--	119	--	X	--	BrW
ADW 54	435938	710936	Sermon	1991	560	--	49	--	X	--	BrW
ADW 55	435942	710939	Barber	1991	560	--	40	--	X	--	BrW
ADW 56	435948	711008	Loring	1991	600	--	113	--	X	--	BrW
ADW 57	435948	711003	Doherty	1991	600	--	103	--	X	--	BrW
ADW 58	435949	711006	Robbins	1991	600	--	103	--	X	--	BrW
ADW 59	435942	710942	Chesley	1991	580	--	19	--	X	--	BrW
ADW 60	435946	710954		--	600	--	35	--	X	--	BrW
ADW 61	435949	711000	Santolucito	1991	600	--	75	--	X	--	BrW
ADW 62	435948	711002	Berry	1991	600	--	93	--	X	--	BrW
ADW 63	435945	710949	Head	1991	600	--	34	--	X	--	BrW
ADW 64	435944	710948	Gorman	1991	600	--	19	--	X	--	BrW
ADW 65	435937	710931	Darcy	1991	550	--	59	--	X	--	BrW
ADW 66	435925	711019	Davidson	1992	630	--	39	--	X	--	BrW
ADW 67	435941	711252	Robert and Mary Diamond	1969	805	6	12	P	O	--	Dug
ADW 68	435940	711253		--	800	24	2.1	C	O	--	Dug
ADW 69	435437	712119	Andrew Thompson	1971	1,115	36	6	C	O	--	Dug
ADW 70	435438	712133	Doug Mcvicar	--	1,130	36	9.6	C	O	--	Dug
<b>Bartlett</b>											
BCB 2	440525	711219		--	632.5	--	--	--	--	--	TH
BCB 4	440216	711913		--	960.6	--	--	--	--	--	TH
BCB 5	440239	711637		--	520.3	--	--	--	--	--	TH
BCB 6	440718	710751		--	771.5	--	--	--	--	--	TH
BCB 7	440501	711708		--	665.2	--	--	--	--	--	TH
BCW 7	440641	711043		--	570	--	--	--	--	--	--
BCW 8	440607	711053		--	620	--	--	--	--	--	BrW
BCW 9	440506	710956		--	540	--	--	--	--	--	BrW
BCW 10	440506	710848		--	490	--	--	--	--	--	--
BCW 11	440457	710950		--	560	--	--	--	--	--	BrW
BCW 12	440438	710951		--	545	--	--	--	--	--	--
BCW 13	440550	710934		--	516	--	--	--	--	--	--
BCW 14	440549	710932		--	100	--	--	--	--	--	--
BCW 15	440549	710932		--	100	--	--	--	--	--	--
BCW 16	440439	710832		--	492	--	--	--	--	--	--
BCW 17	440511	710903		--	100	--	--	--	--	--	--
BCW 18	440502	710829		--	502	--	--	--	--	--	--
BCW 19	440712	711303	Hamblet	1984	1,040	--	40	--	X	--	BrW
BCW 20	440447	711408	Attitash Lift Corp	1984	740	--	40	--	X	--	BrW
BCW 21	440744	711207	Tarr	1984	1,080	--	19	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Albany - Continued</b>								
ADW 40	--	--	H	5	--	--	1	
ADW 41	--	--	H	18	--	--	1	
ADW 42	95	08-28-91	H	1	--	--	1	
ADW 43	20	04-14-91	H	2	--	--	.5	
ADW 44	30	06-20-91	H	0.5	--	--	1	
ADW 45	30	06-20-91	H	2	--	--	1	
ADW 46	65	11-16-91	H	2.5	--	--	24	
ADW 47	30	09-30-91	H	0.5	--	--	1	
ADW 48	--	--	H	9	--	--	1	
ADW 49	--	--	H	6	--	--	2	
ADW 50	--	--	H	2.5	--	--	2	
ADW 51	--	--	H	9	--	--	2	
ADW 52	--	--	H	20	--	--	.5	
ADW 53	--	--	H	3	--	--	2	
ADW 54	--	--	H	2	--	--	2	
ADW 55	--	--	H	8	--	--	--	
ADW 56	--	--	H	4	--	--	2	
ADW 57	--	--	H	1	--	--	2	
ADW 58	--	--	H	5	--	--	2	
ADW 59	--	--	H	3	--	--	2	
ADW 60	--	--	H	--	--	--	--	
ADW 61	--	--	H	2	--	--	2	
ADW 62	--	--	H	1.5	--	--	2	
ADW 63	--	--	H	10	--	--	2	
ADW 64	--	--	H	3	--	--	2	
ADW 65	--	--	H	0.8	--	--	2	
ADW 66	--	--	H	100	--	--	1	
ADW 67	10	08-08-91	H	13.6	--	--	--	
ADW 68	1.4	08-08-91	U	--	--	--	--	
ADW 69	2.8	08-09-91	H	--	--	--	--	
ADW 70	6.8	08-09-91	H	--	--	--	--	
<b>Bartlett</b>								
BCB 2	--	--	U	--	--	--	--	
BCB 4	6.8	12-00-63	U	--	--	--	--	
BCB 5	--	--	U	--	--	--	--	
BCB 6	--	--	U	--	--	--	--	
BCB 7	--	--	U	--	--	--	--	
BCW 7	25	11-10-66	--	--	--	--	--	
BCW 8	100	08-16-81	--	--	--	--	--	
BCW 9	18	07-21-70	--	--	--	--	--	
BCW 10	10	07-21-81	--	--	--	--	--	
BCW 11	--	--	--	--	--	--	--	
BCW 12	--	--	--	--	--	--	--	
BCW 13	--	--	O	--	--	--	--	Project well (Johnson and others, 1987)
BCW 14	--	--	O	--	--	--	--	Project well (Johnson and others, 1987)
BCW 15	--	--	O	--	--	--	--	Project well (Johnson and others, 1987)
BCW 16	--	--	O	--	--	--	--	Project well (Johnson and others, 1987)
BCW 17	--	--	P	--	--	--	--	
BCW 18	--	--	O	--	--	--	--	
BCW 19	40	05-10-84	H	.5	--	--	1	Project well (Johnson and others, 1987)
BCW 20	--	--	P	30	--	--	.5	
BCW 21	--	--	H	1	--	--	.5	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat-itude	Long-itude	Owner or user	Year com-pleted	Alt-i-tude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Bartlett--Continued</b>											
BCW 22	440734	711258	Lynn	1984	1,220	--	19	--	X	--	BrW
BCW 23	440603	711246	Kobialka	1984	780	--	19	--	X	--	BrW
BCW 24	440448	711523	Loeschorn	1984	630	--	149	--	X	--	BrW
BCW 25	440715	711259	Lewando	1984	1,080	--	19	--	X	--	BrW
BCW 26	440448	711433	Mickle	1984	660	--	405	--	X	--	BrW
BCW 27	440645	711410	Clifford	1984	790	--	60	--	X	--	BrW
BCW 28	440647	710818	White	1984	690	--	110	--	X	--	BrW
BCW 29	440747	711202	McEwan	1984	1,040	--	19	--	X	--	BrW
BCW 30	440714	711302	Chaney	1984	1,080	--	19	--	X	--	BrW
BCW 31	440645	710824	Wenzel	1984	690	--	111	--	X	--	BrW
BCW 32	440642	710834	Cuppions	1984	700	--	80	--	X	--	BrW
BCW 33	440634	711239	Bowley	1984	630	--	77	--	X	--	BrW
BCW 34	440723	711313	McGregg	1984	1,240	--	19	--	X	--	BrW
BCW 35	440415	711715	McDonald	1984	720	--	19	--	X	--	BrW
BCW 36	440639	711259	Chandler	1984	700	--	145	--	X	--	BrW
BCW 37	440558	711122	Hildebrand	1984	620	--	100	--	X	--	BrW
BCW 38	440641	710828	Oman	1984	680	--	150	--	X	--	BrW
BCW 39	440624	710925	D'Angelo	1984	560	--	69	--	X	--	BrW
BCW 40	440613	711248	Wright	1984	690	--	60	--	X	--	BrW
BCW 41	440726	710747	Travers	1984	800	--	86	--	X	--	BrW
BCW 42	440448	711435	Marsh	1985	660	--	129	--	--	--	--
BCW 43	440637	711112	State of New Hampshire Patrol	1985	560	--	92	--	X	--	BrW
BCW 44	440710	711301	Manseau	1985	1,040	--	19	--	X	--	BrW
BCW 45	440604	711207	Irving	1986	590	--	147	--	X	--	BrW
BCW 46	440753	711129	Car	1985	800	--	154	--	X	--	BrW
BCW 47	440648	710836	Lower	1985	780	--	96	--	X	--	BrW
BCW 48	440438	711837	Hanson	1985	760	--	49	--	X	--	BrW
BCW 49	440438	711835	Crouther	1985	750	--	80	--	X	--	BrW
BCW 50	440524	711207	Four Seasons Condo	1985	600	--	76	--	X	--	BrW
BCW 51	440523	711207	Four Seasons Condo	1985	600	--	75	--	X	--	BrW
BCW 52	440737	711228	Bay	1985	1,290	--	19	--	X	--	BrW
BCW 53	440736	711230	Bay	1985	1,290	--	19	--	X	--	BrW
BCW 54	440742	711237	Bay	1985	1,340	--	12	--	X	--	BrW
BCW 55	440700	710839	Cantorno	1985	860	--	40	--	X	--	BrW
BCW 56	440450	710937	Saunders	1985	540	--	138	--	--	--	--
BCW 57	440555	711219	Cuptill	1985	600	--	64	--	X	--	BrW
BCW 58	440630	711217	Emery	1985	600	--	90	--	X	--	BrW
BCW 60	440634	711246	Seth Lyons	1984	640	--	24	--	X	--	BrW
BCW 61	440447	711408	Attitash Corp	1985	740	--	23	--	X	--	BrW
BCW 62	440727	711027	Linderhof	1985	1,240	--	19	--	X	--	BrW
BCW 63	440455	711311	Levine	1988	970	--	--	--	X	--	BrW
BCW 64	440436	711836	Gooswin	1985	750	--	64	--	X	--	BrW
BCW 65	440540	711215	Pine Glen Condos	1986	560	--	91	--	X	--	BrW
BCW 66	440528	711221	Bartlett Place Condos	1986	640	--	72	--	X	--	BrW
BCW 67	440553	711120	Attitash Woods Condos	1986	680	--	112	--	X	--	BrW
BCW 68	440553	711120	Attitash Woods Condos	1986	680	--	115	--	X	--	BrW
BCW 69	440503	711659	Murdock	1986	680	--	52	--	X	--	BrW
BCW 70	440445	710950	Hill	1986	530	--	82	--	X	--	BrW
BCW 71	440608	711236	Powers	1986	660	--	41	--	X	--	BrW
BCW 72	440556	711106	Clark	1986	660	--	163	--	X	--	BrW
BCW 73	440726	711211	Zagrodnick	1986	1,050	--	39	--	X	--	BrW
BCW 74	440601	711235	Sheedy	1986	740	--	39	--	X	--	BrW
BCW 75	440447	711438	Marsh	1986	660	--	79	--	--	--	--
BCW 76	440743	711238	Lynn	1986	1,340	--	2	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Bartlett--Continued</b>									
BCW 22	10	05-29-84	H	8	--	--	--	.8	
BCW 23	--	--	H	1.5	--	--	--	1	
BCW 24	--	--	H	1.5	--	--	--	1	
BCW 25	--	--	H	1	--	--	--	.8	
BCW 26	45	06-16-84	H	2	--	--	--	.5	
BCW 27	15	07-27-84	H	1	--	--	--	.3	
BCW 28	--	--	H	10	--	--	--	--	
BCW 29	--	--	H	1.5	--	--	--	1	
BCW 30	--	--	H	4.5	--	--	--	1	
BCW 31	20	10-05-84	H	15	--	--	--	.5	
BCW 32	--	--	H	90	--	--	--	.2	
BCW 33	15	11-03-84	H	3	--	--	--	2	
BCW 34	--	--	H	2	--	--	--	1	
BCW 35	10	11-27-84	H	20	--	--	--	1	
BCW 36	--	--	H	20	--	--	--	1	
BCW 37	--	--	H	150	--	--	--	1	
BCW 38	2	11-15-84	H	30	--	--	--	.5	
BCW 39	15	11-21-84	H	4	--	--	--	.5	
BCW 40	40	12-18-84	H	5	--	--	--	.5	
BCW 41	--	--	H	9	--	--	--	.5	
BCW 42	--	--	H	10	--	--	--	.5	
BCW 43	30	04-26-85	H	10	--	--	--	1	
BCW 44	20	05-02-85	H	5	--	--	--	1	
BCW 45	30	04-03-86	H	20	--	--	--	.5	
BCW 46	50	04-09-85	P	120	--	--	--	1	
BCW 47	80	05-15-85	H	20	--	--	--	.5	
BCW 48	20	06-04-85	H	2.5	--	--	--	1	
BCW 49	35	06-04-85	H	40	--	--	--	.5	
BCW 50	25	06-18-85	P	200	--	--	--	1	
BCW 51	25	06-18-85	P	200	--	--	--	1	
BCW 52	--	--	H	0.5	--	--	--	.5	
BCW 53	--	--	H	4	--	--	--	.5	
BCW 54	--	--	H	1.5	--	--	--	.5	
BCW 55	--	--	P	50	--	--	--	.5	
BCW 56	--	--	H	15	--	--	--	12	
BCW 57	--	--	H	6.5	--	--	--	1	
BCW 58	10	06-24-85	H	7	--	--	--	1	
BCW 60	--	--	H	6	--	--	--	.5	
BCW 61	--	--	P	50	--	--	--	1	
BCW 62	--	--	Z	75	--	--	--	--	
BCW 63	100	01-23-88	H	12	--	--	--	1	
BCW 64	45	04-16-85	H	7	--	--	--	.5	
BCW 65	--	--	P	75	--	--	--	1	
BCW 66	--	--	P	100	--	--	--	1	
BCW 67	5	05-19-86	P	45	--	--	--	1	
BCW 68	--	--	P	20	--	--	--	.5	
BCW 69	--	--	H	2.5	--	--	--	1	
BCW 70	--	--	H	3.5	--	--	--	1	
BCW 71	--	--	H	5	--	--	--	1	
BCW 72	15	07-31-86	H	5.5	--	--	--	.5	
BCW 73	30	07-22-86	H	12	--	--	--	1	
BCW 74	75	07-25-86	H	45	--	--	--	1	
BCW 75	--	--	H	20	--	--	--	1	
BCW 76	--	--	H	2	--	--	--	.5	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat-itude	Long-itude	Owner or user	Year com-pleted	Alt-i-tude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Bartlett--Continued</b>											
BCW 77	440722	711251	Lynn	1986	1,070	--	86	--	X	--	BrW
BCW 78	440730	711202	Biggio	1986	900	--	19	--	X	--	BrW
BCW 79	440445	711441	DiMinico	1986	650	--	74	--	--	--	--
BCW 80	440446	711441	Medeiros	1986	650	--	79	--	--	--	--
BCW 81	440443	711441	Stevens	1986	650	--	80	--	X	--	BrW
BCW 82	440451	711433	Williamson	1986	660	--	87	--	--	--	--
BCW 83	440735	710711	Swarce	1986	1,080	--	241	--	X	--	BrW
BCW 84	440605	711210	Gardner	1986	580	--	125	--	X	--	BrW
BCW 85	440504	711259	Attitash Marketplace	1986	700	--	39	--	X	--	BrW
BCW 86	440559	711121	Eastman	1987	580	--	71	--	X	--	BrW
BCW 87	440426	711608	Schreiber	1987	680	--	114	--	X	--	BrW
BCW 88	440519	711227	Wilson	1987	620	--	138	--	X	--	BrW
BCW 89	440612	711223	McAuliffe	1985	600	--	59	--	X	--	BrW
BCW 90	440701	711311	Hammond	1987	780	--	19	--	X	--	BrW
BCW 91	440632	710927	Washburn	1987	610	--	60	--	X	--	BrW
BCW 92	440456	711255	Astrochan	1987	960	--	106	--	X	--	BrW
BCW 93	440644	711410	Roberts	1987	790	--	80	--	X	--	BrW
BCW 94	440515	711147	Saco Ridge Devel	1987	740	--	40	--	X	--	BrW
BCW 95	440515	711147	Saco Ridge Devel	1987	740	--	45	--	X	--	BrW
BCW 96	440614	711045	Glen Ellis Campground	1987	520	--	86	--	--	--	--
BCW 97	440446	711445	Dias	1987	640	--	114	--	X	--	BrW
BCW 98	440443	711446	Graceffa	1987	640	--	66	--	--	--	--
BCW 99	440600	711239	Despres	1987	760	--	60	--	X	--	BrW
BCW 100	440449	711838	St Onge	1987	740	--	90	--	X	--	BrW
BCW 101	440703	711311	Kilty	1987	800	--	30	--	X	--	BrW
BCW 102	440725	711300	Lynn	1987	1,130	--	99	--	X	--	BrW
BCW 103	440601	711208	Sweet	1987	590	--	109	--	--	--	--
BCW 104	440621	710832	Hydren	1987	620	--	65	--	X	--	BrW
BCW 105	440637	710843	McKenna	1986	810	--	32	--	X	--	BrW
BCW 106	440453	710946	Ganey	1987	550	--	157	--	X	--	BrW
BCW 107	440718	711307	James	1987	1,180	--	39	--	X	--	BrW
BCW 108	440642	711346	Robinson	1987	840	--	181	--	X	--	BrW
BCW 109	440408	711616	Fox	1987	760	--	140	--	X	--	BrW
BCW 110	440654	711308	Robinson	1987	720	--	44	--	X	--	BrW
BCW 111	440445	711448	Roltsch	1987	640	--	100	--	--	--	--
BCW 112	440446	711447	Dufresne	1987	640	--	100	--	--	--	--
BCW 113	440633	711108	Patch	1987	540	--	94	--	X	--	BrW
BCW 114	440526	710919	Lower Bartlett Water Precinct	1987	500	--	122	--	S	--	--
BCW 115	440641	711318	Wakefield	1987	820	--	211	--	X	--	BrW
BCW 116	440553	711240	York	1988	770	--	181	--	X	--	BrW
BCW 117	440650	711039	Illsley	1988	570	--	50	--	X	--	BrW
BCW 118	440441	710617	Armington	1988	820	--	100	--	X	--	BrW
BCW 119	440631	711119	Roberts	1988	540	--	90	--	X	--	BrW
BCW 120	440458	711805	Glen Bldrs Inc	1988	710	--	59	--	S	--	--
BCW 121	440603	711233	Baliou Jr	1988	700	--	72	--	X	--	BrW
BCW 122	440645	711409	Eaton	1988	790	--	40	--	X	--	BrW
BCW 123	440517	711307	Attitash Lift Corporation	1988	580	--	34	--	S	--	--
BCW 124	440453	711838	Fitzpatrick	1988	740	--	115	--	X	--	BrW
BCW 125	440736	710739	Mellor	1988	860	--	27	--	X	--	BrW
BCW 126	440645	711413	Brown	1988	790	--	51	--	X	--	BrW
BCW 127	440644	711411	Wiggins	1988	780	--	91	--	X	--	BrW
BCW 128	440557	711150	Purington	1988	580	--	88	--	X	--	BrW
BCW 129	440518	710739	Eagle Ridge Condos	1988	1,000	--	33	--	X	--	BrW
BCW 130	440603	711056	Ekbergh	1988	610	--	142	--	X	--	BrW
BCW 131	440448	711002	Hoagland	1988	540	--	91	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Bartlett--Continued</b>									
BCW 77	--	--	H	6	--	--	--	.5	
BCW 78	--	--	H	20	--	--	--	.5	
BCW 79	--	--	H	30	--	--	--	1	
BCW 80	25	09-09-86	H	25	--	--	--	24	
BCW 81	40	09-10-86	H	10	--	--	--	1	
BCW 82	25	09-11-86	H	25	--	--	--	24	
BCW 83	85	11-01-86	H	10	--	--	--	.5	
BCW 84	50	10-16-86	H	7.5	--	--	--	.5	
BCW 85	60	10-15-86	Z	1	--	--	--	--	
BCW 86	--	--	H	150	--	--	--	.5	
BCW 87	9	05-05-87	H	3	--	--	--	1	
BCW 88	50	01-28-87	H	6.5	--	--	--	.5	
BCW 89	25	11-23-85	H	10	--	--	--	--	
BCW 90	--	--	H	20	--	--	--	1	
BCW 91	--	--	H	75	--	--	--	1	
BCW 92	6	04-27-87	P	30	--	--	--	1	
BCW 93	15	06-10-87	H	75	--	--	--	.5	
BCW 94	6	05-04-87	H	20	--	--	--	.5	
BCW 95	20	04-30-87	H	17	--	--	--	1	
BCW 96	25	05-16-87	P	35	--	--	--	48	
BCW 97	--	--	H	4	--	--	--	1	
BCW 98	--	--	H	15	--	--	--	48	
BCW 99	--	--	H	100	--	--	--	1	
BCW 100	--	--	H	25	--	--	--	1	
BCW 101	--	--	H	3	--	--	--	1	
BCW 102	--	--	H	3	--	--	--	.5	
BCW 103	--	--	H	10	--	--	--	.5	
BCW 104	--	--	P	150	--	--	--	1	
BCW 105	--	--	H	50	--	--	--	.5	
BCW 106	75	11-06-87	H	5	--	--	--	.5	
BCW 107	80	11-07-87	H	--	--	--	--	--	
BCW 108	--	--	H	15	--	--	--	1	
BCW 109	--	--	H	100	--	--	--	1	
BCW 110	--	--	H	15	--	--	--	1	
BCW 111	30	11-05-87	H	20	--	--	--	12	
BCW 112	20	11-06-87	H	12	--	--	--	12	
BCW 113	--	--	C	10	--	--	--	1	
BCW 114	17.6	12-15-87	P	750	--	--	--	121	
BCW 115	--	--	H	15	--	--	--	.5	
BCW 116	150	03-15-88	H	2.5	--	--	--	1	
BCW 117	--	--	P	18	--	--	--	1	
BCW 118	--	--	H	30	--	--	--	1	
BCW 119	6	04-20-88	H	100	--	--	--	1	
BCW 120	--	--	H	25	--	--	--	8	
BCW 121	--	--	H	2	--	--	--	1	
BCW 122	40	07-22-88	H	12	--	--	--	.5	
BCW 123	20	07-20-88	C	60	--	--	--	1	
BCW 124	10	07-05-88	H	3	--	--	--	.5	
BCW 125	18	06-17-88	H	75	--	--	--	.5	
BCW 126	50	05-25-88	H	50	--	--	--	.5	
BCW 127	40	05-25-88	H	5.5	--	--	--	.5	
BCW 128	40	09-15-88	H	20	--	--	--	.5	
BCW 129	20	10-13-88	P	50	--	--	--	1	
BCW 130	--	--	H	4	--	--	--	1	
BCW 131	--	--	H	10	--	--	--	1	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Latitude	Long- itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Bartlett--Continued</b>											
BCW 132	440655	710844	Cartes	1988	880	--	100	--	X	--	BrW
BCW 133	440702	711114	Linderhoff Property Association	1989	600	--	--	--	X	--	BrW
BCW 134	440457	711752	Beaumont	1989	700	--	78	--	S	--	--
BCW 135	440658	710844	Robertson	1989	900	--	130	--	X	--	BrW
BCW 136	440621	710909	Darrah	1989	600	--	70	--	X	--	BrW
BCW 137	440652	710847	Johnson	1989	880	--	80	--	X	--	BrW
BCW 138	440641	710957	Young	1989	600	--	111	--	X	--	BrW
BCW 139	440641	711340	Curtis	1989	840	--	157	--	X	--	BrW
BCW 140	440607	711244	Farwell	1989	730	--	57	--	X	--	BrW
BCW 141	440602	711225	Comeau	1989	640	--	50	--	X	--	BrW
BCW 142	440604	711224	Wallace	1989	640	--	59	--	X	--	BrW
BCW 143	440525	711821	Poliquin	1989	780	--	149	--	--	--	BrW
BCW 144	440524	711819	Poliquin	1989	780	--	59	--	--	--	BrW
BCW 145	440717	711246	Lewando	1989	1,040	--	189	--	X	--	BrW
BCW 146	440618	710909	Walton	1989	580	--	40	--	X	--	BrW
BCW 147	440457	711747	Rothen	1989	700	--	78	--	S	--	--
BCW 148	440648	710840	Coombs	1989	800	--	90	--	X	--	BrW
BCW 149	440728	711113	Linderhoff	1989	780	--	108	--	--	--	--
BCW 150	440753	711128	Syr	1989	800	--	151	--	X	--	BrW
BCW 152	440504	711748	Merrill	1990	700	--	57	--	S	--	--
BCW 153	440614	710902	Aquiar	1990	580	--	43	--	X	--	BrW
BCW 154	440650	710847	Montague	1990	860	--	76	--	X	--	BrW
BCW 155	440556	711128	Pinkham	1991	620	--	109	--	X	--	BrW
BCW 156	440646	710838	Bush	1991	790	--	109	--	X	--	BrW
BCW 157	440557	711229	Moss	1991	680	--	80	--	X	--	BrW
BCW 158	440726	711314	Grant	1991	1,260	--	50	--	X	--	BrW
BCW 159	440728	711240	Gallahue	1991	1,160	--	70	--	X	--	BrW
BCW 160	440735	711223	Lingafelter	1991	1,220	--	39	--	X	--	BrW
BCW 161	440714	711051	Mittenwood Well Association	1991	760	--	111	--	X	--	BrW
BCW 162	440747	711216	Cunningham	1991	1,240	--	39	--	X	--	BrW
BCW 163	440804	711113	Riverbend Property Association	1991	720	--	141	--	--	--	--
BCW 164	440633	711114	D. Rober	1992	540	--	100	--	X	--	BrW
BCW 165	440726	711027	Linderhof Property Association	1992	1,250	--	44	--	X	--	BrW
BCW 166	440734	711221	Stisi	1992	1,200	--	39	--	X	--	BrW
BCW 167	440525	710949	Orvedal	1992	500	--	79	--	--	--	--
BCW 168	440619	711042	Goff	1979	520	--	160	--	S	--	--
BCW 169	440758	711126	Whispering Brook	1984	790	--	154	--	X	--	BrW
BCW 170	440749	711107	Indelicardo	1984	760	--	147	--	X	--	BrW
BCW 171	440749	711107	Indelicado	1985	760	--	157	--	X	--	BrW
BCW 172	440651	710937	Drake	1985	680	--	40	--	X	--	BrW
BCW 173	440739	711006	Crocker	1986	1,180	--	80	--	X	--	BrW
BCW 174	440730	711238	Murphrey	1991	1,170	--	70	--	X	--	BrW
BCW 175	440727	711146	Lynn	1987	770	--	30	--	X	--	BrW
BCW 176	440439	711704		1992	670	2	16	P	S	18	Bor
BCW 177	440456	711729		1992	695	2	20	P	S	22	Bor
BCW 178	440443	711703		1992	670	2	10	P	S	15	Bor
<b>Chatham</b>											
CKB 1	441442	710058		--	512.6	--	--	--	--	--	TH
CKB 2	441422	710103		--	512.4	--	--	--	--	--	TH
CKB 3	441334	710044		--	449.1	--	--	--	--	--	TH
CKB 4	441216	710111		--	592.8	--	--	--	--	--	TH
CKB 5	440935	710111		--	560	--	--	--	--	--	TH

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				(gallons per minute)				
<b>Bartlett--Continued</b>								
BCW 132	10	11-17-88	H	4	--	--	.5	
BCW 133	--	--	P	60	--	--	1	
BCW 134	--	--	H	25	--	--	1	
BCW 135	50	03-01-89	H	15	--	--	.5	
BCW 136	25	05-10-89	H	15	--	--	1	
BCW 137	--	--	H	7	--	--	1	
BCW 138	--	--	H	100	--	--	1	
BCW 139	80	06-28-89	H	30	--	--	1	
BCW 140	40	07-28-89	H	10	--	--	1	
BCW 141	--	--	H	3.5	--	--	1	
BCW 142	78	07-26-89	H	3	--	--	1	
BCW 143	--	--	P	35	--	--	8	
BCW 144	--	--	P	30	--	--	8	
BCW 145	--	--	H	.5	--	--	.5	
BCW 146	10	08-25-89	H	8	--	--	.5	
BCW 147	--	--	H	25	--	--	36	
BCW 148	--	--	H	10	--	--	1	
BCW 149	--	--	P	75	--	--	24	
BCW 150	--	--	P	75	--	--	1	
BCW 152	--	--	H	30	--	--	8	
BCW 153	30	12-04-90	H	5	--	--	.5	
BCW 154	5	09-15-90	H	10	--	--	.5	
BCW 155	60	07-03-91	H	6	--	--	.5	
BCW 156	10	08-15-91	H	5	--	--	.5	
BCW 157	--	--	H	6	--	--	1	
BCW 158	--	--	H	6	--	--	1	
BCW 159	--	--	H	20	--	--	1	
BCW 160	--	--	H	60	--	--	1	
BCW 161	75	11-01-91	P	30	--	--	.5	
BCW 162	--	--	H	30	--	--	1	
BCW 163	--	--	H	75	--	--	1	
BCW 164	--	--	H	45	--	--	1	
BCW 165	620	06-07-92	P	150	--	--	1	
BCW 166	--	--	H	10	--	--	1	
BCW 167	10	07-29-92	H	55	--	--	--	
BCW 168	--	--	P	30	--	--	--	
BCW 169	--	--	P	25	--	--	1	
BCW 170	60	10-05-84	P	20	--	--	7	
BCW 171	75	06-22-85	P	20	--	--	6	
BCW 172	50	09-30-85	H	18	--	--	1	
BCW 173	--	--	H	45	--	--	1	
BCW 174	--	--	H	6	--	--	1	
BCW 175	--	--	P	120	--	--	.5	
BCW 176	--	--	O	--	--	--	--	USGS
BCW 177	--	--	O	--	--	--	--	USGS
BCW 178	--	--	O	--	--	--	--	USGS
<b>Chatham</b>								
CKB 1	--	--	U	--	--	--	--	
CKB 2	--	--	U	--	--	--	--	
CKB 3	--	--	U	--	--	--	--	
CKB 4	--	--	U	--	--	--	--	
CKB 5	--	--	U	--	--	--	--	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat- itude	Long- itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Chatham--Continued</b>											
CKB 6	440442	710145		--	486	--	--	--	--	--	TH
CKB 7	440553	710025		--	421.5	--	--	--	--	--	TH
CKS 1	440941	710111		--	575	--	--	--	--	--	Sp
CKW 1	440944	710105	Richard Theot	1971	550	36	8.9	C	O	--	Dug
CKW 2	441013	710059	Wiggin	1966	510	36	8.3	C	O	--	Dug
CKW 3	441037	710137	Marie Limmer	--	555	72	12.5	C	O	--	Dug
CKW 4	441019	710038	Linda Miles	1960	510	--	--	--	X	--	BrW
CKW 5	441057	710046	James Maloney	1970	510	36	7.5	C	O	--	Dug
CKW 6	441217	710034	Wayne and Norma McCallis	--	510	--	--	--	X	--	BrW
CKW 7	441217	710034		--	510	--	--	--	O	--	Dug
CKW 8	441513	710104	Richard and Gail Dembow	--	525	36	10.7	C	O	--	Dug
CKW 9	441452	710051		1992	535	2	27.5	P	S	29.5	Bor
CKW 10	441357	710050		1992	510	2	57.9	P	S	59.9	Bor
CKW 11	441004	710040		1992	530	2	57.7	P	S	59.7	Bor
CKW 12	440512	710018	Engle	1984	490	--	181	--	X	--	BrW
CKW 13	440555	710025		--	420	--	27	--	X	--	BrW
CKW 14	440614	710018	Mitchell	1985	390	--	70	--	X	--	BrW
CKW 15	441111	710043	McKenzie	1985	480	--	19	--	X	--	BrW
CKW 16	441019	710029	Calomb	1986	540	--	95	--	X	--	BrW
CKW 17	440649	710019	Foster	1987	500	--	99	--	X	--	BrW
CKW 18	441150	710028	Brown	1987	520	--	43	--	X	--	BrW
CKW 19	440548	710014	Doo	1987	390	--	38	--	X	--	BrW
CKW 20	440629	710017	Forbes	1987	410	--	19	--	X	--	BrW
CKW 21	441427	710112	Beaton	1987	550	--	75	--	X	--	BrW
CKW 22	441445	710102	McViney	1988	520	--	40	--	X	--	BrW
CKW 23	441146	710033	Brooks	1988	520	--	52	--	X	--	BrW
CKW 24	441303	710026	Kubik	1989	430	--	80	--	X	--	BrW
CKW 25	440623	710019	Roy	1989	420	--	59	--	X	--	BrW
CKW 26	440646	710030	Bagosius	1989	510	--	67	--	X	--	BrW
CKW 27	440513	710019	Davis	1989	490	--	180	--	X	--	BrW
CKW 28	440515	710020	Hilliard	1990	500	--	171	--	X	--	BrW
CKW 29	440941	710039	Wilfong	1990	480	--	39	--	X	--	BrW
CKW 30	440645	710027	Stryker	1991	490	--	39	--	X	--	BrW
CKW 31	440441	710127	Pevear	1991	480	--	89	--	X	--	BrW
CKW 32	441503	710043	K. Saunders	1991	540	--	64	--	X	--	BrW
CKW 33	441051	710152	Kennett	1991	720	--	39	--	X	--	BrW
CKW 34	440554	710024	Fernald	1991	420	--	50	--	X	--	BrW
CKW 35	441039	710046	MacPherson	1991	522	--	60	--	X	--	BrW
<b>Conway</b>											
CWA 1	440407	710110		1992	430	--	--	--	--	--	Bor
CWW 10	440232	710830		--	100	--	--	--	--	--	--
CWW 44	440417	710946		--	545	--	--	--	--	--	--
CWW 45	440336	710952		--	520	--	--	--	--	--	--
CWW 46	440307	710925		--	500	--	--	--	--	--	BrW
CWW 47	440305	710924		--	500	--	--	--	--	--	BrW
CWW 48	440253	710901		--	510	--	--	--	--	--	BrW
CWW 49	440246	710845		--	480	--	--	--	--	--	BrW
CWW 50	440238	710855		--	524	--	--	--	--	--	BrW
CWW 51	440235	710854		--	524	--	--	--	--	--	BrW
CWW 52	440223	710836		--	521	--	--	--	--	--	BrW
CWW 53	440212	710827		--	510	--	--	--	--	--	BrW
CWW 54	440156	710914		--	510	--	--	--	--	--	--

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Conway--Continued</b>									
CWW 55	65	11-17-83	--	--	--	--	--	--	
CWW 56	--	--	--	--	--	--	--	--	
CWW 57	15	05-20-73	--	--	--	--	--	--	
CWW 58	32	10-06-60	--	--	--	--	--	--	
CWW 59	50	12-29-61	--	--	--	--	--	--	
CWW 60	10	11-07-77	--	--	--	--	--	--	
CWW 61	11	09-07-73	--	--	--	--	--	--	
CWW 62	55	08-26-66	--	--	--	--	--	--	
CWW 63	--	--	--	--	--	--	--	--	
CWW 64	25	06-20-83	--	--	--	--	--	--	
CWW 65	15	11-20-69	--	--	--	--	--	--	
CWW 66	8	08-05-92	O	--	--	--	--	--	USGS
CWW 67	1.5	08-05-92	O	--	--	--	--	--	USGS
CWW 68	14	04-22-80	--	--	--	--	--	--	
CWW 69	2	08-05-92	O	--	--	--	--	--	USGS
CWW 70	2.4	08-05-92	O	--	--	--	--	--	USGS
CWW 71	23	07-22-63	--	--	--	--	--	--	
CWW 72	--	--	--	--	--	--	--	--	
CWW 73	--	05-10-68	--	--	--	--	--	--	F
CWW 74	--	--	--	--	--	--	--	--	
CWW 75	28	11-01-84	--	--	--	--	--	--	
CWW 76	13	10-30-84	--	--	--	--	--	--	
CWW 77	3	10-30-84	--	--	--	--	--	--	
CWW 78	--	--	--	--	--	--	--	--	
CWW 79	--	--	--	--	--	--	--	--	
CWW 80	10	05-30-75	--	--	--	--	--	--	
CWW 81	--	--	--	--	--	--	--	--	
CWW 82	25	04-03-72	--	--	--	--	--	--	
CWW 83	--	--	--	--	--	--	--	--	
CWW 84	--	--	--	--	--	--	--	--	
CWW 85	--	--	--	--	--	--	--	--	
CWW 86	--	--	--	--	--	--	--	--	
CWW 87	50	11-23-66	--	--	--	--	--	--	
CWW 88	40	01-05-62	--	--	--	--	--	--	
CWW 89	--	--	--	--	--	--	--	--	
CWW 90	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 91	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 92	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 93	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 94	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 95	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 96	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 97	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 98	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 99	--	--	P	--	--	--	--	--	
CWW 100	--	--	P	--	--	--	--	--	
CWW 101	--	--	P	--	--	--	--	--	
CWW 102	--	--	P	--	--	--	--	--	
CWW 103	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 106	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 107	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 108	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 109	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 110	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Conway--Continued</b>											
CWW 111	440143	710721		--	--	--	--	--	--	--	--
CWW 112	440202	710729		--	--	--	--	--	--	--	--
CWW 113	440202	710729		--	--	--	--	--	--	--	--
CWW 114	440121	710818		--	--	--	--	--	--	--	--
CWW 115	440125	710750		--	--	--	--	--	--	--	--
CWW 116	440128	710717		--	--	--	--	--	--	--	--
CWW 117	440128	710717		--	--	--	--	--	--	--	--
CWW 118	440101	710659		--	--	--	--	--	--	--	--
CWW 119	440025	710731		--	--	--	--	--	--	--	--
CWW 120	440022	710701		--	--	--	--	--	--	--	--
CWW 121	440022	710701		--	--	--	--	--	--	--	--
CWW 122	435920	710753		--	--	--	--	--	--	--	--
CWW 123	435916	710720		--	--	--	--	--	--	--	--
CWW 124	435846	710800		--	--	--	--	--	--	--	--
CWW 125	440040	710319		--	--	--	--	--	--	--	--
CWW 126	440302	710748		--	--	--	--	--	--	--	--
CWW 127	440300	710738		--	--	--	--	--	--	--	--
CWW 128	440305	710729		--	--	--	--	--	--	--	--
CWW 129	440236	710749		--	--	--	--	--	--	--	--
CWW 130	440234	710748		--	--	--	--	--	--	--	--
CWW 131	440234	710748		--	--	--	--	--	--	--	--
CWW 132	440233	710741		--	--	--	--	--	--	--	--
CWW 133	440223	710729		--	--	--	--	--	--	--	--
CWW 134	440122	710709		--	--	--	--	--	--	--	--
CWW 135	440122	710709		--	--	--	--	--	--	--	--
CWW 136	440117	710644		--	--	--	--	--	--	--	--
CWW 137	440121	710108		--	--	--	--	--	--	--	--
CWW 138	440051	710014		--	--	--	--	--	--	--	--
CWW 139	440044	710800		--	470	--	--	--	--	--	--
CWW 140	435958	710729		--	480	--	--	--	--	--	BrW
CWW 141	435954	710720		--	465	--	--	--	--	--	--
CWW 142	440038	710756		--	475	--	--	--	--	--	--
<b>Eaton</b>											
ECW 1	435456	710423	Waukeela Camp	--	475	36	7.5	C	O	--	Dug
ECW 2	435453	710403	Hennigan	--	500	2	26	S	T	--	Dvn
ECW 3	435347	710405	Sundman	1979	485	--	--	--	X	--	BrW
ECW 4	435350	710405		1978	480	--	--	--	X	--	BrW
ECW 5	435350	710421	Lee	1984	615	--	20	--	X	--	BrW
ECW 6	435417	710419	Heath	1986	490	--	60	--	X	--	BrW
ECW 7	435343	710411	Gospodarek	1987	470	--	64	--	--	--	--
ECW 8	435349	710355	Hill	1988	530	--	42	--	X	--	BrW
ECW 9	435341	710356	Larson	1988	540	--	71	--	X	--	BrW
ECW 10	435425	710412	Philbrick	1989	545	--	33	--	X	--	BrW
ECW 11	435250	710501	Reynolds	1985	470	--	--	--	--	--	Dug
ECW 12	435522	710529	Bungeroth	1985	800	--	49	--	X	--	BrW
ECW 13	435136	710441	Latour	1986	660	--	83	--	X	--	BrW
ECW 14	435441	710342	Lance	1988	540	--	39	--	X	--	BrW
ECW 15	435422	710534	Lesser	1988	950	--	40	--	X	--	BrW
ECW 16	435430	710239	D'Angelo	1988	860	--	40	--	X	--	BrW
ECW 17	435446	710321	Wilson	1988	560	--	50	--	X	--	BrW
ECW 18	435133	710420	Graf	1988	770	--	201	--	X	--	BrW
ECW 19	435403	710420	Guerringue	1988	520	--	139	--	X	--	BrW
ECW 20	435140	710328	Stewart	1989	750	--	24	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Chatham--Continued</b>								
CKB 6	--	--	U	--	--	--	--	
CKB 7	--	--	U	--	--	--	--	
CKS 1	--	--	S	--	--	--	--	
CKW 1	4	08-12-91	H	--	--	--	--	
CKW 2	3.7	08-12-91	H	--	--	--	--	
CKW 3	9.7	08-12-91	H	--	--	--	--	
CKW 4	--	--	H	--	--	--	--	
CKW 5	0.5	08-12-91	H	--	--	--	--	
CKW 6	--	--	H S	--	--	--	--	
CKW 7	--	--	S I	--	--	--	--	
CKW 8	6.4	08-12-91	H	--	--	--	--	
CKW 9	21.9	08-04-92	O	--	--	--	--	USGS
CKW 10	24.7	08-04-92	O	--	--	--	--	USGS
CKW 11	37.5	08-04-92	O	--	--	--	--	USGS
CKW 12	--	--	H	0.5	--	--	1	
CKW 13	--	--	H	--	--	--	--	
CKW 14	5	10-07-85	H	2.3	--	--	1	
CKW 15	20	10-08-85	H	15	--	--	2	
CKW 16	--	--	H	2.5	--	--	1	
CKW 17	--	--	H	150	--	--	1	
CKW 18	--	--	H	5	--	--	1	
CKW 19	10	07-22-87	H	6	--	--	1	
CKW 20	--	--	P	30	--	--	1	
CKW 21	10	11-20-87	H	5.5	--	--	.5	
CKW 22	--	--	H	2	--	--	1	
CKW 23	--	--	H	60	--	--	1	
CKW 24	--	--	H	20	--	--	1	
CKW 25	--	--	H	60	--	--	1	
CKW 26	--	--	H	40	--	--	1	
CKW 27	--	--	H	2.5	--	--	1	
CKW 28	75	11-22-90	H	30	--	--	1	
CKW 29	--	--	--	10	--	--	.5	
CKW 30	15	01-05-91	H	3	--	--	.5	
CKW 31	--	--	H	3	--	--	.5	
CKW 32	--	--	H	10	--	--	1	
CKW 33	35	08-05-91	H	3	--	--	.5	
CKW 34	--	--	H	4	--	--	1	
CKW 35	20	10-11-91	H	2.5	--	--	1	
<b>Conway</b>								
CWA 1	--	--	T	--	--	--	--	USGS
CWW 10	--	--	O	--	--	--	--	Project well (Johnson and others, 1987)
CWW 44	40	04-19-80	--	--	--	--	--	
CWW 45	30	06-18-77	--	--	--	--	--	
CWW 46	--	--	--	--	--	--	--	
CWW 47	20	07-09-83	--	--	--	--	--	
CWW 48	--	--	--	--	--	--	--	
CWW 49	--	--	--	--	--	--	--	
CWW 50	40	11-19-74	--	--	--	--	--	
CWW 51	35	05-21-66	--	--	--	--	--	
CWW 52	22	01-26-83	--	--	--	--	--	
CWW 53	--	--	--	--	--	--	--	
CWW 54	15	05-20-73	--	--	--	--	--	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat-itude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Conway--Continued</b>											
CWW 55	440157	710817		--	510	--	--	--	--	--	BzW
CWW 56	440155	710816		--	510	--	--	--	--	--	BzW
CWW 57	440156	710914		--	510	--	--	--	--	--	--
CWW 58	440152	710815		--	515	--	--	--	--	--	--
CWW 59	440148	710811		--	510	--	--	--	--	--	BzW
CWW 60	440144	710812		--	520	--	--	--	--	--	BzW
CWW 61	440139	710800		--	458	--	--	--	--	--	--
CWW 62	440125	710755		--	499	--	--	--	--	--	BzW
CWW 63	440121	710801		--	500	--	--	--	--	--	BzW
CWW 64	440107	710752		--	470	--	--	--	--	--	BzW
CWW 65	440047	710759		--	470	--	--	--	--	--	BzW
CWW 66	435815	710823		1992	465	2	47.5	P	S	49.5	Bor
CWW 67	440423	710100		1992	430	2	66.4	P	S	68.4	Bor
CWW 68	435958	710749		--	510	--	--	--	--	--	BzW
CWW 69	440430	710111		1992	435	2	55	P	S	57	Bor
CWW 70	440430	710111		1992	435	2	16	P	S	18	Bor
CWW 71	435939	710644		--	480	--	--	--	--	--	BzW
CWW 72	435900	710549		--	555	--	--	--	--	--	BzW
CWW 73	435919	710524		--	420	--	--	--	--	--	BzW
CWW 74	435928	710510		--	450	--	--	--	--	--	BzW
CWW 75	435948	710408		--	465	--	--	--	--	--	BzW
CWW 76	440027	710328		--	445	--	--	--	--	--	--
CWW 77	440030	710320		--	414	--	--	--	--	--	BzW
CWW 78	435943	710340		--	455	--	--	--	--	--	BzW
CWW 79	435932	710312		--	440	--	--	--	--	--	BzW
CWW 80	435912	710242		--	417	--	--	--	--	--	BzW
CWW 81	440014	710242		--	465	--	--	--	--	--	BzW
CWW 82	440217	710829		--	520	--	--	--	--	--	BzW
CWW 83	435955	710131		--	420	--	--	--	--	--	BzW
CWW 84	435951	710129		--	420	--	--	--	--	--	BzW
CWW 85	440006	705957		--	440	--	--	--	--	--	BzW
CWW 86	440156	710003		--	415	--	--	--	--	--	BzW
CWW 87	440120	710749		--	482	--	--	--	--	--	--
CWW 88	435940	710340		--	440	--	--	--	--	--	BzW
CWW 89	440000	705952		--	475	--	--	--	--	--	BzW
CWW 90	440405	710917		--	486.3	--	--	--	--	--	--
CWW 91	440403	710917		--	484.5	--	--	--	--	--	--
CWW 92	440403	710917		--	484.3	--	--	--	--	--	--
CWW 93	440401	710933		--	499.4	--	--	--	--	--	--
CWW 94	440329	710800		--	527.9	--	--	--	--	--	--
CWW 95	440326	710815		--	478.3	--	--	--	--	--	--
CWW 96	440313	710759		--	474.8	--	--	--	--	--	--
CWW 97	440301	710810		--	469	--	--	--	--	--	--
CWW 98	440410	710920		--	484	--	--	--	--	--	--
CWW 99	440324	710825		--	--	--	--	--	--	--	--
CWW 100	440223	710801		--	--	--	--	--	--	--	--
CWW 101	440223	710758		--	--	--	--	--	--	--	TH
CWW 102	435854	710803		--	--	--	--	--	--	--	--
CWW 103	440234	710847		--	--	--	--	--	--	--	--
CWW 106	440233	710805		--	--	--	--	--	--	--	--
CWW 107	440225	710747		--	--	--	--	--	--	--	--
CWW 108	440225	710747		--	--	--	--	--	--	--	--
CWW 109	440225	710747		--	--	--	--	--	--	--	--
CWW 110	440225	710747		--	--	--	--	--	--	--	--

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Conway--Continued</b>									
CWW 111	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 112	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 113	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 114	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 115	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 116	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 117	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 118	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 119	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 120	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 121	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 122	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 123	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 124	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 125	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 126	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 127	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 128	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 129	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 130	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 131	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 132	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 133	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 134	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 135	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 136	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 137	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 138	--	--	O	--	--	--	--	--	Project well (Johnson and others, 1987)
CWW 139	15	06-01-65	--	--	--	--	--	--	
CWW 140	30	04-05-82	--	--	--	--	--	--	
CWW 141	40	01-05-83	--	--	--	--	--	--	
CWW 142	15	06-11-76	--	--	--	--	--	--	
<b>Eaton</b>									
ECW 1	7.1	08-05-91	H T	--	--	--	--	--	Well Went Dry (8/4/91)
ECW 2	14	08-05-91	H S	--	--	--	--	--	
ECW 3	45	08-05-91	H	16	--	--	--	--	
ECW 4	--	--	H	3	--	--	--	--	
ECW 5	--	--	H	20	--	--	.5	--	
ECW 6	--	--	H	15	--	--	1	--	
ECW 7	--	--	H	30	--	--	1	--	
ECW 8	--	--	H	6	--	--	1	--	
ECW 9	--	--	H	10	--	--	1	--	
ECW 10	50	01-04-89	H	1.5	--	--	1.5	--	
ECW 11	6	09-20-85	H	7	--	--	--	--	
ECW 12	90	10-18-85	H	8	--	--	.5	--	
ECW 13	--	--	H	5	--	--	.8	--	
ECW 14	--	--	H	10	--	--	1	--	
ECW 15	60	06-17-88	H	0.5	--	--	1	--	
ECW 16	75	05-13-88	H	1	--	--	.5	--	
ECW 17	50	09-19-88	H	50	--	--	1	--	
ECW 18	80	08-11-88	H	3	--	--	1	--	
ECW 19	--	--	H	6	--	--	1	--	
ECW 20	8	07-21-89	H	4	--	--	1	--	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Latitude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Eaton--Continued</b>											
ECW 21	435401	710110	Whicher	1989	1,060	--	40	--	X	--	BrW
ECW 22	435510	710255	L. Kandel	1989	800	--	39	--	X	--	BrW
ECW 23	435141	710326	Stavis	1990	740	--	42	--	X	--	BrW
ECW 24	435354	710234	Pliskin	1990	940	--	39	--	X	--	BrW
ECW 25	435359	710133	Ela	1990	1,040	--	143	--	X	--	BrW
<b>Effingham</b>											
EFA 1	434248	710407		--	530	--	--	--	--	--	TH
EFB 1	434746	710325	NHDOT	--	389	--	--	--	--	--	TH
EFB 2	434731	710157	NHDOT	--	381	--	--	--	--	--	TH
EFB 3	434437	710520	NHDOT	--	425	--	--	--	--	--	TH
EFS 1	434120	710047		--	495	--	--	--	--	--	Sp
EFW 2	434734	710459	English	1991	415	6	150	S	X	--	BrW
EFW 3	434757	710259	Robert Burns	--	395	2	25	S	T	--	Dvn
EFW 4	434736	710439	Camp Marist	1981	415	8	40	S	G	--	--
EFW 5	434329	710415		--	450	36	14.6	C	O	--	Dug
EFW 6	434225	710136	Fields	1977	535	36	28	C	O	--	Dug
EFW 7	434120	710049	Phillip Blay	1986	495	--	16	--	X	--	BrW
EFW 8	434120	710048		--	495	36	12	C	O	--	Dug
EFW 9	434608	710640	Merrow, Harry, C	1991	420	2	72	P	S	74.5	Bor
EFW 10	434225	710136	Fields	1985	530	--	--	--	X	--	BrW
EFW 11	434544	710549	Pinkston	1985	435	--	--	--	S	--	--
EFW 12	434403	710545	Piekut	1985	510	--	--	--	X	--	BrW
EFW 13	434359	710523	Moison	1986	530	--	213	--	X	--	BrW
EFW 14	434517	710003	Chapman	1986	465	--	65	--	X	--	BrW
EFW 15	434401	710545	Vivenzio	1986	510	--	115	--	X	--	BrW
EFW 16	434407	710029	Lane	1986	410	--	30	--	X	--	BrW
EFW 17	434422	710524	Barrett	1987	455	--	39	--	X	--	BrW
EFW 18	434752	710225	Kelly	1987	390	--	99	--	X	--	BrW
EFW 19	434522	710550	Cragin	1988	430	--	36	--	X	--	BrW
EFW 20	434522	705951	Molloy	1988	515	--	40	--	X	--	BrW
EFW 21	434458	710013	Edwards	1988	415	--	60	--	X	--	BrW
EFW 22	434358	710439	Miller	1989	465	--	79	--	X	--	BrW
EFW 23	434110	710035	Wright	1989	510	--	69	--	X	--	BrW
EFW 24	434430	710523	Woods	1991	430	--	68	--	S	--	--
EFW 25	434752	710239	Thurston	1990	400	--	80	--	S	--	--
EFW 26	434432	710524	Simeal Properties	1990	430	--	147	--	X	--	BrW
EFW 27	434204	705947	Suter	1990	495	--	53	--	X	--	BrW
EFW 28	434717	705938	Sargent	1984	393	--	--	--	X	--	BrW
EFW 29	434749	710222		1987	395	--	--	--	T	--	Dvn
EFW 30	434649	710231	Highwatch Const	1984	1,000	--	40	--	X	--	BrW
EFW 31	434649	710233	Highwatch Const	1984	980	--	40	--	X	--	BrW
EFW 32	434648	710324	Highwatch Learning Center	1984	660	--	128	--	X	--	BrW
EFW 33	434357	710444	Smith	1985	440	--	60	--	X	--	BrW
EFW 34	434646	710417	Troy	1985	520	--	159	--	X	--	BrW
EFW 35	434542	710549	Soule	1985	440	--	26	--	--	--	--
EFW 36	434235	705933	Lebel	1985	510	--	151	--	X	--	BrW
EFW 37	434319	710054	Edwards	1985	570	--	70	--	X	--	BrW
EFW 38	434524	705918	Clansey	1985	535	--	180	--	X	--	BrW
EFW 39	434348	710008	Edwards	1985	460	--	40	--	X	--	BrW
EFW 40	434434	710519	Clark	1985	440	--	92	--	X	--	BrW
EFW 41	434239	705929	Forbush	1986	510	--	148	--	X	--	BrW
EFW 42	434630	710529	Highwatch Learning Center	1986	440	--	126	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Eaton--Continued</b>								
ECW 21	1	08-02-89	H	0.8	--	--	1	
ECW 22	--	--	H	5	--	--	1	
ECW 23	16	08-21-90	H	2.5	--	--	1	
ECW 24	--	--	H	60	--	--	.5	
ECW 25	--	--	H	1.5	--	--	.5	
<b>Effingham</b>								
EFA 1	65	00-00-91	U	--	--	--	--	
EFB 1	--	--	T	--	--	--	--	
EFB 2	--	--	T	--	--	--	--	
EFB 3	--	--	T	--	--	--	--	
EFS 1	--	--	--	--	--	--	--	
EFW 2	--	--	H T	60	--	--	--	
EFW 3	--	--	H	--	--	--	--	
EFW 4	18	07-10-91	H T	--	--	--	--	
EFW 5	6.4	07-10-91	--	--	--	--	--	
EFW 6	10.6	07-10-91	H	--	--	--	--	
EFW 7	--	--	H T	22	--	--	--	
EFW 8	9	07-10-91	H T	--	--	--	--	
EFW 9	27.5	07-30-91	T	--	--	--	--	USGS
EFW 10	20	05-08-85	H	3	--	--	1	
EFW 11	15	07-28-85	H	35	--	--	1	
EFW 12	25	10-20-85	H	4.5	--	--	1	
EFW 13	150	04-11-86	H	5.5	--	--	.5	
EFW 14	--	--	H	10	--	--	1	
EFW 15	22	06-20-86	H	25	--	--	.5	
EFW 16	--	--	H	5	--	--	1	
EFW 17	--	--	H	6	--	--	1	
EFW 18	35	10-27-87	H	20	--	--	.5	
EFW 19	--	--	H	6	--	--	.2	
EFW 20	50	07-05-88	H	1.3	--	--	1	
EFW 21	20	12-08-88	H	20	--	--	.5	
EFW 22	--	--	H	2	--	--	1.3	
EFW 23	--	--	H	50	--	--	.5	
EFW 24	27	01-06-91	H	12	--	--	1	
EFW 25	--	--	H	18	--	--	12	
EFW 26	50	11-28-90	H	0.5	--	--	1.5	
EFW 27	--	--	H	32	--	--	.3	
EFW 28	40	11-06-84	H	3	--	--	.5	
EFW 29	10	09----87	H	--	--	--	--	
EFW 30	--	--	T	150	--	--	.5	
EFW 31	10	06-21-84	T	100	--	--	.5	
EFW 32	120	08-14-84	T	12	--	--	.5	
EFW 33	15	03-07-85	H	2	--	--	1	
EFW 34	50	11-04-85	H	1	--	--	--	
EFW 35	19.5	06-15-85	H	10	--	--	3	
EFW 36	--	--	H	40	--	--	1	
EFW 37	40	10-29-85	H	30	--	--	.5	
EFW 38	45	10-31-85	H	6	--	--	.5	
EFW 39	--	--	H	100	--	--	.5	
EFW 40	70	12-15-85	H	0.3	--	--	1	
EFW 41	--	--	H	3	--	--	1	
EFW 42	10	04-18-86	H	2.5	--	--	.5	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat- itude	Long- itude	Owner or user	Year com- pleted	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Effingham--Continued</b>											
EFW 43	43 44427	710113	Peterson	1986	530	--	117	--	X	--	BrW
EFW 44	43 44441	710720	Johnson	1986	490	--	120	--	X	--	BrW
EFW 45	43 4728	710228	Murray	1986	440	--	80	--	X	--	BrW
EFW 46	43 4451	710727	Sheehan	1987	440	--	39	--	S	--	--
EFW 47	43 4432	710457	Bowes	1987	480	--	25	--	X	--	BrW
EFW 48	43 4550	710545	Grieffin	1987	440	--	80	--	X	--	BrW
EFW 49	43 4457	710007	Revin	1987	420	--	70	--	X	--	BrW
EFW 50	43 4636	710546	Brennick	1987	420	--	61	--	--	--	BrW
EFW 51	43 4636	710545	Brennick	1987	420	--	55	--	S	--	--
EFW 52	43 4744	710326	Gardner	1987	400	--	54	--	X	--	BrW
EFW 53	43 4410	710444	McClean	1987	470	--	39	--	X	--	BrW
EFW 54	43 4405	710550	Gagne	1987	500	--	45	--	X	--	BrW
EFW 55	43 4344	710046	Raveli	1987	530	--	39	--	X	--	BrW
EFW 56	43 4741	710322	Peckham	1987	420	--	79	--	X	--	BrW
EFW 57	43 4745	710322	DeFanti	1987	400	--	80	--	X	--	BrW
EFW 58	43 4444	710057	Applei	1988	530	--	100	--	X	--	BrW
EFW 59	43 4420	710042	Simmons	1988	470	--	84	--	X	--	BrW
EFW 60	43 4447	710717	Angelo	1988	460	--	53	--	S	--	--
EFW 61	43 4442	710725	Leona	1988	480	--	79	--	X	--	BrW
EFW 62	43 4447	710735	Hodge	1988	480	--	91	--	X	--	BrW
EFW 63	43 4653	710315	Fahy	1988	660	--	103	--	X	--	BrW
EFW 64	43 4529	705957	Libby	1988	520	--	47	--	X	--	BrW
EFW 65	43 4242	705936	Le Bel	1988	520	--	148	--	X	--	BrW
EFW 66	43 4527	705924	L. Seamans	1988	560	--	186	--	X	--	BrW
EFW 67	43 4449	710058	Bedard	1988	540	--	106	--	X	--	BrW
EFW 68	43 4401	710439	Robertson	1988	480	--	30	--	X	--	BrW
EFW 69	43 4521	710001	Jean	1988	500	--	117	--	X	--	BrW
EFW 70	43 4449	710722	K. Haggerty	1988	450	--	47	--	S	--	--
EFW 71	43 4315	710004	Amaral	1988	500	--	63	--	X	--	BrW
EFW 72	43 4446	710720	Mitchell	1988	450	--	47	--	S	--	--
EFW 73	43 4620	705947	Smith	1988	500	--	141	--	X	--	BrW
EFW 74	43 4443	710524	K. Baribeau	1989	440	--	74	--	--	--	--
EFW 75	43 4451	710742	Tuttle	1989	460	--	59	--	S	--	--
EFW 76	43 4301	710142	Ferber	1989	520	--	49	--	X	--	BrW
EFW 77	43 4738	710326	Towle	1989	420	--	60	--	X	--	BrW
EFW 78	43 4426	710702	Brienzzo	1989	480	--	213	--	X	--	BrW
EFW 79	43 4744	710305	Raynes	1990	400	--	80	--	X	--	BrW
EFW 80	43 4746	710304	Hartford	1991	400	--	80	--	X	--	BrW
EFW 81	43 4721	710521	Dig n Doze	1991	420	--	201	--	X	--	BrW
EFW 82	43 4720	705936	J. Lemming-Little	1989	410	--	98	--	X	--	BrW
EFW 83	43 4427	710510	A. Cosentino	1991	460	--	140	--	X	--	BrW
EFW 84	43 4621	705940	Bookholz	1991	440	--	20	--	S	--	--
EFW 85	43 4423	710043	Town of Effingham	1991	480	--	120	--	X	--	BrW
EFW 86	43 4421	710044	Keville	1991	480	--	120	--	X	--	BrW
EFW 87	43 4620	705938	Columbo	1991	440	--	20	--	S	--	--
EFW 88	43 4745	710318	Spiller	1991	400	--	151	--	X	--	BrW
EFW 89	43 4200	710013	Faill	1991	485	--	120	--	X	--	BrW
EFW 90	43 4724	710501	Ossipee Lake Camping	1992	415	--	100	--	X	--	BrW
EFW 91	43 4447	710056	Stackpole	1992	540	--	100	--	X	--	BrW
EFW 92	43 4549	710009	Riordan	1992	570	--	120	--	X	--	BrW
EFW 93	43 4718	705934	Leeming	1992	410	--	150	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Effingham--Continued</b>								
EFW 43	--	--	H	15	--	--	2.5	
EFW 44	55	10-03-86	H	30	--	--	.5	
EFW 45	40	09-25-86	H	3	--	--	.5	
EFW 46	25.5	05-13-87	H	17	--	--	2	
EFW 47	--	--	H	15	--	--	1	
EFW 48	60	06-24-87	H	6	--	--	1	
EFW 49	50	06-03-87	H	0.7	--	--	.5	
EFW 50	7	05-13-87	T	20	--	--	1	
EFW 51	7	05-12-87	T	55	--	--	48	
EFW 52	20	09-09-87	H	2	--	--	.5	
EFW 53	14	12-14-87	H	1	--	--	.5	
EFW 54	65	12-22-87	H	1.8	--	--	1	
EFW 55	65	10-28-87	H	5	--	--	.5	
EFW 56	--	--	H	15	--	--	1	
EFW 57	--	--	H	10	--	--	1	
EFW 58	40	03-17-88	H	50	--	--	.5	
EFW 59	5	05-08-88	H	18	--	--	1	
EFW 60	39	04-17-88	H	12	--	--	1	
EFW 61	--	--	H	6	--	--	.5	
EFW 62	--	--	H	6	--	--	.5	
EFW 63	--	--	H	15	--	--	1	
EFW 64	8	05-19-88	H	4.5	--	--	.5	
EFW 65	--	--	H	6	--	--	1	
EFW 66	--	--	H	4	--	--	1	
EFW 67	--	--	H	8	--	--	1	
EFW 68	20	09-27-88	H	6	--	--	1	
EFW 69	10	08-11-88	H	12	--	--	.5	
EFW 70	31	10-22-88	H	16.5	--	--	1	
EFW 71	--	--	H	15	--	--	1	
EFW 72	31.5	10-26-88	H	16.5	--	--	1.5	
EFW 73	--	--	H	13	--	--	1	
EFW 74	--	--	H	30	--	--	8	
EFW 75	--	--	H	5.5	--	--	6	
EFW 76	20	08-11-89	H	30	--	--	1	
EFW 77	10	08-30-89	H	3	--	--	.5	
EFW 78	35	08-30-89	H	5	--	--	1	
EFW 79	20	08-22-90	H	4	--	--	1	
EFW 80	25	04-11-91	H	40	--	--	.5	
EFW 81	30	04-02-91	H	1.5	--	--	1	
EFW 82	6	08-16-89	H	5.5	--	--	.5	
EFW 83	--	--	H	15	--	--	1	
EFW 84	16	08-04-91	H	8	--	--	1	
EFW 85	20	07-20-91	H	8	--	--	1	
EFW 86	--	--	H	4.5	--	--	1	
FW 87	16	08-24-91	H	6	--	--	1	
FW 88	3	08-15-91	H	50	--	--	1	
FW 89	6	10-17-91	H	14	--	--	1	
FW 90	--	--	H	7.5	--	--	1	
FW 91	--	--	H	30	--	--	1	
FW 92	--	--	H	5.5	--	--	1	
FW 93	40	08-25-92	H	25	--	--	1	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat- itude	Long- itude	Owner or user	Year com- pleted	Alt-i- tude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site	
											Freedon	
FLS	1	434941	710607	--	420	--	--	--	--	--	Sp	
FLW	3	434753	710122	Davis	1990	400	--	--	T	--	Dvn	
FLW	4	434744	710138	Schluter	1988	405	2	15	S	T	--	Dvn
FLW	5	434745	710138	Schluter	--	395	2	18	S	T	--	Dvn
FLW	6	434844	710455	--	422	6	20	S	X	--	BrW	
FLW	7	434845	710454	--	425	--	--	--	T	--	Dvn	
FLW	8	434843	710451	--	425	--	--	--	T	--	Dvn	
FLW	9	434839	710605	--	409	--	--	--	T	--	Dvn	
FLW	10	434833	710549	--	415	2	15	--	T	--	Dvn	
FLW	11	434828	710540	--	420	3	50	S	T	--	Dvn	
FLW	12	434812	710513	--	420	--	--	--	X	--	BrW	
FLW	13	434918	710626	Mitchell	--	455	2	61	S	T	--	Dvn
FLW	14	434919	710619	--	410	--	--	--	T	--	Dvn	
FLW	15	434859	710622	--	410	--	13	S	T	--	Dvn	
FLW	16	434900	710633	John Gallant	--	425	--	--	--	--	--	
FLW	17	434842	710625	Camp Huckins	--	408	48	8.3	C	O	--	Dug
FLW	18	434822	710627	Hormell	1971	415	1	22	S	T	--	Dvn
FLW	19	434904	710916	Camp Calumet	1976	418	--	--	--	X	--	BrW
FLW	20	434912	710926	Camp Calumet	1985	428	--	--	--	X	--	BrW
FLW	21	435049	710540	--	410	3	4.9	C	O	--	Dug	
FLW	22	434941	710606	--	410	--	27	S	T	--	Dvn	
FLW	23	434944	711030	North Country Lumber	1986	455	2	35	G	T	--	Dvn
FLW	24	434846	710644	YMCA Camp Huckins	1991	415	2	58.7	P	S	58.7	Bor
FLW	25	434856	710940	Hobbs, Richard, L	1991	415	2	37.5	P	S	39.5	Bor
FLW	26	434730	710123	USGS	1991	390	2	18	P	S	20	Bor
FLW	27	434734	705926	Lorraine Gaguine	--	405	6	--	S	X	--	BrW
FLW	28	434750	710101	Edward Reed	1968	395	3	25	S	T	--	Dvn
FLW	29	434857	710455	Buck	1984	450	--	--	--	X	--	BrW
FLW	30	434821	710503	Mcvey	1984	430	--	--	--	X	--	BrW
FLW	31	434924	710613	Silver	1984	430	--	--	--	S	--	--
FLW	32	434917	710609	Fielding	1984	420	--	--	--	S	--	--
FLW	33	434736	710633	Hardy	1984	450	--	--	--	S	--	--
FLW	34	434854	710442	Cullinane	1985	460	--	--	--	X	--	BrW
FLW	35	434850	710451	Hill	1985	450	--	--	--	X	--	BrW
FLW	36	434743	710154	Dorian	1985	410	--	25	--	S	--	--
FLW	37	434731	710653	Moore	1986	440	--	99	--	X	--	BrW
FLW	38	434907	710608	Falanga	1986	445	--	119	--	X	--	BrW
FLW	39	434827	710508	Widmer	1986	430	--	160	--	X	--	BrW
FLW	40	434828	710501	Adderley	1986	430	--	30.5	--	S	--	--
FLW	41	434807	710441	MacDonald	1986	430	--	112	--	X	--	BrW
FLW	42	434855	710445	Cullinane	1985	455	--	19	--	X	--	BrW
FLW	43	434819	710508	Rotandi	1986	430	--	41	--	S	--	--
FLW	44	434825	710455	Milotte Association Control	1986	430	--	30.5	--	S	--	--
FLW	45	434819	710450	Storey	1987	430	--	29	--	S	--	--
FLW	46	434820	710458	Fitzpatrick	1987	430	--	34	--	S	--	--
FLW	47	434734	710631	Codner	1987	430	--	62	--	S	--	--
FLW	48	434921	710628	Anson	1987	465	--	62	--	S	--	--
FLW	49	434747	710148	Rainone	1987	405	--	27	--	S	--	--
FLW	50	434756	710454	Blake	1987	420	--	140	--	X	--	BrW
FLW	51	434818	710508	Zampante	1987	430	--	44	--	S	--	--
FLW	52	434729	710650	Lawnicki	1987	460	--	113	--	X	--	BrW
FLW	53	434802	710449	Boyd	1988	430	--	100	--	X	--	BrW
FLW	54	434910	710607	Welch	1988	450	--	71	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Freedom</b>									
FLS 1	--	--	--	--	--	--	--	--	
FLW 3	--	--	H	--	--	--	--	--	
FLW 4	--	--	H	--	--	--	--	--	
FLW 5	--	--	U	--	--	--	--	--	Rust stains
FLW 6	--	--	H	--	--	--	--	--	
FKW 8	--	--	H	--	--	--	--	--	
FKW 9	--	--	H	--	--	--	--	--	point still draws up sand
FLW 9	--	--	H	--	--	--	--	--	
FLW 10	--	--	H	--	--	--	--	--	
FLW 11	--	--	T	--	--	--	--	--	
FLW 12	--	--	H	5.5	--	--	--	--	
FLW 13	36	----83	H	--	--	--	--	--	
FLW 14	--	--	H	--	--	--	--	--	
FLW 15	--	--	H	--	--	--	--	--	
FLW 16	--	--	H	--	--	--	--	--	
FLW 17	2.6	06-05-91	T	--	--	--	--	--	R
FLW 18	--	--	H	--	--	--	--	--	
FLW 19	--	--	T H	--	--	--	--	--	
FLW 20	--	--	T H	--	--	--	--	--	
FLW 21	3.6	06-06-91	H	--	--	--	--	--	Well will go dry
FLW 22	--	--	H	--	--	--	--	--	
FLW 23	32	----86	T H	--	--	--	--	--	
FLW 24	7.5	07-30-91	O	--	--	--	--	--	USGS
FLW 25	15.3	07-31-91	O	--	--	--	--	--	USGS
FLW 26	10	10-09-91	O	--	--	--	--	--	USGS
FLW 27	--	--	H	--	--	--	--	--	
FLW 28	--	--	H	--	--	--	--	--	
FLW 29	48	12-24-84	H	2	--	--	--	.5	
FLW 30	--	--	H	20	--	--	--	--	
FLW 31	47.5	10-11-84	H	7.5	--	--	--	3	
FLW 32	16.5	12-05-84	H	25	--	--	--	2	
FLW 33	45.5	08-29-84	H	10	--	--	--	--	
FLW 34	40	11-18-85	H	1	--	--	--	--	
FLW 35	--	--	H	1.5	--	--	--	1	
FLW 36	18	10-25-85	--	25	--	--	--	2	
FLW 37	50	07-03-86	H	0.8	--	--	--	1	
FLW 38	45	06-27-86	H	2.5	--	--	--	.5	
FLW 39	85	09-16-86	H	12	--	--	--	1	
FLW 40	22	10-11-86	H	5	--	--	--	2	
FLW 41	25	09-20-86	H	40	--	--	--	.5	
FLW 42	40	11-18-85	H	1	--	--	--	--	
FLW 43	27.5	11-18-86	H	16.5	--	--	--	2	
FLW 44	22	11-22-86	H	12	--	--	--	2	
FLW 45	19	04-24-87	H	7	--	--	--	2	
FLW 46	23	05-07-87	H	6.5	--	--	--	2	
FLW 47	--	--	H	10	--	--	--	2	
FLW 48	49	06-11-87	H	10	--	--	--	3	
FLW 49	20	06-06-87	H	30	--	--	--	2	
FLW 50	10	08-18-87	H	1.5	--	--	--	1	
FLW 51	28	10-10-87	H	15	--	--	--	1	
FLW 52	40	10-14-87	H	25	--	--	--	.5	
FLW 53	35	01-08-88	H	4	--	--	--	.5	
FLW 54	--	--	H	25	--	--	--	1	



New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				Maximum well yield (gallons per minute)	Specific capacity (gallons per minute per foot)				
<b>Freedom--Continued</b>									
FLW 55	15	05-13-88	H	3	--	--	--	.5	
FLW 56	40	07-05-88	H	1	--	--	--	.5	
FLW 57	20	07-15-88	H	7	--	--	--	.5	
FLW 58	40	07-16-88	H	3.5	--	--	--	.5	
FLW 59	15	10-27-88	H	2	--	--	--	.5	
FLW 60	--	--	H	15	--	--	--	.5	
FLW 61	25	06-03-89	H	12	--	--	--	1	
FLW 62	33	07-29-89	H	7	--	--	--	2	
FLW 63	50	07-13-89	H	5	--	--	--	.5	
FLW 64	--	--	H	12	--	--	--	1	
FLW 65	21	11-04-90	H	3.5	--	--	--	2	
FLW 66	22.5	04-25-84	H	12	--	--	--	2	
FLW 67	30	06-02-84	H	8	--	--	--	.5	
FLW 68	40	06-29-84	H	0.8	--	--	--	1	
FLW 69	25	06-29-84	H	2	--	--	--	.5	
FLW 70	--	--	P	6	--	--	--	48	
FLW 71	--	--	H	4	--	--	--	1	
FLW 72	20	08-07-84	H	3	--	--	--	.5	
FLW 73	40	09-17-84	H	25	--	--	--	.5	
FLW 74	15	10-13-84	H	4	--	--	--	.5	
FLW 75	21	10-27-84	H	6	--	--	--	5	
FLW 76	46.5	10-26-84	H	10	--	--	--	3	
FLW 77	45	05-25-85	H	0.5	--	--	--	2	
FLW 78	35	07-06-85	H	1.3	--	--	--	1	
FLW 79	10	05-21-85	H	12	--	--	--	.5	
FLW 80	--	--	H	5	--	--	--	.8	
FLW 81	50	12-04-85	H	3	--	--	--	.5	
FLW 82	20	12-15-85	H	6.5	--	--	--	.5	
FLW 83	--	--	H	9	--	--	--	1	
FLW 84	20	01-28-86	H	60	--	--	--	.5	
FLW 85	15	04-22-86	H	2	--	--	--	.5	
FLW 86	25	05-15-86	H	1.5	--	--	--	.5	
FLW 87	5	05-23-86	H	10	--	--	--	10	
FLW 88	--	--	H	150	--	--	--	1	
FLW 89	80	09-17-86	H	4	--	--	--	.5	
FLW 90	4	09-17-86	H	15	--	--	--	.5	
FLW 91	22	10-03-86	H	15	--	--	--	1	
FLW 92	28	10-11-86	H	15	--	--	--	1	
FLW 93	70	10-17-86	H	3.5	--	--	--	.5	
FLW 94	45	10-21-86	H	15	--	--	--	.5	
FLW 95	15	11-15-86	H	0.3	--	--	--	1	
FLW 96	25.5	11-29-86	H	16.5	--	--	--	1	
FLW 97	21	11-28-86	H	16	--	--	--	2	
FLW 98	40	12-11-86	H	12	--	--	--	.5	
FLW 99	20	03-10-87	H	10	--	--	--	.5	
FLW 100	11	04-13-87	H	20	--	--	--	2	
FLW 101	8	03-03-87	H	28	--	--	--	--	
FLW 102	--	--	H	3	--	--	--	1	
FLW 103	28	05-28-87	H	150	--	--	--	.5	
FLW 104	20	05-28-87	H	50	--	--	--	.5	
FLW 105	25	05-29-87	H	100	--	--	--	.5	
FLW 106	20	06-01-87	H	100	--	--	--	.5	
FLW 107	25	07-04-87	H	16	--	--	--	1	
FLW 108	11	06-07-87	H	10	--	--	--	3	



New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				Maximum well yield (gallons per minute)	Specific capacity (gallons per minute per foot)				
<b>Freedom--Continued</b>									
FLW 109	15	07-11-87	H	25	--	--	3.5		
FLW 110	25	08-27-87	H	15	--	--	.5		
FLW 111	25	09-11-87	H	9	--	--	1		
FLW 112	--	--	H	8	--	--	.5		
FLW 113	20	08-13-87	H	1	--	--	1		
FLW 114	--	--	H	15	--	--	1		
FLW 115	43	08-13-87	H	2.5	--	--	1		
FLW 116	54	08-11-87	H	3	--	--	1		
FLW 117	17	09-22-87	H	7	--	--	2		
FLW 118	52	10-10-87	H	8	--	--	1		
FLW 119	30	08-27-87	H	4	--	--	1		
FLW 120	38	10-10-87	H	15	--	--	2		
FLW 121	--	--	H	2	--	--	1		
FLW 122	100	11-04-87	H	5	--	--	2		
FLW 123	35	11-23-87	H	1	--	--	1		
FLW 124	18	11-24-87	H	5	--	--	.5		
FLW 125	25	10-27-87	H	2.5	--	--	.5		
FLW 126	20	10-14-87	P	60	--	--	1		
FLW 127	10	03-29-88	P	40	--	--	.5		
FLW 128	10	03-30-88	P	40	--	--	.5		
FLW 129	10	04-11-88	H	3	--	--	1		
FLW 130	35	04-06-88	H	4	--	--	.5		
FLW 131	23.5	04-30-88	H	7	--	--	1.5		
FLW 132	31	05-07-88	Z	10	--	--	1		
FLW 133	41	06-13-88	H	15	--	--	1		
FLW 134	51	06-11-88	H	12	--	--	2		
FLW 135	--	--	H	100	--	--	1		
FLW 136	12	06-18-88	--	40	--	--	1		
FLW 137	21	07-30-88	H	12	--	--	2		
FLW 138	25	08-01-88	H	0.3	--	--	1		
FLW 139	30	05-03-88	C	200	--	--	4		
FLW 140	60	05-25-88	H	150	--	--	.5		
FLW 141	20	05-31-88	H	60	--	--	.5		
FLW 142	25	05-31-88	H	5	--	--	1		
FLW 143	45	06-24-88	H	5	--	--	.5		
FLW 144	30	07-19-88	H	20	--	--	.5		
FLW 145	25	07-19-88	H	7.5	--	--	.5		
FLW 146	25	07-16-88	H	3	--	--	.5		
FLW 147	22	07-04-88	P	13	--	--	1.5		
FLW 148	15	05-05-87	H	6	--	--	.5		
FLW 149	--	--	H	5	--	--	.5		
FLW 150	60	11-09-88	H	10	--	--	.5		
FLW 151	10	10-27-88	H	100	--	--	.5		
FLW 152	10	10-28-88	H	150	--	--	.5		
FLW 153	60	11-04-88	H	0.5	--	--	1		
FLW 154	--	--	H	0.8	--	--	.5		
FLW 155	--	--	H	10	--	--	1		
FLW 156	45	12-01-88	H	1	--	--	1		
FLW 157	--	--	H	9	--	--	1		
FLW 158	18	04-20-89	H	2.5	--	--	.5		
FLW 159	30	04-20-89	H	15	--	--	1		
FLW 160	--	--	H	1	--	--	1		
FLW 161	--	--	H	12	--	--	1		
FLW 162	--	--	H	10	--	--	1		
FLW 163	18	04-29-89	H	15	--	--	2		

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat- itude	Long- itude	Owner or user	Year com- pleted	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Freedom--Continued</b>											
FLW 164	435059	710153	Perry	1989	1,020	--	60	--	X	--	Brw
FLW 165	434848	710447	Owens	1989	440	--	50	--	X	--	Brw
FLW 166	434845	710759	Corcoran	1989	500	--	141	--	X	--	Brw
FLW 167	434843	710803	Amico	1989	500	--	153	--	X	--	Brw
FLW 168	434816	710720	Kondrat	1989	440	--	195	--	X	--	Brw
FLW 169	434902	710901	McKechnie	1989	420	--	71	--	X	--	Brw
FLW 170	434736	710631	Abode	1989	460	--	172	--	X	--	Brw
FLW 171	435051	710200	Bittner	1990	1,040	--	39	--	X	--	Brw
FLW 172	434841	710800	Stone	1989	500	--	91	--	X	--	Brw
FLW 173	434900	710448	Johnson	1990	480	--	60	--	X	--	Brw
FLW 174	434818	710324	Eldridge	1990	420	--	60	--	X	--	Brw
FLW 175	434922	710337	Wheeler	1990	620	--	34	--	X	--	Brw
FLW 176	434747	710329	Lawler	1990	420	--	53	--	X	--	Brw
FLW 177	434845	710805	Mcfaun	1990	490	--	196	--	X	--	Brw
FLW 178	434843	710705	Neal	1991	440	--	26	--	S	--	--
FLW 179	434831	710751	Bolduc	1989	540	--	43	--	X	--	Brw
FLW 180	434830	710749	Bolduc	1989	520	--	43	--	X	--	Brw
FLW 181	434821	710756	Hulslander	1989	430	--	41	--	X	--	Brw
FLW 182	434820	710756	Coughlin	1989	430	--	86	--	X	--	Brw
FLW 183	434819	710754	Sheilhammer	1989	430	--	86	--	X	--	Brw
FLW 184	434810	710439	Rollins	1991	420	--	11	--	--	--	--
FLW 185	434748	710619	Keenan	1991	420	--	35	--	S	--	--
FLW 186	434837	710645	Hunt	1991	440	--	53	--	S	--	--
FLW 187	434901	710620	DeLuca	1991	420	--	58	--	--	--	--
FLW 188	434846	710711	Collins	1991	450	--	29	--	S	--	--
FLW 189	435021	710447	Walz	1991	590	--	49	--	X	--	Brw
FLW 190	434830	710442	Sanders	1991	440	--	49	--	X	--	Brw
FLW 191	434746	710141	Farnella	1992	400	--	33.5	--	S	--	--
FLW 192	434933	710631	Ogren	1992	420	--	35	--	S	--	--
FLW 193	434756	710218	Cummings	1992	400	--	49	--	X	--	Brw
FLW 194	434815	710803	Mazzeo	1992	410	--	74	--	X	--	Brw
FLW 195	434952	710031	Worth	1992	830	--	36	--	X	--	Brw
FLW 196	434746	710735	Boynton	1992	420	--	21	--	X	--	Brw
FLW 197	434921	710422	Brooks	1992	540	--	108	--	X	--	Brw
FLW 198	434800	710236	Grossman	1992	400	--	80	--	X	--	Brw
FLW 199	435041	710221	Fauver	1992	890	--	119	--	X	--	Brw
FLW 200	434758	710219	Farineilla	1993	400	--	54	--	X	--	Brw
<b>Hart's Location</b>											
HJW 1	440444	711919	Badger Realty	1985	760	--	119	--	X	--	Brw
HJW 2	440442	711913	Stuccchi	1990	760	--	79	--	S	--	--
HJB 1	441200	712425		--	1,487.5	--	--	--	--	--	TH
HJB 2	441152	712428		--	1,459.8	--	--	--	--	--	TH
HJB 3	440911	712154		--	1,153.7	--	--	--	--	--	TH
HJB 4	440647	712115		--	1,020.1	--	--	--	--	--	TH
HJB 5	440645	712115		--	1,002.6	--	--	--	--	--	TH
HJB 6	441013	712306		--	1,287	--	--	--	--	--	TH
<b>Jackson</b>											
JAB 1	441331	711512		--	1,583.3	--	--	--	--	--	TH
JAB 2	441207	711418		--	1,152.6	--	--	--	--	--	TH
JAB 3	440843	711122		--	992	--	--	--	--	--	TH

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				Maximum well yield (gallons per minute)	Draw-down (feet)				
<b>Freedom--Continued</b>									
FLW 164	300	09-14-89	H	1	--	--	--	2	
FLW 165	15	07-07-89	H	2	--	--	--	1	
FLW 166	40	06-12-89	H	6	--	--	--	.5	
FLW 167	40	06-16-89	H	2.5	--	--	--	.5	
FLW 168	35	08-18-89	H	100	--	--	--	1	
FLW 169	60	08-17-89	H	35	--	--	--	1	
FLW 170	100	09-19-89	H	30	--	--	--	.5	
FLW 171	--	--	H	5.5	--	--	--	1	
FLW 172	10	05-19-89	H	2	--	--	--	.5	
FLW 173	30	06-10-90	H	4	--	--	--	.5	
FLW 174	--	--	H	3	--	--	--	.5	
FLW 175	--	--	--	2.5	--	--	--	1	
FLW 176	--	--	H	3.3	--	--	--	--	
FLW 177	--	--	H	4	--	--	--	1	
FLW 178	19	04-13-91	H	7.5	--	--	--	2	
FLW 179	20	09-21-89	H	100	--	--	--	.5	
FLW 180	30	09-19-89	H	75	--	--	--	.5	
FLW 181	10	09-07-89	H	1.5	--	--	--	.5	
FLW 182	10	09-08-89	H	5	--	--	--	.5	
FLW 183	20	09-09-89	H	2	--	--	--	.5	
FLW 184	6	05-18-91	H	4.5	--	--	--	2	
FLW 185	18	06-01-91	H	30	--	--	--	2	
FLW 186	39	06-01-91	H	12	--	--	--	2	
FLW 187	--	--	H	30	--	--	--	8	
FLW 188	29	08-04-91	H	4.5	--	--	--	1	
FLW 189	6	10-29-91	H	5	--	--	--	.5	
FLW 190	--	--	H	2	--	--	--	15	
FLW 191	--	--	H	25	--	--	--	2	
FLW 192	5.5	05-17-92	H	30	--	--	--	2	
FLW 193	20	02-28-92	H	50	--	--	--	.5	
FLW 194	4	05-14-92	H	8	--	--	--	.5	
FLW 195	--	--	H	2.5	--	--	--	1	
FLW 196	30	07-30-92	H	15	--	--	--	1	
FLW 197	--	--	H	3	--	--	--	1	
FLW 198	15	09-23-92	H	3.5	--	--	--	.5	
FLW 199	60	10-10-92	H	3	--	--	--	1	
FLW 200	20	06-08-93	H	7	--	--	--	.5	
<b>Hart's Location</b>									
HJW 1	--	--	P	15	--	--	--	.5	
HJW 2	--	--	H	25	--	--	--	8	
HJB 1	--	--	U	--	--	--	--	--	
HJB 2	--	--	U	--	--	--	--	--	
HJB 3	--	--	U	--	--	--	--	--	
HJB 4	--	--	U	--	--	--	--	--	
HJB 5	--	--	U	--	--	--	--	--	
HJB 6	--	--	U	--	--	--	--	--	
<b>Jackson</b>									
JAB 1	--	--	U	--	--	--	--	--	
JAB 2	--	--	U	--	--	--	--	--	
JAB 3	--	--	U	--	--	--	--	--	



New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				(gallons per minute)				
<b>Jackson--Continued</b>								
JAW 1	18	08-07-91	I	--	--	--	--	contains iron
JAW 2	--	--	H	10	--	--	--	
JAW 3	--	--	H	12	--	--	.5	
JAW 4	40	06-06-84	H	50	--	--	1	
JAW 5	--	--	H	55	--	--	.5	
JAW 6	--	--	H	10	--	--	1	
JAW 7	20	08-01-84	H	3	--	--	1.5	
JAW 8	41	08-08-84	H	4	--	--	1	
JAW 9	50	08-10-84	H	200	--	--	1	
JAW 10	--	--	H	5	--	--	1	
JAW 11	--	--	H	2.8	--	--	1	
JAW 12	45	09-23-85	H	2.5	--	--	.5	
JAW 13	15	10-03-84	H	2	--	--	1	
JAW 14	90	09-07-84	H	3.5	--	--	.5	
JAW 15	15	08-27-84	H	9	--	--	.5	
JAW 16	--	--	H	2	--	--	1	
JAW 17	--	--	H	4	--	--	1	
JAW 18	80	11-24-84	H	1	--	--	1	
JAW 19	--	--	H	4	--	--	2	
JAW 20	25	07-28-85	H	30	--	--	1	
JAW 21	--	--	H	6	--	--	1	
JAW 22	25	09-24-85	H	4	--	--	.5	
JAW 23	25	09-23-85	H	30	--	--	1	
JAW 24	35	09-27-85	H	3	--	--	.5	
JAW 25	--	--	H	0.3	--	--	1	
JAW 26	--	--	H	8	--	--	--	
JAW 27	36	10-30-85	H	2	--	--	2	
JAW 28	--	--	H	1.5	--	--	1	
JAW 29	--	--	H	10	--	--	1	
JAW 30	--	--	H	55	--	--	.5	
JAW 31	--	--	H	40	--	--	.5	
JAW 32	--	--	H	7	--	--	.5	
JAW 33	75	06-04-86	H	5	--	--	.5	
JAW 34	--	--	H	10	--	--	1	
JAW 35	30	07-01-86	H	5	--	--	1	
JAW 36	15	09-19-86	H	20	--	--	.5	
JAW 37	--	--	H	12	--	--	1	
JAW 38	--	--	H	30	--	--	.5	
JAW 39	33	09-03-86	H	2	--	--	1	
JAW 40	--	--	H	100	--	--	.5	
JAW 41	--	--	H	100	--	--	.5	
JAW 42	--	--	H	50	--	--	1	
JAW 43	145	07-20-87	P	50	--	--	1	
JAW 44	--	--	H	60	--	--	1	
JAW 45	--	--	H	5	--	--	1	
JAW 46	30	09-25-87	H	3	--	--	1	
JAW 47	50	11-12-87	H	30	--	--	.5	
JAW 48	--	--	H	1	--	--	.5	
JAW 49	--	--	H	9	--	--	.5	
JAW 50	65	11-19-87	H	6	--	--	.5	
JAW 51	150	11-11-87	H	30	--	--	1	
JAW 52	80	11-16-87	H	3.5	--	--	1	
JAW 53	--	--	H	35	--	--	1	
JAW 54	--	--	H	12	--	--	1	
JAW 55	--	--	H	6	--	--	.5	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Latitude	Long- itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Jackson--Continued</b>											
JAW 56	440905	711036	Chase	1987	960	--	137	--	X	--	BrW
JAW 57	441147	711354	Poirier	1987	1,200	--	19	--	X	--	BrW
JAW 58	440957	711317	Heibich	1988	940	--	101	--	X	--	BrW
JAW 59	440859	711003	Leonard	1988	1,330	--	358	--	X	--	BrW
JAW 60	440818	711043	Kramp	1988	920	--	153	--	X	--	BrW
JAW 61	440947	711129	Heistand	1988	980	--	40	--	X	--	BrW
JAW 62	441138	711136	Chipman	1988	1,220	--	100	--	X	--	BrW
JAW 63	441021	710911	Peterson	1988	1,610	--	232	--	X	--	BrW
JAW 64	440855	711220	Graves	1989	1,000	--	135	--	X	--	BrW
JAW 65	440836	710946	Lafond	1989	1,480	--	130	--	X	--	BrW
JAW 66	441007	711133	Jenkins	1989	980	--	45	--	X	--	BrW
JAW 67	440927	711213	Salerno	1989	1,000	--	160	--	X	--	BrW
JAW 68	441130	711345	Maynard	1989	1,060	--	60	--	X	--	BrW
JAW 69	440903	711243	Lovering	1990	1,030	--	147	--	X	--	BrW
JAW 70	440946	711230	Tesone	1990	1,120	--	70	--	X	--	BrW
JAW 71	440935	711108	Williams	1991	940	--	40	--	X	--	BrW
JAW 72	440954	711125	Bordash	1991	980	--	60	--	X	--	BrW
JAW 73	440957	711134	Kehoe	1991	1,000	--	50	--	X	--	BrW
JAW 74	441001	711048	Jenkins	1991	1,100	--	122	--	X	--	BrW
JAW 75	440912	711024	Stone	1992	1,110	--	432	--	X	--	BrW
JAW 76	440912	710948	Russo	1992	1,460	--	220	--	X	--	BrW
JAW 77	440737	710735	Tinker	1988	900	--	42	--	X	--	BrW
JAW 78	440744	710658	Holmes	1988	1,160	--	121	--	X	--	BrW
<b>Madison</b>											
MBA 1	435618	710917		1992	500	--	--	--	--	--	Bor
MBB 1	435053	711019	NHDOT	--	464.5	--	--	--	--	--	TH
MBB 2	435315	711012	NHDOT	--	469	--	--	--	--	--	TH
MBB 3	435547	710931	NHDOT	--	492	--	--	--	--	--	TH
MBB 4	435333	710935	NHDOT	--	480	--	--	--	--	--	TH
MBS 1	435314	711048	JOHN F. CHICK	--	485	--	--	--	--	--	Sp
MBW 1	435010	711017	New Eng Lumber	1956	456	6	--	--	S	--	--
MBW 2	435002	711111	Madison Lumber Mill	1983	450	--	--	--	X	--	--
MBW 3	435102	710954	Garland	1974	495	6	--	S	X	--	BrW
MBW 4	435102	710954	Garland	1969	495	36	15.5	C	O	--	Dug
MBW 5	435059	710957	Joseph Vonhandorf	1981	485	8	87	S	G	--	Cb1
MBW 6	435104	711046	Kevin and Kate Walker	1980	485	2	55	G	T	--	Dvn
MBW 7	435317	711021	Henry Forrest	1981	475	36	10.3	C	O	--	Dug
MBW 9	435529	710956	Kevin VOLLMAR	--	505	2	--	S	T	--	Dvn
MBW 10	435054	711132	USGS	1991	480	2	59	P	S	59	Bor
MBW 11	435052	711027	Kurinskas	1984	470	--	--	--	--	--	--
MBW 12	435142	711102	McNail	1984	470	--	--	--	X	--	BrW
MBW 13	435545	710853	Daigel	1984	550	--	--	--	X	--	BrW
MBW 14	435122	711121	D'Arezzo	1985	490	--	--	--	--	--	--
MBW 15	435155	711111	Cormack	1984	510	--	23	--	X	--	BrW
MBW 16	435059	711108	Shank	1985	485	--	51.5	--	S	--	--
MBW 17	435259	711044	Nichols	1986	480	--	61	--	X	--	BrW
MBW 18	435054	711038	VonHandorf	1986	475	--	39	--	S	--	--
MBW 19	435141	711117	Wasson	1986	510	--	30	--	X	--	BrW
MBW 20	435145	711116	Ham	1986	510	--	50	--	X	--	BrW
MBW 21	435130	711120	Fern Const	1986	490	--	41	--	X	--	BrW
MBW 22	435054	711043	Cummings	1986	485	--	29	--	S	--	--
MBW 23	435054	711042	McLoughlin	1986	485	--	49	--	S	--	--

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Jackson--Continued</b>									
JAW 56	--	--	H	2	--	--	.5		
JAW 57	--	--	H	5	--	--	.3		
JAW 58	--	--	H	8	--	--	1		
JAW 59	180	07-13-88	H	3	--	--	1		
JAW 60	--	--	H	25	--	--	1		
JAW 61	25	07-29-88	H	12	--	--	1		
JAW 62	5	09-20-88	H	6.5	--	--	.5		
JAW 63	--	--	H	125	--	--	1		
JAW 64	--	--	H	15	--	--	1		
JAW 65	--	--	H	6	--	--	1		
JAW 66	--	--	H	75	--	--	1		
JAW 67	--	--	H	6.5	--	--	1		
JAW 68	6	06-16-89	H	15	--	--	.5		
JAW 69	--	--	H	20	--	--	1		
JAW 70	--	--	H	5	--	--	1		
JAW 71	10	05-03-91	H	45	--	--	1		
JAW 72	--	--	H	150	--	--	1		
JAW 73	--	--	H	7	--	--	1		
JAW 74	--	--	H	5.5	--	--	1		
JAW 75	--	--	H	12	--	--	1		
JAW 76	--	--	H	12	--	--	1		
JAW 77	--	--	H	150	--	--	1		
JAW 78	--	--	H	6	--	--	1		
<b>Madison</b>									
MBA 1	--	--	T	--	--	--	--		USGS
MBB 1	--	--	T	--	--	--	--		
MBB 2	--	--	T	--	--	--	--		
MBB 3	--	--	T	--	--	--	--		
MBB 4	--	--	T	--	--	--	--		
MBS 1	--	--	--	--	--	--	--		Spring is water supply for five houses
MBW 1	9	06-01-66	U	--	--	--	--		
MBW 2	--	--	T	--	--	--	--		
MBW 3	--	--	H	6	--	--	--		
MBW 4	9.9	07-16-91	U	--	--	--	--		
MBW 5	--	--	H	--	--	--	--		Slightly hard
MBW 6	--	--	H	--	--	--	--		Iron stains in tub and toilet
MBW 7	6.2	07-16-91	H S	--	--	--	--		R
MBW 9	--	--	H	--	--	--	--		High in iron
MBW 10	35	08-01-91	O	--	--	--	--		USGS
MBW 11	20.5	05-19-84	H	30	--	--	1		
MBW 12	70	10-25-84	H	20	--	--	.3		
MBW 13	30	11-14-84	H	4.5	--	--	.5		
MBW 14	42	07-06-85	H	10	--	--	3		
MBW 15	--	--	H	1.5	--	--	.5		
MBW 16	37	10-27-85	H	15	--	--	2		
MBW 17	30	02-15-86	H	0.7	--	--	1		
MBW 18	23	04-26-86	H	15	--	--	2		
MBW 19	--	--	H	2	--	--	1		
MBW 20	--	--	H	4.5	--	--	2		
MBW 21	11	06-21-86	H	60	--	--	2		
MBW 22	22	09-13-86	H	15	--	--	1		
MBW 23	29	06-08-86	H	12	--	--	2		

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Latitude	Longtitude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Madison--Continued</b>											
MBW 24	435054	711040	Moschella	1986	480	--	49	--	S	--	--
MBW 25	435124	711117	Cummings	1986	490	--	29	--	S	--	--
MBW 26	435128	711120	Simkins	1986	490	--	70	--	X	--	BrW
MBW 27	435552	710948	Hill	1986	500	--	120	--	X	--	BrW
MBW 28	435142	711108	Cunio	1986	490	--	67	--	X	--	BrW
MBW 29	435055	711045	Cummings	1987	485	--	49	--	S	--	--
MBW 30	435057	711111	Nickerson	1987	490	--	55	--	S	--	--
MBW 31	435049	711111	Wills	1987	470	--	110	--	--	--	--
MBW 32	435132	711105	Bourque	1987	480	--	100	--	X	--	BrW
MBW 33	435053	711114	Hamel	1987	470	--	53	--	S	--	--
MBW 34	435146	711116	Ham	1987	510	--	30	--	X	--	BrW
MBW 35	435049	711111	Wills	1987	470	--	58	--	X	--	BrW
MBW 36	435311	710958	Dudley	1987	500	--	60	--	X	--	BrW
MBW 37	435148	711111	Herzog	1988	510	--	57	--	S	--	--
MBW 38	435032	711113	Ross	1988	470	--	44	--	S	--	--
MBW 39	435620	710900	Durkee	1988	570	--	60	--	X	--	BrW
MBW 40	435053	711035	Vonhandorf	1988	470	--	32	--	S	--	--
MBW 41	435124	711113	James	1988	490	--	59	--	S	--	--
MBW 42	435129	711117	Dalis	1988	490	--	29	--	S	--	--
MBW 43	435323	711014	Sherwood	1988	470	--	17	--	--	--	Dug
MBW 44	435538	710922	Husted	1988	505	--	113	--	X	--	BrW
MBW 45	435059	711116	Luca	1989	470	--	59	--	S	--	--
MBW 46	435548	710930	Knott	1989	490	--	90	--	X	--	BrW
MBW 47	435048	711122	Aglwin	1989	475	--	53	--	S	--	--
MBW 48	435142	711105	Rand	1989	475	--	52	--	X	--	BrW
MBW 49	435324	711017	Sherwood	1989	470	--	60	--	X	--	BrW
MBW 50	435050	711116	Eldridge	1990	470	--	58	--	S	--	--
MBW 51	435238	711003	Beck	1990	510	--	54	--	S	--	--
MBW 52	435540	710957	Tello	1990	495	--	50	--	X	--	BrW
MBW 53	435057	711116	Chase	1990	470	--	174	--	--	--	--
MBW 54	435549	710946	Scoppettuolo	1988	500	--	109	--	--	--	--
MBW 55	435642	710914		1992	475	2	47	P	S	49	Bor
MBW 56	435646	710932	USGS	1992	550	2	66	P	S	69.1	Bor
MBW 57	435715	710913		1992	470	2	47	P	S	49	Bor
MBW 58	435606	710832	Village District of Eidelweiss	--	580	--	--	--	--	--	--
MBW 59	435240	711002	Dreston	1984	670	--	60	--	X	--	BrW
MBW 60	435244	710956	Rameil	1985	540	--	20	--	X	--	BrW
MBW 61	435638	710716	Packard	1984	650	--	106	--	X	--	BrW
MBW 62	435455	710857	Chaplick	1984	720	--	93	--	X	--	BrW
MBW 63	435530	710959	Shipulski	1984	540	--	110	--	X	--	BrW
MBW 64	435347	711106	High Street Association	1984	640	--	35	--	X	--	BrW
MBW 65	435356	710847	Fleischmann	1984	580	--	61	--	X	--	BrW
MBW 66	435610	710654	Tangur	1984	660	--	99	--	X	--	BrW
MBW 67	435003	711111	Madison Saw Mill	1984	440	--	59	--	--	--	--
MBW 68	435003	711111	Madison Saw Mill	1984	440	--	60	--	--	--	--
MBW 69	435300	711130	Bartlett	1984	720	--	19	--	X	--	BrW
MBW 70	435402	710940	Arnold	1985	610	--	17	--	--	--	Dug
MBW 71	435339	710924	Town of Madison	1985	510	--	19	--	--	--	Dug
MBW 72	435557	710834	Village Dist of Eidewe	1985	560	--	36	--	--	--	--
MBW 73	435616	710706	Macleon	1985	655	--	35	--	X	--	BrW
MBW 74	435459	710856	McNaulto	1985	700	--	86	--	X	--	BrW
MBW 75	435223	710622	Pitts	1985	760	--	59	--	X	--	BrW
MBW 76	435610	710712	Potvin	1985	655	--	--	--	--	--	Dug

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Madison--Continued</b>									
MBW 24	27	06-29-86	H	15	--	--	--	2	
MBW 25	22	07-05-86	H	15	--	--	--	1	
MBW 26	--	--	H	20	--	--	--	1	
MBW 27	--	--	H	15	--	--	--	1	
MBW 28	40	09-30-86	H	2	--	--	--	1	
MBW 29	31	04-13-87	H	17	--	--	--	2	
MBW 30	33	05-16-87	H	15	--	--	--	1.5	
MBW 31	40	06-25-87	H	30	--	--	--	48	
MBW 32	40	08-01-87	H	5.5	--	--	--	1	
MBW 33	34	07-29-87	H	12.5	--	--	--	2	
MMBW 34	30	08-09-87	H	7	--	--	--	1	
MBW 35	30	12-28-87	H	30	--	--	--	12	
MBW 36	60	11-13-87	H	1.3	--	--	--	.5	
MBW 37	39	04-02-88	H	10	--	--	--	2	
MBW 38	27	05-21-88	H	16.5	--	--	--	2	
MBW 39	--	--	H	2	--	--	--	1	
MBW 40	10	08-21-88	H	30	--	--	--	1	
MBW 41	44	07-11-88	H	9	--	--	--	1	
MBW 42	23.5	07-06-88	H	15	--	--	--	1	
MBW 43	9	07-29-88	H	--	--	--	--	--	
MBW 44	50	12-20-88	H	2	--	--	--	3	
MBW 45	30	01-17-89	H	25	--	--	--	12	
MBW 46	--	--	H	20	--	--	--	1	
MBW 47	36	06-24-89	H	13	--	--	--	2	
MBW 48	20	06-06-89	H	6	--	--	--	1	
MBW 49	28	10-25-89	H	1	--	--	--	.5	
MBW 50	34	01-21-90	H	15	--	--	--	1	
MBW 51	42.5	08-19-90	H	15	--	--	--	2	
MBW 52	30	11-01-90	H	100	--	--	--	.5	
MBW 53	40	11-05-90	H	30	--	--	--	.5	
MBW 54	15	09-13-88	H	20	--	--	--	.5	
MBW 55	6.4	08-07-92	O	--	--	--	--	--	USGS
MBW 56	66	08-07-92	O	--	--	--	--	--	USGS
MBW 57	10	08-06-92	O	--	--	--	--	--	USGS
MBW 58	--	--	P	--	--	--	--	--	
MBW 59	40	05-15-84	H	3.5	--	--	--	.5	
MBW 60	40	05-16-85	H	0.5	--	--	--	1	
MBW 61	--	--	H	5	--	--	--	.5	
MBW 62	35	06-08-84	H	4	--	--	--	.5	
MBW 63	50	06-10-84	H	3	--	--	--	.5	
MBW 64	60	07-04-84	H	8	--	--	--	.5	
MBW 65	20	08-06-84	H	4	--	--	--	--	
MBW 66	20	10-01-84	H	40	--	--	--	.5	
MBW 67	20	11-14-84	N	35	--	--	--	3	
MBW 68	20	11-14-84	N	35	--	--	--	4	
MBW 69	--	--	H	0.3	--	--	--	.5	
MBW 70	8	05-22-85	H	--	--	--	--	--	
MBW 71	7	06-13-85	C	--	--	--	--	--	
MBW 72	16	06-14-85	P	35	--	--	--	1	
MBW 73	6	03-19-85	H	25	--	--	--	.5	
MBW 74	120	04-05-85	H	30	--	--	--	.5	
MBW 75	2	06-09-85	H	0.8	--	--	--	1	
MBW 76	6	04-15-85	H	20	--	--	--	2	

Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Madison--Continued</b>											
MBW 77	435318	710941	MacDonald	1984	550	--	--	--	--	--	Dug
MBW 78	435120	710903	Dandeneau	1985	480	--	60	--	--	--	--
MBW 79	435357	710852	Town of Madison	1985	560	--	85	--	X	--	BrW
MBW 80	435740	710721	Solo School	1985	620	--	100	--	X	--	BrW
MBW 81	435239	710542	Viana	1985	660	--	140	--	X	--	BrW
MBW 82	435540	710926	PDP Realty	1986	510	--	109	--	X	--	BrW
MBW 83	435539	710924	PDP Realty	1986	510	--	134	--	X	--	BrW
MBW 84	435319	711029	Drew	1986	480	--	17	--	--	--	Dug
MBW 85	435345	710842	Emmel	1985	570	--	23	--	--	--	Dug
MBW 86	435633	710649	Wiggin	1985	680	--	140	--	X	--	BrW
MBW 87	435351	710944	Tompkins	1985	540	--	90	--	X	--	BrW
MBW 88	435318	710941	MacDonald	1985	550	--	29	--	X	--	BrW
MBW 89	435135	711113	Walsh	1985	490	--	59	--	X	--	BrW
MBW 90	435220	710549	Ellis	1985	670	--	29	--	X	--	BrW
MBW 91	435214	710708	Shackford	1985	1,060	--	19	--	X	--	BrW
MBW 92	435222	710556	Sivo	1985	680	--	25	--	X	--	BrW
MBW 93	435339	710847	Martin	1985	620	--	25	--	X	--	BrW
MBW 94	435359	711125	Richardson	1985	690	--	40	--	X	--	BrW
MBW 95	435416	710844	Hanson	1985	700	--	19	--	X	--	BrW
MBW 96	435335	710844	Greenwood	1985	590	--	30	--	X	--	BrW
MBW 97	435149	710818	Davidson	1985	720	--	60	--	X	--	BrW
MBW 98	435130	710537	Hoyt	1984	500	--	20	--	X	--	BrW
MBW 99	435636	710655	Kibertz	1986	690	--	147	--	X	--	BrW
MBW 100	435405	710850	Savary Bros	1986	620	--	20	--	--	--	Dug
MBW 101	435204	711104	Jackson	1986	500	--	182	--	X	--	BrW
MBW 102	435611	710703	Suga	1986	660	--	31	--	X	--	BrW
MBW 103	435352	710838	Crafts	1986	600	--	64	--	X	--	BrW
MBW 104	435541	710856	Chaplow	1986	540	--	33	--	X	--	BrW
MBW 105	435607	710700	Joyce	1986	670	--	49	--	X	--	BrW
MBW 106	435129	711120	Haepers	1986	480	--	29	--	S	--	--
MBW 107	435422	710949	Gustafson	1986	630	--	29	--	X	--	BrW
MBW 108	435421	710949	Olds	1986	630	--	29	--	X	--	BrW
MBW 109	435648	710708	Noyes	1986	760	--	261	--	X	--	BrW
MBW 110	435715	710712	Lawrence	1986	700	--	19	--	X	--	BrW
MBW 111	435422	710946	O'Neil	1986	630	--	39	--	X	--	BrW
MBW 112	435609	710707	Donaldson	1986	660	--	29	--	X	--	BrW
MBW 113	435417	710823	Gillis	1986	880	--	245	--	X	--	BrW
MBW 114	435318	710951	Fernbach	1986	530	--	20	--	X	--	BrW
MBW 115	435321	710949	Martin Fernbach	1986	530	--	20	--	X	--	BrW
MBW 116	435255	711137	Carpenter	1986	740	--	29	--	X	--	BrW
MBW 117	435249	710939	Bates	1986	570	--	19	--	X	--	BrW
MBW 118	435328	710946	Sherwood	1987	500	--	51	--	X	--	BrW
MBW 119	435143	711118	Ham	1987	500	--	30	--	X	--	BrW
MBW 120	435148	711112	Ham	1987	500	--	50	--	X	--	BrW
MBW 121	435424	710949	Lord Gustafson Assoc	1987	640	--	39	--	X	--	BrW
MBW 122	435429	710950	Lord Gustafson Assoc	1987	640	--	39	--	X	--	BrW
MBW 123	435323	710953	Anderson	1987	480	--	39	--	X	--	BrW
MBW 124	435403	710849	Madison Church	1987	620	--	160	--	X	--	BrW
MBW 125	435634	710707	Rubera	1987	660	--	117	--	X	--	BrW
MBW 126	435332	711100	Stepanauskas	1987	600	--	68	--	X	--	BrW
MBW 127	435253	710934	Gove	1987	580	--	39	--	X	--	BrW
MBW 128	435316	710950	Brosor	1987	540	--	29	--	X	--	BrW
MBW 129	435116	711058	Fortin	1987	480	--	44	--	S	--	--
MBW 130	435459	710739	Patriani	1987	1,100	--	31	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Madison--Continued</b>								
MBW 77	12	10-20-84	H	10	--	--	2	
MBW 78	28	07-02-85	H	50	--	--	2	
MBW 79	90	07-22-85	H	35	--	--	.5	
MBW 80	40	08-15-85	T	60	--	--	.5	
MBW 81	25	09-18-85	H	3	--	--	.5	
MBW 82	30	05-19-86	H	10	--	--	.5	
MBW 83	30	05-20-86	H	8	--	--	.5	
MBW 84	--	--	H	--	--	--	--	
MBW 85	10	08-27-85	H	--	--	--	--	
MMBW 86	--	--	H	9	--	--	1	
MBW 87	20	08-15-85	H	5	--	--	1	
MBW 88	--	--	H	20	--	--	1	
MBW 89	30	09-11-85	H	3	--	--	.3	
MBW 90	45	10-18-85	H	1.8	--	--	1	
MBW 91	15	12-18-85	H	1.5	--	--	1	
MBW 92	40	12-19-85	H	75	--	--	.5	
MBW 93	--	--	H	12	--	--	1	
MBW 94	--	--	H	4	--	--	1	
MBW 95	--	--	H	50	--	--	1	
MBW 96	--	--	H	40	--	--	1	
MBW 97	--	--	H	5.5	--	--	1	
MBW 98	--	--	H	1.5	--	--	.5	
MBW 99	70	05-14-86	H	7	--	--	1	
MBW 100	7	07-09-86	H	--	--	--	--	
MBW 101	45	06-02-86	H	0.5	--	--	1	
MBW 102	12	06-22-86	H	50	--	--	1	
MBW 103	12	08-20-86	H	7	--	--	.5	
MBW 104	40	07-22-86	H	2.5	--	--	1	
MBW 105	--	--	H	5.5	--	--	1	
MBW 106	21.5	08-19-86	H	15	--	--	2	
MBW 107	67	08-15-86	H	20	--	--	1	
MBW 108	30	08-14-86	H	150	--	--	1	
MBW 109	65	08-21-86	H	4	--	--	1	
MBW 110	--	--	H	3	--	--	1	
MBW 111	--	--	H	150	--	--	1	
MBW 112	5	10-17-86	H	150	--	--	1	
MBW 113	70	10-24-86	H	30	--	--	1	
MBW 114	--	--	H	1.5	--	--	1	
MBW 115	--	--	H	5	--	--	1	
MBW 116	--	--	H	4	--	--	1	
MBW 117	--	--	H	12	--	--	1	
MBW 118	20	04-14-87	H	12	--	--	.5	
MBW 119	--	--	H	4	--	--	1	
MBW 120	--	--	H	3	--	--	1	
MBW 121	--	--	H	100	--	--	1	
MBW 122	--	--	H	9	--	--	1	
MBW 123	25	02-28-87	H	4	--	--	1	
MBW 124	25	04-17-87	H	3.5	--	--	.5	
IBW 125	5	06-03-87	H	4	--	--	.5	
IBW 126	20	05-11-87	H	15	--	--	.5	
IBW 127	20	06-30-87	H	2	--	--	.5	
IBW 128	--	--	H	3	--	--	1	
IBW 129	34	07-16-87	H	12	--	--	2	
IBW 130	60	08-18-87	H	50	--	--	.5	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Madison--Continued</b>											
MBW 131	435316	710941	Chute	1987	560	--	39	--	X	--	BrW
MBW 132	435654	710712	Pettingell	1987	820	--	209	--	X	--	BrW
MBW 133	435221	710651	Watson	1987	900	--	20	--	--	--	Dug
MBW 134	435049	711113	Gillis	1987	480	--	59	--	S	--	--
MBW 135	435257	711129	Medeiros	1987	740	--	39	--	X	--	BrW
MBW 136	435215	710633	Elworthy	1987	860	--	51	--	X	--	BrW
MBW 137	435057	711114	O'Neil	1987	480	--	58	--	S	--	--
MBW 138	435417	710723	McKnight	1987	920	--	17	--	--	--	Dug
MBW 139	435203	710524	Purity Spring Resort	1987	460	--	49	--	X	--	BrW
MBW 140	435418	710842	Fuller	1987	730	--	38	--	X	--	BrW
MBW 141	435431	710949	Pequawket Assoc	1987	630	--	29	--	X	--	BrW
MBW 142	435431	710946	Thompson	1987	620	--	39	--	X	--	BrW
MBW 143	435352	710842	Goss	1987	580	--	39	--	X	--	BrW
MBW 144	435112	711113	Conley	1987	480	--	57	--	S	--	--
MBW 145	435610	710706	Village District of Eidelweiss	1987	660	--	80	--	X	--	BrW
MBW 146	435241	710758	McNulty	1987	680	--	60	--	X	--	BrW
MBW 147	435259	710558	Kemensky	1987	840	--	54	--	X	--	BrW
MBW 148	435528	711143	Bryant	1986	760	--	30	--	X	--	BrW
MBW 149	435230	710600	Sherman	1987	740	--	49	--	X	--	BrW
MBW 150	435316	710952	Newson	1987	530	--	30	--	X	--	BrW
MBW 151	435046	711116	Savary Bros	1987	480	--	51.5	--	S	--	--
MBW 152	435305	710940	Trombley	1987	560	--	149	--	X	--	BrW
MBW 153	435325	710944	Hurd	1987	520	--	37	--	X	--	BrW
MBW 154	435733	710651	Smith	1987	520	--	80	--	X	--	BrW
MBW 155	435538	710922	PDP Realty	1988	510	--	134	--	X	--	BrW
MBW 156	435319	710940	Brown	1988	540	--	60	--	X	--	BrW
MBW 157	435228	710543	Lancashing	1988	750	--	34	--	X	--	BrW
MBW 158	435258	711133	Waterhouse	1988	720	--	30	--	X	--	BrW
MBW 159	435359	710940	Forgues	1988	600	--	50	--	X	--	BrW
MBW 160	435148	711114	Walker	1988	500	--	27	--	X	--	BrW
MBW 161	435555	710836	Eidelweiss	1988	560	--	29	--	X	--	BrW
MBW 162	435727	710732	Harrow	1988	820	--	80	--	X	--	BrW
MBW 163	435618	710649	Denoncourt	1988	660	--	100	--	X	--	BrW
MBW 164	435457	710857	Tessier	1988	700	--	90	--	X	--	BrW
MBW 165	435623	710648	Bennett	1988	660	--	80	--	X	--	BrW
MBW 166	435512	711158	Baker	1988	720	--	80	--	X	--	BrW
MBW 167	435611	710652	Previte Jr	1988	670	--	84	--	X	--	BrW
MBW 168	435358	711118	Shackford	1988	670	--	41	--	X	--	BrW
MBW 169	435734	710712	Hill	1988	590	--	40	--	X	--	BrW
MBW 170	435416	710817	Curtis	1988	870	--	221	--	X	--	BrW
MBW 171	435337	710933	Plummer and R. Smokla	1988	500	--	80	--	X	--	BrW
MBW 172	435405	711152	McKinney	1988	580	--	114	--	X	--	BrW
MBW 173	435313	711033	Saury	1988	480	--	44	--	S	--	--
MBW 174	435432	710906	Risma	1988	660	--	42	--	X	--	BrW
MBW 175	435432	710910	Gwyther	1988	630	--	44	--	X	--	BrW
MBW 176	435434	710901	McWalter	1988	700	--	39	--	X	--	BrW
MBW 177	435230	710543	Williams	1988	720	--	71	--	X	--	BrW
MBW 178	435101	711126	Nelson	1988	480	--	56	--	S	--	--
MBW 179	435446	710724	Thompson-Tucker	1988	1,080	--	74	--	X	--	BrW
MBW 180	435732	711014	Savary	1988	660	--	170	--	X	--	BrW
MBW 181	435314	710943	Brady	1988	560	--	40	--	X	--	BrW
MBW 182	435320	710947	Soroka	1988	560	--	39	--	X	--	BrW
MBW 183	435338	710748	Keylock Homes	1988	840	--	40	--	X	--	BrW
MBW 184	435740	710845	Talbot	1989	480	--	20	--	--	--	Dug

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				Maximum well yield (gallons per minute)	Specific capacity (gallons per minute per foot)				
<b>Madison--Continued</b>									
MBW 131	40	08-29-87	H	5	--	--	--	1	
MBW 132	60	09-02-87	H	20	--	--	--	.5	
MBW 133	10	08-19-87	H	--	--	--	--	--	
MBW 134	36	08-10-87	H	30	--	--	--	48	
MBW 135	--	--	H	3	--	--	--	1	
MBW 136	20	08-08-87	H	4	--	--	--	1	
MBW 137	35	07-22-87	H	30	--	--	--	48	
MBW 138	8	01-08-87	H	--	--	--	--	--	
MBW 139	--	--	P	30	--	--	--	1.5	
MMBW 140	40	07-30-87	H	75	--	--	--	.5	
MBW 141	--	--	H	4	--	--	--	1	
MBW 142	47	09-15-87	H	15	--	--	--	1	
MBW 143	21	09-11-87	H	4	--	--	--	1	
MBW 144	41	10-25-87	H	15	--	--	--	1.5	
MBW 145	25	11-02-87	P	125	--	--	--	12	
MBW 146	--	--	H	100	--	--	--	1	
MBW 147	25	10-26-87	H	6	--	--	--	1	
MBW 148	--	--	H	9	--	--	--	.5	
MBW 149	--	--	H	4	--	--	--	1	
MBW 150	--	--	H	100	--	--	--	1	
MBW 151	35	12-05-87	H	15	--	--	--	2	
MBW 152	25	12-16-87	H	5	--	--	--	.5	
MBW 153	25	12-02-87	H	15	--	--	--	.5	
MBW 154	20	11-19-87	H	7.5	--	--	--	.5	
MBW 155	60	04-15-88	H	10	--	--	--	.5	
MBW 156	15	01-26-88	H	6	--	--	--	.5	
MBW 157	90	01-22-88	H	0.7	--	--	--	1	
MBW 158	--	--	H	3	--	--	--	1	
MBW 159	15	04-19-88	H	9	--	--	--	1	
MBW 160	30	01-29-88	H	3	--	--	--	1	
MBW 161	15	01-21-88	--	20	--	--	--	1	
MBW 162	130	04-26-88	H	6	--	--	--	1	
MBW 163	--	--	H	100	--	--	--	1	
MBW 164	146	05-21-88	H	10	--	--	--	1	
MBW 165	--	--	H	20	--	--	--	1	
MBW 166	--	--	H	4	--	--	--	1	
MBW 167	--	--	H	75	--	--	--	1	
MBW 168	90	07-18-88	H	3	--	--	--	1	
MBW 169	40	06-11-88	H	1.5	--	--	--	.5	
MBW 170	60	07-05-88	H	3	--	--	--	1	
MBW 171	10	07-12-88	H	12	--	--	--	.5	
MBW 172	30	07-13-88	H	1	--	--	--	1	
MBW 173	28	08-16-88	H	15	--	--	--	2	
MBW 174	--	--	H	3	--	--	--	1	
MBW 175	40	07-20-88	H	6	--	--	--	1	
MBW 176	--	--	H	3	--	--	--	1	
MBW 177	--	--	H	--	--	--	--	1	
MBW 178	42	11-19-88	H	15	--	--	--	1	
MBW 179	--	--	H	5.5	--	--	--	1	
MBW 180	--	--	H	3	--	--	--	1	
MBW 181	21	08-30-88	H	5	--	--	--	1	
MBW 182	--	--	H	25	--	--	--	1	
MBW 183	80	12-02-88	H	0.8	--	--	--	1	
MBW 184	15	01-11-89	H	--	--	--	--	--	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Latitude	Longtitude	Owner or user	Year completed	Altitude above sea level (feet)	Diameter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Madison--Continued</b>											
MBW 185	435353	710727	Rodgers	1989	1,080	--	40	--	X	--	BrW
MBW 186	435219	710617	Cyr	1989	760	--	46	--	X	--	BrW
MBW 187	435525	711148	McInnis	1989	750	--	54	--	X	--	BrW
MBW 188	435238	710548	Van Raden	1989	660	--	93	--	X	--	BrW
MBW 189	435421	710643	Hatten	1989	1,080	--	80	--	X	--	BrW
MBW 190	435353	710914	Madison School Board	1989	520	--	94	--	X	--	BrW
MBW 191	435436	710903	Flanders	1989	680	--	105	--	X	--	BrW
MBW 192	435607	710827	Vatcher	1989	640	--	120	--	X	--	BrW
MBW 193	435633	710658	Howland	1989	660	--	110	--	X	--	BrW
MBW 194	435529	710958	Street Jr	1989	530	--	91	--	X	--	BrW
MBW 195	435336	710840	Litchfield	1988	580	--	62	--	X	--	BrW
MBW 196	435337	710824	Collord	1989	630	--	17	--	--	--	Dug
MBW 197	435343	710933	Rioux	1989	520	--	16	--	--	--	Dug
MBW 198	435419	710942	Wonsor	1989	620	--	45	--	X	--	BrW
MBW 199	435349	710932	Ferry	1989	560	--	80	--	X	--	BrW
MBW 200	435417	710810	Van Wickler	1989	880	--	189	--	X	--	BrW
MBW 201	435416	710939	Littlefield	1989	640	--	60	--	X	--	BrW
MBW 202	435353	710914	Madison Elementary School	1989	520	--	39	--	S	--	
MBW 203	435120	711051	Fortin	1990	480	--	44	--	S	--	
MBW 204	435248	710721	D. Wood	1990	920	--	39	--	X	--	BrW
MBW 205	435532	711002	Silver Lake Association	1990	550	--	79	--	X	--	BrW
MBW 206	435413	710846	Toscano	1990	680	--	70	--	X	--	BrW
MBW 207	435221	710613	Case	1990	700	--	60	--	X	--	BrW
MBW 208	435322	710949	McKinley	1990	530	--	40	--	X	--	BrW
MBW 209	435219	710623	Wall	1990	800	--	40	--	X	--	BrW
MBW 210	435331	710935	Dolly Madison's Country	1991	480	--	17	--	S	--	
MBW 211	435127	710514	Gillard	1991	480	--	20	--	--	--	Dug
MBW 212	435415	711059	Deaderick	1991	680	--	20	--	--	--	Dug
MBW 213	435019	711130	Audette Jr	1991	460	--	35	--	S	--	
MBW 214	435117	711141	Chagnon	1991	480	--	68	--	S	--	
MBW 215	435518	710637	Cody	1991	1,140	--	39	--	X	--	BrW
MBW 216	435258	711136	Leavitt	1991	720	--	45	--	X	--	BrW
MBW 217	435735	710909	Doe	1991	520	--	159	--	S	--	
MBW 218	435311	710957	Hutchinson	1991	500	--	60	--	X	--	BrW
MBW 219	435140	711128	Callahan	1991	500	--	34.8	--	S	--	
MBW 220	435250	710735	Morrill	1991	890	--	60	--	X	--	BrW
MBW 221	435155	711109	Thompson	1991	500	--	70	--	--	--	
MBW 222	435640	710700	Bellisle	1991	720	--	191	--	X	--	BrW
MBW 223	435131	711137	Savory Bros	1991	460	--	26	--	S	--	
MBW 224	435316	711024	Batchelder	1991	477	--	100	--	X	--	BrW
MBW 225	435340	710936	Fanciullo	1992	500	--	70	--	X	--	BrW
MBW 226	435108	711138	Starkey	1992	480	--	71	--	S	--	
MBW 227	435026	711116	Govoni	1992	470	--	44	--	S	--	
MBW 228	435118	711041	Rosse	1992	480	--	35	--	S	--	
MBW 229	435116	711141	Terrasi	1992	480	--	68	--	S	--	
MBW 230	435211	711058	Arnold	1992	480	--	157	--	X	--	BrW
MBW 231	435536	711002	Perkins	1992	520	--	61	--	X	--	BrW
MBW 232	435425	711111	Shackford Jr	1992	640	--	23	--	--	--	Dug
MBW 233	435326	711057	Palica	1992	560	--	113	--	X	--	BrW
MBW 234	435057	711127	Destremps	1992	480	--	58	--	S	--	
MBW 235	435735	711020	VanDyne	1987	680	--	219	--	X	--	BrW
MBW 236	435120	711139	A. Bradshaw	1992	480	--	69	--	--	--	
MBW 237	435113	711118	Murdock	1992	480	--	59	--	--	--	
MBW 238	435733	710922	Rowell	1992	570	--	221	--	X	--	BrW
MBW 239	435257	711129	Medeiros	1992	740	--	39	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Madison--Continued</b>									
MBW 185	--	--	H	5	--	--	--	1	
MBW 186	28	05-01-89	H	1	--	--	--	1	
MBW 187	5	03-27-89	H	3.5	--	--	--	1	
MBW 188	40	03-29-89	H	0.7	--	--	--	2	
MBW 189	95	06-23-89	H	50	--	--	--	1	
MBW 190	--	--	Z	7	--	--	--	1	
MBW 191	--	--	H	30	--	--	--	1	
MBW 192	--	--	H	15	--	--	--	1	
MBW 193	--	--	H	12	--	--	--	1	
MBW 194	--	--	H	8	--	--	--	1	
MMBW 195	--	--	H	10	--	--	--	.8	
MBW 196	4	08-27-89	H	--	--	--	--	--	
MBW 197	9	10-31-89	H	60	--	--	--	.5	
MBW 198	50	08-11-89	H	13	--	--	--	1	
MBW 199	--	--	H	7.5	--	--	--	1	
MBW 200	45	12-03-89	H	3	--	--	--	.5	
MBW 201	30	12-08-89	H	100	--	--	--	1	
MBW 202	--	--	T	24	--	--	--	48	
MBW 203	30	04-29-90	H	20	--	--	--	1	
MBW 204	25	05-26-90	H	4	--	--	--	1	
MBW 205	--	--	H	25	--	--	--	.5	
MBW 206	25	08-29-90	H	15	--	--	--	1	
MBW 207	--	--	H	20	--	--	--	1	
MBW 208	--	--	H	11	--	--	--	1	
MBW 209	30	05-10-90	H	2.5	--	--	--	.5	
MBW 210	5	04-27-91	C	20	--	--	--	1	
MBW 211	10	05-12-91	H	--	--	--	--	--	
MBW 212	3	05-05-91	H	--	--	--	--	--	
MBW 213	26	06-18-91	H	15	--	--	--	1	
MBW 214	54	06-30-91	H	10	--	--	--	2	
MBW 215	5	07-25-91	H	3.5	--	--	--	.5	
MBW 216	--	--	H	2	--	--	--	1	
MBW 217	--	--	H	25	--	--	--	12	
MBW 218	--	--	H	7	--	--	--	1	
MBW 219	31	09-20-91	H	15	--	--	--	1	
MBW 220	15	10-31-91	H	12	--	--	--	1	
MBW 221	--	--	P	20	--	--	--	48	
MBW 222	70	11-12-91	H	15	--	--	--	.5	
MBW 223	24	10-28-91	H	5	--	--	--	2	
MBW 224	--	--	H	10	--	--	--	1	
MBW 225	17	01-16-92	H	2	--	--	--	1	
MBW 226	48	06-20-92	H	11	--	--	--	2	
MBW 227	29	05-02-92	H	17	--	--	--	2	
MBW 228	24	05-17-92	H	17	--	--	--	1	
MBW 229	52	05-09-92	H	10	--	--	--	2	
MBW 230	--	--	H	6	--	--	--	1	
MBW 231	40	06-11-92	H	7	--	--	--	.5	
MBW 232	9	06-27-92	H	20	--	--	--	16	
MBW 233	60	08-11-92	H	12	--	--	--	1	
MBW 234	40	07-28-92	H	35	--	--	--	5	
MBW 235	40	10-16-87	H	4	--	--	--	.5	
MBW 236	54	08-15-92	H	11	--	--	--	2	
MBW 237	43	09-07-92	H	11	--	--	--	1.5	
MBW 238	80	10-29-92	H	0.8	--	--	--	1	
MBW 239	--	--	H	2	--	--	--	1	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Madison--Continued</b>											
MBW 240	435742	710900	Kitchen Jr	1992	470	--	145	--	--	--	
MBW 241	435113	711138	Spence	1992	480	--	69	--	S	--	
MBW 242	435057	711129	Mermet	1992	480	--	59	--	S	--	
MBW 243	435209	710547	Pritchard	1992	540	--	40	--	X	--	BrW
MBW 244	435224	710604	Laliberte	1992	720	--	20	--	X	--	BrW
MBW 245	435139	710521	Purity Spring Resort	1992	460	--	120	--	X	--	BrW
MBW 246	435133	711142	Goc	1992	460	--	68	--	X	--	BrW
MBW 247	435336	710926	Jones	1993	510	--	93	--	X	--	BrW
MBW 248	435204	711058	Ballentyne	1993	475	--	171	--	X	--	BrW
MBW 249	435638	710901	Village District of Eidelweiss	1993	520	--	65	S	X	--	BrW
MBW 250	435030	711114	Jones	1993	460	--	49	--	S	--	
MBW 251	435027	711125	Lowry	1993	460	--	54.5	--	S	--	
MBW 252	435002	711109	Madison Lumber Mill	--	450	--	--	--	--	--	
MBW 253	435610	710702	Village District of Eidelweiss	--	0	--	--	--	--	--	
<b>Ossipee</b>											
OXA 1	434828	711004	LeConte, Paul	--	415	--	--	--	--	--	TH
OXA 2	434558	710837		--	410	--	--	--	--	--	
OXA 3	434829	711003		1991	415	--	--	--	--	--	Bor
OXB 1	434909	711224	NHDOT	--	414	--	--	--	--	--	TH
OXB 2	434750	711055	NHDOT	--	413	--	--	--	--	--	TH
OXB 3	434756	711052	NHDOT	--	415	--	--	--	--	--	TH
OXB 4	434547	710908	NHDOT	--	424	--	--	--	--	--	TH
OXB 5	434522	710828	NHDOT	--	434.5	--	--	--	--	--	TH
OXB 6	434511	710814	NHDOT	--	415	--	--	--	--	--	TH
OXB 7	434543	710807	NHDOT	--	412	--	--	--	--	--	TH
OXB 8	434129	710707	NHDOT	--	649.5	--	--	--	--	--	TH
OXB 9	434642	710958	NHDOT	--	440	--	--	--	--	--	TH
OXB 10	434516	711018	NHDOT	--	556	--	--	--	--	--	TH
OXB 11	434514	711033	NHDOT	--	569	--	--	--	--	--	TH
OXB 12	434105	710519	NHDOT	--	515	--	--	--	--	--	TH
OXB 13	434010	710426	NHDOT	--	508	--	--	--	--	--	TH
OXB 14	434030	710449	NHDOT	--	490	--	--	--	--	--	TH
OXB 15	434051	710649	NHDOT	--	635.5	--	--	--	--	--	TH
OXB 16	434900	711146	NHDOT	--	422	--	--	--	--	--	TH
OXS 1	434709	711139	--	--	590	--	--	--	--	--	Sp
OXS 2	434335	710937	--	--	530	--	--	--	--	--	Sp
OXS 3	434053	710539	--	--	565	--	--	--	--	--	Sp
OXS 4	434056	710529	--	--	525	--	--	--	--	--	Sp
OXS 5	433909	710350	--	--	575	--	--	--	--	--	Sp
OXW 4	434923	711115	--	1979	430	--	--	--	T	--	Dvn
OXW 5	434920	711116	--	1987	430	2	12	G	T	--	Dvn
OXW 6	434927	711231	Lail	1987	425	6	100	S	F	--	Wsh
OXW 7	434926	711238	Roland Lord	--	425	1	25	S	T	--	Dvn
OXW 8	434920	711220	U.S. Post Office, Ossipee	1985	420	--	--	--	T	--	Dvn
OXW 9	434916	711250	Nudd	1989	435	2	48	S	T	--	Dvn
OXW 10	434903	711200	Virgil Abbott	1973	425	6	250	S	G	--	BrW
OXW 11	434905	711157	Virgil Abbott	--	425	2	13	G	T	--	Dvn
OXW 12	434856	711133	Doe	1989	430	36	12	C	C	--	Dug
OXW 13	434849	711126	Walter Penny	--	435	36	9.8	T	O	--	Dug
OXW 14	434826	710949	Stanley Ward	1951	410	--	--	--	T	--	Dvn
OXW 15	434811	711039	Galente	1964	415	2	18	G	T	--	Dvn
OXW 16	434806	711048	Kim Ross	1986	425	2	17.5	S	T	--	Dvn
OXW 17	434339	710926	Peter Cook	--	545	--	--	--	T	--	Dvn

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Madison--Continued</b>									
MBW 240	10	11-07-92	C	100	--	--	--	1	
MBW 241	51	10-24-92	H	12	--	--	--	2	
MBW 242	43	12-12-92	H	13	--	--	--	2	
MBW 243	25	06-28-92	H	10	--	--	--	.5	
MBW 244	20	06-26-92	H	6	--	--	--	.5	
MBW 245	2	06-24-92	C	100	--	--	--	.5	
MBW 246	2	05-27-92	H	2.5	--	--	--	.5	
MBW 247	50	05-03-93	H	0.8	--	--	--	1	
MBW 248	12	05-20-93	H	25	--	--	--	1	
MBW 249	40	07----93	P	207	--	--	--	72	
MBW 250	28	05-22-93	H	18	--	--	--	4	
MBW 251	29	08-28-93	H	20	--	--	--	2	
MBW 252	--	--	T	--	--	--	--	--	
MBW 253	60	08-18-87	H	50	--	--	--	.5	
<b>Ossipee</b>									
OXA 1	6	07-29-91	T	--	--	--	--	--	
OXA 2	--	--	U	--	--	--	--	--	
OXA 3	6	07-29-91	O	--	--	--	--	--	
OXB 1	--	--	T	--	--	--	--	--	
OXB 2	--	--	T	--	--	--	--	--	
OXB 3	--	--	T	--	--	--	--	--	
OXB 4	--	--	T	--	--	--	--	--	
OXB 5	--	--	T	--	--	--	--	--	
OXB 6	--	--	T	--	--	--	--	--	
OXB 7	--	--	T	--	--	--	--	--	
OXB 8	--	--	T	--	--	--	--	--	
OXB 9	--	--	T	--	--	--	--	--	
OXB 10	--	--	T	--	--	--	--	--	
OXB 11	--	--	T	--	--	--	--	--	
OXB 12	--	--	T	--	--	--	--	--	
OXB 13	--	--	T	--	--	--	--	--	
OXB 14	--	--	T	--	--	--	--	--	
OXB 15	--	--	T	--	--	--	--	--	
OXB 16	--	--	T	--	--	--	--	--	
OXS 1	--	--	--	1.2	--	--	--	--	
OXS 2	--	--	--	--	--	--	--	--	
OXS 3	--	--	--	--	--	--	--	--	
OXS 4	--	--	--	--	--	--	--	--	
OXS 5	--	--	--	--	--	--	--	--	More than one spring in the area
OXW 4	--	--	H	--	--	--	--	--	
OXW 5	4	----87	T	--	--	--	--	--	
OXW 6	20	06-13-87	T	25	--	--	--	--	High in iron and manganese pH=5.8, Fe=1.1ppm, hard=20
OXW 7	20	06-11-91	H	--	--	--	--	--	
OXW 8	--	--	H	--	--	--	--	--	High iron, they do not drink water
OXW 9	20	----89	H	--	--	--	--	--	
OXW 10	7.5	06-11-91	H	--	--	--	--	--	Contains salts and iron R Treat water with lime, iron stains, sulfur S
OXW 11	5	06-11-91	I	--	--	--	--	--	
OXW 12	7.1	06-11-91	H	--	--	--	--	--	R
OXW 13	3.8	06-11-91	H	--	--	--	--	--	
OXW 14	--	--	H	--	--	--	--	--	
OXW 15	--	--	H	--	--	--	--	--	
OXW 16	--	--	H	--	--	--	--	--	Contains iron
OXW 17	--	--	H	--	--	--	--	--	



New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				well yield (gallons per minute)	Draw-down (feet)				
<b>Ossipee--Continued</b>									
OXW 18	12	----86	H	--	--	--	--	--	
OXW 19	15	----58	H	--	--	--	--	--	
OXW 20	--	--	H	--	--	--	--	--	Treat water
OXW 22	12	----88	H	--	--	--	--	--	Some iron
OXW 23	--	--	T	--	--	--	--	--	
OXW 24	--	--	H	75	--	--	--	--	Contains sediments, odor
OXW 25	4.6	06-14-91	H	--	--	--	--	--	R Salt contamination from state shed across st
OXW 26	20	----91	H	--	--	--	--	--	Lots of salt
OXW 27	--	--	T	15	--	--	--	--	
OXW 28	--	--	H	--	--	--	--	--	Traces of iron
OXW 29	--	--	H	2	--	--	--	--	
OXW 30	--	--	H	--	--	--	--	--	
OXW 31	7	06-18-91	U	--	--	--	--	--	
OXW 32	--	--	T H	33	--	--	--	--	Water supply for a subdivision
OXW 33	--	--	T H	36	--	--	--	--	Water supply for a subdivision
OXW 34	19	10-15-91	O	2.5	--	--	--	--	USGS
OXW 35	--	--	O	--	--	--	--	--	USGS
OXW 36	7	10-10-91	O	--	--	--	--	--	USGS
OXW 37	27	08-02-91	O	--	--	--	--	--	USGS
OXW 38	37	09-23-91	O	--	--	--	--	--	USGS
OXW 40	11	07-09-84	H	50	--	--	--	2	
OXW 41	10	09-14-84	H	2	--	--	--	1.5	
OXW 42	--	--	H	100	--	--	--	--	
OXW 43	35	11-30-84	H	0.8	--	--	--	1	
OXW 44	2.7	11-13-84	Z	281	--	--	--	6	
OXW 45	2.8	11-06-84	Z	330	--	--	--	6	
OXW 46	1.6	11-15-84	Z	290	--	--	--	6	
OXW 47	--	--	H	40	--	--	--	--	
OXW 48	12	09-29-84	C	10.5	--	--	--	2	
OXW 49	40	07-10-85	H	80	--	--	--	.5	
OXW 50	28	09-13-85	H	7.5	--	--	--	.5	
OXW 51	30	11-13-85	--	2.5	--	--	--	1	
OXW 52	30	11-13-85	H	2.5	--	--	--	1	
OXW 53	--	--	H	0.2	--	--	--	2	
OXW 54	6	10-04-85	P	60	--	--	--	3	
OXW 55	--	--	H	5.5	--	--	--	.5	
OXW 56	10	04-23-86	H	10	--	--	--	.5	
OXW 57	16	04-19-86	H	5	--	--	--	.5	
OXW 58	--	--	H	5.5	--	--	--	1	
OXW 59	5	05-20-86	H	30	--	--	--	3	
OXW 60	36	04-20-86	H	12	--	--	--	2	
OXW 61	26	07-03-86	H	10	--	--	--	2	
OXW 62	28	07-03-86	H	20	--	--	--	2	
OXW 63	--	--	H	40	--	--	--	.5	
OXW 64	20	07-01-86	H	20	--	--	--	.5	
OXW 65	70	06-26-86	H	20	--	--	--	12	
OXW 66	35	08-17-86	H	1.5	--	--	--	1	
OXW 67	20	08-15-86	N	60	--	--	--	1	
OXW 68	35	06-28-86	H	15	--	--	--	1	
OXW 69	2	06-01-86	H	35	--	--	--		
OXW 70	18	06-01-86	H	30	--	--	--	1	
OXW 71	--	--	H	10	--	--	--	2	
OXW 72	56	04-14-87	H	10	--	--	--	1.5	
OXW 73	34	04-12-87	H	10	--	--	--	2	
OXW 74	10	05-05-87	H	6	--	--	--	.5	



New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Ossipee--Continued</b>									
OXW 75	8	03-12-87	H	20	--	--	--	--	
OXW 76	50	06-12-87	H	25	--	--	--	48	
OXW 77	--	--	H	100	--	--	--	1	
OXW 78	10	07-01-87	H	15	--	--	--	1	
OXW 79	6	07-06-87	H	20	--	--	--	2	
OXW 80	18	07-28-87	H	2.5	--	--	--	.5	
OXW 81	50	11-01-86	H	10	--	--	--	1	
OXW 82	36	08-16-87	H	10	--	--	--	3	
OXW 83	6	08-15-87	H	25.5	--	--	--	2	
OXW 84	20	08-28-87	H	40	--	--	--	1	
OXW 85	--	--	H	25	--	--	--	12	
OXW 86	24.5	09-22-87	H	15	--	--	--	1	
OXW 87	--	--	H	3	--	--	--	1	
OXW 88	--	--	H	6	--	--	--	1	
OXW 89	35	11-05-87	H	50	--	--	--	.5	
OXW 90	25	04-16-88	H	18	--	--	--	2	
OXW 91	--	--	H	15	--	--	--	1	
OXW 92	5	06-23-88	H	27.5	--	--	--	1	
OXW 93	49	08-30-88	H	10	--	--	--	1	
OXW 94	--	--	H	20	--	--	--	1	
OXW 95	33.5	09-30-88	H	15	--	--	--	2	
OXW 96	10	07-06-88	H	80	--	--	--	.5	
OXW 97	20	07-07-88	H	8.5	--	--	--	.5	
OXW 98	35	06-11-88	H	5	--	--	--	.5	
OXW 99	30	05-20-88	H	10	--	--	--	.5	
OXW 100	30	05-23-88	H	15	--	--	--	1	
OXW 101	3	08-10-88	H	0.8	--	--	--	1	
OXW 102	--	--	H	25	--	--	--	2.5	
OXW 103	--	--	H	100	--	--	--	.5	
OXW 104	--	--	H	5	--	--	--	--	
OXW 105	5	11-11-88	H	6	--	--	--	.5	
OXW 106	10	03-11-89	H	12	--	--	--	1	
OXW 107	2	04-30-89	H	60	--	--	--	2	
OXW 108	2	06-30-89	H	35	--	--	--	1	
OXW 109	5.3	08-05-89	H	30	--	--	--	1	
OXW 110	12	09-25-89	H	30	--	--	--	2	
OXW 111	4	11-19-89	H	40	--	--	--	2	
OXW 112	30	11-30-89	H	12	--	--	--	.5	
OXW 113	--	--	H	4	--	--	--	1	
OXW 114	8	06-16-90	H	35	--	--	--	2	
OXW 115	43	08-20-90	H	4.5	--	--	--	1	
OXW 116	--	--	H	30	--	--	--	.3	
OXW 117	144	11-28-89	H	0.5	--	--	--	1	
OXW 118	9	08-06-84	C	30	--	--	--	3	
OXW 119	--	--	H	1	--	--	--	.5	
OXW 120	38	05-13-84	H	5	--	--	--	2	
OXW 121	30	05-31-84	H	100	--	--	--	.5	
OXW 122	30	05-31-84	H	100	--	--	--	.5	
OXW 123	1	07-18-84	H	50	--	--	--	.5	
OXW 124	13	07-12-84	H	40	--	--	--	2	
OXW 125	15	09-29-84	H	6	--	--	--	.3	
OXW 126	--	--	H	4	--	--	--	.3	
OXW 127	28	08-15-84	H	3.5	--	--	--	.5	
OXW 128	40	10-12-84	--	1.5	--	--	--	.5	
OXW 129	--	--	H	4	--	--	--	1	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Lat-itude	Long-itude	Owner or user	Year completed	Alt-i-tude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Ossipee--Continued</b>											
OXW 130	434107	710513	West	1984	530	--	41	--	X	--	BrW
OXW 131	434048	710510	Lewis	1985	535	--	41	--	--	--	--
OXW 132	434133	710600	Runnels	1985	570	--	49	--	X	--	BrW
OXW 133	434752	711104	Hodgdon	1985	420	--	49	--	--	--	--
OXW 134	434400	710915	O'Rourke & Hinchey	1985	560	--	194	--	X	--	BrW
OXW 135	434107	710521	Zavas	1985	530	--	59	--	X	--	BrW
OXW 136	434727	710948	Deer Cove Condos	1985	415	--	54	--	--	--	--
OXW 137	433951	710546	McDowell	1985	630	--	50	--	X	--	BrW
OXW 138	434532	710832	Allie	1984	420	--	183	--	X	--	BrW
OXW 139	434340	710557	Amero	1986	510	--	128	--	X	--	BrW
OXW 140	434104	710506	Kirch	1986	520	--	40	--	X	--	BrW
OXW 141	434215	710347	Manchester	1986	560	--	107	--	X	--	BrW
OXW 142	434314	710613	Smith and C. Lambias	1986	540	--	29	--	X	--	BrW
OXW 143	434037	710357	Gurley	1984	580	--	59	--	X	--	BrW
OXW 144	434102	710408	Smith	1984	480	--	39	--	X	--	BrW
OXW 145	434611	710856	Currier	1986	410	--	217	--	X	--	BrW
OXW 146	434409	710908	Board of Selectmen	1986	540	--	205	--	X	--	BrW
OXW 147	434536	710831	Welch	1987	420	--	163	--	X	--	BrW
OXW 148	434035	710355	Morris	1987	580	--	85	--	X	--	BrW
OXW 149	434351	710935	Riley	1987	560	--	131	--	X	--	BrW
OXW 150	434126	710655	Cogswell	1987	630	--	39	--	X	--	BrW
OXW 151	434030	710349	Mack	1987	600	--	79	--	X	--	BrW
OXW 152	434724	710523	Evans	1987	430	--	176	--	X	--	BrW
OXW 153	434556	710917	Hincman	1987	420	--	26	--	S	--	--
OXW 154	434452	710816	Dunkerly	1987	510	--	139	--	X	--	BrW
OXW 155	434020	710337	Lane	1987	700	--	189	--	X	--	BrW
OXW 156	434059	710631	Cotton	1987	660	--	120	--	X	--	BrW
OXW 157	434153	710649	Pike Industries Inc	1987	570	--	149	--	X	--	BrW
OXW 158	434723	710608	Wand	1987	460	--	125	--	X	--	BrW
OXW 159	434333	710602	Pines Realty Trust	1986	520	--	40	--	X	--	BrW
OXW 160	433949	710556	Resotko	1987	650	--	60	--	X	--	BrW
OXW 161	434230	711039	Benson	1987	640	--	151	--	X	--	BrW
OXW 162	434221	710355	Stuart	1987	540	--	138	--	X	--	BrW
OXW 163	434316	710602	Buchikos	1988	520	--	40	--	X	--	BrW
OXW 164	434129	710728	L. DiCopua	1988	720	--	110	--	--	--	Dug
OXW 165	434525	711052	Denisco	1988	600	--	49	--	X	--	BrW
OXW 166	434711	710543	Ossipee Val Masonic Tem	1988	540	--	44	--	S	--	--
OXW 167	434715	710609	Norton	1988	440	--	121	--	X	--	BrW
OXW 168	434532	711050	Lovely	1988	660	--	106	--	X	--	BrW
OXW 169	434723	710941	McDonough	1988	420	--	35	--	S	--	--
OXW 170	434407	710914	New Hampshire Electric Corp	1987	550	--	201	--	X	--	BrW
OXW 171	434540	711054	Brennick	1988	680	--	91	--	X	--	BrW
OXW 172	434730	710553	Correia	1988	430	--	101	--	X	--	BrW
OXW 173	434128	710659	New Hampshire Hwy Barn Div 307	1988	640	--	63	--	X	--	BrW
OXW 174	433910	710414	Tarabanovic	1988	640	--	119	--	X	--	BrW
OXW 175	434227	710537	Hart	1988	560	--	72	--	X	--	BrW
OXW 176	434225	710400	Schultz	1988	540	--	59	--	X	--	BrW
OXW 177	434317	710546	Sampson	1988	500	--	40	--	X	--	BrW
OXW 178	434724	711035	Montanez	1989	420	--	35	--	S	--	--
OXW 179	434528	711043	Mountain Road Realty	1989	600	--	80	--	X	--	BrW
OXW 180	434707	710938	Bramhall	1989	460	--	59	--	S	--	--
OXW 181	434142	711142	Bethel	1989	760	--	201	--	X	--	BrW
OXW 182	434330	710537	Willey	1989	510	--	104	--	X	--	BrW
OXW 183	434049	710724	Clinton	1989	680	--	80	--	X	--	BrW
OXW 184	434138	711147	Martin	1989	750	--	201	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Ossipee--Continued</b>									
OXW 130	--	--	H	2	--	--	.5		
OXW 131	36	06-29-85	H	10	--	--	3		
OXW 132	25	04-27-85	H	60	--	--	2		
OXW 133	150	03-13-85	H	1.5	--	--	1		
OXW 134	22	06-20-85	H	3	--	--	.5		
OXW 135	30	10-26-85	H	11	--	--	.5		
OXW 136	7.5	10-05-85	P	60	--	--	2		
OXW 137	15	08-28-85	H	3	--	--	1		
OXW 138	--	--	H	2.5	--	--	.5		
OXW 139	--	--	H	2	--	--	.5		
OXW 140	40	06-02-86	H	25	--	--	.5		
OXW 141	25	06-06-86	H	3.5	--	--	.5		
OXW 142	11	08-25-86	H	30	--	--	1		
OXW 143	55	04-27-84	H	15	--	--	2		
OXW 144	--	--	H	5	--	--	1		
OXW 145	5	12-04-86	H	1.8	--	--	1		
OXW 146	20	12-04-86	N	25	--	--	1		
OXW 147	20	05-06-87	H	4	--	--	.5		
OXW 148	25	05-14-87	H	30	--	--	.5		
OXW 149	20	05-28-87	H	25	--	--	.5		
OXW 150	20	05-18-87	H	0.8	--	--	1		
OXW 151	--	--	H	4	--	--	1		
OXW 152	50	04-16-87	H	15	--	--	.5		
OXW 153	8	07-30-87	H	30	--	--	2		
OXW 154	--	--	H	35	--	--	2		
OXW 155	--	--	H	20	--	--	1.5		
OXW 156	50	08-27-87	H	2	--	--	1		
OXW 157	60	03-13-87	C	1	--	--	1		
OXW 158	--	--	H	35	--	--	--		
OXW 159	--	--	H	30	--	--	.5		
OXW 160	20	12-12-87	H	1.5	--	--	.5		
OXW 161	50	09-22-87	H	2.5	--	--	1		
OXW 162	--	--	H	4	--	--	1		
OXW 163	45	04-15-88	H	1	--	--	1		
OXW 164	60	02-25-88	H	15	--	--	72		
OXW 165	20	05-20-88	H	4	--	--	1		
OXW 166	36.5	07-09-88	H	11	--	--	2		
OXW 167	30	05-04-88	H	50	--	--	.5		
OXW 168	40	05-04-88	H	1	--	--	1		
OXW 169	7.5	09-26-88	H	35	--	--	1		
OXW 170	--	--	N	8.5	--	--	.5		
OXW 171	--	--	H	30	--	--	1		
OXW 172	--	--	H	10	--	--	.8		
OXW 173	--	--	--	1.8	--	--	1		
OXW 174	--	--	H	--	--	--	--		
OXW 175	--	--	H	--	--	--	1		
OXW 176	--	--	H	6	--	--	1		
OXW 177	25	11-11-88	H	1.8	--	--	1		
OXW 178	7	06-03-89	H	20	--	--	1		
OXW 179	20	05-15-89	H	1	--	--	.5		
OXW 180	42	04-30-89	H	13.5	--	--	1		
OXW 181	45	07-08-89	H	15	--	--	1		
OXW 182	25	09-06-89	H	30	--	--	.5		
OXW 183	25	12-20-89	H	4	--	--	.5		
OXW 184	10	11-15-89	H	5	--	--	.5		



New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Ossipee--Continued</b>								
OXW 185	48	11-03-89	H	0.7	--	--	1	
OXW 186	--	--	H	7	--	--	.5	
OXW 187	--	--	H	1.5	--	--	.8	
OXW 188	25	01-04-91	H	30	--	--	1.5	
OXW 189	15	02-05-91	H	40	--	--	.5	
OXW 190	4	05-18-91	H	30	--	--	2	
OXW 191	25	08-15-91	H	4	--	--	1	
OXW 192	3.5	09-10-91	H	50	--	--	.5	
OXW 193	--	--	H	10	--	--	1	
OXW 194	26	08-17-91	H	15	--	--	1	
OXW 195	20	04-04-91	C	2.5	--	--	.5	
OXW 196	40	07-03-92	H	1.5	--	--	.5	
OXW 197	45	06-17-92	H	2.3	--	--	1	
OXW 198	36	07-11-92	H	10	--	--	3	
OXW 199	20	08-23-84	H	15	--	--	.5	
OXW 200	9	06-08-84	C	30	--	--	3	
OXW 201	50	07-25-84	H	6	--	--	.5	
OXW 202	30	10-11-84	H	3	--	--	.5	
OXW 203	28	10-06-84	H	4	--	--	.5	
OXW 204	15	07-02-84	H	30	--	--	1	
OXW 205	45	04-24-85	H	2.5	--	--	1	
OXW 206	30	05-31-85	H	6	--	--	.5	
OXW 207	150	07-09-85	H	1.5	--	--	1	
OXW 208	50	07-16-85	H	8.5	--	--	.5	
OXW 209	21	08-22-85	H	6	--	--	.5	
OXW 210	100	08-22-85	H	15	--	--	.5	
OXW 211	100	08-23-85	H	15	--	--	.5	
OXW 212	20	10-24-85	H	7.5	--	--	1	
OXW 213	--	--	H	25	--	--	.5	
OXW 214	5.5	10-19-85	H	40	--	--	2	
OXW 215	15	10-25-85	C	150	--	--	2	
OXW 216	55	06-17-86	H	6	--	--	.5	
OXW 217	55	06-23-86	H	2	--	--	.5	
OXW 218	55	06-12-86	H	50	--	--	.5	
OXW 219	15.5	10-03-86	C	30	--	--	2	
OXW 220	35	08-19-84	H	5	--	--	.5	
OXW 221	--	--	H	1.5	--	--	.5	
OXW 222	60	09-20-86	H	15	--	--	.5	
OXW 223	20	11-25-86	H	25	--	--	.5	
OXW 224	25	12-31-86	H	35	--	--	.5	
OXW 225	25	12-24-86	H	4	--	--	.5	
OXW 226	--	--	H	5	--	--	1	
OXW 227	--	--	H	0.8	--	--	1	
OXW 228	--	--	H	7	--	--	--	
OXW 229	4	05-28-87	H	--	--	--	--	
OXW 230	--	--	H	100	--	--	1	
OXW 231	20	06-10-87	C	25	--	--	48	
OXW 232	--	--	H	10	--	--	1	
OXW 233	40	07-22-87	H	15	--	--	.5	
OXW 234	250	08-14-87	H	50	--	--	.5	
OXW 235	20	08-17-87	H	3.5	--	--	.5	
OXW 236	62	08-24-87	H	1.5	--	--	1	
OXW 237	49	10-16-87	H	3	--	--	1	
OXW 238	45	10-15-87	H	6	--	--	1	
OXW 239	29	10-13-87	H	4	--	--	1	



New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				well yield (gallons per minute)	maximum well yield (gallons per minute)				
<b>Ossipee--Continued</b>									
OXW 240	--	--	H	1	--	--	--	1	
OXW 241	--	--	H	1	--	--	--	1	
OXW 242	--	--	H	0.8	--	--	--	.5	
OXW 243	--	--	H	20	--	--	--	.5	
OXW 244	--	--	H	10	--	--	--	.5	
OXW 245	65	11-04-87	H	3.5	--	--	--	1	
OXW 246	150	10-15-87	H	0.7	--	--	--	1	
OXW 247	28	10-13-87	H	3.5	--	--	--	.5	
OXW 248	--	--	H	3.5	--	--	--	1	
OXW 249	--	--	H	2	--	--	--	1	
OXW 250	--	--	H	4	--	--	--	1	
OXW 251	--	--	H	1	--	--	--	1.5	
OXW 252	--	--	H	0.4	--	--	--	1.5	
OXW 253	--	--	H	3	--	--	--	1.8	
OXW 254	32.5	09-10-88	H	12	--	--	--	2	
OXW 255	15	07-12-88	H	20	--	--	--	.5	
OXW 256	--	--	H	10	--	--	--	1	
OXW 257	28.5	10-02-88	H	13	--	--	--	1	
OXW 258	--	--	H	50	--	--	--	.5	
OXW 259	--	--	H	5	--	--	--	.5	
OXW 260	--	--	H	35	--	--	--	.5	
OXW 261	--	--	H	2.5	--	--	--	1.5	
OXW 262	60	01-11-89	H	6	--	--	--	1	
OXW 263	10	05-05-88	H	15	--	--	--	.5	
OXW 264	10	11-23-88	H	20	--	--	--	.5	
OXW 265	--	--	H	6	--	--	--	1	
OXW 266	--	--	H	150	--	--	--	1	
OXW 267	--	--	H	8	--	--	--	1	
OXW 268	5	09-12-89	H	50	--	--	--	.5	
OXW 269	--	--	H	4	--	--	--	.5	
OXW 270	50	07-25-89	H	12	--	--	--	.5	
OXW 271	--	--	H	3	--	--	--	--	
OXW 272	4	09-11-89	H	20	--	--	--	2	
OXW 273	--	--	H	2	--	--	--	1.3	
OXW 274	18	11-29-89	H	12	--	--	--	.5	
OXW 275	--	--	H	12	--	--	--	1	
DXW 276	4	03-03-90	H	60	--	--	--	2	
DXW 277	--	--	H	2	--	--	--	--	
DXW 278	50	09-20-90	H	6	--	--	--	.5	
DXW 279	20	11-01-88	H	6	--	--	--	1	
DXW 280	--	--	H	15	--	--	--	1	
DXW 281	--	--	H	6	--	--	--	.5	
DXW 282	15	04-06-91	H	25	--	--	--	1	
DXW 283	--	--	H	30	--	--	--	2	
DXW 284	33	07-03-91	H	10	--	--	--	1	
DXW 285	28	06-22-91	H	15	--	--	--	2	
DXW 286	20	08-10-91	H	30	--	--	--	1.5	
DXW 287	28	07-20-91	H	12	--	--	--	1	
DXW 288	30	06-25-91	H	50	--	--	--	.5	
DXW 289	35	07-25-91	H	2.5	--	--	--	.5	
DXW 290	--	--	H	5	--	--	--	66	
DXW 291	40	11-23-91	H	3.5	--	--	--	1	
DXW 292	80	12-09-92	Z	2	--	--	--	2	
DXW 293	20	07-06-91	H	3.5	--	--	--	.5	
DXW 294	10	02-28-92	H	15	--	--	--	.5	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Ossipee--Continued</b>											
OXW 295	434124	710656	Dellolio	1992	630	--	38	--	X	--	Brw
OXW 296	434133	710230	Matheny	1992	1,020	--	76	--	X	--	Brw
OXW 297	434058	710953	Sanders	1992	1,200	--	99	--	X	--	Brw
OXW 298	434925	711058	Brainerd	1992	450	--	39	--	S	--	--
OXW 299	434344	710758	Upson	1992	540	--	60	--	X	--	Brw
OXW 300	434620	710906	O'Donovan	1992	410	--	219	--	X	--	Brw
OXW 301	434932	711119	Buskirk	1992	450	--	79	--	S	--	--
OXW 302	434728	711037	Country Clipper	1992	420	--	35	--	S	--	--
OXW 303	434351	710911	Aller	1992	560	--	53	--	S	--	--
<b>Sandwich</b>											
SEA 1	434945	712029		1992	590	--	--	--	--	--	Bor
SEB 1	435258	712509		--	964.3	--	--	--	--	--	TH
SEB 11	435258	712508		--	961.1	--	--	--	--	--	TH
SEB 12	435012	712102		--	597.3	--	--	--	--	--	TH
SES 1	435238	712401		--	900	--	--	--	--	--	Sp
SES 2	435337	712427		--	1,040	--	--	--	--	--	Sp
SES 3	435319	712634	Mary P. Bullard Estate	--	1,140	--	--	--	--	--	Sp
SEW 3	434944	712904	Meade Base, Daniel Webs	--	960	6	--	S	X	--	--
SEW 4	434945	712905	Meade Base, Daniel Webs	--	980	48	10.4	R	O	--	Dug
SEW 18	434919	712711	Racine	1988	820	--	79	--	X	--	Brw
SEW 19	434927	712321	O'Brien	1984	640	--	27	--	X	--	Brw
SEW 20	435054	712721	Booty	1984	1,120	--	--	--	--	--	Dug
SEW 22	434917	712151	Philbin	1985	620	--	50	--	X	--	Brw
SEW 23	435231	712350	Moore	1985	870	--	--	--	--	--	Dug
SEW 24	434836	712023	Durgin	1985	740	--	281	--	X	--	Brw
SEW 25	435150	712448	Ritzenthaler	1985	800	--	120	--	X	--	Brw
SEW 26	434959	712042		1992	590	2	18	P	S	20	Bor
SEW 27	434859	712150	Bradfield	1986	600	--	39	--	X	--	Brw
SEW 28	435032	712119	Smith	1986	610	--	100	--	X	--	Brw
SEW 29	435251	712252	Viens	1986	980	--	174	--	X	--	Brw
SEW 30	434837	712249	Harvey	1986	760	--	19	--	X	--	Brw
SEW 32	435319	712202	Marino	1986	920	--	11	--	--	--	Dug
SEW 33	435014	712544	Tolles	1986	780	--	39	--	X	--	Brw
SEW 34	435001	712154	Barre	1986	600	--	62	--	X	--	Brw
SEW 39	435031	712411	Fair	1987	780	--	--	--	--	--	Dug
SEW 40	435046	712715	Starmer	1987	1,040	--	60	--	X	--	Brw
SEW 41	435117	712225	Everett	1987	750	--	130	--	X	--	Brw
SEW 42	435030	712142	Keith	1987	610	--	--	--	--	--	Dug
SEW 43	434903	712229	Hillsgrove	1987	600	--	38	--	X	--	Brw
SEW 46	434807	712113	McDonald	1986	840	--	20	--	X	--	Brw
SEW 47	435011	712206	King	1987	600	--	80	--	X	--	Brw
SEW 48	435253	712412	L. Elliott	1988	970	--	11	--	--	--	Dug
SEW 51	435053	712709	Booty	1988	1,020	--	60	--	X	--	Brw
SEW 54	434804	712107	O'Connor	1988	920	--	29	--	X	--	Brw
SEW 56	435150	712441	Conley	1988	800	--	105	--	X	--	Brw
SEW 57	435019	712119	S. Hoag	1988	610	--	--	--	--	--	Dug
SEW 59	434740	712148	Martines	1988	800	--	103	--	X	--	Brw
SEW 62	434953	712109	Fowler	1988	600	--	60	--	X	--	Brw
SEW 63	434808	712122	Neher and D. Perkins	1988	760	--	100	--	X	--	Brw
SEW 64	435242	712402	Lockhart	1988	910	--	171	--	X	--	Brw
SEW 65	435208	712406	Peaslee	1988	820	--	216	--	X	--	Brw
SEW 73	434756	712225	Frank	1987	680	--	40	--	X	--	Brw

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				(gallons per minute)					
<b>Ossipee--Continued</b>									
OXW 295	600	05-06-92	H	--	--	--	--	--	
OXW 296	30	05-23-92	H	1.5	--	--	--	1	
OXW 297	60	07-08-92	H	4	--	--	--	.5	
OXW 298	28	09-19-92	H	17	--	--	--	2	
OXW 299	40	11-01-92	H	3.5	--	--	--	1	
OXW 300	3	08-27-92	H	30	--	--	--	.5	
OXW 301	35	10-31-92	H	13	--	--	--	--	
OXW 302	9	11-29-92	H	5.3	--	--	--	1	
OXW 303	43	12-13-92	H	9	--	--	--	2	
<b>Sandwich</b>									
SEA 1	--	--	T	--	--	--	--	--	USGS
SEB 1	--	--	T	--	--	--	--	--	
SEB 11	--	--	U	--	--	--	--	--	
SEB 12	--	--	U	--	--	--	--	--	
SES 1	--	--	--	3.5	--	--	--	--	
SES 2	--	--	--	10	--	--	--	--	
SES 3	--	--	--	4	--	--	--	--	
SEW 3	--	--	H T	--	--	--	--	--	
SEW 4	10.4	07-29-91	U	--	--	--	--	--	
SEW 18	15	03-03-88	H	3	--	--	--	.8	
SEW 19	30	07-17-84	H	10	--	--	--	1	
SEW 20	3	09-24-84	H	--	--	--	--	--	
SEW 22	15	06-11-85	H	4	--	--	--	1	
SEW 23	3	08-09-85	H	--	--	--	--	--	
SEW 24	60	07-31-85	H	30	--	--	--	.5	
SEW 25	80	11-20-85	H	1.5	--	--	--	.5	
SEW 26	6	08-27-92	O	--	--	--	--	--	USGS
SEW 27	10	06-01-86	H	2	--	--	--	.5	
SEW 28	25	08-21-86	H	12	--	--	--	.5	
SEW 29	55	09-10-86	H	1.8	--	--	--	.5	
SEW 30	4	08-16-86	H	1.3	--	--	--	1	
SEW 32	6	09-08-86	H	--	--	--	--	--	
SEW 33	35	10-07-86	H	30	--	--	--	.5	
SEW 34	40	10-10-86	H	2.5	--	--	--	.5	
SEW 39	1	06-18-87	H	3	--	--	--	--	
SEW 40	30	06-15-87	H	30	--	--	--	1	
SEW 41	85	05-30-87	H	3	--	--	--	1	
SEW 42	10	06-25-87	H	5	--	--	--	1.3	
SEW 43	30	06-15-87	H	7	--	--	--	2	
SEW 46	--	--	H	2	--	--	--	.5	
SEW 47	10	09-16-87	H	3.5	--	--	--	.5	
SEW 48	3	01-13-88	H	--	--	--	--	--	
SEW 51	--	--	H	30	--	--	--	1	
SEW 54	--	--	H	1.5	--	--	--	1	
SEW 56	--	--	H	3	--	--	--	1	
SEW 57	8	07-30-88	H	30	--	--	--	3	
SEW 59	40	08-06-88	H	20	--	--	--	.5	
SEW 62	20	05-18-88	H	2	--	--	--	.5	
SEW 63	50	04-22-88	H	3	--	--	--	.5	
SEW 64	--	--	H	7	--	--	--	1	
SEW 65	80	10-06-88	H	2.5	--	--	--	.5	
SEW 73	10	08-19-87	H	15	--	--	--	.5	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Latitude	Long-itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Sandwich--Continued</b>											
SEW 74	434759	712204	Trombley	1988	700	--	131	--	X	--	BrW
SEW 75	435018	712123	Ingari and R. Demars	1989	610	--	17	--	--	--	Dug
SEW 76	434805	712109	Hunt	1988	900	--	40	--	X	--	BrW
SEW 77	434925	712834	Milbury	1988	920	--	99	--	X	--	BrW
SEW 81	435023	712415	Litzell	1988	780	--	85	--	X	--	BrW
SEW 82	435040	712118	Gove	1988	620	--	224	--	X	--	BrW
SEW 84	435324	712643	Berg	1989	1,220	--	43	--	X	--	BrW
SEW 85	435253	712359	Twaddie	1989	960	--	266	--	X	--	BrW
SEW 86	435122	712202	Azerrad	1989	640	--	111	--	X	--	BrW
SEW 87	435306	712231	Father & Son Construction	1989	1,000	--	56	--	X	--	BrW
SEW 88	434923	712207	Hoffman	1989	600	--	99	--	X	--	BrW
SEW 89	435014	712710	Nee	1989	880	--	45	--	X	--	BrW
SEW 92	435144	712224	Lombardi	1989	800	--	14	--	--	--	Dug
SEW 96	435115	712428	Caradona	1988	900	--	19	--	X	--	BrW
SEW 97	434732	712206	Everett	1988	760	--	69	--	X	--	BrW
SEW 98	435118	712445	Danielovich	1989	980	--	--	--	--	--	Dug
SEW 99	434835	712202	Bauderob	1989	700	--	57	--	X	--	BrW
SEW 101	435012	712358	Town of Sandwich	1989	670	--	53	--	X	--	BrW
SEW 102	435233	712403	Elliott	1989	870	--	251	--	X	--	BrW
SEW 103	435319	712156	Daniels	1990	910	--	14	--	--	--	Dug
SEW 104	435319	712620	Winship	1990	1,160	--	19	--	X	--	BrW
SEW 111	435331	712424		--	1,020	--	--	O	--	--	Dug
SEW 152	434856	712244	Mumford	1986	600	--	50	--	X	--	BrW
SEW 153	434929	712901	Wilber Cook	1971	890	36	12	C	O	--	Dug
SEW 154	434931	712849	Wilber Cook	--	890	36	4	R	O	--	Dug
SEW 155	434942	712721	E.H. Harding	1960	785	--	--	--	X	--	--
SEW 156	434929	712629	Legault	1979	975	6	40	S	X	--	BrW
SEW 157	435327	712413	Oilly Moulton	1975	990	--	--	--	X	--	--
SEW 158	435259	712447	Ed Wondoloski	--	985	36	10.6	C	O	--	Dug
<b>Tamworth</b>											
TAB 1	435135	711555	NHDOT	--	503	--	--	--	--	--	TH
TAB 2	435430	712034	NHDOT	--	1,085	--	--	--	--	--	TH
TAB 3	435332	711755	NHDOT	--	732	--	--	--	--	--	TH
TAB 4	434955	711602	NHDOT	--	465	--	--	--	--	--	TH
TAB 5	435022	711554	NHDOT	--	449	--	--	--	--	--	TH
TAB 6	435049	711557	NHDOT	--	480	--	--	--	--	--	TH
TAB 7	434936	711414	NHDOT	--	444.5	--	--	--	--	--	TH
TAB 8	434951	711631	NHDOT	--	485	--	--	--	--	--	TH
TAB 9	435428	712105		--	1,102.7	--	--	--	--	--	TH
TAS 1	435038	711528		--	450	--	--	--	--	--	Sp
TAS 2	435132	711906		--	550	--	--	--	--	--	Sp
TAW 1	434936	711947	Karl Bickford	--	590	--	--	--	--	--	--
TAW 2	435012	712016	Crory	1985	605	--	--	--	X	--	--
TAW 3	435000	711948		--	595	--	--	--	--	--	BrW
TAW 4	435008	711931	Valentine	1984	595	2	32	G	T	--	Dvn
TAW 5	434941	711943	Karl Bickford	--	595	--	--	--	X	--	BrW
TAW 6	434933	711857	Andy Norcorss	--	585	36	13.2	R	O	--	Dug
TAW 7	434934	711859	Irene Norcorss	--	590	--	--	--	X	--	--
TAW 8	434934	711911	John Cook	1981	595	6	60	S	X	--	BrW
TAW 9	434940	711919	David Whiting	1989	598	--	--	--	G	--	BrW
TAW 10	435035	711557	Woodward	1939	490	1	46	S	T	--	Dvn
TAW 11	435052	711549	Shaun Holladay	--	480	--	--	--	--	--	--
TAW 12	435040	711526	Dana and Laurie Bonica	1960	465	2	30	S	T	--	Dvn

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Sandwich--Continued</b>									
SEW 74	--	--	H	3	--	--	--	1	
SEW 75	11.5	01-06-89	H	30	--	--	--	--	
SEW 76	60	11-20-88	H	1.5	--	--	--	1	
SEW 77	--	--	H	8	--	--	--	1	
SEW 81	40	06-01-88	H	4	--	--	--	.5	
SEW 82	50	11-04-88	H	3	--	--	--	.5	
SEW 84	--	--	H	25	--	--	--	1	
SEW 85	35	03-29-89	H	10	--	--	--	.5	
SEW 86	--	--	H	8	--	--	--	1	
SEW 87	--	--	H	3	--	--	--	--	
SEW 88	--	--	H	20	--	--	--	48	
SEW 89	--	--	H	2	--	--	--	1	
SEW 92	3	10-24-89	H	4.5	--	--	--	.5	
SEW 96	--	--	H	30	--	--	--	1	
SEW 97	--	--	H	2	--	--	--	1	
SEW 98	8	09-29-89	H	5	--	--	--	3.5	
SEW 99	--	--	H	3	--	--	--	.5	
SEW 101	--	--	H	2	--	--	--	1	
SEW 102	--	--	H	1	--	--	--	1	
SEW 103	6	02-28-90	H	40	--	--	--	6	
SEW 104	--	--	H	25	--	--	--	.3	
SEW 111	11.5	07-29-91	--	--	--	--	--	--	
SEW 152	15	05-01-86	H	3.5	--	--	--	.5	
SEW 153	--	--	H S	--	--	--	--	--	Well was dry at the time of the interview
SEW 154	3.9	07-29-91	U	--	--	--	--	--	
SEW 155	--	--	H	--	--	--	--	--	
SEW 156	--	--	H	0.8	--	--	--	--	
SEW 157	--	--	H	11	--	--	--	--	
SEW 158	7.7	07-30-91	H	--	--	--	--	--	
<b>Tamworth</b>									
TAB 1	--	--	T	--	--	--	--	--	
TAB 2	--	--	T	--	--	--	--	--	
TAB 3	--	--	T	--	--	--	--	--	
TAB 4	--	--	T	--	--	--	--	--	
TAB 5	--	--	T	--	--	--	--	--	
TAB 6	--	--	T	--	--	--	--	--	
TAB 7	--	--	T	--	--	--	--	--	
TAB 8	--	--	T	--	--	--	--	--	
TAB 9	--	--	U	--	--	--	--	--	
TAS 1	--	--	--	--	--	--	--	--	
TAS 2	--	--	--	--	--	--	--	--	
TAW 1	--	--	H	--	--	--	--	--	
TAW 2	--	--	H	200	--	--	--	--	
TAW 3	--	--	H	--	--	--	--	--	
TAW 4	18	06-19-91	H	40	--	--	--	--	R High in iron, filters water
TAW 5	--	--	H	--	--	--	--	--	
TAW 6	9.5	06-19-91	U	--	--	--	--	--	Contaminated with salt
TAW 7	--	--	H	--	--	--	--	--	
TAW 8	--	--	H	2.5	--	--	--	--	
TAW 9	--	--	H	--	--	--	--	--	
TAW 10	18	06-19-91	H	--	--	--	--	--	
TAW 11	--	--	H	--	--	--	--	--	
TAW 12	--	--	T H	--	--	--	--	--	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-i-tude	Owner or user	Year com-pleted	Alt-i-tude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
Tamworth--Continued											
TAW 13	435134	711906	Deborah Alavosius	--	565	24	8.8	C	O	--	Dug
TAW 14	434950	711229	Lucille Swaim	1976	460	--	15	S	T	--	Dvn
TAW 15	435012	711230	Russell Kelley	1976	455	2	25	S	T	--	Dvn
TAW 16	435204	711255	Frederick Albers	1975	510	1	20	S	T	--	Dvn
TAW 17	435212	711250	Kenneth Wiggin	1967	515	1	32	G	T	--	Dvn
TAW 18	435219	711253	John Hartley	1984	520	6	60	S	X	--	BrW
TAW 19	435217	711253	John Hartley	1979	515	6	60	S	X	--	BrW
TAW 20	435011	711235	White Lake State Park	1969	450	--	--	--	X	--	BrW
TAW 21	434952	711304	White Lake State Park	1965	470	6	100	S	F	--	Wsh
TAW 22	435517	711321	Albert Rich	1966	615	2	9	S	T	--	Dvn
TAW 23	435520	711329	Albert Rich	1985	420	36	6	C	O	--	Dug
TAW 24	435341	711753		1966	810	--	--	--	X	--	BrW
TAW 25	435430	712047		--	1,098	--	--	--	T	--	Dvn
TAW 26	435113	711825	Richard Alt	1971	545	36	13.9	C	O	--	Dug
TAW 28	435427	712011		1930	1,150	--	--	--	O	--	Dug
TAW 29	435430	712012		1966	1,165	--	--	--	O	--	Dug
TAW 30	435432	712019		--	1,165	--	--	--	O	--	Dug
TAW 31	435016	711406	USGS	1991	450	2	109	P	S	114	Bor
TAW 32	435005	711945	USGS	1991	600	2	35	P	S	37	Bor
TAW 32	435005	711945		--	600	2	42	P	--	--	--
TAW 33	435000	711337	USGS	1991	450	2	65.5	P	S	67.5	Bor
TAW 34	435013	711521	USGS	1991	450	2	38	P	S	40	Bor
TAW 35	435033	711505	Lee	1984	470	--	--	--	S	--	--
TAW 36	435111	711546	Austin	1984	490	--	--	--	S	--	--
TAW 37	434934	711351	Holstein	1985	450	--	--	--	--	--	--
TAW 38	435035	711506	Powers	1985	470	--	--	--	S	--	--
TAW 39	435037	711509	McCabe	1985	470	--	--	--	S	--	--
TAW 40	435032	711503	Meehaw	1985	470	--	--	--	S	--	--
TAW 41	435229	711619	Vittum	1985	685	--	--	--	X	--	BrW
TAW 42	435214	711259	Hanson	1985	510	--	64	--	X	--	BrW
TAW 43	434935	711352	Klein	1985	450	--	49	--	S	--	--
TAW 44	435033	711230	Sigston	1986	455	--	51	--	X	--	BrW
TAW 45	435106	711145	Flynn	1986	490	--	62	--	S	--	--
TAW 46	435022	711557	Marrone	1986	465	--	53	--	S	--	--
TAW 47	435108	711209	Wick	1986	490	--	63	--	S	--	--
TAW 48	435113	711159	Griffin	1986	490	--	64	--	S	--	--
TAW 49	435300	711338	Chapman	1986	540	--	87	--	S	--	--
TAW 50	434935	711417	Douville	1986	435	--	285	--	X	--	BrW
TAW 51	435104	711157	Baima	1986	490	--	60	--	S	--	--
TAW 52	435115	711206	Lindstrom	1986	490	--	69	--	S	--	--
TAW 53	435056	711144	Poremski	1986	490	--	--	--	S	--	--
TAW 54	435031	711512	Neal	1986	460	--	--	--	S	--	--
TAW 55	435055	711206	LaLancette	1986	470	--	49	--	S	--	--
TAW 56	435120	711153	Putnam	1986	490	--	139	--	X	--	BrW
TAW 57	435019	711151	Pinetree Power	1986	470	--	119	--	X	--	BrW
TAW 58	435003	711149	Pinetree Power	1986	470	--	94	--	X	--	BrW
TAW 59	435011	711148	Pinetree Power	1986	470	--	89	--	X	--	BrW
TAW 60	435012	711604	Tamworth Pre School	1987	490	--	68	--	X	--	BrW
TAW 61	435058	711242	Blinn	1987	490	--	19	--	S	--	--
TAW 62	434945	711459	Bagbutt	1987	445	--	39	--	X	--	BrW
TAW 63	435046	711555	Cutrone	1987	470	--	--	--	--	--	Dug
TAW 64	435030	711502	McCarthy	1987	460	--	35	--	S	--	--
TAW 65	435121	711215	Dodge	1987	460	--	44	--	S	--	--
TAW 66	435041	711229	Westinghouse Electric Co	1987	455	--	107	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Tamworth--Continued</b>								
TAW 13	6.4	06-19-91	H	--	--	--	--	R
TAW 14	--	--	H	--	--	--	--	Lots of iron and magnesium
TAW 15	14	----76	H	--	--	--	--	Contains iron
TAW 16	--	--	H	6	--	--	--	
TAW 17	17	----67	H	--	--	--	--	A little hard
TAW 18	--	--	H	1.5	--	--	--	
TAW 19	--	--	H	3.5	--	--	--	
TAW 20	--	--	T H	18	--	--	--	
TAW 21	--	--	T H	200	--	--	--	
TAW 22	3	06-21-91	H	--	--	--	--	
TAW 23	4	06-21-91	H	--	--	--	--	
TAW 24	30	----66	H	3	--	--	--	Hard water
TAW 25	--	--	H	--	--	--	--	
TAW 26	4.8	06-21-91	I H	--	--	--	--	R
TAW 28	5.2	06-21-91	H	--	--	--	--	High iron
TAW 29	10	06-21-91	H	--	--	--	--	High iron, will go dry if water garden too long
TAW 30	2	06-21-91	H	--	--	--	--	
TAW 31	18	09-27-91	O	--	--	--	--	USGS
TAW 32	--	--	O	--	--	--	--	USGS
TAW 32	--	--	O	--	--	--	--	
TAW 33	27	10-17-91	O	--	--	--	--	USGS
TAW 34	--	--	O	12	--	--	--	USGS
TAW 35	--	--	H	13	--	--	2	
TAW 36	18	08-30-84	H	7.5	--	--	2	
TAW 37	12	04-16-85	H	16.5	--	--	2	
TAW 38	21	04-14-85	H	12	--	--	3	
TAW 39	21	07-07-85	H	30	--	--	1	
TAW 40	27	06-29-85	H	16.5	--	--	2	
TAW 41	20	09-06-85	H	2	--	--	.5	
TAW 42	30	12-06-85	H	10	--	--	.5	
TAW 43	12	09-22-85	H	50	--	--	2	
TAW 44	--	--	P	40	--	--	1	
TAW 45	50	01-18-86	H	7.5	--	--	3	
TAW 46	41	03-09-86	H	6	--	--	2	
TAW 47	52	05-18-86	H	8	--	--	2	
TAW 48	47	05-18-86	H	5	--	--	2	
TAW 49	30	07-08-86	H	20	--	--	12	
TAW 50	15	08-13-86	H	15	--	--	.5	
TAW 51	46	10-25-86	H	10	--	--	1	
TAW 52	54	09-07-86	H	6	--	--	2	
TAW 53	44	08-23-86	H	10	--	--	2	
TAW 54	12	08-09-86	H	40	--	--	1	
TAW 55	33	07-19-86	H	15	--	--	2	
TAW 56	50	10-07-86	H	1.5	--	--	1	
TAW 57	30	06-25-86	--	5	--	--	1	
TAW 58	30	06-25-86	--	50	--	--	2	
TAW 59	30	06-27-86	C	150	--	--	.5	
TAW 60	30	01-24-87	H	1.3	--	--	1	
TAW 61	15	05-07-87	H	35	--	--	1	
TAW 62	30	06-29-87	H	3.5	--	--	.5	
TAW 63	9	06-24-87	H	--	--	--	--	
TAW 64	22	07-08-87	H	15	--	--	2	
TAW 65	30.5	06-09-87	H	8.5	--	--	2	
TAW 66	--	--	--	2	--	--	--	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat- itude	Long- itude	Owner or user	Year com- pleted	Alt- itude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Tamworth--Continued</b>											
TAW 67	434952	711544	Welch	1987	465	--	--	--	--	--	Dug
TAW 68	434939	711435	Johnson	1987	445	--	--	--	--	--	Dug
TAW 69	435101	711141	Fenderson	1987	445	--	56	--	S	--	--
TAW 70	435040	711510	Austin	1987	470	--	70	--	X	--	BrW
TAW 71	434956	711554	Wilkinson	1987	465	--	61	--	X	--	BrW
TAW 72	435058	711144	Delgado	1988	490	--	56	--	S	--	--
TAW 73	435303	712051	Deo	1988	930	--	231	--	X	--	BrW
TAW 74	435351	711820	Costa	1988	825	--	219	--	X	--	BrW
TAW 75	435048	711237	Hobbs	1988	490	--	181	--	X	--	BrW
TAW 76	435100	711203	Hidden	1988	485	--	59	--	S	--	--
TAW 77	435219	711621	Swan	1988	600	--	20	--	S	--	--
TAW 78	435028	711457	Anderson	1988	455	--	41	--	S	--	--
TAW 79	435113	711208	Fumara	1988	490	--	66	--	S	--	--
TAW 80	435021	711623	Emmons	1988	490	--	80	--	X	--	BrW
TAW 81	435057	711208	Tully	1988	470	--	56	--	S	--	--
TAW 82	435430	712001	Farnham	1989	1,155	--	60	--	X	--	BrW
TAW 83	435057	711154	Dewing	1989	490	--	59	--	S	--	--
TAW 84	435112	711147	Dewing	1989	490	--	65	--	S	--	--
TAW 85	435116	711149	Talbot	1990	490	--	68	--	S	--	--
TAW 86	435058	711201	Braun	1990	480	--	62	--	S	--	--
TAW 87	435059	711214	Robbins	1990	470	--	70	--	S	--	--
TAW 88	435242	711646	Beecher	1990	650	--	40	--	X	--	BrW
TAW 89	435018	711609	Town of Tamworth	1988	490	--	63	--	X	--	BrW
TAW 90	434920	711311	Wrobleski	1990	450	--	44	--	S	--	--
TAW 91	435056	711243	Smith	1990	490	--	32	--	S	--	--
TAW 92	435049	711229	McLean	1990	490	--	--	--	--	--	Dug
TAW 93	435051	711229	Wilkinson	1984	490	--	--	--	X	--	BrW
TAW 94	435225	711620	Boucher	1984	665	--	--	--	--	--	--
TAW 95	435055	711548	Drugg	1984	485	--	--	--	X	--	BrW
TAW 96	435029	711459	Jones	1984	455	--	--	--	--	--	--
TAW 97	435108	711203	Learned	1984	480	--	--	--	--	--	--
TAW 98	435308	711656	Kennett	1984	820	--	240	--	X	--	BrW
TAW 99	435013	712022	White	1984	610	--	25	--	--	--	--
TAW 100	435135	711524	Tamworth Sand and Gravel	1984	500	--	1	--	--	--	Dug
TAW 101	435244	711324	Johnson	1984	530	--	40	--	--	--	BrW
TAW 102	435135	711232	DuPuis	1984	520	--	40	--	X	--	BrW
TAW 103	434929	711817	Moody	1984	590	--	29	--	X	--	BrW
TAW 104	435012	712020	Pacheco	1984	610	--	70	--	X	--	BrW
TAW 105	435121	711719	Cutter	1984	640	--	1	--	--	--	Dug
TAW 106	435107	711155	Wong and T. Terrance	1984	480	--	62	--	--	--	--
TAW 107	434943	711744	D. McGarity	1984	530	--	39	--	X	--	BrW
TAW 108	435236	711421	Howe	1984	770	--	195	--	X	--	BrW
TAW 109	435237	711421	Howe	1984	770	--	195	--	X	--	BrW
TAW 110	435218	711302	Roberge	1984	520	--	89	--	X	--	BrW
TAW 111	435300	711508	Eller	1984	840	--	226	--	X	--	BrW
TAW 112	435021	711620	Billings	1984	490	--	16	--	S	--	--
TAW 113	435010	711931	Valentine	1984	600	--	25	--	S	--	--
TAW 114	435117	711158	Vitiello	1984	480	--	67	--	--	--	--
TAW 115	435101	711209	Winslow	1985	470	--	80	--	--	--	--
TAW 116	435222	711302	Penta Corp	1985	520	--	58	--	X	--	BrW
TAW 117	435317	711335	Saxton	1985	740	--	30	--	X	--	BrW
TAW 118	435341	711419	Gill	1985	620	--	19	--	X	--	BrW
TAW 119	435110	711149	Whalen	1985	480	--	62	--	S	--	--
TAW 120	435100	711148	J. Pariseau	1985	480	--	62	--	S	--	--

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Tamworth--Continued</b>								
TAW 67	--	--	H	--	--	--	--	
TAW 68	--	--	H	--	--	--	--	
TAW 69	42	11-14-87	H	15	--	--	2	
TAW 70	40	09-24-87	H	6	--	--	.5	
TAW 71	10	11-30-87	H	0.5	--	--	1	
TAW 72	42	05-28-88	H	10	--	--	2	
TAW 73	--	--	H	35	--	--	1	
TAW 74	--	--	--	3	--	--	1	
TAW 75	--	--	H	20	--	--	.5	
TAW 76	44	10-02-88	H	12	--	--	1	
TAW 77	17	10-31-88	H	30	--	--	1	
TAW 78	18	11-19-88	H	30	--	--	2	
TAW 79	54	10-29-88	H	15	--	--	1	
TAW 80	28	10-25-88	H	1	--	--	1	
TAW 81	43	12-10-88	H	15	--	--	2	
TAW 82	35	03-27-89	H	50	--	--	.5	
TAW 83	44.5	05-07-89	H	12	--	--	2	
TAW 84	50	09-10-89	H	9.5	--	--	2	
TAW 85	50	02-24-90	H	10	--	--	1	
TAW 86	47	01-03-90	H	15	--	--	1	
TAW 87	55	01-28-90	H	9	--	--	1	
TAW 88	--	--	H	40	--	--	1	
TAW 89	--	--	--	15	--	--	1	
TAW 90	7	11-04-90	H	30	--	--	1.5	
TAW 91	29	12-01-90	H	15	--	--	1	
TAW 92	7	11-27-90	H	10	--	--	1.5	
TAW 93	30	06-19-84	H	1	--	--	1	
TAW 94	54	06-05-84	H	6	--	--	3	
TAW 95	15	10-31-84	H	20	--	--	.3	
TAW 96	25	09-29-84	H	15	--	--	2	
TAW 97	55	02-16-84	H	20	--	--	18	
TAW 98	90	03-12-84	H	2	--	--	.8	
TAW 99	13.5	06-13-84	H	25	--	--	2	
TAW 100	2	07-02-84	Z	--	--	--	--	
TAW 101	20	07-05-84	H	12	--	--	.5	
TAW 102	20	07-12-84	H	4.5	--	--	.5	
TAW 103	--	--	H	3	--	--	1	
TAW 104	--	--	H	5	--	--	1	
TAW 105	--	--	H	--	--	--	-	
TAW 106	46	05-22-84	H	10	--	--	2	
TAW 107	10	10-20-84	H	12	--	--	.5	
TAW 108	90	12-18-84	H	3	--	--	.5	
TAW 109	--	--	H	--	--	--	.5	
TAW 110	25	12-27-84	H	75	--	--	.5	
TAW 111	--	--	H	5	--	--	.5	
TAW 112	--	--	H	20	--	--	2	
TAW 113	12	08-15-84	H	40	--	--	2	
TAW 114	53	11-15-84	H	8	--	--	2	
TAW 115	45	05-17-85	H	30	--	--	12	
TAW 116	60	03-06-85	H	25	--	--	.5	
TAW 117	55	05-04-85	H	6	--	--	.5	
TAW 118	30	06-06-85	H	5	--	--	.5	
TAW 119	49	07-20-85	H	9	--	--	3	
TAW 120	--	--	H	10	--	--	2	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat- itude	Long- itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Tamworth--Continued</b>											
TAW 121	435117	711205	Demello	1985	480	--	62	--	S	--	--
TAW 122	435301	711624	Mahler	1985	820	--	60	--	X	--	BrW
TAW 123	435251	711348	Brothers	1985	550	--	151	--	X	--	BrW
TAW 124	435037	711855	Freeto	1985	720	--	209	--	X	--	BrW
TAW 125	435339	711242	Mille	1985	770	--	153	--	X	--	BrW
TAW 126	435240	711324	Robinson	1985	560	--	25	--	X	--	BrW
TAW 127	434947	711730	Whillemois	1985	510	--	35	--	X	--	BrW
TAW 128	435136	711416	McPeck	1985	700	--	200	--	X	--	BrW
TAW 129	435058	711213	Lavoie, Jr	1984	470	--	62	--	S	--	--
TAW 130	435234	711321	Pugh	1985	560	--	36	--	X	--	BrW
TAW 131	435347	711232	Brown	1985	820	--	59	--	X	--	BrW
TAW 132	435129	711831	Webster	1986	560	--	40	--	X	--	BrW
TAW 133	435055	711555	Woodside	1985	480	--	36	--	X	--	BrW
TAW 134	435249	711410	Gagnon	1985	640	--	49	--	X	--	BrW
TAW 135	435110	711157	Fusco	1985	480	--	62	--	S	--	--
TAW 136	435101	711144	Wogman	1985	480	--	62	--	S	--	--
TAW 137	435106	711146	Clayton	1985	480	--	63	--	S	--	--
TAW 138	435113	711204	Zilrat	1985	480	--	62	--	S	--	--
TAW 139	435118	711205	Stanley	1985	480	--	62	--	S	--	--
TAW 140	435105	711157	N. Lisano	1985	480	--	62	--	S	--	--
TAW 141	435056	711236	Avellani	1985	480	--	41	--	S	--	--
TAW 142	435144	711648	Palmer	1986	670	--	174	--	X	--	BrW
TAW 143	434929	711811	Tappen	1986	600	--	39	--	X	--	BrW
TAW 144	435103	711205	Powers	1986	480	--	50	--	S	--	--
TAW 145	435058	711150	Pieroni	1986	480	--	62	--	S	--	--
TAW 146	435059	711145	F. Pizzut	1986	480	--	59	--	S	--	--
TAW 147	435117	711148	Randozza	1986	480	--	67	--	S	--	--
TAW 148	435105	711152	Foley	1986	480	--	59	--	S	--	--
TAW 149	435107	711158	Boisvert	1986	480	--	59	--	S	--	--
TAW 150	435203	711649	Reigate Realty Trust	1986	640	--	120	--	X	--	BrW
TAW 151	434804	711826	Perry	1986	1,080	--	199	--	X	--	BrW
TAW 152	435236	711325	Roberts	1986	580	--	21	--	X	--	BrW
TAW 153	435257	711456	Marston	1986	840	--	131	--	X	--	BrW
TAW 154	435018	711233	Robiller	1987	450	--	28	--	S	--	--
TAW 155	435016	711233	Robiller	1987	450	--	28	--	S	--	--
TAW 156	435115	711202	S. Leong	1987	480	--	63	--	S	--	--
TAW 157	435250	711240	Chocorua Meadows Association	1987	590	--	173	--	X	--	BrW
TAW 158	435000	711214	Lundberg	1987	430	--	44	--	--	--	--
TAW 159	435249	711419	Yannalfo	1987	680	--	--	--	X	--	BrW
TAW 160	435459	711333	Creps	1987	680	--	19	--	X	--	BrW
TAW 161	435238	711320	Dyrenforth	1987	540	--	39	--	X	--	BrW
TAW 162	435248	711423	Kaufhold	1987	730	--	37	--	X	--	BrW
TAW 163	435112	711147	M. Pepin	1987	480	--	62	--	S	--	--
TAW 164	435107	711200	M. Merrill	1987	480	--	62	--	S	--	--
TAW 165	435123	711213	T. Greco	1987	450	--	26	--	S	--	--
TAW 166	435125	711212	M. Knapp	1987	450	--	21	--	S	--	--
TAW 167	435135	711228	Lloyd	1987	500	--	129	--	X	--	BrW
TAW 168	435251	711452	Elliott	1987	840	--	60	--	X	--	BrW
TAW 169	435105	711200	Kohut	1987	480	--	62	--	S	--	--
TAW 170	435247	711328	Whitting's Auto Body	1987	530	--	20	--	S	--	--
TAW 171	435226	711623	Norcross	1987	660	--	120	--	X	--	BrW
TAW 172	435003	711148	Pinetree Power	1987	470	--	135	--	X	--	BrW
TAW 173	435059	711153	J. Deslauriers	1987	480	--	62	--	S	--	--
TAW 174	435118	711207	H. Booska	1987	480	--	71	--	S	--	--
TAW 175	435425	711734	Lenauer	1987	840	--	253	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
				(gallons per minute)					
<b>Tamworth--Continued</b>									
TAW 121	52.5	07-12-85	H	7.5	--	--		3	
TAW 122	75	07-17-85	H	8.5	--	--		.5	
TAW 123	60	08-02-85	H	30	--	--		.5	
TAW 124	100	08-14-85	H	1.5	--	--		.5	
TAW 125	--	--	H	0.1	--	--		1	
TAW 126	15	08-20-85	H	15	--	--		.5	
TAW 127	12	08-27-85	H	50	--	--		.5	
TAW 128	--	--	H	75	--	--		.5	
TAW 129	48	11-02-84	H	10	--	--		3	
TAW 130	45	10-12-85	H	0.8	--	--		1	
TAW 131	60	10-15-85	H	25	--	--		.5	
TAW 132	35	10-18-86	H	1.8	--	--		1	
TAW 133	30	11-08-85	H	1.8	--	--		.5	
TAW 134	90	12-23-85	H	20	--	--		.5	
TAW 135	49	09-13-85	H	10	--	--		2	
TAW 136	48	09-28-85	H	10	--	--		2	
TAW 137	49.5	09-29-85	H	7.5	--	--		2	
TAW 138	54	08-10-85	H	8.5	--	--		2	
TAW 139	53	08-17-85	H	8	--	--		2	
TAW 140	47.5	08-01-85	H	9	--	--		3	
TAW 141	33	08-03-85	H	6.5	--	--		5	
TAW 142	--	--	H	1.3	--	--		.5	
TAW 143	25	09-18-86	H	50	--	--		.5	
TAW 144	35	10-12-86	H	10	--	--		2	
TAW 145	45	10-02-86	H	6	--	--		1	
TAW 146	45	06-10-86	H	12	--	--		1.5	
TAW 147	49	08-30-86	H	10	--	--		1	
TAW 148	42	08-30-86	H	12	--	--		1.5	
TAW 149	46	08-30-86	H	10.5	--	--		1	
TAW 150	100	11-06-86	H	30	--	--		.5	
TAW 151	13	10-24-86	H	30	--	--		2	
TAW 152	40	12-04-86	H	6	--	--		.5	
TAW 153	40	12-30-86	H	1.5	--	--		.5	
TAW 154	19	05-17-87	H	20	--	--		1	
TAW 155	19	05-17-87	H	20	--	--		1	
TAW 156	48	05-16-87	H	12	--	--		2	
TAW 157	--	--	P	25	--	--		1	
TAW 158	15	01-05-87	P	35	--	--		6	
TAW 159	110	06-03-87	H	6.5	--	--		.5	
TAW 160	30	06-18-87	H	0.3	--	--		1	
TAW 161	--	--	H	1.3	--	--		1	
TAW 162	10	04-23-87	H	15	--	--		.5	
TAW 163	48	07-19-87	H	10	--	--		3	
TAW 164	48	08-07-87	H	11	--	--		3	
TAW 165	11	08-08-87	H	40	--	--		2	
TAW 166	6	08-08-87	H	50	--	--		2	
TAW 167	150	08-27-87	H	2.5	--	--		.5	
TAW 168	60	07-10-87	H	12	--	--		.5	
TAW 169	46.5	08-15-87	H	11	--	--		2	
TAW 170	2	09-05-87	H	30	--	--		2	
TAW 171	--	--	H	2	--	--		1	
TAW 172	--	--	--	10	--	--		--	
TAW 173	44	09-19-87	H	10	--	--		2	
TAW 174	52	10-03-87	H	10	--	--		2	
TAW 175	--	--	H	1.5	--	--		1	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Lat-itude	Long-itude	Owner or user	Year com-pleted	Alt-i-tude above sea level (feet)	Dia-meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Tamworth--Continued</b>											
TAW 176	435106	711202	R. Boudrot	1987	480	--	62	--	S	--	--
TAW 177	435101	711201	Butler	1987	480	--	62	--	S	--	--
TAW 178	435112	711204	P. Coscia	1987	480	--	63.5	--	S	--	--
TAW 179	435006	711222	Kirkpatrick	1987	440	--	69	--	X	--	BrW
TAW 180	435008	711222	Miracle	1988	440	--	101	--	X	--	BrW
TAW 181	435055	711620	Webster	1987	520	--	202	--	X	--	BrW
TAW 182	435201	711618	Lord	1988	560	--	90	--	X	--	BrW
TAW 183	435206	711612	Dulski	1988	580	--	132	--	X	--	BrW
TAW 184	435010	711130	Cook Family Trust	1988	460	--	39	--	S	--	--
TAW 185	435106	711207	Fiumara	1988	480	--	50	--	S	--	--
TAW 186	435103	711152	K. Finlestein	1988	480	--	62	--	S	--	--
TAW 187	435114	711146	G. Learned	1988	480	--	68	--	S	--	--
TAW 188	435104	711145	Ruo	1988	480	--	60	--	S	--	--
TAW 189	435313	711347	Woodward	1988	640	--	80	--	X	--	BrW
TAW 190	435107	711148	Katsos	1988	480	--	59	--	S	--	--
TAW 191	435108	711206	Riccardi	1988	480	--	64	--	S	--	--
TAW 192	435122	711217	Hervieux	1988	450	--	120	--	X	--	BrW
TAW 193	435341	711820	O'Brien	1988	840	--	241	--	X	--	BrW
TAW 194	435140	711641	Burton	1988	640	--	2	--	--	--	Dug
TAW 195	435252	711449	B. Shipley	1988	840	--	59	--	X	--	BrW
TAW 196	435455	711331	New Dartmouth Bank	1988	700	--	19	--	X	--	BrW
TAW 197	435100	711151	Huddleston	1988	480	--	60	--	S	--	--
TAW 198	435103	711145	J. Ashe	1988	480	--	62	--	S	--	--
TAW 199	435140	711640	Burton	1988	640	--	214	--	X	--	BrW
TAW 200	434958	711229	Capalbo	1988	450	--	26	--	S	--	--
TAW 201	435135	711421	Staples	1988	740	--	249	--	X	--	BrW
TAW 202	435142	711240	Lonigro	1988	510	--	29	--	X	--	BrW
TAW 203	435102	711142	Campbell-Smith	1988	480	--	64	--	S	--	--
TAW 204	435249	711343	Cavalieri	1988	540	--	20	--	S	--	--
TAW 205	435212	711238	O'Hanian	1988	500	--	105	--	X	--	BrW
TAW 206	435103	711201	Fusco	1988	480	--	63	--	S	--	--
TAW 207	435103	711209	Birth	1988	470	--	84	--	S	--	--
TAW 208	435114	711207	Austin	1988	480	--	79	--	S	--	--
TAW 209	435003	711601	Martin Carrier Corp	1988	480	--	90	--	X	--	BrW
TAW 210	435005	711601	Martin Carrier Corp	1988	480	--	85	--	X	--	BrW
TAW 211	434944	711222	Chute	1988	440	--	74	--	X	--	BrW
TAW 212	434929	711818	N. Nielson	1988	590	--	39	--	X	--	BrW
TAW 213	435017	711232	Robiller	1989	450	--	65	--	X	--	BrW
TAW 214	435311	711357	T. Leonard	1989	580	--	146	--	X	--	BrW
TAW 215	435150	711233	Sampson	1989	480	--	62	--	X	--	BrW
TAW 216	435059	711200	C. Rebello	1989	480	--	65	--	S	--	--
TAW 217	435111	711204	L. Perry	1989	480	--	68	--	S	--	--
TAW 218	435238	711608	Elliott	1989	740	--	204	--	X	--	BrW
TAW 219	435044	711227	Ross	1989	480	--	76	--	S	--	--
TAW 220	435110	711154	C. Tierney	1989	480	--	70.5	--	S	--	--
TAW 221	435109	711151	D. Kenney	1989	480	--	62	--	S	--	--
TAW 222	435243	711312	Fortier	1989	520	--	138	--	X	--	BrW
TAW 223	435240	711310	L. Brett	1989	520	--	118	--	X	--	BrW
TAW 224	435242	711310	Free Baptist Society	1989	520	--	111	--	X	--	BrW
TAW 225	435158	711707	Hidden	1989	750	--	108	--	X	--	BrW
TAW 226	435122	711829	Bunker Hill Trust	1990	560	--	80	--	X	--	BrW
TAW 227	435105	711155	Ayers	1990	480	--	62	--	G	--	--
TAW 228	435429	711859	S. Cargill	1990	960	--	14	--	--	--	Dug
TAW 229	435102	711151	Bradshaw	1990	480	--	62	--	S	--	--
TAW 230	435004	711606	Woodman	1990	480	--	75	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Tamworth--Continued</b>									
TAW 176	48.5	12-05-87	H	12	--	--	--	2	
TAW 177	47	12-05-87	H	13	--	--	--	2	
TAW 178	50	11-14-87	H	10	--	--	--	2	
TAW 179	--	--	H	25	--	--	--	2	
TAW 180	--	--	H	3	--	--	--	1.5	
TAW 181	27	12-02-87	H	4	--	--	--	1	
TAW 182	30	03-09-88	H	100	--	--	--	.5	
TAW 183	60	03-10-88	H	60	--	--	--	.5	
TAW 184	27	04-17-88	H	10	--	--	--	2	
TAW 185	32	04-16-88	H	15	--	--	--	2	
TAW 186	44	04-30-88	H	12	--	--	--	1.5	
TAW 187	53	05-09-88	H	10	--	--	--	1	
TAW 188	48	05-28-88	H	10	--	--	--	2	
TAW 189	--	--	H	8	--	--	--	1	
TAW 190	48	07-24-88	H	11	--	--	--	2	
TAW 191	48.5	07-24-88	H	10	--	--	--	1	
TAW 192	30	06-03-88	H	4	--	--	--	.5	
TAW 193	60	07-20-88	H	40	--	--	--	.5	
TAW 194	--	--	H	--	--	--	--	--	
TAW 195	50	06-30-88	H	1	--	--	--	.5	
TAW 196	30	07-14-88	H	10	--	--	--	1	
TAW 197	47	10-30-88	H	13	--	--	--	1	
TAW 198	50	11-20-88	H	12	--	--	--	1	
TAW 199	--	--	H	7	--	--	--	1	
TAW 200	19	10-22-88	H	12	--	--	--	1	
TAW 201	--	--	H	30	--	--	--	1	
TAW 202	20	09-10-88	H	11	--	--	--	.5	
TAW 203	50	12-11-88	H	10	--	--	--	1.5	
TAW 204	5	12-10-88	H	30	--	--	--	2	
TAW 205	--	--	H	60	--	--	--	1	
TAW 206	47.5	12-11-88	H	14	--	--	--	3	
TAW 207	--	--	H	25	--	--	--	12	
TAW 208	60	12-14-88	H	25	--	--	--	1	
TAW 209	20	12-20-88	H	50	--	--	--	.5	
TAW 210	20	12-20-88	H	50	--	--	--	.5	
TAW 211	28	11-30-88	H	4.5	--	--	--	1	
TAW 212	15	06-07-88	H	0.5	--	--	--	1	
TAW 213	60	06-01-89	H	10	--	--	--	1	
TAW 214	10	03-27-89	H	5	--	--	--	.5	
TAW 215	--	--	H	25	--	--	--	.8	
TAW 216	47.5	04-02-89	H	13	--	--	--	2	
TAW 217	52.5	07-04-89	H	10	--	--	--	1	
TAW 218	70	06-15-89	H	3	--	--	--	2	
TAW 219	47	08-27-89	H	8.5	--	--	--	2	
TAW 220	52	10-18-89	H	9	--	--	--	.5	
TAW 221	49	09-24-89	H	10	--	--	--	2	
TAW 222	--	--	H	4	--	--	--	1	
TAW 223	--	--	H	3	--	--	--	1	
TAW 224	20	09-20-89	H	4	--	--	--	1	
TAW 225	10	09-22-89	--	2	--	--	--	.5	
TAW 226	14	01-20-90	H	9	--	--	--	.8	
TAW 227	43	05-05-90	H	16	--	--	--	2	
TAW 228	6	09-07-90	H	1	--	--	--	--	
TAW 229	47	09-29-90	H	12	--	--	--	1	
TAW 230	20	06-11-90	H	80	--	--	--	.5	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Latitude	Long- itude	Owner or user	Year completed	Altitude above sea level (feet)	Dia- meter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Tamworth--Continued</b>											
TAW 231	435414	711842	Pray	1990	815	--	164	--	X	--	BrW
TAW 232	434952	711627	King	1990	480	--	40	--	X	--	BrW
TAW 233	434945	711230	Keough	1990	440	--	122	--	X	--	BrW
TAW 234	435100	711146	Delp	1990	480	--	62	--	S	--	--
TAW 235	434935	711354	Geary	1990	450	--	35	--	S	--	--
TAW 236	435032	711704	Ryder	1990	510	--	--	--	--	--	Dug
TAW 237	435055	711159	Burt	1990	480	--	59	--	S	--	--
TAW 238	435304	711624	Stevens	1990	880	--	40	--	X	--	BrW
TAW 239	435312	711313	Diphilippo	1990	690	--	151	--	X	--	BrW
TAW 240	435240	711312	Scolaro	1990	450	--	120	--	X	--	BrW
TAW 241	435059	711210	Twoney	1991	470	--	100	--	--	--	--
TAW 242	435105	711148	Azibert	1991	480	--	58	--	S	--	--
TAW 243	435103	711147	L. Cox	1991	480	--	59	--	S	--	--
TAW 244	435029	711557	Remick	1991	480	--	60	--	X	--	BrW
TAW 245	434950	711228	Swain	1991	440	--	111	--	X	--	BrW
TAW 246	435200	712003	Bleakney	1991	770	--	128	--	X	--	BrW
TAW 247	435056	711149	Eaton	1992	480	--	59	--	S	--	--
TAW 248	434938	711356	LaForge	1992	450	--	23	--	S	--	--
TAW 249	434941	711351	Spotholtz Family Trust	1992	450	--	14	--	S	--	--
TAW 250	435126	711613	B. Brinsack	1992	510	--	221	--	X	--	BrW
TAW 251	435309	711328	Wright	1992	700	--	141	--	X	--	BrW
TAW 252	435328	711751	Baker	1992	760	--	281	--	X	--	BrW
TAW 253	434939	711550	M. and S. Temkin	1992	490	--	100	--	X	--	BrW
TAW 254	435304	711315	Lessard	1992	680	--	130	--	X	--	BrW
TAW 255	435109	711553	Forst	1992	480	--	70	--	X	--	BrW
TAW 256	435012	711247	Mason	1992	450	--	49	--	--	--	--
TAW 257	435017	711230	Rosie's Restaurant	1991	450	--	32	--	S	--	--
<b>Tuftonboro</b>											
TZW 37	434204	711239	McClure	1985	1,060	--	20	--	X	--	BrW
TZW 73	434108	711147	Workman	1987	860	--	--	--	--	--	Dug
TZW 96	434110	711135	Libby	1987	880	--	59	--	X	--	BrW
TZW 134	433948	711223	Ringer	1989	980	--	54	--	X	--	BrW
TZW 159	434144	711207	Mott	1990	830	--	209	--	X	--	BrW
TZW 160	433949	711214	Banks	1990	980	--	69	--	X	--	BrW
TZW 165	434333	711415	Camp Merrow Vista	1990	960	--	50	--	X	--	BrW
<b>Wakefield</b>											
WAA 3	433830	710306		--	610	--	--	--	--	--	--
WAB 1	433807	710311	1955	--	585	--	--	--	--	--	TH
WAB 2	433741	710251	NHDOT	--	689	--	--	--	--	--	TH
WAW 3	433722	710258	Lupien	1984	780	--	40	--	X	--	BrW
WAW 5	433914	710005	Vrettos	1984	600	--	9.5	--	--	--	--
WAW 6	433714	705913	Slack	1984	580	--	181	--	X	--	BrW
WAW 7	433707	705919	McHugh	1984	580	--	62	--	--	--	--
WAW 8	434049	705937	McNur	1984	500	--	60	--	X	--	BrW
WAW 9	433808	710307	McCormick	1984	580	--	60	--	--	--	BrW
WAW 10	433811	710308	McCormick	1984	580	--	60	--	--	--	BrW
WAW 12	433714	705901	Galabrun	1984	560	--	123	--	X	--	BrW
WAW 13	433718	705901	Galabrun	1984	580	--	107	--	--	--	BrW
WAW 15	433752	710122	Gray	1984	620	--	104	--	--	--	BrW
WAW 16	433723	705853	Donnelly	1985	560	--	16	--	S	--	--
WAW 17	433717	705921	Dwyer	1984	620	--	48	--	S	--	--

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Tamworth--Continued</b>									
TAW 231	--	--	H	8	--	--	--	.5	
TAW 232	10	07-18-90	H	6.5	--	--	--	.5	
TAW 233	40	07-18-90	H	2.5	--	--	--	1	
TAW 234	--	--	H	13	--	--	--	1.5	
TAW 235	20	08-20-90	H	30	--	--	--	2	
TAW 236	10	05-10-90	H	6	--	--	--	4	
TAW 237	42	12-01-90	H	15	--	--	--	2	
TAW 238	10	08-18-90	H	15	--	--	--	.5	
TAW 239	40	12-01-90	H	2.5	--	--	--	1	
TAW 240	30	10-06-90	H	1.3	--	--	--	1	
TAW 241	55	04-05-91	H	30	--	--	--	1	
TAW 242	47	07-27-91	H	13	--	--	--	.5	
TAW 243	46.5	08-10-91	H	10	--	--	--	2	
TAW 244	60	08-29-91	H	1	--	--	--	1	
TAW 245	30	08-15-91	H	7	--	--	--	1	
TAW 246	30	07-17-91	H	1.5	--	--	--	1	
TAW 247	44.5	04-16-92	H	15	--	--	--	2	
TAW 248	12	06-08-92	H	35	--	--	--	2	
TAW 249	11.5	06-20-92	H	25	--	--	--	4	
TAW 250	15	07-09-92	H	30	--	--	--	.3	
TAW 251	100	08-15-92	H	1.5	--	--	--	1	
TAW 252	85	07-28-92	H	10	--	--	--	.5	
TAW 253	50	07-22-92	H	50	--	--	--	1	
TAW 254	--	--	H	6	--	--	--	1	
TAW 255	15	10-31-92	H	6	--	--	--	1	
TAW 256	10	10-25-92	P	70	--	--	--	18	
TAW 257	24	04-20-91	C	12	--	--	--	2	
<b>Tuftonboro</b>									
TZW 37	--	--	H	2.5	--	--	--	.5	
TZW 73	8	08-26-87	H	--	--	--	--	--	
TZW 96	--	--	H	9	--	--	--	1.5	
TZW 134	--	--	H	10	--	--	--	.5	
TZW 159	--	--	H	0.8	--	--	--	.7	
TZW 160	25	09-04-90	H	4	--	--	--	1	
TZW 165	40	10-27-90	H	40	--	--	--	.5	
<b>Wakefield</b>									
WAA 3	--	--	U	--	--	--	--	--	
WAB 1	--	--	T	--	--	--	--	--	
WAB 2	--	--	T	--	--	--	--	--	
WAW 3	--	--	H	5	--	--	--	.5	
WAW 5	2	06-14-84	H	30	--	--	--	2	
WAW 6	--	--	H	45	--	--	--	.5	
WAW 7	46.5	07-20-84	H	9	--	--	--	2	
WAW 8	20	09-11-84	H	6	--	--	--	.5	
WAW 9	30	08-23-84	H	4	--	--	--	.5	
WAW 10	30	08-20-84	H	0.2	--	--	--	1	
WAW 12	35	10-26-84	H	20	--	--	--	.5	
WAW 13	--	--	H	--	--	--	--	.5	
WAW 15	--	--	H	--	--	--	--	--	
WAW 16	7	05-19-85	H	15	--	--	--	2	
WAW 17	30	11-06-84	H	16	--	--	--	1	

**Table 1-1. Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central**

Local site number	Latitude	Longtitude	Owner or user	Year completed	Altitude above sea level (feet)	Diameter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
Wakefield--Continued											
WAW 18	433716	710000	Aaronian	1985	600	--	112	--	--	--	BrW
WAW 19	433738	705907	Patten	1985	560	--	161	--	--	--	BrW
WAW 21	433804	710257	Donnelly	1985	600	--	80	--	--	--	BrW
WAW 22	433726	710029	St. Cyr	1985	590	--	80	--	--	--	BrW
WAW 23	433828	705932	Harrison	1985	600	--	43	--	--	--	BrW
WAW 25	433753	705853	Chick	1985	560	--	28	--	S	--	--
WAW 26	433839	705938	Anderson	1985	640	--	119	--	--	--	BrW
WAW 27	433716	710000	Sapp	1985	600	--	120	--	--	--	BrW
WAW 28	433721	710000	Seftan	1985	620	--	109	--	--	--	--
WAW 29	433719	705947	Creighton	1985	580	--	120	--	--	--	BrW
WAW 33	433816	710300	Pike	1985	640	--	124	--	X	--	BrW
WAW 34	433833	710247	Lake Land Devel	1985	600	--	59	--	--	--	--
WAW 35	433841	705905	Harleb	1985	620	--	74	--	X	--	BrW
WAW 36	433812	710313	Ford	1985	620	--	89	--	--	--	BrW
WAW 37	433826	710305	Blackadar	1985	640	--	112	--	X	--	BrW
WAW 41	433853	705921	Toriano	1985	640	--	100	--	X	--	BrW
WAW 43	433749	705843	Downing	1986	580	--	45	--	--	--	BrW
WAW 45	433724	710013	Armburst	1986	590	--	60	--	X	--	BrW
WAW 46	433725	710024	St Cyr	1986	590	--	52	--	X	--	BrW
WAW 47	433728	710036	Doherty	1986	590	--	60	--	X	--	BrW
WAW 48	433726	705946	Burgess	1986	590	--	120	--	X	--	BrW
WAW 49	433818	710303	Donnelly	1986	640	--	161	--	X	--	BrW
WAW 50	433722	710106	Frechette	1986	600	--	48	--	X	--	BrW
WAW 51	433905	705930	Hagen	1986	600	--	95	--	X	--	BrW
WAW 52	433940	705936	Minnon	1986	640	--	38	--	X	--	BrW
WAW 54	433743	710206	Colella	1986	640	--	91	--	--	--	--
WAW 97	433944	705942	Minnon	1986	590	--	38	--	X	--	BrW
WAW 99	433652	705913	Carpentier	1986	570	--	19	--	X	--	BrW
WAW 100	433740	710212	Jones	1986	615	--	92	--	X	--	BrW
WAW 101	433706	705911	Gear	1986	570	--	170	--	X	--	BrW
WAW 102	433914	705926	McGrath	1986	620	--	76	--	X	--	BrW
WAW 103	433915	705926	Yeo	1986	620	--	71	--	X	--	BrW
WAW 104	434052	705958	Santos	1986	495	--	39	--	X	--	BrW
WAW 105	434032	705926	Hewitt	1986	525	--	40	--	X	--	BrW
WAW 106	433712	710100	Walsh	1987	605	--	79	--	X	--	BrW
WAW 107	433838	705858	Nichiniello	1987	630	--	75	--	X	--	BrW
WAW 108	433943	705936	Trask	1987	615	--	49	--	X	--	BrW
WAW 109	433944	705947	Michaud	1987	600	--	40	--	X	--	BrW
WAW 110	434101	705940	Fiore	1987	500	--	20	--	X	--	BrW
WAW 111	433828	705850	Tobin	1987	595	--	60	--	X	--	BrW
WAW 112	433747	710232	Walking	1987	620	--	67	--	X	--	BrW
WAW 113	433653	705917	Tandus Jr	1987	570	--	30	--	X	--	BrW
WAW 114	434107	705950	Chick	1987	490	--	27	--	X	--	BrW
WAW 115	433845	705902	Noviello	1987	630	--	33	--	X	--	BrW
WAW 116	433727	710131	Carney	1987	595	--	44	--	X	--	BrW
WAW 117	433755	710139	Fox	1987	600	--	125	--	X	--	BrW
WAW 118	433902	705922	Jaeger	1987	625	--	59	--	X	--	BrW
WAW 119	433841	705912	Perry	1987	610	--	100	--	X	--	BrW
WAW 120	433735	710156	Marston	1987	590	--	40	--	X	--	BrW
WAW 121	433757	710229	David	1987	595	--	19	--	X	--	BrW
WAW 122	433842	705928	Buxton	1987	590	--	74	--	X	--	BrW
WAW 123	433747	710226	Black	1987	595	--	72	--	X	--	BrW
WAW 124	433925	705934	Tryder	1988	590	--	59	--	X	--	BrW
WAW 125	433751	710234	O'Leary	1988	620	--	119	--	X	--	BrW

New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)	Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
Wakefield--Continued								
WAW 18	35	04-17-85	H	3.5	--	--	1	
WAW 19	50	04-19-85	H	5	--	--	1	
WAW 21	50	05-23-85	H	1.8	--	--	1	
WAW 22	20	05-29-85	H	9	--	--	.5	
WAW 23	10	05-29-85	H	8	--	--	.5	
WAW 25	19.5	05-01-85	H	35	--	--	2	
WAW 26	30	06-27-85	H	1.5	--	--	.5	
WAW 27	35	07-18-85	H	8	--	--	.5	
WAW 28	40	07-18-85	H	9	--	--	4	
WAW 29	40	08-08-85	H	40	--	--	.5	
WAW 33	--	--	H	25	--	--	1	
WAW 34	20	08-03-85	P	80	--	--	1	
WAW 35	--	--	H	4	--	--	1	
WAW 36	--	--	H	7	--	--	2	
WAW 37	--	--	H	5	--	--	1	
WAW 41	60	12-09-85	H	30	--	--	.5	
WAW 43	--	--	H	4	--	--	2	
WAW 45	10	04-01-86	H	12	--	--	.5	
WAW 46	10	04-02-86	H	5	--	--	.5	
WAW 47	10	04-03-86	H	20	--	--	.5	
WAW 48	50	04-04-86	H	5	--	--	.5	
WAW 49	55	04-10-86	H	1.5	--	--	.5	
WAW 50	10	04-14-86	H	60	--	--	.5	
WAW 51	4	04-29-86	H	15	--	--	.5	
WAW 52	10	05-09-86	H	10	--	--	1.5	
WAW 54	50	05-08-86	H	50	--	--	1	
WAW 97	10	05-09-86	H	10	--	--	1.5	
WAW 99	--	--	H	4	--	--	--	
WAW 100	--	--	H	1	--	--	1	
WAW 101	20	08-18-86	H	25	--	--	.5	
WAW 102	60	07-14-86	H	30	--	--	.5	
WAW 103	50	07-17-86	H	10	--	--	.5	
WAW 104	50	11-29-86	H	2	--	--	.5	
WAW 105	--	--	H	12	--	--	1	
WAW 106	--	--	H	15	--	--	1	
WAW 107	40	08-07-87	H	1	--	--	.5	
WAW 108	25	08-11-87	H	5	--	--	.5	
WAW 109	10	08-28-87	H	5	--	--	.5	
WAW 110	--	--	H	3	--	--	1	
WAW 111	--	--	H	5	--	--	.8	
WAW 112	--	--	H	50	--	--	1	
WAW 113	--	--	H	100	--	--	--	
WAW 114	--	--	H	10	--	--	--	
NAW 115	--	--	H	4	--	--	1	
NAW 116	--	--	H	3	--	--	1	
NAW 117	--	--	H	2	--	--	1	
NAW 118	--	--	H	1	--	--	1.5	
NAW 119	45	08-09-87	H	35	--	--	.5	
NAW 120	--	--	H	25	--	--	.3	
NAW 121	--	--	H	0.3	--	--	1	
NAW 122	20	05-07-87	H	7.5	--	--	.5	
NAW 123	--	--	H	100	--	--	1	
NAW 124	--	--	H	5	--	--	1	
NAW 125	--	--	H	0.2	--	--	4.5	

**Table 1-1.** Description of selected wells, borings, and springs in the Saco and Ossipee River Basins, east-central

Local site number	Latitude	Longtitude	Owner or user	Year completed	Altitude above sea level (feet)	Diameter of well casing (inches)	Depth to bottom of casing (feet)	Casing material	Type of finish	Depth to bottom of open section (feet)	Type of site
<b>Wakefield--Continued</b>											
WAW 126	433640	705844	S. Larson	1988	600	--	74	--	X	--	BrW
WAW 127	434042	705852	Flaherty	1988	540	--	93	--	X	--	BrW
WAW 128	433830	705927	Fisher	1988	595	--	40	--	X	--	BrW
WAW 129	433931	705928	Kench	1988	620	--	41	--	X	--	BrW
WAW 130	434100	710020	Dolaher	1988	520	--	59	--	X	--	BrW
WAW 131	434040	705931	Gillespie	1988	500	--	50	--	X	--	BrW
WAW 132	433745	710127	Brown	1988	610	--	131	--	X	--	BrW
WAW 133	433736	710200	Ellis	1988	595	--	84	--	X	--	BrW
WAW 134	433754	705911	R. Stevens	1988	560	--	129	--	X	--	BrW
WAW 135	433753	710233	Clark	1988	640	--	130	--	X	--	BrW
WAW 136	433700	710002	Spinale	1989	665	--	106	--	X	--	BrW
WAW 137	433924	705936	Perrin MD	1989	590	--	80	--	X	--	BrW
WAW 138	433751	710214	Irving	1988	600	--	--	--	S	--	BrW
WAW 139	433904	705920	Irving	1989	635	--	--	--	S	--	BrW
WAW 140	433658	710000	St.Cyr	1989	670	--	107	--	X	--	BrW
WAW 141	433844	705900	Hackett	1989	630	--	79	--	X	--	BrW
WAW 142	433730	710150	Tomasello	1989	590	--	59	--	X	--	BrW
WAW 143	433904	705949	Gautreau	1989	660	--	129	--	X	--	BrW
WAW 144	433903	705947	O'Connor	1989	660	--	113	--	X	--	BrW
WAW 145	434056	705951	Liani	1989	530	--	35	--	X	--	BrW
WAW 146	433745	710221	Dodge	1990	650	--	100	--	X	--	BrW
WAW 147	433722	705945	McCarthy	1990	615	--	--	--	--	--	BrW
WAW 148	433815	710215	Plouffe	--	590	--	--	--	T	--	Dvn
WAW 149	433814	710204	Ayles	--	595	36	10.7	C	O	--	Dug
WAW 150	434037	705919	Harold Mallett	1980	510	72	14.2	C	O	--	Dug
WAW 151	434036	705919	Artist Remick	1971	530	36	15.7	C	O	--	Dug
WAW 152	434042	705919	Asher	1950	490	72	9.5	R	O	--	Dug
WAW 153	434046	705928	Scott Carpenter	1976	490	--	8	G	T	--	Dvn
WAW 154	433815	705850	Gobbi	1976	600	--	22	S	T	--	Dvn
WAW 155	433640	705910	Gary Baker	1988	570	8	--	S	G	--	--
WAW 156	433641	705910		--	570	36	11.3	C	O	--	Dug
WAW 157	433820	710319	USGS	1991	620	2	47	P	S	49	Bor
<b>Wolfeboro</b>											
WRW 28	433834	710707	Brown	1985	1,090	--	95	--	X	--	BrW
WRW 38	434006	711136	Lavarelio	1986	1,160	--	38	--	X	--	BrW
WRW 50	433915	710559	Aversa	1986	720	--	38	--	X	--	BrW
WRW 63	433836	711144	Olimpio	1987	1,220	--	39	--	X	--	BrW
WRW 65	433855	710504	Wright	1987	840	--	80	--	X	--	BrW
WRW 98	433848	710453	Deyab and P. Martin	1988	840	--	40	--	X	--	BrW
WRW 135	433912	710544	Lush	1989	770	--	85	--	X	--	BrW
WRW 140	433855	710511	Gray	1990	840	--	53	--	X	--	BrW
WRW 144	433836	710708	Kelly	1990	1,100	--	60	--	X	--	BrW
WRW 156	433913	710550	Nepveu	1991	760	--	79	--	X	--	BrW

#### COOS COUNTY

##### Carroll

CFB	7	441257	712433	NHDOT	1964	1,889	--	--	--	--	TH
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New Hampshire--Continued

Local site number	Water level depth (feet)	Date mm/dd/yy	Use	Maximum well yield (gallons per minute)		Draw-down (feet)	Specific capacity (gallons per minute per foot)	Pumping period (hours)	Remarks
<b>Wakefield--Continued</b>									
WAW 126	--	--	H	8	--	--	--	1	
WAW 127	12	06-18-88	H	8	--	--	--	.5	
WAW 128	15	07-05-88	H	30	--	--	--	.5	
WAW 129	--	--	H	1	--	--	--	1.3	
WAW 130	--	--	H	100	--	--	--	.5	
WAW 131	--	--	H	12	--	--	--	1	
WAW 132	--	--	H	15	--	--	--	.8	
WAW 133	--	--	H	50	--	--	--	.8	
WAW 134	--	--	H	5	--	--	--	1	
WAW 135	30	12-08-88	H	5	--	--	--	.5	
WAW 136	--	--	H	2	--	--	--	1.5	
WAW 137	--	--	H	20	--	--	--	1	
WAW 138	3	06-23-88	H	20	--	--	--	5	
WAW 139	25	09-11-89	H	15	--	--	--	5	
WAW 140	20	07-28-89	H	20	--	--	--	.5	
WAW 141	75	09-06-89	H	100	--	--	--	1	
WAW 142	--	--	H	12	--	--	--	1	
WAW 143	--	--	H	30	--	--	--	1	
WAW 144	30	05-09-89	H	50	--	--	--	1	
WAW 145	--	--	H	15	--	--	--	1	
WAW 146	40	08-02-90	H	10	--	--	--	1	
WAW 147	15	05-19-90	H	15	--	--	--	8	
WAW 148	3.2	07-16-91	H	--	--	--	--	--	
WAW 149	3	07-16-91	H	--	--	--	--	--	
WAW 150	13.1	07-16-91	H	--	--	--	--	--	R
WAW 151	5.7	07-16-91	H	--	--	--	--	--	
WAW 152	4.9	07-17-91	H	--	--	--	--	--	R
WAW 153	4	07-17-91	T H	--	--	--	--	--	R
WAW 154	12	07-17-91	H	--	--	--	--	--	Contains iron
WAW 155	--	--	H	--	--	--	--	--	
WAW 156	5	07-17-91	H	--	--	--	--	--	
WAW 157	17	10-11-91	O	--	--	--	--	--	USGS
<b>Wolfeboro</b>									
WRW 28	20	12-18-85	H	2.5	--	--	--	1	
WRW 38	12	06-19-86	H	28	--	--	--	72	
WRW 50	--	--	H	1	--	--	--	1	
WRW 63	--	--	H	40	--	--	--	1	
WRW 65	30	08-13-87	H	12	--	--	--	.5	
WRW 98	15	07-05-88	H	6	--	--	--	.5	
WRW 135	--	--	H	35	--	--	--	.5	
WRW 140	20	09-18-90	H	20	--	--	--	1	
WRW 144	60	05-15-90	H	1	--	--	--	1	
WRW 156	--	--	H	7.5	--	--	--	.4	

COOS COUNTY

Carroll

CFB 7 -- -- T -- -- -- --

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**APPENDIX 2. Stratigraphic logs of selected wells  
and borings in the Saco and Ossipee River Basins,  
east-central, New Hampshire**

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**Table 2-1.** Stratigraphic logs of selected wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire.

**Local Site number:** First two characters are U.S. Geological Survey town and code. Third character indicates -- A, borings done for hydrologic purposes; B, borings done primarily for constructional purposes; S, springs; W, wells. The numbers are sequential numbers for each town.

**Depth drilled:** Depth drilled in feet below land-surface datum.

**Depth of well:** Depth of well in feet below land-surface datum.

**Depth to refusal:** Depth to bedrock or refusal in feet below land-surface datum.

**Depth to top:** Depth to top of lithologic unit, in feet below land-surface datum.

**Depth to bottom:** Depth to bottom of lithologic unit, in feet below land-surface datum.

#### Aquifer code:

Codes for the following geologic ages and aquifer materials are listed below.

110SDMN	Quaternary sediment, undifferentiated	110SOIL	Quaternary soil
111SDMN	Holocene sediments, undifferentiated	111FILL	Holocene fill
111SWMP	Holocene swamp deposits	112SRFD	Pleistocene stratified drift
112GLCL	Pleistocene glacial deposits, undifferentiated	112TILL	Pleistocene till
112CSR	Pleistocene lacustrine deposits	BEDROCK	bedrock

#### Lithology Code:

The following lithologic codes are used to describe aquifer units.

ALVM	alluvium	BLDR	boulders
GLCL	glacial (undifferentiated)	GRNT	granite
GRSC	gravel, silt, and clay	GRVL	gravel
MUCK	muck	OTHR	other
SAND	sand	SDCL	sand and clay
SDST	sand and silt	SGVC	sand, gravel, and clay
CLAY	clay	GRDS	gravel, sand, and silt
LOAM	loam	PEAT	peat
SDGL	sand and gravel	SILT	silt
STCL	silt and clay	TILL	till

The following abbreviations are used to modify the lithologic descriptions:

VF	Very fine	C	Coarse
F	Fine	VC	Very Coarse
M	Medium	S	Sand

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire

[--, A dash indicates no data available]

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
CARROLL COUNTY							
ALBANY							
ADB 2	50	--	--	0 3 5 19	3 5 19 --	112SRFD 112SRFD 112SRFD 112SRFD	SDGL SAND FS WITH SILT SDGL F TO M GRAVEL SAND FS WITH SILT AND STONES
ADB 5	9	--	--	0 4	4 --	112SRFD 112TILL	GRVL GRAVEL WITH BOULDERS TILL GRAVELLY TILL (HARDPAN)
ADB 6	15	--	--	0 3 6	3 6 --	112SRFD 112SRFD 112SRFD	SAND MS GRDS SILT, SAND, AND STONE SDGL SANDY GRAVEL
ADB 7	14	--	--	0 4	4 --	112SRFD 112SRFD	SDGL SDGL
ADB 8	21	--	21	0	--	112SRFD	GRVL GRAVEL WITH BOULDERS
ADB 9	29	--	29	0 10	10 --	112SRFD 112SRFD	GRVL GRAVEL WITH SILT GRVL GRAVEL AND BOULDERS
ADB 10	22	--	22	2	--	112SRFD	GRVL GRAVEL WITH BOULDERS
ADB 11	29	--	29	0 2 4	2 4 --	112SRFD 112SRFD 112SRFD	LOAM TOPSOIL SAND LOAMY FS SDGL M TO CS AND GRAVEL WITH SILT AND STONES
ADB 12	17	--	--	0	--	112SRFD	SDGL
ADW 1	420	--	--	--	--	--	--
ADW 2	63	61.5	--	--	--	--	--
ADW 3	39.5	22.5	--	--	--	--	--
ADW 4	32.2	29.8	--	--	--	--	--
ADW 5	113	99.1	--	--	--	--	--
ADW 6	31.4	31.4	--	--	--	--	--
ADW 7	--	503	--	0 30 273	30 273 --	110SDMN 112TILL BEDROCK	SDGL TILL GRAVEL, CLAY, HARDPAN
ADW 8	--	102	--	0 80	80 --	110SDMN 110SDMN	SAND F SDGL
ADW 9	--	8	--	--	--	110SDMN	SDGL
ADW 10	--	16	--	--	--	110SDMN	SDGL
ADW 11	--	12	--	--	--	110SDMN	SDGL
ADW 12	--	35	--	--	--	110SDMN	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>ALBANY--Continued</b>							
ADW 13	59	52.4	--	0 7 8 33  48 58	7 8 33 48  58	110SDMN 110SDMN 112SRFD 112SRFD  112SRFD 112TILL	ALVM PEAT SDGL C TO VCS (FS TO PEBBLES) SDGL VFS TO COBBLES, POORLY SORTED, SILTY SDGL CS, VCS, COBBLES, SILTY TILL
ADW 14	90	79.5	--	0 15 18 21 28 33 53 73 83	15 18 21 28 33 53 73 83 90	112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD	SDGL VCS (MS TO COBBLES) SDST VFS TO SILT SDGL CS TO GRANULES SAND VFS, FEW SILT LAMINAE SDGL CS (MS TO PEBBLES) SAND LAYERS, FS, MS, CS SDST LAYERS VFS, SILT SDGL CS (MS TO PEBBLES) SAND LAYERS VFS, FS, MS
ADW 15	90	18	90	0 15 18 21 28 33 53 73 83	15 18 21 28 33 53 73 83 90	112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD	SDGL VCS (MS TO COBBLES) SDST VFS TO SILT SDGL CS TO GRANULES SAND VFS, FEW SILT LAMINAE SDGL CS (MS TO PEBBLES) SAND LAYERS, FS, MS, CS SDST LAYERS VFS, SILT SDGL CS (MS TO PEBBLES) SAND LAYERS VFS, FS, MS
ADW 16	57.5	49.5	--	0 15 25 33 48 57	15 25 33 48 57 --	112SRFD 112SRFD 112GLCL 112SRFD 112SRFD BEDROCK	SDGL MS TO PEBBLES SAND LAYERS MS AND FS SGVC DIAMICTON SDGL VCS (MS TO SMALL PEBBLES) SAND FS (VFS TO MS)
ADW 17	--	280	--	0 3	3 --	110SDMN BEDROCK	SDGL
ADW 18	--	802	--	0 248	248 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
ADW 19	--	221	--	0 15 28	15 28 --	110SDMN 112TILL BEDROCK	SAND TILL
ADW 20	--	652	--	0 1	1 --	112TILL BEDROCK	TILL
ADW 21	--	421	--	0 12	12 --	112TILL BEDROCK	TILL
ADW 22	--	627	--	-- -- 223	-- 223 --	110SDMN 110SDMN BEDROCK	OTHR CLAY
ADW 23	--	302	--	0 40 90	40 90 --	112TILL 110SDMN BEDROCK	TILL CLAY
ADW 24	--	542	--	0 232	232 --	110SDMN BEDROCK	SDGL
ADW 25	--	802	--	0 115	115 --	110SDMN BEDROCK	SDCL
ADW 26	--	302	--	0 115	115 --	110SDMN BEDROCK	CLAY
ADW 27	--	523	--	0 12	12 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>ALBANY--Continued</b>							
ADW 28	--	20	--	--	--	112TILL	TILL
ADW 29	--	19	--	0	8	112TILL	TILL
				8	10	110SDMN	SDGL
				10	12	112TILL	TILL
				12	--	110SDMN	SDGL
ADW 30	--	421	--	0	2	112TILL	TILL
				2	--	BEDROCK	
ADW 31	--	242	--	0	17	112TILL	TILL
				17	--	BEDROCK	
ADW 32	--	202	--	0	18	112TILL	TILL
				18	--	BEDROCK	
ADW 33	--	282	--	0	120	112TILL	TILL
				120	270	BEDROCK	
				270	--	BEDROCK	
ADW 34	--	521	--	0	50	110SDMN	SDGL
				50	220	112TILL	TILL
				220	--	BEDROCK	
ADW 35	--	1110	--	0	22	112TILL	TILL
				22	--	BEDROCK	
ADW 36	--	280	--	0	205	112TILL	TILL
				205	--	BEDROCK	
ADW 37	--	422	--	0	60	112TILL	TILL
				60	--	BEDROCK	
ADW 38	--	424	--	0	180	112TILL	TILL
				180	200	BEDROCK	
				200	--	BEDROCK	
ADW 39	--	102	--	0	15	112TILL	TILL SAND, GRAVEL, HARDPAN
				15	--	BEDROCK	
ADW 40	--	345	--	0	15	110SDMN	SAND
				15	--	BEDROCK	
ADW 41	--	343	--	0	40	110SDMN	SDGL
				40	240	110SDMN	SDCL
				240	250	BEDROCK	
				250	--	BEDROCK	
ADW 42	--	922	--	11	--	BEDROCK	
ADW 43	--	422	--	0	45	112TILL	TILL
				45	--	BEDROCK	
ADW 44	--	322	--	0	25	112TILL	TILL
				25	--	BEDROCK	
ADW 45	--	422	--	0	15	112TILL	TILL
				15	--	BEDROCK	
ADW 46	--	523	--	0	180	112TILL	TILL
				180	--	BEDROCK	
ADW 47	--	727	--	0	40	110SDMN	SDCL
				40	50	110SDMN	SDGL
				50	--	BEDROCK	
ADW 48	--	325	--	0	60	112TILL	TILL
				60	--	BEDROCK	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>ALBANY--Continued</b>							
ADW 49	--	385	--	0 134	134	110SDMN BEDROCK	SDGL
	--	425	--	0 115	115	110SDMN BEDROCK	SDGL
ADW 51	--	145	--	0 26	26	110SDMN BEDROCK	SDGL
ADW 52	--	145	--	0 11	11	110SDMN BEDROCK	SDGL
ADW 53	--	225	--	0 108	108	110SDMN BEDROCK	SDGL
ADW 54	--	225	--	0 43	43	110SDMN BEDROCK	SDGL
ADW 55	--	165	--	0 30	30	110SDMN BEDROCK	SDGL
ADW 56	--	445	--	0 108	108	110SDMN BEDROCK	SDGL
ADW 57	--	405	--	0 87	87	110SDMN BEDROCK	SDGL
ADW 58	--	445	--	0 94	94	110SDMN BEDROCK	SDGL
ADW 59	--	325	--	0 12	12	110SDMN BEDROCK	SDGL
ADW 60	--	165	--	0 22	22	110SDMN BEDROCK	SDGL
ADW 61	--	285	--	0 68	68	110SDMN BEDROCK	SDGL
ADW 62	--	425	--	0 89	89	110SDMN BEDROCK	SDGL
ADW 63	--	345	--	0 18	18	110SDMN BEDROCK	SDGL
ADW 64	--	305	--	0 10	10	110SDMN BEDROCK	SDGL
ADW 65	--	445	--	0 50	50	110SDMN BEDROCK	SDGL
ADW 66	--	183	--	0 10	10	112TILL BEDROCK	TILL
ADW 67	12	12	--	--	--		
ADW 68	2.1	2.1	--	--	--		
ADW 69	6	6	--	--	--		
ADW 70	9.6	9.6	--	--	--		
<b>BARTLETT</b>							
BCB 2	11.3	--	--	0 2.5	2.5	112SRFD 112SRFD	SAND LOAMY SAND SDGL SAND AND GRAVEL WITH BOULDERS

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire—Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT--Continued</b>							
BCB 4	17	--	--	0	5	112SRFD	SDGL F TO CS AND GRAVEL
				5	9	112SRFD	PEAT PEAT AND WOOD
				9	--	112SRFD	SDGL F TO CS, COBBLES, BOULDERS, AND TRACES OF SILT
BCB 5	7	--	7	0	3	112SRFD	GRSC GRAVEL, SAND, AND SILT
				3	5	112SRFD	ROCK
				5	--	112SRFD	SILT SILT WITH WEATHERED ROCK
BCB 6	29	--	--	0	8	112SRFD	GRVL GRAVEL WITH BOULDERS
				8	12	112SRFD	BLDR CORED BOULDERS
				12	14	112SRFD	GRVL
				14	--	112SRFD	BLDR
BCB 7	27.5	--	--	0	8	112SRFD	SDGL TRACE OF SILT AND COBBLES
				8	18	112SRFD	SAND SILTY SAND
				18	--	BEDROCK	GRNT PINK CONWAY GRANITE
BCW 7	--	93	--	--	--	112SRFD	
BCW 8	--	305	--	120	--	BEDROCK	
BCW 9	--	1010	--	100	--	BEDROCK	
BCW 10	--	61	--	--	--	112SRFD	
BCW 11	--	289	--	111	--	BEDROCK	
BCW 12	--	80	--	--	--	112SRFD	
BCW 19	--	800	--	--	10	112TILL	TILL
				10	--	BEDROCK	
BCW 20	--	753	--	0	25	110SDMN	SDGL
				25	--	BEDROCK	
BCW 21	--	385	--	5	--	BEDROCK	
BCW 22	--	505	--	8	--	BEDROCK	
BCW 23	--	515	--	0	6	112TILL	TILL
				6	--	BEDROCK	
BCW 24	--	545	--	0	135	110SDMN	SAND
				135	--	BEDROCK	
BCW 25	--	245	--	0	18	112TILL	TILL
				18	--	BEDROCK	
BCW 26	--	527	--	0	70	112TILL	TILL GRAVEL, CLAY, HARDPAN
				70	150	112TILL	HARDPAN
				150	--	BEDROCK	
BCW 27	--	265	--	0	30	112TILL	TILL CLAY, HARDPAN
				30	--	BEDROCK	
BCW 28	--	242	--	0	5	110SDMN	SDGL
				5	50	110SDMN	SAND
				50	90	112TILL	TILL
				90	--	BEDROCK	
BCW 29	--	298	--	0	3	110SDMN	SDGL
				3	--	BEDROCK	
BCW 30	--	298	--	0	4	110SDMN	OTHR
				4	--	BEDROCK	
BCW 31	--	227	--	0	50	112TILL	TILL
				50	95	112TILL	TILL GRAVEL, HARDPAN
				95	--	BEDROCK	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT--Continued</b>							
BCW 32	--	277	--	0 60	60 --	112TILL BEDROCK	TILL
BCW 33	--	381	--	0 60	60 --	110SDMN BEDROCK	SDGL
BCW 34	--	575	--	0 4	4 --	112TILL BEDROCK	TILL
BCW 35	--	203	--	0 4	4 --	112TILL BEDROCK	TILL
BCW 36	--	321	--	0 125	125 --	112TILL BEDROCK	TILL
BCW 37	--	282	--	0 50 85	50 85 --	110SDMN 110SDMN BEDROCK	SDGL SAND
BCW 38	--	228	--	0 137	137 --	110SDMN BEDROCK	SDCL
BCW 39	--	302	--	0 61	61 --	112TILL BEDROCK	TILL
BCW 40	--	687	--	0 50	50 --	110SDMN BEDROCK	OTHR
BCW 41	--	477	--	0 76	76 --	110SDMN BEDROCK	OTHR
BCW 42	--	130	--	0	--	110SDMN	SDGL
BCW 43	--	265	--	0 78	78 --	110SDMN BEDROCK	SDGL
BCW 44	--	298	--	0 6	6 --	110SDMN BEDROCK	SDGL
BCW 45	--	277	--	0 133	133 --	112TILL BEDROCK	TILL
BCW 46	--	377	--	0 80 141	80 141 --	110SDMN 112TILL BEDROCK	CLAY TILL
BCW 47	--	452	--	0 80	80 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
BCW 48	--	502	--	0 30	30 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
BCW 49	--	327	--	0 45	45 --	112TILL BEDROCK	TILL
BCW 50	--	222	--	0 70	70 --	110SDMN BEDROCK	SDGL
BCW 51	--	222	--	0 70	70 --	110SDMN BEDROCK	SDGL
BCW 52	--	865	--	0 9	9 --	110SDMN BEDROCK	SDGL
BCW 53	--	985	--	0 3	3 --	110SDMN BEDROCK	SDGL
BCW 54	--	645	--	0	--	BEDROCK	
BCW 55	--	150	--	0 20	20 --	110SDMN BEDROCK	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT--Continued</b>							
BCW 56	--	150	--	0 130	130 --	110SDMN BEDROCK	SDGL
BCW 57	--	280	--	0 58	58 --	110SDMN BEDROCK	SDGL
BCW 58	--	401	--	0 78	78 --	110SDMN BEDROCK	SDGL
BCW 60	--	265	--	0 25	25 --	110SDMN BEDROCK	SAND
BCW 61	--	689	--	0 10	10 --	112TILL BEDROCK	TILL
BCW 62	--	990	--	0 3	3 --	110SDMN BEDROCK	SDGL
BCW 63	--	502	--	0	--	110SDMN	SDGL
BCW 64	--	177	--	0 37	37 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
BCW 65	--	242	--	0 80	80 --	110SDMN BEDROCK	SDGL
BCW 66	--	363	--	0 10 30	10 30 --	110SDMN 110SDMN BEDROCK	SAND SDGL
BCW 67	--	200	--	0 95	95 --	112TILL BEDROCK	TILL
BCW 68	--	225	--	0 97	97 --	112TILL BEDROCK	TILL
BCW 69	--	513	--	0 35	35 --	112TILL BEDROCK	TILL
BCW 70	--	363	--	0 75	75 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
BCW 71	--	322	--	0 25	25 --	112TILL BEDROCK	TILL
BCW 72	--	402	--	0 90 143	90 143 --	110SDMN 112TILL BEDROCK	SDGL TILL GRAVEL, CLAY, HARDPAN
BCW 73	--	444	--	0 15	15 --	110SDMN BEDROCK	SDGL
BCW 74	--	383	--	0 25	25 --	110SDMN BEDROCK	SDGL
BCW 75	--	80	--	--	--	110SDMN	SDGL
BCW 76	--	425	--	0 3	3 --	110SDMN BEDROCK	SDGL
BCW 77	--	305	--	0 60	60 --	110SDMN BEDROCK	CLAY
BCW 78	--	185	--	0 7	7 --	110SDMN BEDROCK	SDGL
BCW 79	--	75	--	--	--	110SDMN	SDGL
BCW 80	--	81	--	0 89	89 --	110SDMN BEDROCK	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT--Continued</b>							
BCW 81	--	302	--	0 45	45 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
BCW 82	--	92	--	0 130	130 --	110SDMN BEDROCK	SDGL
BCW 83	--	452	--	0 228	228 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
BCW 84	--	202	--	0 108	108 --	110SDMN BEDROCK	OTHR
BCW 85	--	1100	--	0 17	17 --	112TILL BEDROCK	TILL
BCW 86	--	200	--	0 60	60 --	110SDMN BEDROCK	SDGL
BCW 87	--	421	--	0 40 100	40 100 --	110SDMN 112TILL BEDROCK	SDGL TILL
BCW 88	--	402	--	0 15 115 125	15 115 125 --	110SDMN 112TILL BEDROCK BEDROCK	SDGL TILL CLAY, HARDPAN
BCW 89	--	305	--	0 4 30 40	4 30 40 --	110SDMN 110SDMN 110SDMN BEDROCK	SAND SDGL CLAY
BCW 90	--	141	--	0 10	10 --	112TILL BEDROCK	TILL
BCW 91	--	221	--	0 45	45 --	112TILL BEDROCK	TILL
BCW 92	--	402	--	0 88	88 --	112TILL BEDROCK	TILL
BCW 93	--	262	--	0 25	25 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
BCW 94	--	602	--	0 13	13 --	110SDMN BEDROCK	SDGL
BCW 95	--	802	--	0 24	24 --	110SDMN BEDROCK	SDGL
BCW 96	--	90	--	0 218	218 --	110SDMN BEDROCK	SDGL
BCW 97	--	423	--	0 100	100 --	110SDMN BEDROCK	SDGL
BCW 98	--	70	--	0 76	76 --	110SDMN BEDROCK	SDGL
BCW 99	--	322	--	0 45	45 --	112TILL BEDROCK	TILL
BCW 100	--	244	--	0 60	60 --	110SDMN BEDROCK	SDGL
BCW 101	--	622	--	0 15	15 --	112TILL BEDROCK	TILL
BCW 102	--	425	--	0 85	85 --	110SDMN BEDROCK	SGVC

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT--Continued</b>							
BCW 103	--	110	--	--	--	110SDMN	SDGL
BCW 104	--	280	--	0	40	110SDMN	SDGL
				40	50	110SDMN	CLAY
				50	--	BEDROCK	
BCW 105	--	385	--	0 24	24	110SDMN BEDROCK	SDGL
BCW 106	--	377	--	0 139	139	110SDMN BEDROCK	SDCL F
BCW 107	--	402	--	0 10	10	112TILL BEDROCK	TILL
BCW 108	--	361	--	0 150	150	112TILL BEDROCK	TILL
BCW 109	--	420	--	0 80 120	80 120	112TILL 110SDMN BEDROCK	TILL CLAY
BCW 110	--	141	--	0 25	25	112TILL BEDROCK	TILL
BCW 111	--	103	--	0 115	115	110SDMN BEDROCK	SDGL
BCW 112	--	103	--	0 115	115	110SDMN BEDROCK	SDGL
BCW 113	--	301	--	0 75	75	110SDMN BEDROCK	SDGL
BCW 114	--	123	--	0 5 23	5 23	110SDMN 110SDMN 110SDMN	SAND F SDGL C SAND
BCW 115	--	445	--	0 188	188	110SDMN BEDROCK	SGVC
BCW 116	--	752	--	0 75 161	75 161	112TILL 110SDMN BEDROCK	TILL SGVC
BCW 117	--	323	--	0 35	35	112TILL BEDROCK	TILL CLAY, HARDPAN
BCW 118	--	303	--	0 80	80	BEDROCK BEDROCK	
BCW 119	--	403	--	0 60 70	60 70	110SDMN 110SDMN BEDROCK	SDGL OTHR
BCW 120	--	60	--	0	--	110SDMN	SDGL
BCW 121	--	643	--	0 55	55	112TILL BEDROCK	TILL
BCW 122	--	322	--	0 18	18	112TILL BEDROCK	TILL
BCW 123	--	38	--	0 40 60	40 60	110SDMN 110SDMN BEDROCK	SDGL SDST
BCW 124	--	352	--	0 100	100	110SDMN BEDROCK	SGVC
BCW 125	--	302	--	0 8	8	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT--Continued</b>							
BCW 126	--	282	--	0 38	38 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
BCW 127	--	202	--	0 60 75	60 75 --	112TILL BEDROCK BEDROCK	TILL GRAVEL, HARDPAN
BCW 128	--	202	--	0 70	70 --	110SDMN BEDROCK	SDCL
BCW 129	--	402	--	0 18	18 --	112TILL BEDROCK	TILL
BCW 130	--	383	--	0 120	120 --	112TILL BEDROCK	TILL
BCW 131	--	624	--	0 80	80 --	110SDMN BEDROCK	SAND
BCW 132	--	322	--	0 35 50 88	35 50 88 --	110SDMN 110SDMN 112TILL BEDROCK	SDCL CLAY TILL
BCW 133	--	505	--	205	--	BEDROCK	
BCW 134	--	81	--	--	--	110SDMN	SDGL
BCW 135	--	152	--	0 120	120 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
BCW 136	--	303	--	0 10 60	10 60 --	112TILL BEDROCK BEDROCK	TILL
BCW 137	--	424	--	0 25 60	25 60 --	112TILL BEDROCK BEDROCK	TILL
BCW 138	--	182	--	0 100	100 --	112TILL BEDROCK	TILL
BCW 139	--	283	--	0 100 140	100 140 --	112TILL BEDROCK BEDROCK	TILL
BCW 140	--	322	--	0 20 58	20 58 --	110SDMN BEDROCK BEDROCK	OTHR
BCW 141	--	424	--	0 15	15 --	BEDROCK BEDROCK	
BCW 142	--	505	--	0 20	20 --	BEDROCK BEDROCK	
BCW 143	--	150	--	0 40 150	40 150 --	110SDMN BEDROCK BEDROCK	SDGL
BCW 144	--	100	--	0 40	40 --	110SDMN BEDROCK	SDGL
BCW 145	--	805	--	0 60	60 --	110SDMN BEDROCK	SGVC
BCW 146	--	142	--	0 16 18	16 18 --	110SDMN 110SDMN BEDROCK	SAND SDGL
BCW 147	--	81	--	79	--	BEDROCK	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT - Continued</b>							
BCW 148	--	360	--	0 75	75 --	112TILL BEDROCK	TILL
BCW 149	--	109	--	0 109	109 --	110SDMN BEDROCK	SDGL
BCW 150	--	342	--	0 90 135	90 135 --	112TILL BEDROCK BEDROCK	TILL
BCW 152	--	6	--	0 58	58 --	110SDMN BEDROCK	SDGL
BCW 153	--	222	--	0 25	25 --	110SDMN BEDROCK	SGVC
BCW 154	--	152	--	0 60	60 --	112TILL BEDROCK	TILL CLAY, HARDPAN
BCW 155	--	252	--	0 80	80 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
BCW 156	--	300	--	0 83	83 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
BCW 157	--	525	--	0 25 60	25 60 --	112TILL 110SDMN BEDROCK	TILL OTHR
BCW 158	--	524	--	0 10	10 --	112TILL BEDROCK	TILL
BCW 159	--	522	--	0 50	50 --	112TILL BEDROCK	TILL
BCW 160	--	564	--	0 3	3 --	112TILL BEDROCK	TILL
BCW 161	--	662	--	0 90	90 --	112TILL BEDROCK	TILL CLAY, HARDPAN
BCW 162	--	424	--	0 2	2 --	112TILL BEDROCK	TILL
BCW 163	--	600	--	0 118	118 --	110SDMN BEDROCK	SGVC
BCW 164	--	425	--	0 20 80	20 80 --	110SDMN BEDROCK BEDROCK	OTHR
BCW 165	--	1020	--	0 5	5 --	112TILL BEDROCK	TILL
BCW 166	--	503	--	0 2	2 --	112TILL BEDROCK	TILL
BCW 167	--	83.2	--	0 10 70	10 70 --	112SRFD 112SRFD 112SRFD	SDGL SAND SDGL
BCW 168	--	168	--	--	--		
BCW 169	--	500	--	0 130	130 --	112TILL BEDROCK	TILL
BCW 170	--	440	--	0 30 138	30 138 --	112TILL 110SDMN BEDROCK	TILL SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>BARTLETT--Continued</b>							
BCW 171	--	500	--	0 80 150	80 150 --	112TILL BEDROCK BEDROCK	TILL
BCW 172	--	422	--	0 30	30 --	112TILL BEDROCK	TILL
BCW 173	--	421	--	0 60	60 --	112TILL BEDROCK	TILL
BCW 174	--	523	--	0 20	20 --	112TILL BEDROCK	TILL
BCW 175	--	150	--	0 25	25 --	110SDMN BEDROCK	CLAY
BCW 176	23	18	--	0 15 18	15 18 --	110SDMN 112SRFD 112TILL	SDGL COBBLE GRAVEL SDGL M TO VCS AND PEBBLES TILL
BCW 177	23.5	22	23.5	0 17 18 23	17 18 23 23.5	110SDMN 112GLCL 112SRFD 112TILL	SDGL COBBLE GRAVEL GLCL DIAMICTON SDGL PEBBLE GRAVEL (F TO VCS/M TO VCS MATRIX) TILL
BCW 178	18.5	15	18.5	0 2 7 15 15	2 7 15 18.5	110SDMN 112SRFD 112SRFD 112TILL	LOAM SDGL COBBLE GRAVEL SDGL BOULDER GRAVEL TILL
<b>CHATHAM</b>							
CKB 1	25	--	--	--	--	112SRFD	SAND M TO C SAND
CKB 2	10	--	--	--	--	112SRFD	GRVL
CKB 3	10	--	--	0 5	5 --	112SRFD 112SRFD	GRVL SAND MS
CKB 4	7	--	7	--	--	112SRFD	GRVL
CKB 5	2.5	--	--	--	--	112SRFD	SAND FS
CKB 6	9	--	9	0 4	4 --	112SRFD 112SRFD	SDGL TILL SANDY TILL
CKB 7	8	--	8	0 1	1 --	112SRFD 112SRFD	GRVL GRVL SILTY GRAVEL
CKS 1	--	--	--	--	--	--	--
CKW 1	8.9	8.9	--	--	--	--	--
CKW 2	8.3	8.3	--	--	--	--	--
CKW 3	12.5	12.5	--	--	--	--	--
CKW 4	240	--	--	--	--	--	--
CKW 5	7.5	7.5	--	--	--	--	--
CKW 6	300	--	--	--	--	--	--
CKW 7	8.9	8.9	--	--	--	--	--
CKW 8	10.7	10.7	--	--	--	--	--

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>CHATHAM--Continued</b>							
CKW 9	89	30	--	0	18	112SRFD	SDGL M TO CS WITH GRANULES AND FEW PEBBLES
				18	39	112SRFD	SAND LAYERS FS TO MS
				39	72	112SRFD	SDST LAYERS VFS AND SILT
				72	85	112SRFD	SDGL MS TO PEBBLES, SILTY
				85	--	112TILL	TILL
CKW 10	107	60	107	0	23	110SDMN	ALVM VFS TO COBBLES
				23	48	112SRFD	SDGL CS (MS TO GRANULES)
				48	58	112SRFD	SAND FS / MS / CS (M TO VCS)
				58	73	112SRFD	SDGL MATRIX MOSTLY MS (MS TO PEBBLES)
				73	83	112SRFD	SAND MS / VFS TO FS
				83	95	112SRFD	SAND VFS
				95	107	112SRFD	SDGL CS (MS TO PEBBLES)
CKW 11	87.5	59	--	0	17	112SRFD	SDGL COBBLE GRAVEL WITH SMALL BLDRS
				17	53	112SRFD	SAND LAYERS F TO VFS WITH FEW MS LAYERS
				53	68	112SRFD	SAND MS (F TO MS) IRON STAINED LAYERS
				68	84	112SRFD	SDST LAYERS VFS AND SILT
				84	--	112TILL	TILL
CKW 12	--	803	--	0	50	110SDMN	SDGL
				50	178	112TILL	TILL CLAY, HARDPAN
				178	--	BEDROCK	
CKW 13	--	122	--	0	18	110SDMN	SDGL
				18	--	BEDROCK	
CKW 14	--	302	--	0	58	110SDMN	SGVC
				58	--	BEDROCK	
CKW 15	--	110	--	0	6	112TILL	TILL
				6	--	BEDROCK	
CKW 16	--	220	--	0	84	110SDMN	SAND
				84	--	BEDROCK	
CKW 17	--	262	--	0	80	112TILL	TILL
				80	--	BEDROCK	
CKW 18	--	401	--	0	4	112TILL	TILL
				4	--	BEDROCK	
CKW 19	--	323	--	0	15	110SDMN	OTHR
				15	--	BEDROCK	
CKW 20	--	402	--	0	10	110SDMN	SDGL
				10	--	BEDROCK	
CKW 21	--	422	--	0	62	112TILL	TILL GRAVEL, HARDPAN
				62	--	BEDROCK	
CKW 22	--	423	--	0	20	110SDMN	SDGL
				20	--	BEDROCK	
CKW 23	--	222	--	0	35	112TILL	TILL
				35	--	BEDROCK	
CKW 24	--	363	--	0	55	110SDMN	SDCL
				55	--	BEDROCK	
CKW 25	--	165	--	16	--	BEDROCK	
CKW 26	--	262	--	0	40	112TILL	TILL
				40	--	BEDROCK	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>CHATHAM--Continued</b>							
CKW 27	--	682	--	0 60 165	60 165 --	112TILL BEDROCK BEDROCK	TILL
CKW 28	--	362	--	0 135 145	135 145 --	112TILL BEDROCK BEDROCK	TILL
CKW 29	--	200	--	0 32	32 --	112TILL BEDROCK	TILL
CKW 30	--	225	--	0 25	25 --	112TILL BEDROCK	TILL
CKW 31	--	220	--	0 55 83	55 83 --	110SDMN 112TILL BEDROCK	SDGL TILL
CKW 32	--	420	--	0 15 57	15 57 --	110SDMN 112TILL BEDROCK	SDGL TILL
CKW 33	--	382	--	0 20	20 --	112TILL BEDROCK	TILL
CKW 34	--	325	--	0 12	12 --	110SDMN BEDROCK	SDGL
CKW 35	--	422	--	0 20 45	20 45 --	112TILL 110SDMN BEDROCK	TILL GRAVEL, HARDPAN CLAY
<b>CONWAY</b>							
CWA 1	49	--	--	0 7 8 23 33 41	7 8 23 33 41 --	110SDMN 110SDMN 110SDMN 112SRFD 112SRFD 112TILL	LOAM VFS TO SILT SAND CS (MS TO VCS) SDST VFS TO SILT SAND VFS GRAY STCL MASSIVE, GRAY TILL GRAY, COMPACT
CWW 10	--	--	--	--	--	--	--
CWW 44	--	110	--	--	--	112SRFD	
CWW 45	--	185	--	--	--	112SRFD	
CWW 46	--	428	--	75	--	BEDROCK	
CWW 47	--	305	--	70	--	BEDROCK	
CWW 48	--	530	--	80	--	BEDROCK	
CWW 49	--	140	--	122	--	BEDROCK	
CWW 50	--	385	--	65	--	BEDROCK	
CWW 51	--	118	--	60	--	BEDROCK	
CWW 52	--	405	--	40	--	BEDROCK	
CWW 53	--	225	--	475	--	BEDROCK	
CWW 54	--	100	--	--	--	112SRFD	
CWW 55	--	470	--	36	--	BEDROCK	
CWW 56	--	500	--	--	--	--	
CWW 57	--	180	--	--	--	112SRFD	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire—Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>CONWAY--Continued</b>							
CWW 58	--	52	--	--	--	112SRFD	
CWW 59	--	550	--	50	--	BEDROCK	
CWW 60	--	205	--	22	--	BEDROCK	
CWW 61	--	45	--	--	--	112SRFD	
CWW 62	--	156	--	145	--	BEDROCK	
CWW 63	--	225	--	130	--	BEDROCK	
CWW 64	--	515	--	148	--	BEDROCK	
CWW 65	--	258	--	102	--	BEDROCK	
CWW 66	119	50	--	0 23 43 68 78	23 43 68 78 --	112SRFD 112SRFD 112SRFD 112SRFD 112TILL	SDGL CS (MS TO COBBLES) SDGL CS (MS TO GRANULES) FEW PEBBLES (1 F TO MS LYR) SAND LAYERS MS TO CS, SOME VCS, 1 VFS AND SILT LAMINA SDGL CS - VCS (MS TO PEBBLES, SILTY) TILL
CWW 67	75	69	75	0 18 33 43 65	18 33 43 65 75	112SRFD 112SRFD 112SRFD 112SRFD 112SRFD	SDGL VCS (CS TO PEBBLES) SAND VFS TO FS SOME MS SDST VFS AND SILT WITH CLAY LAMANAE STCL GRAY SDGL MS TO VCS MATRIX, SILTY
CWW 68	--	440	--	21	--	BEDROCK	
CWW 69	60	58	--	0 7 15 23 33 53 60	7 15 23 33 53 60 --	110SDMN 110SDMN 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD BEDROCK	LOAM PEAT SDGL LAYERS VCS (MS TO PEBBLES) SDGL LAYERS MATRIX FS, MS, TO VCS SDST SDGL CD (MS TO GRAN)
CWW 70	60	19	--	0 7 15 23 33 53 60	7 15 23 33 53 60 --	110SDMN 110SDMN 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD BEDROCK	LOAM PEAT SDGL LAYERS VCS (MS TO PEBBLES) SDGL LAYERS MATRIX FS, MS TO VCS SDST SDGL CS (MS TO GRAN)
CWW 71	--	153	--	20	--	BEDROCK	
CWW 72	--	325	--	50	--	BEDROCK	
CWW 73	--	260	--	20	--	BEDROCK	
CWW 74	--	175	--	20	--	BEDROCK	
CWW 75	--	227	--	30	--	BEDROCK	
CWW 76	--	101	--	--	--	112SRFD	
CWW 77	--	75	--	69	--	BEDROCK	
CWW 78	--	158	--	33	--	BEDROCK	
CWW 79	--	260	--	100	--	BEDROCK	
CWW 80	--	480	--	110	--	BEDROCK	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>CONWAY--Continued</b>							
CWW 81	--	117	--	105	--	BEDROCK	
CWW 82	--	280	--	50	--	BEDROCK	
CWW 83	--	--	--	89	--	BEDROCK	
CWW 84	--	485	--	70	--	BEDROCK	
CWW 85	--	266	--	70	--	BEDROCK	
CWW 86	--	--	--	118	--	BEDROCK	
CWW 87	--	79	--	--	--	112SRFD	
CWW 88	--	413	--	90	--	BEDROCK	
CWW 89	--	178	--	90	--	BEDROCK	
CWW 107	--	15.8	--	--	--	--	
CWW 108	--	36.7	--	--	--	--	
CWW 109	--	79.6	--	--	--	--	
CWW 110	--	60.1	--	--	--	--	
CWW 139	--	120	--	--	--	112SRFD	
CWW 140	--	485	--	135	--	BEDROCK	
CWW 141	--	140	--	--	--	112SRFD	
CWW 142	--	150	--	--	--	112SRFD	
<b>EATON</b>							
ECW 1	7.5	7.5	--	--	--	--	
ECW 2	26	23	--	--	--	--	
ECW 3	350	350	--	--	--	--	
ECW 4	365	--	--	--	--	--	
ECW 5	--	213	--	0 8	8 --	110SDMN BEDROCK	SDGL
ECW 6	--	261	--	0 10 45	10 45 --	110SDMN 110SDMN BEDROCK	SAND SDGL
ECW 7	--	65	--	0 65	65 --	110SDMN BEDROCK	SDGL
ECW 8	--	503	--	0 15	15 --	110SDMN BEDROCK	SDGL
ECW 9	--	423	--	0 60	60 --	110SDMN BEDROCK	SDGL
ECW 10	--	350	--	0 25	25 --	110SDMN BEDROCK	SDGL
ECW 11	--	10	--	--	--	112TILL 110SDMN	TILL SDGL
ECW 12	--	177	--	0 17	17 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire—Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
EATON--Continued							
ECW 13	--	402	--	0 75	75 --	110SDMN BEDROCK	SDGL
ECW 14	--	364	--	0 28	28 --	110SDMN BEDROCK	SDGL
ECW 15	--	1200	--	0 12	12 --	112TILL BEDROCK	TILL
ECW 16	--	602	--	0 17	17 --	112TILL BEDROCK	TILL CLAY, HARDPAN
ECW 17	--	281	--	0 20	20 --	112TILL BEDROCK	TILL
ECW 18	--	482	--	0 186	186 --	112TILL BEDROCK	TILL CLAY, HARDPAN
ECW 19	--	422	--	0 120	120 --	110SDMN BEDROCK	SDGL
ECW 20	--	600	--	0 12	12 --	112TILL BEDROCK	TILL
ECW 21	--	802	--	0 25	25 --	110SDMN BEDROCK	CLAY
ECW 22	--	524	--	0 15	15 --	112TILL BEDROCK	TILL
ECW 23	--	525	--	0 1	1 13	112TILL BEDROCK	TILL
ECW 24	--	406	--	13	--	BEDROCK	
ECW 25	--	325	--	0 130	130 --	110SDMN BEDROCK	CLAY
EFFINGHAM							
EFA 1	67	--	--	-- 63	-- --	112SRFD 112GLCL	SAND LAYERS OF F TO VCS GRDS DIAMICTON
EFB 1	14	--	--	0 3 8 14	3 8 14 --	111FILL 112SRFD 112TILL 112TILL	OTHR FILL SAND SAND, SOME COBBLES TILL TILL, SANDY TILL REFUSAL
EFB 2	54	--	--	0 2 45 54	2 45 54 --	112SRFD 112LCSR 112SRFD BEDROCK	SAND SAND, COARSE SAND SAND, FINE SDGL SAND, COARSE AND GRAVEL REFUSAL ON BOULDER OR BEDROCK
EFB 3	60	--	--	0 10 25 42 47 52 60	10 25 42 47 52 60 --	112SRFD 112SRFD 112LCSR 112SRFD 112LCSR 112TILL 112TILL	SAND SAND, FINE TO MEDIUM SAND SAND, MEDIUM TO COARSE SAND SAND, FINE, SILTY SAND SAND, MEDIUM SILT SILT, FINE SANDY TILL TILL, GRAVELLY TILL END OF HOLE AT 60 FEET (OTHER LOGS HIT REFUSAL 52 FEET- 62 FEET)
EFW 2	600	--	--	--	--	--	
EFW 3	25	--	--	--	--	--	
EFW 4	40	40	--	--	--	--	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>EFFINGHAM--Continued</b>							
EFW 5	14.6	14.6	--	--	--	--	
EFW 6	28	28	--	--	--	--	
EFW 7	48	--	--	--	--	--	
EFW 8	12	12	--	--	--	--	
EFW 9	83	74.5	83	0 18 35 74	18 35 74 81	112SRFD 112SRFD 112SRFD 112SRFD	SAND F, WELL SORTED SAND M, MEDIUM SORTED SAND C TO VC, POORLY SORTED SAND F, FEW PEBBLES, POORLY SORTED
				81 83	83 --	112TILL BEDROCK	TILL
EFW 10	--	302	--	0 16	16	110SDMN BEDROCK	SAND
EFW 11	--	30	--	--	--	110SDMN	SAND
EFW 12	--	352	--	0 48	48	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
EFW 13	--	527	--	0 194	194	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
EFW 14	--	125	--	0 56	56	110SDMN BEDROCK	SAND
EFW 15	--	627	--	0 110	110	110SDMN BEDROCK	SAND
EFW 16	--	223	--	0 20	20	112TILL BEDROCK	TILL
EFW 17	--	545	--	0 25	25	110SDMN BEDROCK	SDGL
EFW 18	--	252	--	0 81	81	110SDMN BEDROCK	SDCL
EFW 19	--	420	--	0 20	20	110SDMN BEDROCK	SDGL
EFW 20	--	502	--	0 28	28	112TILL BEDROCK	TILL
EFW 21	--	202	--	0 46	46	112TILL BEDROCK	TILL CLAY, HARDPAN
EFW 22	--	382	--	0 72	72	110SDMN BEDROCK	SDGL
EFW 23	--	630	--	0 47	47	110SDMN BEDROCK	SAND
EFW 24	--	72	--	--	--	110SDMN	SAND
EFW 25	--	85	--	0 81	81	110SDMN BEDROCK	SDGL
EFW 26	--	1000	--	0 120	120	110SDMN BEDROCK	SDCL
EFW 27	--	82	--	0 41	41	110SDMN BEDROCK	SAND
EFW 28	--	202	--	0 55	55	110SDMN BEDROCK	OTHR

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>EPPINGHAM--Continued</b>							
EFW 29	25	25	--	--	--		
EFW 30	--	670	--	0 10	10 --	112TILL BEDROCK	TILL
EFW 31	--	638	--	0 8	8 --	112TILL BEDROCK	TILL
EFW 32	--	503	--	-- 0 99	-- 99 --	112TILL 110SDMN BEDROCK	TILL CLAY, HARDPAN SGVC
EFW 33	--	323	--	0 30 40	30 40 152	110SDMN 112TILL BEDROCK	SAND TILL
EFW 34	--	300	--	152	--	BEDROCK	
EFW 35	--	30	--	0	140	110SDMN	SAND
EFW 36	--	223	--	140	--	BEDROCK	
EFW 37	--	127	--	0 40	40 --	112TILL BEDROCK	TILL
EFW 38	--	303	--	0 160	160 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
EFW 39	--	350	--	0 12	12 --	112TILL BEDROCK	TILL
EFW 40	--	800	--	0 70 80	70 80 --	110SDMN 112TILL BEDROCK	SAND TILL
EFW 41	--	362	--	0 50 135	50 135 --	110SDMN 110SDMN BEDROCK	SAND CLAY
EFW 42	--	427	--	0 107	107 --	110SDMN BEDROCK	SDCL
EFW 43	--	282	--	0 100	100 --	110SDMN BEDROCK	SDGL
EFW 44	--	377	--	0 100	100 --	110SDMN BEDROCK	SAND
EFW 45	--	377	--	0 70	70 --	110SDMN BEDROCK	SDGL
EFW 46	--	43	--	--	--	110SDMN 110SDMN	SAND SDGL
EFW 47	--	241	--	0 10	10 --	112TILL BEDROCK	TILL
EFW 48	--	352	--	0 64	64 --	110SDMN BEDROCK	SDCL
EFW 49	--	602	--	0 20 35 35	20 35 --	110SDMN 110SDMN BEDROCK	SAND SDGL
EFW 50	--	120	--	0 45 62	45 62 --	110SDMN 110SDMN BEDROCK	SDCL SDGL
EFW 51	--	59	--	0 46 61	46 61 --	110SDMN 110SDMN BEDROCK	SDCL SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>EFFINGHAM - Continued</b>							
EFW 52	--	300	--	0 25	25 --	110SDMN BEDROCK	SDGL
EFW 53	--	502	--	0 25	25 --	110SDMN BEDROCK	SDCL
EFW 54	--	880	--	0 34	34 --	110SDMN BEDROCK	SAND
EFW 55	--	502	--	0 18	18 --	110SDMN BEDROCK	SAND
EFW 56	--	202	--	0 65	65 --	110SDMN BEDROCK	OTHR
EFW 57	--	361	--	0 25	25 --	110SDMN BEDROCK	CLAY
EFW 58	--	327	--	-- 88	-- --	112TILL BEDROCK	TILL
EFW 59	--	150	--	0 76	76 --	110SDMN BEDROCK	SDGL
EFW 60	--	57	--	--	--	110SDMN	SAND
EFW 61	--	280	--	0 58 72	58 72 --	110SDMN 110SDMN BEDROCK	SAND SDGL
EFW 62	--	255	--	0 86	86 --	110SDMN BEDROCK	SDCL
EFW 63	--	365	--	0 85	85 --	112TILL BEDROCK	TILL
EFW 64	--	242	--	0 35	35 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
EFW 65	--	423	--	0 135	135 --	110SDMN BEDROCK	SDCL
EFW 66	--	323	--	0 150	150 --	112TILL BEDROCK	TILL
EFW 67	--	303	--	0 90	90 --	112TILL BEDROCK	TILL
EFW 68	--	423	--	0 15	15 --	112TILL BEDROCK	TILL
EFW 69	--	202	--	0 98	98 --	110SDMN BEDROCK	SAND
EFW 70	--	51	--	--	--	110SDMN	SDGL
EFW 71	--	241	--	0 20	20 --	110SDMN BEDROCK	SAND
EFW 72	--	51	--	--	--	110SDMN	SAND
EFW 73	--	225	--	0 127	127 --	110SDMN BEDROCK	SGVC
EFW 74	--	75	--	0 50 75	50 75 --	110SDMN 110SDMN BEDROCK	SAND SDGL
EFW 75	--	62	--	--	--	110SDMN	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>EFFINGHAM--Continued</b>							
EFW 76	--	93	--	0 30	30 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
EFW 77	--	322	--	0 45	45 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
EFW 78	--	422	--	0 100 203	100 203 --	110SDMN 112TILL BEDROCK	SAND TILL SAND, CLAY, HARDPAN
EFW 79	--	502	--	0 55	55 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
EFW 80	--	482	--	0 50	50 --	110SDMN BEDROCK	SDGL
EFW 81	--	422	--	0 75 165	75 165 --	110SDMN 112TILL BEDROCK	SAND TILL GRAVEL, CLAY, HARDPAN
EFW 82	--	255	--	0 75	75 --	110SDMN BEDROCK	SAND
EFW 83	--	324	--	0 100 120	100 120 --	110SDMN 110SDMN BEDROCK	SAND OTHR
EFW 84	--	24	--	0 25	25 --	110SDMN 112TILL	SAND TILL
EFW 85	--	425	--	0 90	90 --	110SDMN BEDROCK	OTHR
EFW 86	--	325	--	0 90	90 --	110SDMN BEDROCK	OTHR
EFW 87	--	24	--	0 24.5	24.5 --	110SDMN 112TILL	SDGL TILL
EFW 88	--	324	--	0 20 140	20 140 --	110SDMN 110SDMN BEDROCK	SDGL OTHR ROTTEN ROCK
EFW 89	--	523	--	0 90	90 --	110SDMN BEDROCK	SAND
EFW 90	--	665	--	0 90	90 --	112TILL BEDROCK	TILL SAND, HARDPAN
EFW 91	--	503	--	0 85	85 --	112TILL BEDROCK	TILL
EFW 92	--	423	--	0 80 100	80 100 --	112TILL 110SDMN BEDROCK	TILL OTHR ROTTEN ROCK
<b>FREEDOM</b>							
EFW 93	--	303	--	0 140	140 --	112TILL BEDROCK	TILL
FLS 1	--	--	--	--	--	--	--
FLW 3	--	--	--	--	--	--	--
FLW 4	15	15	--	--	--	--	--
FLW 5	18	18	--	--	--	--	--
FLW 6	87	20	--	--	--	--	--

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 7	28	28	--	--	--		
FLW 8	32	32	--	--	--		
FLW 9	12	12	--	--	--		
FLW 10	15	15	--	--	--		
FLW 11	50	50	--	--	--		
FLW 12	377	60	--	--	--		
FLW 13	61	61	--	--	--		
FLW 14	18	18	--	--	--		
FLW 15	16	16	--	--	--		
FLW 16	--	--	--	--	--		
FLW 17	8.3	8.3	--	--	--		
FLW 18	22	22	--	--	--		
FLW 19	--	--	--	--	--		
FLW 20	--	--	--	--	--		
FLW 21	4.9	4.9	--	--	--		
FLW 22	30	30	--	--	--		
FLW 23	35	35	--	--	--		
FLW 24	73.5	58.7	73.5	0 10 13.5 16 18 37.5 48 63 73.5	10 13.5 15 18 37.5 48 63 73.5 --	112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112TILL 112TILL	SAND M, POORLY SORTED SAND C, POORLY SORTED SAND F SAND VC SAND C, MEDIUM SORTED SAND M, MEDIUM SORTED SAND C, VERY POORLY SORTED TILL TILL REFUSAL
FLW 25	109	39.5	109	0 15 23 23 33 40 40 68 73 73 83 83 97.5 97.5 106 106 109	15 23 33 33 40 68 73 83 97.5 106 109 --	112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112LCSR 112LCSR 112LCSR 112LCSR 112LCSR 112LCSR 112TILL 112TILL	SAND M, WELL SORTED SAND C TO VC, MEDIUM SORTED SAND M, POORLY SORTED SAND VC, POORLY SORTED SAND F TO M, BANDED SDST VF, GRAY SAND F, GRAY, MEDIUM SORTED STCL GRAY CLAY BROWN, VARVED TILL TILL REFUSAL
FLW 26	113	20	113	-- 33 63 63 73 73 108	33 63 73 108 --	112SRFD 112SRFD 112SRFD 112SRFD 112TILL	SAND VF TO FS SDCL CLAY AND VFS LAYERS STCL SILT AND CLAY LAYERS SDST SILT AND F TO VFS LAYERS TILL
FLW 27	200	--	--	--	--		
FLW 28	25	25	--	--	--		
FLW 29	--	453	--	0 43	43 --	110SDMN BEDROCK	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire—Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 30	--	242	--	-- 0 140	-- 140 --	110SDMN 112TILL BEDROCK	SAND TILL CLAY, HARDPAN
FLW 31	--	66	--	0 30 58	30 58 --	110SDMN 110SDMN 110SDMN	SDGL SGVC SDGL
FLW 32	--	25	--	0 12 25	12 25 --	110SDMN 110SDMN 110SDMN	SGVC SDGL OTHR
FLW 33	--	66	--	--	--		
FLW 34	--	530	--	0 8	8 --	112TILL BEDROCK	TILL
FLW 35	--	506	--	0 80	80 --	110SDMN BEDROCK	SAND
FLW 36	--	28	--	0 28	28 --	110SDMN 112TILL	SDGL TILL
FLW 37	--	475	--	0 82	82 --	110SDMN BEDROCK	SAND
FLW 38	--	425	--	0 105	105 --	110SDMN BEDROCK	SDCL
FLW 39	--	277	--	0 70 146	70 146 --	110SDMN 110SDMN BEDROCK	SAND SDCL
FLW 40	--	32	--	0 33	33 --	110SDMN 110SDMN	SAND CLAY
FLW 41	--	277	--	0 102	102 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
FLW 42	--	530	--	0 8	8 --	110SDMN BEDROCK	SDGL
FLW 43	--	45	--	--	--	110SDMN	SDGL
FLW 44	--	34	--	--	--	110SDMN	SAND
FLW 45	--	33	--	--	--	110SDMN	SAND
FLW 46	--	38	--	--	--	110SDMN	SAND
FLW 47	--	66	--	0 15	15 --	110SDMN 110SDMN	SDGL SAND
FLW 48	--	65	--	--	--	110SDMN	SDGL
FLW 49	--	35	--	--	--	110SDMN	SDGL
FLW 50	--	362	--	0 35 110	35 110 --	110SDMN 110SDMN BEDROCK	SAND CLAY
FLW 51	--	47.6	--	0 22	22 --	110SDMN 110SDMN	SAND SDGL
FLW 52	--	242	--	0 106	106 --	110SDMN BEDROCK	SDCL
FLW 53	--	282	--	0 85	85 --	110SDMN BEDROCK	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire—Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
FREEDOM--Continued							
FLW 54	--	325	--	0 62	62 --	110SDMN BEDROCK	SDGL
FLW 55	--	302	--	0 55	55 --	110SDMN BEDROCK	SDCL
FLW 56	--	702	--	0 40	40 --	112TILL BEDROCK	TILL CLAY, HARDPAN
FLW 57	--	152	--	0 30	30 --	110SDMN BEDROCK	SAND
FLW 58	--	302	--	0 60 69	60 69 --	110SDMN 110SDMN BEDROCK	SAND CLAY
FLW 59	--	400	--	0 45	45 --	110SDMN BEDROCK	SAND
FLW 60	--	142	--	0 42	42 --	110SDMN BEDROCK	CLAY
FLW 61	--	45	--	--	--	110SDMN	SDGL
FLW 62	--	57	--	0 48	48 --	110SDMN 110SDMN	SDCL SAND
FLW 63	--	482	--	0 177 195 195 222	177 195 222 --	110SDMN 110SDMN 112TILL BEDROCK	SAND CLAY TILL GRAVEL, HARDPAN
FLW 64	--	423	--	0 30	30 --	110SDMN BEDROCK	SDGL
FLW 65	--	30	--	0 30	30 --	110SDMN 112TILL	SAND TILL
FLW 66	--	51	--	-- 51	-- 51	110SDMN 110SDMN	SAND SDGL
FLW 67	--	178	--	5	--	BEDROCK	
FLW 68	--	803	--	0 40	40 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
FLW 69	--	403	--	0 10	10 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
FLW 70	--	800	--	0 30 40	30 40 --	110SDMN 110SDMN BEDROCK	SAND OTHR
FLW 71	--	335	--	0 38	38 --	110SDMN BEDROCK	SAND
FLW 72	--	303	--	0 17	17 --	110SDMN BEDROCK	SAND
FLW 73	--	503	--	0 15	15 --	112TILL BEDROCK	TILL
FLW 74	--	303	--	0 53	53 --	110SDMN BEDROCK	SAND
FLW 75	--	43	--	0 24 28 28 43	24 28 43 --	110SDMN 110SDMN 110SDMN 112TILL	SAND CLAY SAND TILL
FLW 76	--	61	--	--	--	110SDMN	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire—Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 77	--	802	--	0 14	14 --	112TILL BEDROCK	TILL
FLW 78	--	1000	--	- 0 150	-- 150 --	110SDMN 112TILL BEDROCK	SAND TILL CLAY, HARDPAN
FLW 79	--	550	--	0 30 78	30 78 --	110SDMN 110SDMN BEDROCK	SAND CLAY
FLW 80	--	200	--	0 17	17 --	110SDMN BEDROCK	CLAY
FLW 81	--	377	--	0 70 106	70 106 --	110SDMN 112TILL BEDROCK	SAND TILL SAND, CLAY, HARDPAN
FLW 82	--	202	--	0 20 60	20 60 --	110SDMN 112TILL BEDROCK	SAND TILL
FLW 83	--	655	--	0 145	145 --	112TILL BEDROCK	TILL
FLW 84	--	200	--	0 33	33 --	110SDMN BEDROCK	SGVC
FLW 85	--	400	--	0 87	87 --	110SDMN BEDROCK	SDGL
FLW 86	--	452	--	0 92	92 --	110SDMN BEDROCK	SDCL
FLW 87	--	46	--	0 30 39	30 39 --	110SDMN 112TILL 110SDMN	SAND TILL SDGL
FLW 88	--	463	--	0 25	25 --	110SDMN BEDROCK	SAND
FLW 89	--	502	--	0 38	38 --	112TILL BEDROCK	TILL SAND, HARDPAN
FLW 90	--	227	--	0 32	32 --	110SDMN BEDROCK	SDCL
FLW 91	--	30	--	0 30 43	30 43 --	110SDMN 110SDMN 110SDMN	SAND SDCL CLAY
FLW 92	--	39	--	--	--	110SDMN	SAND
FLW 93	--	302	--	0 10	10 --	112TILL BEDROCK	TILL
FLW 94	--	552	--	0 152	152 --	110SDMN BEDROCK	SDCL
FLW 95	--	1000	--	0 20	20 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
FLW 96	--	45	--	--	--	110SDMN	SDGL
FLW 97	--	34	--	--	--	110SDMN	SAND
FLW 98	--	352	--	0 50 157	50 157 --	110SDMN 112TILL BEDROCK	SAND TILL CLAY, HARDPAN
FLW 99	--	202	--	0 12	12 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 100	--	24	--	0 25	25 --	110SDMN 110SDMN	SDGL SDCL
FLW 101	--	20	--	--	--	110SDMN	CLAY
FLW 102	--	442	--	0 200	200 --	110SDMN BEDROCK	SAND
FLW 103	--	417	--	0 22	22 --	110SDMN BEDROCK	SAND
FLW 104	--	501	--	0 35 71	35 71 --	110SDMN 112TILL BEDROCK	SDGL TILL CLAY, HARDPAN
FLW 105	--	395	--	0 20	20 --	112TILL BEDROCK	TILL
FLW 106	--	477	--	0 212	212 --	112TILL BEDROCK	TILL CLAY, HARDPAN
FLW 107	--	39	--	0 45	45 --	110SDMN 110SDMN	SAND CLAY
FLW 108	--	26	--	--	--	110SDMN	SGVC
FLW 109	--	34	--	0 10 28 40	10 28 40 --	110SDMN 112TILL 110SDMN 112TILL	SAND TILL SAND, HARDPAN SDCL TILL
FLW 110	--	282	--	0 5	5 --	110SDMN BEDROCK	OTHR
FLW 111	--	102	--	0 18	18 --	110SDMN BEDROCK	SAND
FLW 112	--	182	--	-- 0 92	-- 92 --	112TILL 112TILL BEDROCK	TILL TILL CLAY, HARDPAN
FLW 113	--	1000	--	0 27	27 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
FLW 114	--	302	--	0 20 50	20 50 --	110SDMN 112TILL BEDROCK	SAND TILL
FLW 115	--	422	--	0 10 150	10 150 --	110SDMN 112TILL BEDROCK	SAND TILL
FLW 116	--	422	--	0 10 150	10 150 --	110SDMN 112TILL BEDROCK	SAND TILL
FLW 117	--	37	--	--	--	110SDMN	SAND
FLW 118	--	75	--	--	--	110SDMN	SDGL
FLW 119	--	424	--	0 50	50 --	110SDMN BEDROCK	SDGL
FLW 120	--	57	--	--	--	110SDMN	SDGL
FLW 121	--	441	--	0 135	135 --	112TILL BEDROCK	TILL
FLW 122	--	544	--	0 5	5 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 123	--	403	--	0 5	5 --	112TILL BEDROCK	TILL
FLW 124	--	275	--	0 20	20 --	112TILL BEDROCK	TILL
FLW 125	--	502	--	0 4	4 --	110SDMN BEDROCK	SAND
FLW 126	--	282	--	0 15	15 --	110SDMN BEDROCK	SAND
FLW 127	--	377	--	0 21	21 --	110SDMN BEDROCK	SDCL
FLW 128	--	377	--	0 21	21 --	110SDMN BEDROCK	SDCL
FLW 129	--	302	--	0 48	48 --	110SDMN BEDROCK	SAND
FLW 130	--	360	--	0 58	58 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
FLW 131	--	35	--	--	--		--
FLW 132	--	53	--	--	--	110SDMN	SAND
FLW 133	--	61	--	0 25	25 --	110SDMN 110SDMN	SDGL SAND
FLW 134	--	73	--	--	--	110SDMN	SDGL
FLW 135	--	243	--	0 20	20 --	110SDMN BEDROCK	SDGL
FLW 136	--	31	--	--	--	110SDMN	SDGL
FLW 137	--	39	--	0 5 42	5 42 --	110SDMN 110SDMN 112TILL	SDGL SAND TILL CLAY, HARDPAN
FLW 138	--	1000	--	0 20	20 --	110SDMN BEDROCK	CLAY
FLW 139	--	84	--	0 25 44 46 50 60	25 44 46 50 60 --	110SDMN 110SDMN 110SDMN 110SDMN 110SDMN 110SDMN	SDCL SDGL CLAY SAND SGVC SDGL
FLW 140	--	427	--	0 200	200 --	110SDMN BEDROCK	CLAY
FLW 141	--	327	--	0 50 258	50 258 --	110SDMN 110SDMN BEDROCK	SDGL CLAY
FLW 142	--	202	--	0 20 45	20 45 --	110SDMN 110SDMN BEDROCK	SAND CLAY
FLW 143	--	202	--	0 72	72 --	110SDMN BEDROCK	SGVC
FLW 144	--	362	--	0 10	10 --	110SDMN BEDROCK	SDCL
FLW 145	--	142	--	0 20	20 --	110SDMN BEDROCK	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 146	--	352	--	0 55	55 --	110SDMN BEDROCK	SDCL
FLW 147	--	43	--	0 10 25 43	10 25 43 --	110SDMN 110SDMN 110SDMN 112TILL	SAND SDCL SDGL TILL
FLW 148	--	273	--	0 23	23 --	110SDMN BEDROCK	SAND
FLW 149	--	273	--	0 86	86 --	110SDMN BEDROCK	SAND
FLW 150	--	322	--	0 22	22 --	112TILL BEDROCK	TILL
FLW 151	--	475	--	0 50	50 --	110SDMN BEDROCK	SDCL
FLW 152	--	782	--	0 15	15 --	112TILL BEDROCK	TILL
FLW 153	--	482	--	0 8	8 --	112TILL BEDROCK	TILL
FLW 154	--	960	--	0 240	240 --	112TILL BEDROCK	TILL CLAY, HARDPAN
FLW 155	--	140	--	0 50	50 --	110SDMN BEDROCK	SDGL
FLW 156	--	442	--	0 13	13 --	110SDMN BEDROCK	SDCL
FLW 157	--	420	--	0 50	50 --	112TILL BEDROCK	TILL CLAY, HARDPAN
FLW 158	--	442	--	0 25	25 --	110SDMN BEDROCK	SAND
FLW 159	--	242	--	0 80	80 --	112TILL BEDROCK	TILL
FLW 160	--	475	--	0 100	100 --	110SDMN BEDROCK	SDGL
FLW 161	--	423	--	0 60 120 215	60 120 215 --	112TILL 112TILL 110SDMN BEDROCK	TILL SAND, HARDPAN TILL CLAY
FLW 162	--	360	--	0 160	160 --	112TILL BEDROCK	TILL
FLW 163	--	48	--	--	--	110SDMN	SDGL
FLW 164	--	1000	--	0 47	47 --	110SDMN BEDROCK	CLAY
FLW 165	--	802	--	0 35	35 --	110SDMN BEDROCK	SAND
FLW 166	--	502	--	0 120	120 --	112TILL BEDROCK	TILL CLAY, HARDPAN
FLW 167	--	400	--	0 135	135 --	112TILL BEDROCK	TILL CLAY, HARDPAN

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 168	--	303	--	0 25 100 180	25 100 180 --	110SDMN 112TILL 110SDMN BEDROCK	SDGL TILL OTHR
FLW 169	--	242	--	0 20 55	20 55 --	110SDMN 110SDMN BEDROCK	SAND OTHR
FLW 170	--	242	--	0 155	155 --	110SDMN BEDROCK	SDCL
FLW 171	--	505	--	0 3	3 --	112TILL BEDROCK	TILL
FLW 172	--	305	--	0 67	67 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
FLW 173	--	302	--	0 38	38 --	112TILL BEDROCK	TILL CLAY, HARDPAN
FLW 174	--	302	--	0 49	49 --	110SDMN BEDROCK	CLAY
FLW 175	--	220	--	0 26	26 --	112TILL BEDROCK	TILL
FLW 176	--	220	--	0 39	39 --	112TILL BEDROCK	TILL CLAY, HARDPAN
FLW 177	--	523	--	0 180	180 --	110SDMN BEDROCK	OTHR
FLW 178	--	35	--	--	--	110SDMN	SAND
FLW 179	--	482	--	0 4	4 --	110SDMN BEDROCK	SAND
FLW 180	--	505	--	0 3	3 --	110SDMN BEDROCK	SAND
FLW 181	--	630	--	0 7	7 --	112TILL BEDROCK	TILL
FLW 182	--	305	--	0 15	15 --	110SDMN BEDROCK	CLAY
FLW 183	--	555	--	0 17	17 --	110SDMN BEDROCK	CLAY
FLW 184	--	15	--	--	--	110SDMN	SAND
FLW 185	--	39	--	--	--	110SDMN	SDGL
FLW 186	--	63	--	--	--	110SDMN	SAND
FLW 187	--	61	--	0 220	220 --	110SDMN BEDROCK	SDGL
FLW 188	--	41	--	0 41	41 --	110SDMN 112TILL	SAND TILL
FLW 189	--	242	--	0 38	38 --	110SDMN BEDROCK	SAND
FLW 190	--	422	--	0 30	30 --	110SDMN BEDROCK	SDCL
FLW 191	--	37	--	0 40 50	40 50 --	110SDMN 110SDMN 110SDMN	SDGL SAND CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>FREEDOM--Continued</b>							
FLW 192	--	39	--	--	--	110SDMN	SDGL
FLW 193	--	302	--	0 25	25 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
FLW 194	--	200	--	0 40	40 --	110SDMN BEDROCK	SGVC
FLW 195	--	220	--	0 27	27 --	112TILL BEDROCK	TILL
FLW 196	--	260	--	0 9	9 --	110SDMN BEDROCK	SDGL
FLW 197	--	525	--	0 85	85 --	112TILL BEDROCK	TILL
FLW 198	--	302	--	0 55	55 --	110SDMN BEDROCK	CLAY
FLW 199	--	1180	--	0 80	80 --	110SDMN BEDROCK	CLAY
FLW 200	--	302	--	0 18	18 --	110SDMN BEDROCK	CLAY
<b>HART'S LOCATION</b>							
HJW 1	--	565	--	0 35 108	35 108 --	110SDMN BEDROCK BEDROCK	SDGL
HJW 2	--	81	--	0 90	90 --	110SDMN BEDROCK	SDGL
HJB 1	28	--	28	0 2 28	2 28 --	112SRFD 112SRFD 112SRFD	GRVL BLDR TILL TILL WITH BOULDERS
HJB 2	14	--	14	--	--	112SRFD	TILL GRAVELLY TILL AND BOULDERS (STREAMBED)
HJB 3	13	--	13	--	--	112SRFD	GRVL GRAVEL WITH BOULDERS
HJB 4	22	--	22	--	--	112SRFD	SDGL SAND AND GRAVEL WITH COBBLES
HJB 5	31	--	--	0 5 17 21	5 17 21 --	112SRFD 112SRFD 112SRFD 112SRFD	GRVL BLDR GRVL ROCK
HJB 6	9	--	9	--	--	112SRFD	GRVL GRAVEL WITH BOULDERS
<b>JACKSON</b>							
JAB 1	15	--	15	--	--	112SRFD	TILL TILL WITH BOULDERS
JAB 2	25	--	25	--	--	112SRFD	TILL TILL WITH SAND, SILT, AND BOULDERS
JAB 3	8	--	8	0 4	4 --	112SRFD 112TILL	SDGL SAND AND GRAVEL WITH BOULDERS TILL SILTY TILL WITH BOULDERS
JAW 1	24	24	--	--	--	--	
JAW 2	250	--	--	--	--	--	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>JACKSON--Continued</b>							
JAW 3	--	205	--	0 15	15 --	110SDMN BEDROCK	SDGL
JAW 4	--	394	--	-- 0 130	-- 130 --	112TILL 110SDMN BEDROCK	TILL SDGL
JAW 5	--	125	--	0 24	24 --	110SDMN BEDROCK	SDGL
JAW 6	--	184	--	0 50	50 --	112TILL BEDROCK	TILL
JAW 7	--	678	--	0 5	5 --	110SDMN BEDROCK	SDGL
JAW 8	--	438	--	0 195	195 --	112TILL BEDROCK	TILL
JAW 9	--	405	--	0 250	250 --	112TILL BEDROCK	TILL
JAW 10	--	318	--	0 20	20 --	112TILL BEDROCK	TILL
JAW 11	--	480	--	0 284	284 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
JAW 12	--	275	--	0 92	92 --	112TILL BEDROCK	TILL
JAW 13	--	502	--	0 20	20 --	110SDMN BEDROCK	OTHR
JAW 14	--	528	--	0 415	415 --	110SDMN BEDROCK	OTHR
JAW 15	--	403	--	0 48	48 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
JAW 16	--	362	--	0 185	185 --	112TILL BEDROCK	TILL
JAW 17	--	377	--	0 105	105 --	112TILL BEDROCK	TILL
JAW 18	--	602	--	6	--	BEDROCK	
JAW 19	--	487	--	0 140	140 --	112TILL BEDROCK	TILL
JAW 20	--	282	--	0 18	18 --	112TILL BEDROCK	TILL
JAW 21	--	442	--	0 70	70 --	112TILL BEDROCK	TILL
JAW 22	--	421	--	0 15	15 --	112TILL BEDROCK	TILL
JAW 23	--	122	--	0 35	35 --	112TILL BEDROCK	TILL
JAW 24	--	421	--	0 20	20 --	112TILL BEDROCK	TILL
JAW 25	--	1280	--	0 220	220 --	112TILL BEDROCK	TILL CLAY, HARDPAN
JAW 26	--	362	--	0 60	60 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>JACKSON--Continued</b>							
JAW 27	--	422	--	0 15	15 --	112TILL BEDROCK	TILL
JAW 28	--	514	--	0 20	20 --	112TILL BEDROCK	TILL
JAW 29	--	230	--	0 80	80 --	110SDMN BEDROCK	SDGL
JAW 30	--	490	--	0 4	4 --	110SDMN BEDROCK	SAND
JAW 31	--	105	--	0 18	18 --	110SDMN BEDROCK	SGVC
JAW 32	--	225	--	0 8	8 --	110SDMN BEDROCK	CLAY
JAW 33	--	302	--	0 124	124 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
JAW 34	--	363	--	0 40	40 --	112TILL BEDROCK	TILL CLAY, HARDPAN
JAW 35	--	551	--	0 8	8 --	112TILL BEDROCK	TILL
JAW 36	--	177	--	0 91	91 --	112TILL BEDROCK	TILL
JAW 37	--	521	--	0 165	165 --	112TILL BEDROCK	TILL
JAW 38	--	245	--	0 176	176 --	110SDMN BEDROCK	SDGL
JAW 39	--	421	--	0 38	38 --	112TILL BEDROCK	TILL
JAW 40	--	80	--	--	--	110SDMN	SGVC
JAW 41	--	76	--	--	--	110SDMN	SGVC
JAW 42	--	342	--	0 135	135 --	112TILL BEDROCK	TILL
JAW 43	--	624	--	0 15	15 --	112TILL BEDROCK	TILL
JAW 44	--	300	--	28	--	BEDROCK	
JAW 45	--	300	--	9	--	BEDROCK	
JAW 46	--	1000	--	0 530 0 690	530 -- 690 --	110SDMN 112TILL 110SDMN BEDROCK	CLAY TILL CLAY
JAW 47	--	927	--	0 134	134 --	110SDMN BEDROCK	CLAY
JAW 48	--	775	--	0 132	132 --	110SDMN BEDROCK	CLAY
JAW 49	--	222	--	0 5	5 --	112TILL BEDROCK	TILL
JAW 50	--	302	--	0 98	98 --	110SDMN BEDROCK	CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>JACKSON--Continued</b>							
JAW 51	--	523	--	0 100	100 --	110SDMN BEDROCK	CLAY
JAW 52	--	504	--	0 50	50 --	110SDMN BEDROCK	CLAY
JAW 53	--	421	--	0 100 135	100 135 --	112TILL 110SDMN BEDROCK	TILL CLAY
JAW 54	--	423	--	0 20	20 --	112TILL BEDROCK	TILL
JAW 55	--	305	--	0 92	92 --	110SDMN BEDROCK	SGVC
JAW 56	--	805	--	0 115	115 --	110SDMN BEDROCK	SGVC
JAW 57	--	355	--	0 7	7 --	110SDMN BEDROCK	SDGL
JAW 58	--	423	--	0 40 90	40 90 --	110SDMN 112TILL BEDROCK	SDGL TILL CLAY, HARDPAN
JAW 59	--	665	--	0 330	330 --	112TILL BEDROCK	TILL
JAW 60	--	484	--	0 80 140	80 140 --	BEDROCK 112TILL BEDROCK	TILL
JAW 61	--	102	--	0 10	10 --	112TILL BEDROCK	TILL CLAY, HARDPAN
JAW 62	--	350	--	0 80	80 --	110SDMN BEDROCK	CLAY
JAW 63	--	240	--	0 10 175 210	10 175 210 --	110SDMN 112TILL BEDROCK BEDROCK	SDGL TILL
JAW 64	--	302	--	0 10 100	10 100 --	110SDMN 112TILL BEDROCK	SAND TILL
JAW 65	--	605	--	0 100 120	100 120 --	112TILL BEDROCK BEDROCK	TILL CLAY, HARDPAN
JAW 66	--	182	--	0 25	25 --	112TILL BEDROCK	TILL
JAW 67	--	521	--	0 80 140	80 140 --	112TILL 110SDMN BEDROCK	TILL CLAY
JAW 68	--	255	--	0 34 61	34 61 --	112TILL BEDROCK BEDROCK	TILL CLAY, HARDPAN
JAW 69	--	584	--	0 120	120 --	112TILL BEDROCK	TILL
JAW 70	--	422	--	0 50	50 --	112TILL BEDROCK	TILL
JAW 71	--	262	--	0 12	12 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>JACKSON--Continued</b>							
JAW 72	--	282	--	0 45	45	BEDROCK BEDROCK	
JAW 73	--	362	--	0 30	30	112TILL BEDROCK	TILL
JAW 74	--	522	--	0 100	100	112TILL BEDROCK	TILL
JAW 75	--	805	--	0 400 410	400 410	112TILL BEDROCK BEDROCK	TILL CLAY, HARDPAN
JAW 76	--	708	--	0 80 200	80 200	112TILL 110SDMN BEDROCK	TILL OTHR
JAW 77	--	350	--	0 2.5	2.5	112TILL BEDROCK	TILL
JAW 78	--	361	--	0 100	100	112TILL BEDROCK	TILL
<b>MADISON</b>							
MBA 1	32	--	32	0 15 30	15	112SRFD 112SRFD 112TILL	SDGL MOSTLY CS TO VCS (FS TO SMALL COBBLES) SDGL LAYERS, MOSTLY MS (VFS TO CS MATRIX) TILL
MBB 1	40	--	--	0 4 20 28 40	4 20 28 40	112SRFD 112SRFD 112LCSR 112SRFD 112SRFD	GRVL GRAVEL SAND SAND, MEDIUM TO COARSE SAND SAND, FINE SAND SAND, MEDIUM TO COARSE SAND END OF HOLE AT 40 FEET
MBB 2	75	--	--	0 11 18 18 26 26 37 37 75	11 18 26 37 75	111SWMP 111SWMP 112LCSR 112SRFD 112GCFV 112GCFV	MUCK SAND, MEDIUM; MUCK MUCK SILT, MUCK SAND SAND, FINE; SOME SILT SAND SAND, COARSE SAND SAND, FINE; COARSE SAND LAYERS SAND END OF HOLE AT 75 FEET
MBB 3	66	--	--	0 5 14 17 35 35 65 66	5 14 17 35 65 66	111FILL 112LCSR 112LCSR 112LCSR 112LCSR 112TILL BEDROCK	OTHR FILL SAND SAND, FINE, SILTY WITH COARSE SAND LENSES SAND SILT, SOME CLAY SILT SILT, SANDY; SOME FINE TO COARSE SAND LENSES SAND SAND, FINE TO MEDIUM, SOME SILT LAYERS TILL TILL REFUSAL ON BOULDER OR BEDROCK
MBB 4	15	--	--	0 3 15	3 15	112SRFD 111SDMN BEDROCK	GRVL GRAVEL SAND SAND, SILTY AND COBBLES REFUSAL ON BOULDER OR BEDROCK
MBW 1	--	56	--	--	--		
MBW 2	35	--	--	--	--		
MBW 3	395	--	--	--	--		
MBW 4	15.5	15.5	--	--	--		
MBW 5	87	87	--	--	--		

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 6	55	55	--	--	--		
MBW 7	10.3	10.3	--	--	--		
MBW 10	124	59	--	0	31	112SRFD	SDGL C TO VCS, PEBBLES AND COBBLES
				31	41	112SRFD	SAND M TO CS LAYERS
				41	93	112SRFD	SDGL F TO VCS WITH PEBBLES
				93	--	112SRFD	SAND F TO VCS LAYERS
MBW 11	--	40	--	0	15	110SDMN	SDGL
				15	--	110SDMN	SDGL
MBW 12	--	242	--	0	40	110SDMN	SDGL
				40	65	110SDMN	SAND
				65	--		BEDROCK
MBW 13	--	802	--	0	31	110SDMN	SAND
				31	--		BEDROCK
MBW 14	--	55.5	--	0	12	110SDMN	SDGL
				12	32	110SDMN	SAND
				32	--	110SDMN	SAND
MBW 15	--	770	--	0	8	112TILL	TILL
				8	--		BEDROCK
MBW 16	--	55	--	0	15	110SDMN	SDGL
				15	--	110SDMN	SDGL
MBW 17	--	800	--	0	15	110SDMN	SAND F
				15	50	110SDMN	SDGL
				50	--		BEDROCK
MBW 18	--	43	--	--	--	110SDMN	SDGL
MBW 19	--	422	--	0	18	110SDMN	SDGL
				18	--		BEDROCK
MBW 20	--	361	--	0	10	110SDMN	SDGL
				10	35	110SDMN	SAND
				35	--		BEDROCK
MBW 21	--	122	--	0	25	112TILL	TILL
				25	--		BEDROCK
MBW 22	--	30	--	0	30	110SDMN	SDGL
				30	--	112TILL	TILL
MBW 23	--	53	--	--	--	110SDMN	SDGL
MBW 24	--	53	--	--	--	110SDMN	SDGL
MBW 25	--	33	--	0	30	110SDMN	SDGL
				30	42	110SDMN	SDCL
				42	--	112TILL	TILL
MBW 26	--	401	--	0	55	110SDMN	SDGL
				55	--		BEDROCK
MBW 27	--	301	--	0	105	110SDMN	SAND
				105	--		BEDROCK
MBW 28	--	443	--	0	45	110SDMN	SDGL
				45	--		BEDROCK
MBW 29	--	52.5	--	--	--	110SDMN	SDGL
MBW 30	--	58	--	--	--	110SDMN	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 31	--	114	--	0 208	208 --	110SDMN BEDROCK	SDGL
MBW 32	--	241	--	0 40 72	40 72 --	110SDMN 112TILL BEDROCK	SAND TILL
MBW 33	--	57	--	--	--	110SDMN	SDGL
MBW 34	--	363	--	0 15	15 --	110SDMN BEDROCK	SDGL
MBW 35	--	61	--	--	--	110SDMN	SDGL
MBW 36	--	522	--	0 47	47 --	110SDMN BEDROCK	OTHR
MBW 37	--	59	--	0 28 59	28 59 --	110SDMN 110SDMN 112TILL	SDGL SAND TILL SAND, HARDPAN
MBW 38	--	48	--	--	--	110SDMN	SDGL
MBW 39	--	503	--	0 35	35 --	110SDMN BEDROCK	SDGL
MBW 40	--	36	--	--	--	110SDMN	SDGL
MBW 41	--	63	--	0 20	20 --	110SDMN 110SDMN	SDGL SAND
MBW 42	--	30.5	--	0 38	38 --	110SDMN 112TILL	SDGL TILL
MBW 43	--	17	--	--	--	110SDMN	SAND
MBW 44	--	602	--	0 93	93 --	110SDMN BEDROCK	CLAY
MBW 45	--	63	--	--	--	110SDMN	SDGL
MBW 46	--	362	--	0 60	60 --	110SDMN BEDROCK	SDCL
MBW 47	--	57	--	--	--	110SDMN	SDGL
MBW 48	--	282	--	0 41	41 --	110SDMN BEDROCK	SAND
MBW 49	--	642	--	0 35 48	35 48 --	110SDMN 110SDMN BEDROCK	SAND SDGL
MBW 50	--	62	--	--	--	110SDMN	SDGL
MBW 51	--	57	--	0 58	58 --	110SDMN 112TILL	SDGL TILL SAND, GRAVEL, HARDPAN
MBW 52	--	300	--	0 31	31 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
MBW 53	--	175	--	--	--	110SDMN	SDGL
MBW 54	--	241	--	0 99	99 --	110SDMN BEDROCK	SDCL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 55	57.5	49	--	0 13	13 48	112SRFD 112SRFD	SAND F TO MS SOME CS SDGL LAYERS MOSTLY VCS (FS TO PEBBLES)
				48 57	57 --	112TILL BEDROCK	TILL ROTTEN ROCK
MBW 56	89	69.1	--	0 30	30 68	112SRFD 112SRFD	SDGL M TO VCS WITH PEBBLES SAND LAYERS M TO F SOME CS AND VFS
				68 84	78 --	112SRFD 112SRFD	SDST VFS TO SILT LAYERS SAND VFS TO FS LAYERS SOME MS
MBW 57	78	49	--	0 15	15 23	112SRFD 112SRFD	SAND F TO VF SAND LAYERS MOSTLY VCS (MS TO GRAN)
				23	68	112SRFD	SDGL LAYERS MATRIX MOSTLY VCS - CS (SOME VFS, FS, OR MS)
				68	--	112TILL	TILL
MBW 59	--	177	--	0 30 40 50	30 40 50 --	110SDMN 110SDMN 112TILL BEDROCK	SDGL CLAY TILL
MBW 60	--	453	--	0 12	12 --	110SDMN BEDROCK	SDGL
MBW 61	--	303	--	0 93	93 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
MBW 62	--	253	--	0 80	80 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 63	--	203	--	0 80	80 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 64	--	753	--	0 10	10 --	110SDMN BEDROCK	CLAY
MBW 65	--	423	--	0 40	40 --	110SDMN BEDROCK	SDGL
MBW 66	--	252	--	0 27 85	27 85 --	110SDMN 110SDMN BEDROCK	SAND CLAY
MBW 67	--	60	--	0 40	40 --	110SDMN 110SDMN	SAND SDGL
MBW 68	--	61	--	0 40	40 --	110SDMN 110SDMN	SAND SDGL
MBW 69	--	765	--	0 7	7 --	110SDMN BEDROCK	SDGL
MBW 70	--	17	--	0	--	110SDMN	SDGL
MBW 71	--	18	--	0 7	7 --	110SDMN 110SDMN	SDGL SAND
MBW 72	--	36	--	0	--	110SDMN	SDGL
MBW 73	--	103	--	0 21	21 --	110SDMN BEDROCK	SGVC
MBW 74	--	452	--	0 73	73 --	112TILL BEDROCK	TILL CLAY, HARDPAN

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 75	--	803	--	0 15	15 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
MBW 76	--	12	--	0 5	5 --	112TILL 110SDMN	TILL CLAY, HARDPAN SDGL
MBW 77	--	18	--	0 5 12 18	5 12 18 --	112TILL 110SDMN 112TILL BEDROCK	TILL SDGL TILL
MBW 78	--	62	--	--	--	110SDMN	SDGL
MBW 79	--	253	--	0 73	73 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
MBW 80	--	175	--	0 80	80 --	110SDMN BEDROCK	OTHR
MBW 81	--	402	--	0 125	125 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 82	--	527	--	0 80 97	80 97 --	110SDMN 112TILL BEDROCK	SAND TILL GRAVEL, HARDPAN
MBW 83	--	327	--	0 80 120	80 120 --	110SDMN 112TILL BEDROCK	SDGL TILL
MBW 84	--	17	--	0 12	12 --	110SDMN 110SDMN	SDGL SAND
MBW 85	--	20	--	--	--	112TILL	TILL
MBW 86	--	204	--	0 130	130 --	110SDMN BEDROCK	SAND
MBW 87	--	322	--	0 80	80 --	110SDMN BEDROCK	SDGL
MBW 88	--	101	--	0 15	15 --	112TILL BEDROCK	TILL
MBW 89	--	361	--	0 45	45 --	110SDMN BEDROCK	SDGL
MBW 90	--	428	--	0 6	6 --	112TILL BEDROCK	TILL
MBW 91	--	500	--	0 3	3 --	110SDMN BEDROCK	SAND
MBW 92	--	638	--	0 12	12 --	110SDMN BEDROCK	SAND
MBW 93	--	242	--	0 6	6 --	112TILL BEDROCK	TILL
MBW 94	--	322	--	0 20	20 --	112TILL BEDROCK	TILL
MBW 95	--	282	--	0 3	3 --	112TILL BEDROCK	TILL
MBW 96	--	202	--	0 15	15 --	112TILL BEDROCK	TILL
MBW 97	--	342	--	0 45	45 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 98	--	334	--	0 7	7 --	110SDMN BEDROCK	SAND
MBW 99	--	322	--	0 135	135 --	112TILL BEDROCK	TILL
MBW 100	--	19	--	0 4	4 --	110SDMN 112TILL	SDGL TILL
MBW 101	--	600	--	0 40 170	40 170 --	110SDMN 112TILL BEDROCK	SDGL TILL SAND, HARDPAN
MBW 102	--	182	--	0 18	18 --	112TILL BEDROCK	TILL
MBW 103	--	377	--	0 42	42 --	110SDMN BEDROCK	SDGL
MBW 104	--	323	--	0 20	20 --	110SDMN BEDROCK	SDGL
MBW 105	--	221	--	0 28	28 --	112TILL BEDROCK	TILL
MBW 106	--	32	--	0 33	33 --	110SDMN 112TILL	SDGL TILL
MBW 107	--	545	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 108	--	281	--	0 12	12 --	110SDMN BEDROCK	SDGL
MBW 109	--	420	--	0 240	240 --	112TILL BEDROCK	TILL
MBW 110	--	281	--	0 4	4 --	112TILL BEDROCK	TILL
MBW 111	--	213	--	0 15	15 --	112TILL BEDROCK	TILL
MBW 112	--	188	--	0 15	--	112TILL BEDROCK	TILL
MBW 113	--	323	--	0 236	236 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
MBW 114	--	500	--	0 8	8 --	110SDMN BEDROCK	SDGL
MBW 115	--	400	--	0 6	6 --	110SDMN BEDROCK	SDGL
MBW 116	--	540	--	0 18	18 --	112TILL BEDROCK	TILL
MBW 117	--	241	--	0 5	5 --	112TILL BEDROCK	TILL
MBW 118	--	302	--	0 35	35 --	110SDMN BEDROCK	SDGL
MBW 119	--	424	--	0 15	15 --	110SDMN BEDROCK	SDGL
MBW 120	--	424	--	0 40	40 --	110SDMN BEDROCK	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 121	--	538	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 122	--	543	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 123	--	443	--	0 30	30 --	112TILL BEDROCK	TILL
MBW 124	--	927	--	0 135	135 --	112TILL BEDROCK	TILL
MBW 125	--	220	--	0 30 107	30 107 --	110SDMN 110SDMN BEDROCK	SDGL OTHR
MBW 126	--	227	--	0 52	52 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
MBW 127	--	402	--	0 18	18 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
MBW 128	--	423	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 129	--	48	--	0	--	110SDMN	SDGL
MBW 130	--	152	--	0 22	22 --	112TILL BEDROCK	TILL
MBW 131	--	442	--	7	--	BEDROCK	
MBW 132	--	342	--	0 205	205 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 133	--	20	--	0 9 10 20	9 10 20 --	112TILL 110SDMN 112TILL BEDROCK	TILL SDGL TILL
MBW 134	--	62	--	0	--	110SDMN	SDGL
MBW 135	--	602	--	0 5	5 --	112TILL BEDROCK	TILL
MBW 136	--	545	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 137	--	61	--	--	--	110SDMN	SDGL
MBW 138	--	18	--	0 37	37 --	110SDMN 112TILL	SAND TILL
MBW 139	--	242	--	0 40	40 --	110SDMN BEDROCK	SDGL
MBW 140	--	595	--	7	--	BEDROCK	
MBW 141	--	562	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 142	--	540	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 143	--	462	--	0 25	25 --	112TILL BEDROCK	TILL
MBW 144	--	61	--	0 13	13 --	110SDMN 110SDMN	SDGL SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 145	--	423	--	0 15	15 --	110SDMN BEDROCK	CLAY
MBW 146	--	223	--	0 15	15 --	112TILL BEDROCK	TILL
MBW 147	--	424	--	0 15	15 --	112TILL BEDROCK	TILL
MBW 148	--	198	--	0 12	12 --	112TILL BEDROCK	TILL
MBW 149	--	422	--	0 40	40 --	110SDMN BEDROCK	SDGL
MBW 150	--	560	--	0 10 18	10 18 --	110SDMN 110SDMN BEDROCK	SDGL CLAY
MBW 151	--	55.5	--	--	--	110SDMN	SDGL
MBW 152	--	377	--	0 130	130 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
MBW 153	--	302	--	0 10	10 --	110SDMN BEDROCK	SAND
MBW 154	--	177	--	0 60	60 --	110SDMN BEDROCK	SDCL
MBW 155	--	302	--	0 117	117 --	110SDMN BEDROCK	SAND
MBW 156	--	202	--	0 10	10 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 157	--	876	--	0 21	21 --	112TILL BEDROCK	TILL
MBW 158	--	502	--	0 15	15 --	112TILL BEDROCK	TILL
MBW 159	--	303	--	0 30	30 --	110SDMN BEDROCK	SDGL
MBW 160	--	424	--	0 18	18 --	110SDMN BEDROCK	SDGL
MBW 161	--	1060	--	0 20	20 --	110SDMN BEDROCK	SAND
MBW 162	--	604	--	0 65	65 --	112TILL BEDROCK	TILL
MBW 163	--	202	--	0 40 80	40 80 --	110SDMN 112TILL BEDROCK	SDGL TILL
MBW 164	--	438	--	0 60 75	60 75 --	112TILL 110SDMN BEDROCK	TILL CLAY
MBW 165	--	303	--	0 60	60 --	112TILL BEDROCK	TILL
MBW 166	--	263	--	0 50	50 --	112TILL BEDROCK	TILL
MBW 167	--	164	--	0 20 50	20 65 --	112TILL 110SDMN BEDROCK	TILL CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 168	--	545	--	0 10	10 --	112TILL BEDROCK	TILL
MBW 169	--	482	--	0 26	26 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 170	--	402	--	0 210	210 --	110SDMN BEDROCK	CLAY
MBW 171	--	202	--	0 55	55 --	110SDMN BEDROCK	SGVC
MBW 172	--	652	--	0 85	85 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 173	--	48	--	0 25 39 50	25 39 50 --	110SDMN 110SDMN 110SDMN BEDROCK	SAND CLAY SDGL
MBW 174	--	525	--	0 30	30 --	112TILL BEDROCK	TILL
MBW 175	--	242	--	0 30	30 --	112TILL BEDROCK	TILL
MBW 176	--	423	--	0 20	20 --	112TILL BEDROCK	TILL
MBW 177	--	1200	--	0 55	55 --	110SDMN BEDROCK	CLAY
MBW 178	--	60	--	--	--	110SDMN	SDGL
MBW 179	--	340	--	0 45	45 --	112TILL BEDROCK	TILL
MBW 180	--	423	--	0 160	160 --	112TILL BEDROCK	TILL
MBW 181	--	420	--	0 8	8 --	112TILL BEDROCK	TILL
MBW 182	--	402	--	0 2	2 --	112TILL BEDROCK	TILL
MBW 183	--	602	--	0 10	10 --	110SDMN BEDROCK	CLAY
MBW 184	--	20	--	--	--	110SDMN 110SDMN	SAND SDGL
MBW 185	--	504	--	0 12	12 --	112TILL BEDROCK	TILL
MBW 186	--	502	--	0 35	35 --	112TILL BEDROCK	TILL CLAY, HARDPAN
MBW 187	--	302	--	0 35	35 --	110SDMN BEDROCK	CLAY
MBW 188	--	1050	--	0 80	80 --	112TILL BEDROCK	TILL
MBW 189	--	345	--	0 65	65 --	110SDMN BEDROCK	OTHR
MBW 190	--	1020	--	0 40 50	40 50 --	110SDMN 110SDMN BEDROCK	SDCL OTHR ROTTEN ROCK

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 191	--	502	--	0 20 85	20 85 --	112TILL 110SDMN BEDROCK	TILL CLAY
MBW 192	--	422	--	0 100	100 --	110SDMN BEDROCK	OTHR
MBW 193	--	422	--	0 95	95 --	112TILL BEDROCK	TILL
MBW 194	--	242	--	-- 0 75	-- 75 --	110SDMN 110SDMN BEDROCK	SAND SDCL
MBW 195	--	282	--	0 52	52 --	110SDMN BEDROCK	SDGL
MBW 196	--	17	--	0 28	28 --	110SDMN 112TILL	SDGL TILL
MBW 197	--	16	--	0 10	10 --	110SDMN 112TILL	SDGL TILL
MBW 198	--	303	--	0 15	15 --	110SDMN BEDROCK	SDGL
MBW 199	--	362	--	0 55	55 --	112TILL BEDROCK	TILL
MBW 200	--	327	--	0 180	180 --	110SDMN BEDROCK	OTHR
MBW 201	--	177	--	0 18	18 --	112TILL BEDROCK	TILL
MBW 202	--	51	--	0 40	40 --	110SDMN BEDROCK	SDGL
MBW 203	--	48	--	--	--	110SDMN	SDGL
MBW 204	--	525	--	0 2	2 --	112TILL BEDROCK	TILL
MBW 205	--	190	--	0 40	40 --	112TILL BEDROCK	TILL
MBW 206	--	164	--	0 50	50 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
MBW 207	--	202	--	0 12	12 --	112TILL BEDROCK	TILL
MBW 208	--	522	--	0 16	16 --	110SDMN BEDROCK	SDGL
MBW 209	--	402	--	0 18	18 --	110SDMN BEDROCK	CLAY
MBW 210	--	20	--	0 21	21 --	110SDMN 112TILL	SDGL TILL SAND, HARDPAN
MBW 211	--	20	--	0 2 17	2 17 --	110SDMN 110SDMN BEDROCK	SAND SDGL
MBW 212	--	19	--	0 3	3 --	110SDMN 112TILL	SDGL TILL
MBW 213	--	45	--	--	--	110SDMN	SAND
MBW 214	--	72	--	0	4	110SDMN	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 215	--	300	--	4	--	BEDROCK	
MBW 216	--	525	--	0 25	25	110SDMN BEDROCK	OTHR
MBW 217	--	162	--	0 180	180 --	110SDMN BEDROCK	SDGL
MBW 218	--	525	--	0 47	47	110SDMN BEDROCK	SDGL
MBW 219	--	37	--	0 38	38	110SDMN 112TILL	SDGL TILL
MBW 220	--	323	--	0 25	25	110SDMN BEDROCK	OTHR
MBW 221	--	122	--	0 60	60	110SDMN BEDROCK	SDGL
MBW 222	--	322	--	0 175	175 --	110SDMN BEDROCK	OTHR
MBW 223	--	28	--	0 28	28 --	110SDMN 112TILL	SDGL TILL
MBW 224	--	422	--	78	--	BEDROCK	
MBW 225	--	223	--	0 50	50	110SDMN BEDROCK	OTHR
MBW 226	--	75	--	--	--	110SDMN	SDGL
MBW 227	--	53	--	--	--	110SDMN	SDGL
MBW 228	--	49	--	--	--	110SDMN	SDGL
MBW 229	--	72	--	--	--	110SDMN	SDGL
MBW 230	--	526	--	0 140	140 --	110SDMN BEDROCK	OTHR
MBW 231	--	362	--	0 50	50 --	110SDMN BEDROCK	SDCL
MBW 232	--	23	--	--	--	112TILL	TILL GRAVEL, HARDPAN
MBW 233	--	523	--	0 100	100 --	112TILL BEDROCK	TILL
MBW 234	--	60	--	--	--	110SDMN	SDGL
MBW 235	--	352	--	0 205	205 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
MBW 236	--	73	--	--	--	110SDMN	SDGL
MBW 237	--	63	--	0 35	35 --	110SDMN 110SDMN	SDGL SAND
MBW 238	--	952	--	0 80 140 189	80 140 189 --	110SDMN 110SDMN 110SDMN BEDROCK	SAND SGVC CLAY
MBW 239	--	803	--	5	--	BEDROCK	
MBW 240	--	200	--	0 140	140 --	110SDMN BEDROCK	SDGL
MBW 241	--	73	--	--	--	110SDMN	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>MADISON--Continued</b>							
MBW 242	--	63	--	--	--	110SDMN	SDGL
MBW 243	--	320	--	0 20	20 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
MBW 244	--	580	--	0 4	4 --	112TILL BEDROCK	TILL
MBW 245	--	320	--	0 105	105 --	110SDMN BEDROCK	SDGL
MBW 246	--	355	--	0 50	50 --	110SDMN BEDROCK	SDGL
MBW 247	--	552	--	0 75	75 --	110SDMN BEDROCK	SGVC
MBW 248	--	304	--	0 50 150	50 150 --	110SDMN 110SDMN BEDROCK	SDGL OTHR
MBW 249	--	74	--	0 76	76 --	112SDMN BEDROCK	SDGL
MBW 250	--	53	--	--	--	110SDMN	SDGL
MBW 251	--	58.5	--	--	--	110SDMN	SDGL
MBW 252	30	--	--	--	--		
<b>OSSIPEE</b>							
OXA 1	59	--	--	0 6 10 20 30 35 45 50	6 10 20 30 35 45 50 --	112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD 112SRFD	SAND M SAND VS, POORLY SORTED SAND F TO M, MEDIUM SORTED SAND M, POORLY SORTED SAND C, MEDIUM SORTED SAND M, POORLY SORTED SAND F, MEDIUM SORTED SAND M, POORLY SORTED
OXA 2	44	--	--	0 3	3 --	111FILL 112SRFD	SDGL VF TO CS LAYERS AND PEBBLES
OXA 3	59	--	--	0 1 26 31	1 26 31 --	110SOIL 112SRFD 112SRFD 112SRFD	LOAM TOPSOIL SAND F TO VCS POORLY SORTED SAND MS WITH C GRAVEL SAND F TO VCS LAYERS
OXB 1	98	--	--	0 3 41 98	3 41 98 --	110LAKE 112SRFD 112SRFD 112SRFD	SAND SAND, FINE SDGL SAND, COARSE AND GRAVEL SAND SAND, FINE TO COARSE SAND END OF HOLE AT 98 FEET
OXB 2	109	--	--	0 20 29 33 40 72 109	20 29 33 40 72 109 --	112SRFD 112LCSR 112SRFD 112LCSR 112SRFD 112LCSR 112LCSR	SAND SAND, FINE TO COARSE SAND SAND, FINE SAND SAND, COARSE SAND SAND, FINE SAND SAND, MEDIUM, STONY SAND SAND, FINE SAND END OF HOLE AT 109 FEET
OXB 3	100	--	--	0 10 15 100	10 15 100 --	112SRFD 111SDMN 112SRFD 112SRFD	SAND SAND, FINE TO MEDIUM SAND SAND, MUCK, WOOD SAND SAND, FINE TO MEDIUM SAND END OF HOLE AT 100 FEET

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXB 4	40	--	--	0 10 31 40	10 31 40 --	111LAKE 112LCSR 112TILL BEDROCK	SAND SAND, FINE SAND SAND, FINE; TRACE OF SILT TILL TILL, SANDY REFUSAL ON BOULDER OR BEDROCK
OXB 5	93	--	--	0 4 60 93	4 60 93 --	112SRFD 112LCSR 112LCSR	SAND SAND, COARSE SAND SAND, FINE; TRACE OF SILT SAND SAND, FINE BEDROCK REFUSAL ON BOULDER OR BEDROCK
OXB 6	26	--	--	0 15 26	15 26 --	112SRFD 112TILL	GRVL GRAVEL, SANDY TILL TILL, SANDY
OXB 7	90	--	--	0 9 15 21 90	9 15 21 90 --	111LAKE 111SWMP 111SDMN 112LCSR 112LCSR	SAND SAND, FINE SAND SAND, ORGANIC AND WOOD SAND SAND; TRACE OF SILT SAND SAND, FINE SAND END OF HOLE AT 90 FEET
OXB 8	20	--	--	0  4 20	4 20 --	112SRFD 112TILL	SAND SAND, FINE TO COARSE; SOME GRAVEL TILL TILL
OXB 9	31	--	--	0 4 6 22 31	4 6 22 31 --	112LCSR 112GCFV 112GCFV 112TILL BEDROCK	SAND SAND, FINE SDGL SAND, FINE AND GRAVEL SAND SAND, FINE; FEW COBBLES TILL TILL REFUSAL
OXB 10	22	--	--	0 5 13 15 22	5 13 15 22 --	112SRFD 112ICCC 111SWMP 112TILL BEDROCK	GRVL GRAVEL SAND SAND, MEDIUM AND COBBLES MUCK MUCK TILL TILL, GRAVELLY AND BOULDERS REFUSAL ON BOULDER OR BEDROCK
OXB 11	20	--	--	0 1 10 20	1 10 20 --	110SOIL 112SRFD 112SRFD 112SRFD	SOIL TOPSOIL GRVL GRAVEL AND BOULDERS SAND SAND, COARSE SAND END OF HOLE AT 20 FEET (OTHER LOG HIT REFUSAL AT 19 FEET)
OXB 12	8	--	--	0 4 8	4 8 --	111SDMN 112TILL BEDROCK	SAND SAND AND MUCK TILL TILL, GRAVELLY REFUSAL ON BOULDER OR BEDROCK
OXB 13	35	--	--	0 4.5 8 35	4.5 8 35 --	112SRFD 112ICCC 112ICCC 112ICCC	GRVL GRAVEL, SANDY BLDR BOULDERS GRVL GRAVEL, SANDY AND BOULDERS GRVL END OF HOLE AT 35 FEET
OXB 14	30	--	--	0 4 9 21 30	4 9 21 30 --	111SDMN 112SRFD 112SRFD 112LCSR 112LCSR	SAND SAND AND MUCK GRVL GRAVEL SAND SAND, MEDIUM SAND SAND, FINE SAND END OF HOLE AT 30 FEET
OXB 15	17	--	--	0 17	17 --	112SRFD 112SRFD	GRVL GRAVEL, SANDY GRVL END OF HOLE AT 17 FEET (OTHER LOGS HIT REFUSAL 8 TO 14 FEET)
OXB 16	81	--	--	0 10 17 81	10 17 81 --	111FILL 112SRFD 112LCSR 112LCSR	OTHR SAND, FILL SAND SAND; SOME WOOD SAND SAND, FINE, SILTY SAND END OF HOLE AT 81 FEET
OXW 5	12	12	--	--	--		
OXW 6	100	100	--	--	--		

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 7	25	25	--	--	--	--	
OXW 8	40	40	--	--	--	--	
OXW 9	48	48	--	--	--	--	
OXW 10	260	250	--	--	--	--	
OXW 11	13	13	--	--	--	--	
OXW 12	12.5	12.5	--	--	--	--	
OXW 13	9.8	9.8	--	--	--	--	
OXW 15	18	18	--	--	--	--	
OXW 16	17.5	17.5	--	--	--	--	
OXW 18	15	15	--	--	--	--	
OXW 19	20	20	--	--	--	--	
OXW 20	250	--	--	--	--	--	
OXW 22	20	20	--	--	--	--	
OXW 23	327	--	--	--	--	--	
OXW 24	325	--	--	--	--	--	
OXW 25	8.6	8.6	--	--	--	--	
OXW 26	75	75	--	--	--	--	
OXW 27	230	--	--	--	--	--	
OXW 29	510	--	--	--	--	--	
OXW 30	554	--	--	--	--	--	
OXW 31	15	15	--	--	--	--	
OXW 32	69	69	--	--	--	--	
OXW 33	25	25	--	--	--	--	
OXW 34	114	69	--	0 15 89 89	15 89 --	112SRFD 112SRFD 112SRFD	SDGL C TO CVS AND GRANUALS SAND LAYERS FS TO VCS SAND VFS TO FS WITH SILT
OXW 35	71	18.5	71	0 26 68	26 68 --	112SRFD 112SRFD 112TILL	SDGL M TO VCS AND PEBBLES SDST LAYERS VF TO MS AND SILT TILL
OXW 36	103	90	103	0 83 98	83 98 --	112SRFD 112SRFD 112TILL	SDGL M TO VCS, PEBBLES AND COBBLES WITH SILT SAND C TO VCS TILL
OXW 37	94	49	94	0 23 56.5 78	23 56.5 78 --	112SRFD 112SRFD 112GLCL 112SRFD	SAND LAYERS OF C TO VCS SDGL LAYERS C TO VCS AND PEBBLES GRDS DIAMICTON SILT TO PEBBLES SDGL CS TO PEBBLES, SILTY, DIAMICTON AND CS LAYERS

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 38	115	115	--	0 25 53	25 53 97	112SRFD 112SRFD 112SRFD	SAND M OVER F TO VF SDGL LAYERS M TO VCS AND PEBBLES SDGL SILTY SAND AND PEBBLES, LAYERS F TO CS TO C TO VCS
				97 104	104	112GLCL 112SRFD	GRDS DIAMICTON SDGL MS TO C TO VCS AND PEBBLES
OXW 40	--	40	--	0 20	20 --	110SDMN 110SDMN	SAND SDGL
OXW 41	--	503	--	0 67	67 --	110SDMN BEDROCK	SAND
OXW 42	--	585	--	0 35	35 --	110SDMN BEDROCK	SAND
OXW 43	--	753	--	0 35	35 --	110SDMN BEDROCK	SAND
OXW 44	--	72	--	0 10 62 62 87	10 62 87 --	110SDMN 110SDMN 110SDMN BEDROCK	SDGL SAND SDGL
OXW 45	--	62	--	0 12 53 53 57 89	12 53 57 89 --	110SDMN 110SDMN 110SDMN 110SDMN BEDROCK	SDGL SAND SDGL SAND
OXW 46	--	75.6	--	0 20 35 35 69 89	20 35 69 89 --	110SDMN 110SDMN 110SDMN 110SDMN BEDROCK	SAND SDGL SAND SDGL
OXW 47	--	113	--	--	--		--
OXW 48	--	40	--	--	--	110SDMN	SAND
OXW 49	--	540	--	0 120	120 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
OXW 50	--	253	--	0 195	195 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 51	--	552	--	0 277	277 --	110SDMN BEDROCK	SDCL
OXW 52	--	377	--	0 83	83 --	110SDMN BEDROCK	SAND
OXW 53	--	800	--	0 120	120 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
OXW 54	--	61	--	--	--	110SDMN	SAND
OXW 55	--	312	--	0 22	22 --	110SDMN BEDROCK	SAND
OXW 56	--	237	--	0 25	25 --	110SDMN BEDROCK	SAND
OXW 57	--	32	--	--	--	110SDMN	SAND
OXW 58	--	600	--	0 250	250 --	110SDMN BEDROCK	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 59	--	9	--	0 4 5	4 5 --	110SDMN 110SDMN 110SDMN	SAND SDGL CLAY
OXW 60	--	53	--	--	--	110SDMN	SDGL
OXW 61	--	36	--	--	--	110SDMN	SAND
OXW 62	--	33	--	--	--	110SDMN	SAND
OXW 63	--	576	--	0 28	28 --	110SDMN BEDROCK	SGVC
OXW 64	--	552	--	0 125 130	125 130 --	110SDMN 110SDMN BEDROCK	SDCL SDGL
OXW 65	--	106	--	0 181	181 --	110SDMN BEDROCK	SDGL
OXW 66	--	452	--	0 90	90 --	110SDMN BEDROCK	SDCL
OXW 67	--	602	--	0 60	60 --	110SDMN BEDROCK	SAND
OXW 68	--	53	--	--	--	110SDMN	SAND
OXW 69	--	92	--	0 30 73	30 73 --	110SDMN 110SDMN 110SDMN	SAND CLAY SAND
OXW 70	--	92	--	0 30 73	30 73 --	110SDMN 110SDMN 110SDMN	SAND CLAY SAND
OXW 71	--	53	--	0 20	20 --	110SDMN 110SDMN	SDGL SAND F
OXW 72	--	82	--	0 40 58	40 58 --	110SDMN 110SDMN 110SDMN	SAND SDCL SAND
OXW 73	--	42	--	0 8	8 --	110SDMN 110SDMN	SDGL SAND
OXW 74	--	300	--	0 11	11 --	110SDMN BEDROCK	SDGL
OXW 75	--	14	--	0 6	6 --	110SDMN 110SDMN	SAND SDGL
OXW 76	--	94	--	0 120	120 --	110SDMN BEDROCK	SDGL
OXW 77	--	498	--	0 70	70 --	110SDMN BEDROCK	SAND
OXW 78	--	403	--	0 80	80 --	110SDMN BEDROCK	SGVC
OXW 79	--	16	--	--	--	110SDMN	SAND
OXW 80	--	302	--	0 15	15 --	112TILL BEDROCK	TILL
OXW 81	--	500	--	0 115	115 --	110SDMN BEDROCK	SDGL
OXW 82	--	48	--	--	--	110SDMN	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
OSSIPEE--Continued							
OXW 83	--	11	--	0 12	12 --	110SDMN 110SDMN	SAND SDCL
OXW 84	--	264	--	0 60	60 --	110SDMN BEDROCK	SDGL
OXW 85	--	91	--	0 132	132 --	110SDMN BEDROCK	SAND
OXW 86	--	39	--	--	--	110SDMN	SAND
OXW 87	--	423	--	0 100	100 --	110SDMN BEDROCK	SDGL
OXW 88	--	180	--	0 130	130 --	110SDMN BEDROCK	SAND
OXW 89	--	690	--	-- 0 72	-- 72 --	110SDMN 110SDMN BEDROCK	SAND CLAY
OXW 90	--	41	--	--	--	110SDMN	SAND
OXW 91	--	50	--	--	--	110SDMN	SAND
OXW 92	--	93	--	0 30 75	30 75 --	110SDMN 110SDMN 110SDMN	SDCL CLAY SAND
OXW 93	--	63	--	0 20 50 85	20 50 85 --	110SDMN 110SDMN 110SDMN 110SDMN	SAND CLAY SAND SDGL
OXW 94	--	44	--	0 15	15 --	110SDMN 112TILL	SDGL TILL SAND, GRAVEL, HARDPAN
OXW 95	--	60	--	--	--	110SDMN	SAND
OXW 96	--	380	--	0 39	39 --	110SDMN BEDROCK	SAND
OXW 97	--	502	--	0 170	170 --	110SDMN BEDROCK	SDCL
OXW 98	--	894	--	0 89	89 --	110SDMN BEDROCK	SDCL
OXW 99	--	575	--	0 35 80	35 80 --	110SDMN 110SDMN BEDROCK	SAND OTHR
OXW 100	--	202	--	0 72	72 --	110SDMN BEDROCK	SDGL
OXW 101	--	802	--	0 85	85 --	110SDMN BEDROCK	CLAY
OXW 102	--	100	--	--	--	110SDMN	SAND
OXW 103	--	202	--	0 88	88 --	110SDMN BEDROCK	SDGL
OXW 104	--	140	--	0 20 38	20 38 --	110SDMN 110SDMN BEDROCK	SAND SDGL
OXW 105	--	352	--	0 210	210 --	110SDMN BEDROCK	SGVC
OXW 106	--	315	--	--	--		

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 107	--	51	--	0 6	6 --	110SDMN 110SDMN	SDCL SDGL
OXW 108	--	31	--	0 32	32 --	110SDMN 110SDMN	SDGL SAND
OXW 109	--	84	--	0 20 72	20 72 --	110SDMN 110SDMN 110SDMN	SAND CLAY SAND
OXW 110	--	31	--	--	--	110SDMN	SDGL
OXW 111	--	34	--	--	--	110SDMN	SAND
OXW 112	--	242	--	0 138	138 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
OXW 113	--	421	--	0 40 80 140	40 80 140 --	112TILL 110SDMN BEDROCK BEDROCK	TILL CLAY
OXW 114	--	17	--	0 18 25	18 25 --	110SDMN 112TILL BEDROCK	SAND TILL
OXW 115	--	54	--	--	--	110SDMN	SDGL
OXW 116	--	105	--	0 88	88 --	112TILL BEDROCK	TILL SAND, HARDPAN
OXW 117	--	1120	--	0 20	20 --	110SDMN BEDROCK	SDGL
OXW 118	--	25	--	0 5 10	5 10 --	110SDMN 110SDMN 110SDMN	SDGL SDGL SAND
OXW 119	--	500	--	0 90	90 --	110SDMN BEDROCK	SAND
OXW 120	--	43	--	0 44	44 --	110SDMN 112TILL	SDGL TILL GRAVEL, CLAY, HARDPAN
OXW 121	--	505	--	0 121	121 --	110SDMN BEDROCK	SDCL
OXW 122	--	515	--	0 120 145	120 145 --	110SDMN 112TILL BEDROCK	SAND TILL CLAY, HARDPAN
OXW 123	--	585	--	0 35	35 --	110SDMN BEDROCK	SDGL
OXW 124	--	32	--	0 35	35 --	110SDMN 110SDMN	SDGL CLAY
OXW 125	--	202	--	0 20 45	20 45 --	110SDMN 110SDMN BEDROCK	SDGL CLAY
OXW 126	--	202	--	0 14	14 --	110SDMN BEDROCK	SDGL
OXW 127	--	302	--	0 10	10 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
OXW 128	--	553	--	0 80 115	80 115 --	110SDMN 110SDMN BEDROCK	SAND CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
OSSIPEE--Continued							
OXW 129	--	204	--	0 40 65	40 65 --	110SDMN 110SDMN BEDROCK	SDGL SAND
OXW 130	--	303	--	0 25	25 --	110SDMN BEDROCK	SAND
OXW 131	--	43.5	--	0 45	45 --	110SDMN 112TILL	SAND TILL
OXW 132	--	163	--	0 20 30	20 30 --	110SDMN 112TILL BEDROCK	SAND TILL
OXW 133	--	800	--	0 38	38 --	110SDMN BEDROCK	SDCL
OXW 134	--	302	--	0 169	169 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
OXW 135	--	253	--	0 40	40 --	110SDMN BEDROCK	SAND
OXW 136	--	58	--	--	--	110SDMN	SAND
OXW 137	--	362	--	0 30	30 --	110SDMN BEDROCK	SAND
OXW 138	--	493	--	0 160	160 --	110SDMN BEDROCK	SAND
OXW 139	--	402	--	0 115	115 --	110SDMN BEDROCK	SDCL
OXW 140	--	127	--	0 22	22 --	110SDMN BEDROCK	SAND
OXW 141	--	252	--	0 40 88	40 88 --	112TILL 112TILL BEDROCK	TILL GRAVEL, HARDPAN TILL CLAY, HARDPAN
OXW 142	--	113	--	0 13	13 --	110SDMN BEDROCK	OTHR
OXW 143	--	145	--	0 50	50 --	110SDMN BEDROCK	SAND
OXW 144	--	304	--	0 25	25 --	110SDMN BEDROCK	SAND
OXW 145	--	652	--	0 195	195 --	110SDMN BEDROCK	SDCL
OXW 146	--	442	--	0 100 190	100 190 --	110SDMN 112TILL BEDROCK	SDGL TILL
OXW 147	--	302	--	0 100 135	100 135 --	110SDMN 112TILL BEDROCK	SAND TILL
OXW 148	--	177	--	0 48	48 --	110SDMN BEDROCK	SDCL
OXW 149	--	177	--	0 90 110	90 110 --	110SDMN 112TILL BEDROCK	SDGL TILL CLAY, HARDPAN
OXW 150	--	800	--	0 20	20 --	110SDMN BEDROCK	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 151	--	182	--	0 71	71 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
OXW 152	--	422	--	0 100 162	100 162 --	110SDMN 112TILL BEDROCK	SAND TILL CLAY, HARDPAN
OXW 153	--	30	--	0 32	32 --	110SDMN 110SDMN	SAND SDCL
OXW 154	--	162	--	0 125	125 --	110SDMN BEDROCK	SDGL
OXW 155	--	202	--	0 130	130 --	110SDMN BEDROCK	OTHR
OXW 156	--	545	--	0 105	105 --	110SDMN BEDROCK	SAND
OXW 157	--	700	--	0	--		--
OXW 158	--	140	--	0 115	115 --	110SDMN BEDROCK	SDGL
OXW 159	--	252	--	0 16	16 --	110SDMN BEDROCK	SAND
OXW 160	--	522	--	0 47	47 --	110SDMN BEDROCK	SAND
OXW 161	--	502	--	0 122	122 --	110SDMN BEDROCK	SGVC
OXW 162	--	303	--	0 120	120 --	110SDMN BEDROCK	SDGL
OXW 163	--	640	--	0 25	25 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
OXW 164	--	112	--	0 95	95 --	112TILL 110SDMN	TILL SDGL
OXW 165	--	421	--	0 25	25 --	110SDMN BEDROCK	SDGL
OXW 166	--	46.5	--	--	--	110SDMN	SDCL
OXW 167	--	402	--	0 104	104 --	110SDMN BEDROCK	SDCL
OXW 168	--	602	--	0 80	80 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 169	--	39	--	0 12 15	12 15 --	110SDMN 110SDMN 110SDMN	SDGL CLAY SAND
OXW 170	--	353	--	0 177	177 --	110SDMN BEDROCK	SDCL
OXW 171	--	422	--	0 75	75 --	112TILL BEDROCK	TILL
OXW 172	--	202	--	0 91	91 --	110SDMN BEDROCK	SDGL
OXW 173	--	880	--	0 19	19 --	110SDMN BEDROCK	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
OSSIPEE--Continued							
OXW 174	--	785	--	0 109	109	110SDMN BEDROCK	SAND
OXW 175	--	600	--	0 60	60	110SDMN BEDROCK	SAND
OXW 176	--	322	--	0 40	40	110SDMN BEDROCK	SDGL
OXW 177	--	402	--	0 14	14	112TILL BEDROCK	TILL
OXW 178	--	39	--	0 2 35 35 43	2 35 43 --	110SDMN 110SDMN 110SDMN 112TILL	SDGL CLAY SDGL TILL SAND, GRAVEL, HARDPAN
OXW 179	--	527	--	0 65	65	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
OXW 180	--	63	--	--	--	110SDMN	SAND
OXW 181	--	542	--	0 40 185	40 185 --	112TILL 110SDMN BEDROCK	TILL CLAY
OXW 182	--	440	--	0 50 90	50 90 --	110SDMN 110SDMN BEDROCK	SAND SDCL
OXW 183	--	202	--	0 60	60 --	110SDMN BEDROCK	OTHR
OXW 184	--	352	--	0 172	172	110SDMN BEDROCK	CLAY
OXW 185	--	302	--	0 68	68	110SDMN BEDROCK	SDCL
OXW 186	--	410	--	0 60	60	110SDMN BEDROCK	SAND
OXW 187	--	502	--	0 108	108	112TILL BEDROCK	TILL SAND, HARDPAN
OXW 188	--	125	--	0 76	76	110SDMN BEDROCK	SAND
OXW 189	--	200	--	0 20	20	112TILL BEDROCK	TILL
OXW 190	--	30	--	--	--	110SDMN	SAND
OXW 191	--	302	--	0 50	50	110SDMN BEDROCK	OTHR
OXW 192	--	240	--	0 46 82	46 82 --	110SDMN 112TILL BEDROCK	SAND TILL CLAY, HARDPAN
OXW 193	--	304	--	0 80	80	110SDMN BEDROCK	OTHR
OXW 194	--	39	--	0 40	40	110SDMN 112TILL	SDGL TILL
OXW 195	--	405	--	0 174	174	110SDMN BEDROCK	SDCL
OXW 196	--	602	--	0 70	70	110SDMN BEDROCK	SDCL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 197	--	402	--	0 39	39 --	110SDMN BEDROCK	SDGL
OXW 198	--	54	--	--	--	110SDMN	SAND
OXW 199	--	403	--	0 117	117 --	110SDMN BEDROCK	SDCL
OXW 200	--	25	--	0 5 10 11 32	5 10 11 32 --	110SDMN SDGL 110SDMN CLAY 110SDMN SAND 110SDMN SDCL	SDGL SDGL CLAY SAND SDCL
OXW 201	--	478	--	0 382	382 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
OXW 202	--	302	--	0 30 180	30 180 --	110SDMN 110SDMN BEDROCK	SDGL OTHR
OXW 203	--	328	--	0 50	50 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 204	--	310	--	0 20 90	20 90 --	110SDMN 112TILL BEDROCK	SDGL TILL
OXW 205	--	403	--	0 152	152 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
OXW 206	--	300	--	0 15	15 --	110SDMN BEDROCK	SAND
OXW 207	--	502	--	0 84	84 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
OXW 208	--	278	--	0 32	32 --	110SDMN BEDROCK	SDGL
OXW 209	--	377	--	0 32	32 --	110SDMN BEDROCK	SDGL
OXW 210	--	177	--	0 80	80 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 211	--	202	--	0 92	92 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 212	--	552	--	0 136	136 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
OXW 213	--	352	--	0 34	34 --	110SDMN BEDROCK	OTHR
OXW 214	--	12.5	--	0 13	13 --	110SDMN 112TILL	SDGL TILL GRAVEL, HARDPAN
OXW 215	--	190	--	0 40	40 --	110SDMN 110SDMN	SAND SDGL
OXW 216	--	377	--	0 88	88 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 217	--	402	--	0 175	175 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 218	--	252	--	0 185	185 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 219	--	29	--	0 12 21 30	12 21 30 --	110SDMN 110SDMN 110SDMN 110SDMN	SDGL CLAY SDGL CLAY
OXW 220	--	328	--	0 149	149 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 221	--	228	--	0 21	21 --	110SDMN BEDROCK	SDCL
OXW 222	--	252	--	0 153	153 --	110SDMN BEDROCK	CLAY
OXW 223	--	425	--	0 89	89 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
OXW 224	--	552	--	0 200 250	200 250 --	110SDMN 112TILL BEDROCK	CLAY TILL
OXW 225	--	427	--	0 60	60 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 226	--	142	--	0 39	39 --	110SDMN BEDROCK	CLAY
OXW 227	--	402	--	0 117	117 --	110SDMN BEDROCK	SAND
OXW 228	--	160	--	0 30	30 --	110SDMN BEDROCK	OTHR
OXW 229	--	14	--	0 12	12 --	110SDMN BEDROCK	SDGL
OXW 230	--	344	--	0 80	80 --	112TILL BEDROCK	TILL
OXW 231	--	100	--	0 212	212 --	110SDMN BEDROCK	SDGL
OXW 232	--	315	--	0 130	130 --	112TILL BEDROCK	TILL
OXW 233	--	502	--	0 100 250 375	100 250 375 --	112TILL 112TILL 112TILL BEDROCK	TILL GRAVEL, HARDPAN TILL TILL GRAVEL, HARDPAN
OXW 234	--	736	--	0 12	12 --	110SDMN BEDROCK	SDGL
OXW 235	--	402	--	0 150	150 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
OXW 236	--	505	--	0 105	105 --	110SDMN BEDROCK	SAND
OXW 237	--	322	--	0 20 40 175	20 40 175 --	112TILL 110SDMN 112TILL BEDROCK	TILL CLAY TILL
OXW 238	--	621	--	0 50	50 --	112TILL BEDROCK	TILL
OXW 239	--	421	--	0 4	4 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
OSSIPEE--Continued							
OXW 240	--	380	--	0 91	91 --	110SDMN BEDROCK	SDGL
OXW 241	--	365	--	0 12	12 --	112TILL BEDROCK	TILL
OXW 242	--	565	--	0 44	44 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
OXW 243	--	325	--	0 33	33 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
OXW 244	--	302	--	0 5	5 --	112TILL BEDROCK	TILL
OXW 245	--	300	--	0 14	14 --	112TILL BEDROCK	TILL
OXW 246	--	902	--	0 15	15 --	112TILL BEDROCK	TILL
OXW 247	--	302	--	0 131	131 --	110SDMN BEDROCK	SGVC
OXW 248	--	423	--	0 70	70 --	110SDMN BEDROCK	CLAY
OXW 249	--	262	--	0 159	159 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
OXW 250	--	363	--	0 225	225 --	112TILL BEDROCK	TILL
OXW 251	--	482	--	0 11	11 --	110SDMN BEDROCK	SDGL
OXW 252	--	402	--	0 160	160 --	110SDMN BEDROCK	SDGL
OXW 253	--	302	--	0 87	87 --	110SDMN BEDROCK	SDGL
OXW 254	--	57	--	--	--	110SDMN	SAND
OXW 255	--	142	--	-- 10	10 --	112TILL BEDROCK	TILL
OXW 256	--	62	--	--	--	110SDMN	SDCL
OXW 257	--	86	--	--	--	110SDMN	SAND
OXW 258	--	277	--	0 55	55 --	110SDMN BEDROCK	SDCL
OXW 259	--	500	--	0 95	95 --	110SDMN BEDROCK	SDGL
OXW 260	--	705	--	0 8	8 --	112TILL BEDROCK	TILL
OXW 261	--	220	--	0 78	78 --	110SDMN BEDROCK	SDGL
OXW 262	--	650	--	0 101	101 --	110SDMN BEDROCK	OTHR
OXW 263	--	327	--	0 50	50 --	110SDMN BEDROCK	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
OSSIPEE--Continued							
OXW 264	--	203	--	-- 0 80	-- 80 --	112TILL 110SDMN BEDROCK	TILL GRAVEL, HARDPAN CLAY
OXW 265	--	262	--	0 100	100 --	112TILL BEDROCK	TILL
OXW 266	--	294	--	0 10	10 --	112TILL BEDROCK	TILL
OXW 267	--	342	--	0 74	74 --	110SDMN BEDROCK	SDGL
OXW 268	--	177	--	0 85	85 --	112TILL BEDROCK	TILL
OXW 269	--	603	--	0 12	12 --	112TILL BEDROCK	TILL
OXW 270	--	222	--	0 50 180	50 180 --	110SDMN 112TILL BEDROCK	SDGL TILL GRAVEL, CLAY, HARDPAN
OXW 271	--	400	--	0 8	8 --	110SDMN BEDROCK	SDGL
OXW 272	--	14	--	0 15 28	15 28 --	110SDMN 112TILL BEDROCK	SDGL TILL
OXW 273	--	262	--	0 30 130	30 130 --	112TILL 110SDMN BEDROCK	TILL CLAY
OXW 274	--	45	--	--	--	110SDMN	SAND
OXW 275	--	265	--	0 95	95 --	112TILL BEDROCK	TILL
OXW 276	--	28	--	--	--	110SDMN	SDGL
OXW 277	--	300	--	0 20 60 120 166	20 60 120 166 --	110SDMN 110SDMN 110SDMN 110SDMN BEDROCK	SAND SDGL CLAY SDGL
OXW 278	--	277	--	2	--	BEDROCK	
OXW 279	--	665	--	0 120	120 --	110SDMN BEDROCK	SDGL
OXW 280	--	365	--	0 15	15 --	110SDMN BEDROCK	SDGL
OXW 281	--	142	--	0 29	29 --	112TILL BEDROCK	TILL
OXW 282	--	35	--	--	--	110SDMN	SAND
OXW 283	--	24	--	--	--	110SDMN	SDGL
OXW 284	--	42	--	0 42.5	42.5 --	110SDMN 112TILL	SDGL TILL CLAY, HARDPAN
OXW 285	--	88	--	--	--	110SDMN	SAND
OXW 286	--	48	--	--	--	110SDMN	SAND
OXW 287	--	88	--	--	--	110SDMN	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>OSSIPEE--Continued</b>							
OXW 288	--	242	--	0 45	45 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
OXW 289	--	602	--	0 50	50 --	112TILL BEDROCK	TILL SAND, HARDPAN
OXW 290	--	202	--	0 10	10 --	112TILL BEDROCK	TILL
OXW 291	--	302	--	0 85	85 --	112TILL BEDROCK	TILL
OXW 292	--	1280	--	0 220	220 --	112TILL BEDROCK	TILL
OXW 293	--	330	--	0 35	35 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
OXW 294	--	280	--	0 134	134 --	110SDMN BEDROCK	SGVC
OXW 295	--	660	--	0 21	21 --	110SDMN BEDROCK	SAND
OXW 296	--	502	--	0 7	7 --	112TILL BEDROCK	TILL
OXW 297	--	277	--	0 83	83 --	112TILL BEDROCK	TILL CLAY, HARDPAN
OXW 298	--	43	--	0 45	45 --	110SDMN 110SDMN	SAND SDCL
OXW 299	--	362	--	0 40	40 --	112TILL BEDROCK	TILL
OXW 300	--	477	--	0 80 220	80 220 --	110SDMN 110SDMN BEDROCK	SAND CLAY
OXW 301	--	88	--	0	--	110SDMN	SAND
OXW 302	--	39	--	0 20	20 --	110SDMN 110SDMN	SDCL SAND
OXW 303	--	61	--	0 65	65 --	110SDMN 112TILL	SDGL TILL
<b>SANDWICH</b>							
SEA 1	35	--	--	0 12 15 23	12 15 23 --	110SDMN 112SRFD 112SRFD 112TILL	SAND CS (MS TO GRANULES) SDST LAYERS FS, VFS, SILT GRDS SAND AND SILT, POORLY SORTED, WITH PEBBLES TILL GRAY, COMPACT
SEB 1	32	--	--	0 7 32	7 32 --	112LCSR 112TILL 112TILL	SAND SAND, FINE TILL TILL TILL TILL; END OF HOLE
SEB 11	24	--	24	--	--	112TILL	TILL LAYERS OF SILTY, CLAYEY AND GRAVELLY TILL
SEB 12	39	--	--	0 6 20	6 20 --	112SRFD 112SRFD 112SRFD	SDGL SAND CS SAND FS WITH SILT AND STONES
SEW 3	165	--	--	--	--	--	
SEW 4	10.4	10.4	--	--	--	--	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>SANDWICH--Continued</b>							
SEW 18	--	653	--	0 60	60 --	112TILL BEDROCK	TILL
SEW 19	--	695	--	0 14	14 --	112TILL BEDROCK	TILL
SEW 20	--	12.5	--	0 3	3 --	110SDMN 110SDMN	SAND CLAY
SEW 22	--	362	--	0 40	40 --	110SDMN BEDROCK	SDGL
SEW 23	--	11	--	0 1 3	1 3 --	110SDMN 110SDMN 110SDMN	SDGL SDGL SAND
SEW 24	--	668	--	0 266	266 --	112TILL BEDROCK	TILL CLAY, HARDPAN
SEW 25	--	773	--	0 100	100 --	112TILL BEDROCK	TILL
SEW 26	62	30	--	0 10 18  18.2 33  58	10 18 18.2  33 58  --	110SDMN 112SRFD 112SRFD  112SRFD 112SRFD  112TILL	SAND F TO VFS SDGL VCS (MS TO PEBBLES) GRVL PEBBLES (8-21 MILLIMETER DIAMETER)  SDGL VCS TO PEBBLES SDGL LAYERS MS TO CS WITH PEBBLES  TILL
SEW 27	--	500	--	0 8	8 --	110SDMN BEDROCK	SAND
SEW 28	--	502	--	0 84	84 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
SEW 29	--	802	--	0 160	160 --	112TILL BEDROCK	TILL
SEW 30	--	305	--	0 11	11 --	110SDMN BEDROCK	SDGL
SEW 32	--	12	--	0 6	6 --	110SDMN 112TILL	SDGL TILL SAND, HARDPAN
SEW 33	--	477	--	0 15	15 --	112TILL BEDROCK	TILL
SEW 34	--	452	--	0 30 45 50	30 45 50 --	110SDMN 110SDMN 110SDMN BEDROCK	SAND SDGL CLAY
SEW 39	--	11	--	0 1	1 --	110SDMN 112TILL	SAND TILL
SEW 40	--	304	--	0 50	50 --	112TILL BEDROCK	TILL
SEW 41	--	641	--	0 115	115 --	112TILL BEDROCK	TILL
SEW 42	--	18	--	0 8 9	8 9 --	110SDMN 110SDMN 110SDMN	SDGL CLAY SDGL
SEW 43	--	137	--	0 22	22 --	112TILL BEDROCK	TILL
SEW 46	--	413	--	0 6	6 --	112TILL BEDROCK	TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>SANDWICH--Continued</b>							
SEW 47	--	302	--	0 40 60	40 60 --	110SDMN 110SDMN BEDROCK	SDCL SGVC
SEW 48	--	11	--	0 2	2 --	110SDMN 112TILL	SDGL TILL
SEW 51	--	204	--	0 15	15 --	112TILL BEDROCK	TILL
SEW 54	--	82	--	0 9	9 --	112TILL BEDROCK	TILL
SEW 56	--	423	--	0 60 85	60 85 --	112TILL 110SDMN BEDROCK	TILL CLAY
SEW 57	--	11	--	0 3	3 --	110SDMN 110SDMN	SAND SDGL
SEW 59	--	290	--	0 80	80 --	112TILL BEDROCK	TILL CLAY, HARDPAN
SEW 62	--	873	--	0 42	42 --	110SDMN BEDROCK	SDGL
SEW 63	--	473	--	0 81	81 --	112TILL BEDROCK	TILL CLAY, HARDPAN
SEW 64	--	524	--	0 150	150 --	112TILL BEDROCK	TILL
SEW 65	--	400	--	0 200	200 --	110SDMN BEDROCK	CLAY
SEW 73	--	233	--	0 20	20 --	112TILL BEDROCK	TILL
SEW 74	--	424	--	0 100	100 --	112TILL BEDROCK	TILL
SEW 75	--	15	--	0 7 10 11.5	7 10 11.5 --	110SDMN 110SDMN 110SDMN 110SDMN	SAND SDGL SAND SDGL
SEW 76	--	552	--	0 18	18 --	110SDMN BEDROCK	CLAY
SEW 77	--	330	--	0 90	-- --	110SDMN BEDROCK	OTHR
SEW 81	--	400	--	0 60 69	60 69 --	112TILL 110SDMN BEDROCK	TILL CLAY, HARDPAN
SEW 82	--	503	--	0 50 150 194	50 150 194 --	110SDMN 112TILL 110SDMN BEDROCK	SDGL TILL CLAY, HARDPAN CLAY
SEW 84	--	237	--	0 36	36 --	110SDMN BEDROCK	SDGL
SEW 85	--	477	--	0 245	245 --	112TILL BEDROCK	TILL CLAY, HARDPAN
SEW 86	--	303	--	0 20 85	20 85 --	112TILL 110SDMN BEDROCK	TILL CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
SANDWICH--Continued							
SEW 87	--	405	--	0 12	12 --	110SDMN BEDROCK	SAND
SEW 88	--	154	--	0 90	90 --	112TILL BEDROCK	TILL
SEW 89	--	462	--	0 20	20 --	112TILL BEDROCK	TILL
SEW 92	--	13	--	-- --	-- --	110SDMN 112TILL	SAND TILL CLAY, HARDPAN
SEW 96	--	255	--	0 4	4 --	112TILL BEDROCK	TILL
SEW 97	--	530	--	0 45	45 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
SEW 98	--	18	--	-- --	-- --	110SDMN 112TILL	CLAY TILL
SEW 99	--	305	--	0 48	48 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
SEW 101	--	520	--	0 8	8 --	112TILL BEDROCK	TILL
SEW 102	--	523	--	0 200 230	200 230 --	112TILL 110SDMN BEDROCK	TILL OTHR ROTTEN ROCK
SEW 103	--	12	--	0	--	110SDMN	SDGL
SEW 104	--	250	--	0 8	8 --	112TILL BEDROCK	TILL
SEW 111	12.5	12.5	--	--	--		
SEW 152	--	402	--	0 35	35 --	112TILL BEDROCK	TILL SAND, HARDPAN
SEW 153	12	12	--	--	--		
SEW 154	4	4	--	--	--		
SEW 155	90	--	--	--	--		
SEW 156	700	--	--	--	--		
SEW 158	10.6	10.6	--	--	--		
TAMWORTH							
TAB 1	24	--	--	0 3 8 24	3 8 24 --	111SDMN 112SRFD 112TILL BEDROCK	OTHR FILL GRVL GRAVEL TILL TILL REFUSAL ON BOULDER OR BEDROCK
TAB 2	51	--	--	0 7 30 51	7 30 51 --	111SDMN 112SRFD 112LCSR BEDROCK	SAND SAND AND MUCK SAND SAND, GRAVELLY AND SILTY SAND SAND, SILTY REFUSAL ON BOULDER OR BEDROCK
TAB 3	23.5	--	--	0 23.5	23.5 --	112SRFD BEDROCK	SDGL SAND AND GRAVEL; SOME BOULDERS REFUSAL ON BOULDER OR BEDROCK
TAB 4	20	--	--	0 20	20 --	112SRFD BEDROCK	GRVL GRAVEL, COARSE AND BOULDERS REFUSAL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>TAMWORTH--Continued</b>							
TAB 5	34.5	--	--	0 15 20 26 34.5	15 20 26 34.5 --	112SRFD 112SRFD 112SRFD 112TILL BEDROCK	SAND SAND, FINE TO MEDIUM SAND SAND, FINE TO COARSE SAND SAND, FINE TO MEDIUM TILL TILL
TAB 6	42	--	--	0 2 5 10 42	2 5 10 42 --	112SRFD 112GCFV 112SRFD 112TILL BEDROCK	GRVL GRAVEL, LOAMY SAND SAND, FINE TO MEDIUM; SOME SILT GRVL GRAVEL TILL TILL
TAB 7	67	--	--	0 9 20 27 37 42 60 67	9 20 27 37 42 60 67 --	112SRFD 112SRFD 112LCSR 112SRFD 112LCSR 112SRFD 112SRFD 112SRFD	GRVL GRAVEL; SOME SILT SAND SAND, FINE TO MEDIUM; SOME COBBLES SAND SAND, FINE, SILTY SAND SAND, FINE TO COARSE SAND SAND, FINE; SOME SILT SAND SAND, FINE TO MEDIUM; SOME COARSE SAND SAND SAND, FINE TO MEDIUM; SOME SILT SAND END OF HOLE AT 67 FEET
TAB 8	15	--	--	0 1 7 15	1 7 15 --	110SOIL 111SDMN 112TILL BEDROCK	SOIL TOPSOIL GRVL GRAVEL, FINE, SILTY TILL TILL REFUSAL ON BOULDER OR BEDROCK
TAB 9	20	--	--	0 10	10 --	112SRFD 112SRFD	SDGL GRAVEL WITH BOULDERS SAND MEDIUM TO COARSE SAND
TAW 1	190	--	--	--	--	--	--
TAW 2	75	--	--	--	--	--	--
TAW 4	32	32	--	--	--	--	--
TAW 5	240	--	--	--	--	--	--
TAW 6	13.2	13.2	--	--	--	--	--
TAW 8	300	--	--	--	--	--	--
TAW 9	67	67	--	--	--	--	--
TAW 10	46	46	--	--	--	--	--
TAW 12	30	30	--	--	--	--	--
TAW 13	8.8	8.8	--	--	--	--	--
TAW 14	15	15	--	--	--	--	--
TAW 15	25	25	--	--	--	--	--
TAW 16	20	20	--	--	--	--	--
TAW 17	32	32	--	--	--	--	--
TAW 18	1210	--	--	--	--	--	--
TAW 19	430	--	--	--	--	--	--
TAW 20	360	--	--	--	--	--	--
TAW 21	100	100	--	--	--	--	--
TAW 22	9	9	--	--	--	--	--

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>TAMWORTH--Continued</b>							
TAW 23	6	6	--	--	--	--	
TAW 24	300	--	--	--	--	--	
TAW 25	14	14	--	--	--	--	
TAW 26	13.9	13.9	--	--	--	--	
TAW 28	9.1	9.1	--	--	--	--	
TAW 29	15	15	--	--	--	--	
TAW 30	7.9	7.9	--	--	--	--	
TAW 31	114	114	--	0	63	112SRFD	SDGL M TO VCS, PEBBLES AND COBBLES
				63	97	112SRFD	SAND POORLY SORTED CS
				97	112	112GLCL	GRDS DIAMICTON, M TO FS WITH SILT AND PEBBLES
				112	--	112SRFD	SAND F TO VCS LAYERS
TAW 32	45	42	--	0	14	112SRFD	SDGL CS AND COBBLES
				14	26	112SRFD	SAND M TO VF
				26	28	112SRFD	CLAY
				28	38	112SRFD	SAND M TO VFS
				38	--	112TILL	TILL
TAW 33	99	67.5	--	0	47	112SRFD	SAND F TO VC LAYERS
				47	63	112SRFD	SDGL F TO CS AND PEBBLES
				63	73	112GLCL	GRDS DIAMICTON CS, SILT, PEBBLES, AND COBBLES
				73	83	112SRFD	SAND M TO CS
				83	--	112SRFD	SDGL M TO VCS AND PEBBLES
TAW 34	44	40	44	0	11	112SRFD	SDGL CS AND PEBBLES
				11	21	112SRFD	SAND F TO MS UNIFORM
				21	37	112SRFD	SILT SILT WITH VFS LAMANAE
				37	41	112SRFD	SDGL C TO VCS AND PEBBLES
				41	--	112TILL	TILL SILT TO PEBBLES
TAW 35	--	45	--	--	--	110SDMN	SDGL
TAW 36	--	22	--	0	22	110SDMN	SAND
				22	--	112TILL	TILL
TAW 37	--	27.5	--	--	--	110SDMN	SDGL
TAW 38	--	28	--	0	29	110SDMN	SDGL
				29	--	110SDMN	CLAY
TAW 39	--	28	--	0	20	110SDMN	SDGL
				20	28.5	110SDMN	SAND C
				28.5	--	112TILL	TILL
TAW 40	--	34	--	0	35	110SDMN	SAND
				35	--	110SDMN	SDCL
TAW 41	--	302	--	0	3	112TILL	TILL
				3	--	BEDROCK	
TAW 42	--	177	--	0	45	110SDMN	SDGL
				45	--	BEDROCK	
TAW 43	--	47	--	--	--	110SDMN	SDGL
TAW 44	--	608	--	0	47	110SDMN	SDGL
				47	--	BEDROCK	
TAW 45	--	66	--	--	--	110SDMN	SDGL
TAW 46	--	53	--	--	--	110SDMN	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>TAMWORTH--Continued</b>							
TAW 47	--	67	--	--	--	110SDMN	SDGL
TAW 48	--	68	--	--	--	110SDMN	SDGL
TAW 49	--	88	--	--	160	110SDMN BEDROCK	SDGL
TAW 50	--	352	--	0 41 270	41 270 --	110SDMN 112TILL BEDROCK	SGVC TILL CLAY, HARDPAN
TAW 51	--	64	--	--	--	110SDMN	SDGL
TAW 52	--	70	--	--	--	110SDMN	SDGL
TAW 53	--	63	--	--	--	110SDMN	SDGL
TAW 54	--	43	--	--	--		
TAW 55	--	53	--	--	--	110SDMN	SDGL
TAW 56	--	502	--	0 132	132 --	110SDMN BEDROCK	SAND
TAW 57	--	400	--	0 104	104 --	110SDMN BEDROCK	SAND
TAW 58	--	120	--	0 85	85 --	110SDMN BEDROCK	SAND
TAW 59	--	310	--	0 80	80 --	110SDMN BEDROCK	SAND
TAW 60	--	802	--	0 15	15 --	110SDMN BEDROCK	SAND
TAW 61	--	28	--	--	--	110SDMN	SDGL
TAW 62	--	700	--	0 13	13 --	110SDMN BEDROCK	SGVC
TAW 63	--	13	--	0 2	2 --	112TILL 110SDMN	TILL SDGL
TAW 64	--	39	--	--	--	110SDMN	SDGL
TAW 65	--	48	--	--	--	110SDMN	SDGL
TAW 66	--	500	--	0 103	103 --	110SDMN BEDROCK	SAND
TAW 67	--	15	--	0 10	10 --	110SDMN 110SDMN	SDGL SAND
TAW 68	--	12	--	--	--	110SDMN	SAND
TAW 69	--	60	--	--	--	110SDMN	SAND
TAW 70	--	342	--	0 52	52 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
TAW 71	--	702	--	0 42	42 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
TAW 72	--	60	--	--	--	110SDMN	SDGL
TAW 73	--	402	--	0 50 150 215	50 150 215 --	110SDMN 112TILL 110SDMN BEDROCK	SAND TILL CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>TAMWORTH--Continued</b>							
TAW 74	--	274	--	0 60 200	60 200 --	110SDMN BEDROCK BEDROCK	SDGL
TAW 75	--	1100	--	0 161	161 --	110SDMN BEDROCK	SDCL
TAW 76	--	63	--	--	--	110SDMN	SDGL
TAW 77	--	23	--	0 24	24 --	110SDMN 110SDMN	SDGL SDCL
TAW 78	--	45	--	--	--	110SDMN	SDGL
TAW 79	--	70	--	0 30	30 --	110SDMN 110SDMN	SAND SDGL
TAW 80	--	602	--	0 50	50 --	110SDMN BEDROCK	SDCL
TAW 81	--	60	--	--	--	110SDMN	SDGL
TAW 82	--	577	--	0 25 30 40	25 30 40 --	110SDMN 110SDMN 110SDMN BEDROCK	SDCL OTHR CLAY
TAW 83	--	63	--	--	--	110SDMN	SDGL
TAW 84	--	69	--	--	--	110SDMN	SDGL
TAW 85	--	72	--	--	--	110SDMN	SDGL
TAW 86	--	66	--	--	--	110SDMN	SDGL
TAW 87	--	74	--	--	--	110SDMN	SDGL
TAW 88	--	363	--	0 12	12 --	110SDMN BEDROCK	SDGL
TAW 89	--	525	--	0 55	55 --	110SDMN BEDROCK	SDGL
TAW 90	--	48	--	--	--	110SDMN	SDGL
TAW 91	--	43	--	--	--	110SDMN	SDGL
TAW 92	--	15	--	0 52	52 --	110SDMN 112TILL	SDGL TILL GRAVEL, HARDPAN
TAW 93	--	550	--	0 71	71 --	110SDMN BEDROCK	SDGL
TAW 94	--	68	--	--	--	110SDMN	SDGL
TAW 95	--	82	--	0 45	45 --	110SDMN BEDROCK	SDGL
TAW 96	--	40	--	--	--	110SDMN	SAND
TAW 97	--	135	--	0 130	130 --	110SDMN 110SDMN	SAND SDGL
TAW 98	--	453	--	-- 0 226	-- 226 --	110SDMN 112TILL BEDROCK	OTHR TILL CLAY, HARDPAN
TAW 99	--	28	--	0 21 28	21 28 --	110SDMN 110SDMN 112TILL	SDGL SAND TILL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
TAMWORTH --Continued							
TAW 100	--	12	--	0 2	2 --	110SDMN 112TILL	SDGL TILL
TAW 101	--	678	--	0 14	14 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
TAW 102	--	803	--	0 12	12 --	110SDMN BEDROCK	OTHR
TAW 103	--	319	--	0 5	5 --	112TILL BEDROCK	TILL
TAW 104	--	304	--	0 50	50 --	110SDMN BEDROCK	SAND
TAW 105	--	12	--	--	--	112TILL	TILL
TAW 106	--	66	--	--	--	110SDMN	SDGL
TAW 107	--	502	--	0 22	22 --	110SDMN BEDROCK	SDGL
TAW 108	--	800	--	0 70 185	70 185 --	112TILL 112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN TILL CLAY, HARDPAN
TAW 109	--	300	--	0 70 185	70 185 --	110SDMN 112TILL BEDROCK	SGVC TILL CLAY, HARDPAN
TAW 110	--	527	--	0 50	50 --	110SDMN BEDROCK	SDCL
TAW 111	--	378	--	0 210	210 --	110SDMN BEDROCK	SGVC
TAW 112	--	20	--	0 25	25 --	110SDMN 112TILL	SDGL TILL
TAW 113	--	33	--	0 12	12 --	110SDMN 110SDMN	SDGL SAND
TAW 114	--	71	--	--	--	110SDMN	SDGL
TAW 115	--	84	--	0 60	60 --	110SDMN 110SDMN	SAND SDGL
TAW 116	--	650	--	0 40	40 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
TAW 117	--	453	--	0 10	10 --	112TILL BEDROCK	TILL
TAW 118	--	527	--	0 8	8 --	112TILL BEDROCK	TILL
TAW 119	--	66	--	--	--	110SDMN	SDGL
TAW 120	--	66	--	--	--	110SDMN	SDGL
TAW 121	--	65.5	--	--	--	110SDMN	SAND
TAW 122	--	627	--	0 26	26 --	110SDMN BEDROCK	SDGL
TAW 123	--	577	--	0 47 138	47 138 --	110SDMN 112TILL BEDROCK	SDGL TILL CLAY, HARDPAN
TAW 124	--	427	--	0 194	194 --	112TILL BEDROCK	TILL CLAY, HARDPAN

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
TAMWORTH--Continued							
TAW 125	--	800	--	0 30 35 100	30 35 100 --	112TILL 110SDMN 112TILL BEDROCK	TILL SAND TILL CLAY, HARDPAN
TAW 126	--	727	--	0 10	10 --	112TILL BEDROCK	TILL CLAY, HARDPAN
TAW 127	--	227	--	0 17	17 --	110SDMN BEDROCK	SDGL
TAW 128	--	253	--	0 180	180 --	112TILL BEDROCK	TILL CLAY, HARDPAN
TAW 129	--	66	--	--	--	--	--
TAW 130	--	875	--	0 20	20 --	110SDMN BEDROCK	SDGL
TAW 131	--	425	--	0 30	30 --	112TILL BEDROCK	TILL
TAW 132	--	752	--	0 8	8 --	112TILL BEDROCK	TILL
TAW 133	--	452	--	0 25	25 --	110SDMN BEDROCK	SDGL
TAW 134	--	202	--	0 24	24 --	110SDMN BEDROCK	SAND
TAW 135	--	66	--	--	--	110SDMN	SDGL
TAW 136	--	66	--	--	--	110SDMN	SDGL
TAW 137	--	67	--	--	--	110SDMN	SDGL
TAW 138	--	66	--	--	--	110SDMN	SDGL
TAW 139	--	66	--	--	--	110SDMN	SDGL
TAW 140	--	66	--	--	--	110SDMN	SDGL
TAW 141	--	45	--	0 25	25 --	110SDMN 110SDMN	SDGL SAND
TAW 142	--	310	--	0 160	160 --	112TILL BEDROCK	TILL CLAY, HARDPAN
TAW 143	--	440	--	0 10	10 --	112TILL BEDROCK	TILL
TAW 144	--	52.5	--	--	--	110SDMN	SAND
TAW 145	--	62	--	--	--	110SDMN	SDGL
TAW 146	--	63	--	--	--	110SDMN	SDGL
TAW 147	--	67.5	--	--	--	110SDMN	SDGL
TAW 148	--	63	--	--	--	110SDMN	SDGL
TAW 149	--	63	--	--	--	110SDMN	SDGL
TAW 150	--	502	--	0 95	95 --	112TILL BEDROCK	TILL SAND, CLAY, HARDPAN
TAW 151	--	242	--	0 100 180	100 180 --	112TILL 110SDMN BEDROCK	TILL CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
TAMWORTH--Continued							
TAW 152	--	425	--	0 5	5 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
TAW 153	--	602	--	0 115	115 --	110SDMN BEDROCK	SDCL
TAW 154	--	31	--	0 33	33 --	110SDMN 112TILL	SAND TILL
TAW 155	--	31	--	0 33	33 --	110SDMN 112TILL	SAND TILL
TAW 156	--	67	--	--	--	110SDMN	SDGL
TAW 157	--	680	--	0 160	160 --	112TILL BEDROCK	TILL
TAW 158	--	49	--	0 35 50	35 50 --	110SDMN 110SDMN BEDROCK	SAND SDGL
TAW 159	--	762	--	--	--		
TAW 160	--	908	--	0 4	4 --	110SDMN BEDROCK	SDGL
TAW 161	--	1030	--	0 10	10 --	110SDMN BEDROCK	SDGL
TAW 162	--	201	--	0 5	5 --	110SDMN BEDROCK	SDGL
TAW 163	--	66	--	--	--	110SDMN	SDGL
TAW 164	--	65	--	--	--	110SDMN	SDGL
TAW 165	--	30	--	--	--	110SDMN	SDGL
TAW 166	--	25	--	--	--	110SDMN	SDGL
TAW 167	--	952	--	0 60 105	60 105 --	110SDMN 112TILL BEDROCK	SDGL TILL CLAY, HARDPAN
TAW 168	--	560	--	0 40	40 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
TAW 169	--	66	--	--	--	110SDMN	SDGL
TAW 170	--	23	--	0 12	12 --	110SDMN 110SDMN	SDGL SDGL
TAW 171	--	421	--	0 50 60 80	50 60 80 --	110SDMN 110SDMN 112TILL BEDROCK	SAND SDGL TILL
TAW 172	--	400	--	0 126	126 --	110SDMN BEDROCK	SAND
TAW 173	--	66	--	--	--	110SDMN	SDGL
TAW 174	--	75	--	--	--	110SDMN	SDGL
TAW 175	--	600	--	0 238	238 --	112TILL BEDROCK	TILL GRAVEL, HARDPAN
TAW 176	--	66	--	--	--	110SDMN	SAND
TAW 177	--	66	--	--	--	110SDMN	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>TAMWORTH--Continued</b>							
TAW 178	--	67.5	--	--	--	110SDMN	SAND
TAW 179	--	102	--	0 62	62 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
TAW 180	--	202	--	0 89	89 --	110SDMN BEDROCK	SAND
TAW 181	--	361	--	0 160	160 --	112TILL BEDROCK	TILL
TAW 182	--	227	--	0 70 77	70 77 --	110SDMN 110SDMN BEDROCK	SGVC CLAY
TAW 183	--	377	--	0 117	117 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
TAW 184	--	43	--	--	--	110SDMN	SAND
TAW 185	--	54	--	--	--	110SDMN	SDGL
TAW 186	--	66	--	--	--	110SDMN	SDGL
TAW 187	--	72	--	--	--	110SDMN	SDGL
TAW 188	--	64	--	--	--	110SDMN	SDGL
TAW 189	--	402	--	0 70	70 --	112TILL BEDROCK	TILL
TAW 190	--	68	--	--	--	110SDMN	SDGL
TAW 191	--	68	--	--	--	110SDMN	SDGL
TAW 192	--	577	--	0 60 105	60 105 --	110SDMN 110SDMN BEDROCK	SDGL SDCL
TAW 193	--	277	--	-- 0 220	-- 220 --	110SDMN 110SDMN BEDROCK	SGVC CLAY
TAW 194	--	12	--	--	--	112TILL	TILL
TAW 195	--	--	--	0 55	55 --	110SDMN BEDROCK	SDCL
TAW 196	--	230	--	0 9	9 --	112TILL BEDROCK	TILL
TAW 197	--	64	--	--	--	110SDMN	SDGL
TAW 198	--	66	--	--	--	110SDMN	SDGL
TAW 199	--	423	--	0 190	190 --	112TILL BEDROCK	TILL
TAW 200	--	30	--	0 30	30 --	110SDMN 110SDMN	SAND SDCL
TAW 201	--	322	--	0 200	200 --	112TILL BEDROCK	TILL
TAW 202	--	550	--	0 7	7 --	112TILL BEDROCK	TILL
TAW 203	--	68	--	--	--	110SDMN	SDGL
TAW 204	--	24	--	0 5	5 --	110SDMN 110SDMN	SGVC SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
TAMWORTH--Continued							
TAW 205	--	360	--	0 78	78 --	110SDMN BEDROCK	SDGL
TAW 206	--	67	--	--	--	110SDMN	SDGL
TAW 207	--	85	--	--	--	110SDMN	SDGL
TAW 208	--	83	--	--	--	110SDMN	SDGL
TAW 209	--	352	--	0 40	40 --	110SDMN BEDROCK	OTHR
TAW 210	--	502	--	0 65	65 --	110SDMN BEDROCK	CLAY
TAW 211	--	902	--	0 60	60 --	110SDMN BEDROCK	SDCL
TAW 212	--	652	--	0 15	15 --	110SDMN BEDROCK	SDGL
TAW 213	--	1160	--	0 50	50 --	110SDMN BEDROCK	SDCL
TAW 214	--	442	--	0 132	132 --	110SDMN BEDROCK	CLAY
TAW 215	--	322	--	0 52	52 --	110SDMN BEDROCK	SDGL
TAW 216	--	69	--	--	--	110SDMN	SDGL
TAW 217	--	72	--	--	--	110SDMN	SDGL
TAW 218	--	260	--	0 185	185 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
TAW 219	--	79	--	--	--	110SDMN	SDGL
TAW 220	--	70	--	--	--	110SDMN	SDGL
TAW 221	--	66	--	--	--	110SDMN	SDGL
TAW 222	--	504	--	0 60 95 129	60 95 129 --	110SDMN 112TILL 110SDMN BEDROCK	SDGL TILL OTHR ROTTEN ROCK
TAW 223	--	525	--	0 50 110	50 110 --	110SDMN 110SDMN BEDROCK	SDGL OTHR ROTTEN ROCK
TAW 224	--	524	--	0 60 100	60 100 --	110SDMN 110SDMN BEDROCK	SDGL OTHR ROTTEN ROCK
TAW 225	--	624	--	0 96	96 --	110SDMN BEDROCK	SGVC
TAW 226	--	120	--	0 60	60 --	110SDMN BEDROCK	SAND
TAW 227	--	66	--	--	--	110SDMN	SDGL
TAW 228	--	13	--	0 3 7	3 7 --	110SDMN 110SDMN 110SDMN	SAND SDGL SAND
TAW 229	--	66	--	--	--	110SDMN	SDGL

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>TAMWORTH--Continued</b>							
TAW 230	--	352	--	0 57	57 --	112TILL BEDROCK	TILL SAND, GRAVEL, HARDPAN
TAW 231	--	427	--	0 45 65 115	45 65 115 --	110SDMN 110SDMN 110SDMN BEDROCK	SDGL CLAY SGVC
TAW 232	--	442	--	0 4	4 --	110SDMN BEDROCK	SDGL
TAW 233	--	502	--	0 90	90 --	110SDMN BEDROCK	SDCL
TAW 234	--	66	--	--	--	110SDMN	SDGL
TAW 235	--	39	--	--	--	110SDMN	SDGL
TAW 236	--	17	--	--	--	110SDMN	SAND
TAW 237	--	63	--	--	24	110SDMN	SDGL
TAW 238	--	725	--	24	--	BEDROCK	
TAW 239	--	802	--	0 130	130 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
TAW 240	--	542	--	0 86	86 --	110SDMN BEDROCK	SDGL
TAW 241	--	101	--	0 90	90 --	110SDMN 110SDMN	SAND SDGL
TAW 242	--	66	--	--	--	110SDMN	SAND
TAW 243	--	68	--	--	--	110SDMN	SDGL
TAW 244	--	500	--	0 45	45 --	110SDMN BEDROCK	SDCL
TAW 245	--	602	--	0 55	55 --	110SDMN BEDROCK	OTHR
TAW 246	--	502	--	0 110	110 --	112TILL BEDROCK	TILL CLAY, HARDPAN
TAW 247	--	63	--	--	--	110SDMN	SDGL
TAW 248	--	27	--	0 28	28 --	110SDMN 112TILL	SDGL TILL CLAY, HARDPAN
TAW 249	--	17	--	0 17	17 --	110SDMN 112TILL	SDGL TILL CLAY, HARDPAN
TAW 250	--	442	--	0 210	210 --	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
TAW 251	--	1030	--	0 118	118 --	112TILL BEDROCK	TILL CLAY, HARDPAN
TAW 252	--	377	--	0 262	262 --	112TILL BEDROCK	TILL CLAY, HARDPAN
TAW 253	--	503	--	0 40 80	40 80 --	110SDMN 110SDMN BEDROCK	SDGL OTHR ROTTEN ROCK
TAW 254	--	523	--	0 120	120 --	110SDMN BEDROCK	OTHR

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>TAMWORTH--Continued</b>							
TAW 255	--	382	--	0 45	45	110SDMN BEDROCK	SDGL
TAW 256	--	47	--	--	--	110SDMN	SDGL
TAW 257	--	36	--	0 38	38	110SDMN 112TILL	SDGL TILL
TZW 37	--	652	--	0 2	--	112TILL BEDROCK	TILL
TZW 73	--	13	--	-- --	--	110SDMN 112TILL	CLAY TILL
TZW 96	--	331	--	0 43	--	110SDMN BEDROCK	SDCL
TZW 134	--	380	--	0 40	--	112TILL BEDROCK	TILL GRAVEL, CLAY, HARDPAN
TZW 159	--	502	--	-- 198	--	112TILL BEDROCK	TILL CLAY, HARDPAN
TZW 160	--	230	--	-- 52	--	110SDMN BEDROCK	SGVC
TZW 165	--	753	--	-- 28	--	110SDMN BEDROCK	CLAY
<b>WAKEFIELD</b>							
WAA 3	8.5	--	8.5	0 6	6	112SRFD 112TILL	SAND MS OVER SILTY SAND TILL COMPACT COBBLES AND SANDS
WAB 1	30	--	--	0 6 18 20 25 30	6 18 20 25 30	111SDMN 112SRFD GRVL 112LCSR 112SRFD 112TILL	SAND AND MUCK GRVL SILT GRVL TILL REFUSAL ON BOULDER OR BEDROCK
WAB 2	19	--	--	0 19	19	112SRFD	GRVL SOME BOULDERS REFUSAL ON BOULDER OR BEDROCK
WAW 3	253	--	--	0 15	--	112TILL BEDROCK	TILL
WAW 5	13	--	--	0 13	13	110SDMN 112TILL	SDGL SAND AND GRAVEL TILL END OF HOLE 18 FEET
WAW 6	360	--	--	0 60 179	60 179	110SDMN 112TILL BEDROCK	SAND TILL BEDROCK
WAW 7	66	--	--	0 25 35	25 35	110SDMN 110SDMN 110SDMN	SDGL SAND, COARSE; GRAVEL SAND MEDIUM SAND FINE; END OF HOLE 70 FEET
WAW 8	303	--	--	-- 15	--	110SDMN BEDROCK	SAND
WAW 9	303	--	--	43	--	BEDROCK	
WAW 10	985	--	--	43	--	BEDROCK	
WAW 12	700	--	--	0 113	113	110SDMN BEDROCK	SDCL SAND, CLAY
WAW 13	800	--	--	92	--	BEDROCK	
WAW 15	110	--	--	--	--		

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>WAKEFIELD--Continued</b>							
WAW 16	18	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
WAW 17	52	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
WAW 18	377	--	--	0	35	110SDMN	SAND COARSE
				35	80	110SDMN	SAND FINE
				80	98	112TILL	TILL GRAVELLY
				98	--	BEDROCK	
WAW 19	302	--	--	--	--	110SDMN	SAND
				--	--	112TILL	TILL GRAVEL, CLAY, HARDPAN
				100	--	BEDROCK	
WAW 21	577	--	--	62	--	BEDROCK	
WAW 22	202	--	--	0	--	110SDMN	SDGL SAND AND GRAVEL
				30	--	BEDROCK	
WAW 23	102	--	--	0	--	110SDMN	SAND
				30	--	BEDROCK	
WAW 25	32	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
WAW 26	550	--	--	102	--	BEDROCK	
WAW 27	353	--	--	0	113	110SDMN	OTHR SAND, GRAVEL, CLAY, TILL
				105	--	BEDROCK	
WAW 28	118	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
WAW 29	205	--	--	111	--	BEDROCK	
WAW 33	160	--	--	--	--	110SDMN	SAND
				123	--	BEDROCK	
WAW 34	60	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
WAW 35	165	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
				60	--	BEDROCK	
WAW 36	100	--	--	--	--	110SDMN	SAND
				80	--	BEDROCK	
WAW 37	165	--	--	0	90	110SDMN	SAND FINE
				90	100	110SDMN	TILL GRAVEL (PROBABLY TILL)
				100	--	BEDROCK	
WAW 41	325	--	--	--	--	110SDMN	SAND
				90	--	BEDROCK	
WAW 43	182	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
				36	--	BEDROCK	
WAW 45	252	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
				45	--	BEDROCK	
WAW 46	200	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
				30	--	BEDROCK	
WAW 47	227	--	--	--	--	110SDMN	SDGL SAND AND GRAVEL
				30	--	BEDROCK	
WAW 48	302	--	--	0	30	110SDMN	SDGL SAND AND GRAVEL
				30	106	112TILL	TILL
				106	--	BEDROCK	
WAW 49	602	--	--	0	113	110SDMN	SDCL SAND, CLAY
				113	--	BEDROCK	
WAW 50	312	--	--	--	--	110SDMN	OTHER
				35	--	BEDROCK	

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
WAKEFIELD--Continued							
WAW 51	377	--	--	-- 80	--	110SDMN BEDROCK	SDGL SAND AND GRAVEL
WAW 52	352	--	--	-- 17	--	110SDMN BEDROCK	SAND
WAW 54	93	--	--	-- 95	--	110SDMN BEDROCK	SDGL SAND AND GRAVEL
WAW 97	--	352	--	0 17	17	110SDMN BEDROCK	SAND
WAW 99	--	220	--	0 8	8	110SDMN BEDROCK	SDGL
WAW 100	--	422	--	0 26 43 81	26 43 81	110SDMN 110SDMN 112TILL BEDROCK	SAND SDGL TILL SAND, HARDPAN
WAW 101	--	427	--	0 60 158	60 158	110SDMN 112TILL BEDROCK	SDGL TILL GRAVEL, CLAY, HARDPAN
WAW 102	--	252	--	0 60	60	110SDMN BEDROCK	SAND
WAW 103	--	277	--	45	--	BEDROCK	
WAW 104	--	552	--	0 18	18	112TILL BEDROCK	TILL
WAW 105	--	300	--	0 22	22	110SDMN BEDROCK	SAND
WAW 106	--	142	--	0 75	75	110SDMN BEDROCK	SDGL
WAW 107	--	800	--	0 62	62	110SDMN BEDROCK	SAND
WAW 108	--	322	--	0 32	32	110SDMN BEDROCK	SDCL
WAW 109	--	402	--	0 17	17	110SDMN BEDROCK	SDGL
WAW 110	--	222	--	0 15	15	110SDMN BEDROCK	SAND
WAW 111	--	242	--	0 58	58	110SDMN BEDROCK	SDGL
WAW 112	--	162	--	0 66	66	110SDMN BEDROCK	SAND
WAW 113	--	260	--	0 23	23	110SDMN BEDROCK	SDGL
WAW 114	--	100	--	0 13	13	110SDMN BEDROCK	SAND
WAW 115	--	142	--	0 23	23	110SDMN BEDROCK	SDGL
WAW 116	--	402	--	0 43	43	110SDMN BEDROCK	SDGL
WAW 117	--	280	--	0 116	116	110SDMN BEDROCK	SAND

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>WAKEFIELD--Continued</b>							
WAW 118	--	300	--	0 40 47	40 47 --	110SDMN 110SDMN BEDROCK	SAND SDGL
WAW 119	--	362	--	0 88	88 --	110SDMN BEDROCK	SDCL
WAW 120	--	82	--	0 36	36 --	110SDMN BEDROCK	SDGL
WAW 121	--	482	--	0 5	5 --	110SDMN BEDROCK	SAND
WAW 122	--	252	--	0 60	60 --	110SDMN BEDROCK	SAND
WAW 123	--	102	--	0 43	43 --	110SDMN BEDROCK	SAND
WAW 124	--	202	--	0 50	50 --	110SDMN BEDROCK	SDGL
WAW 125	--	482	--	0 105	105 --	110SDMN BEDROCK	SAND
WAW 126	--	503	--	0 50	50 --	110SDMN BEDROCK	SDGL
WAW 127	--	282	--	0 80	80 --	110SDMN BEDROCK	SDCL
WAW 128	--	162	--	0 20	20 --	110SDMN BEDROCK	SGVC
WAW 129	--	362	--	0 30	30 --	110SDMN BEDROCK	SDGL
WAW 130	--	445	--	0 49	49 --	110SDMN BEDROCK	SDGL
WAW 131	--	283	--	0 30	30 --	110SDMN BEDROCK	SDGL
WAW 132	--	135	--	0 124	124 --	110SDMN BEDROCK	SDGL
WAW 133	--	122	--	0 74	74 --	110SDMN BEDROCK	SDGL
WAW 134	--	300	--	0 115	115 --	110SDMN BEDROCK	SGVC
WAW 135	--	462	--	0 115	115 --	110SDMN BEDROCK	OTHR
WAW 136	--	342	--	0 99	99 --	110SDMN BEDROCK	SAND
WAW 137	--	502	--	0 20 40 55	20 40 55 --	110SDMN 110SDMN 110SDMN BEDROCK	SAND PEAT SDGL
WAW 138	--	25	--	--	--	110SDMN	SDGL
WAW 139	--	70	--	0 25 65	25 65 --	110SDMN 110SDMN 110SDMN	SDCL SDGL
WAW 140	--	602	--	0 50 88	50 88 --	110SDMN 110SDMN BEDROCK	SDGL SGVC

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site no.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
<b>WAKEFIELD--Continued</b>							
WAW 141	--	304	--	0 20 60	20 60 --	110SDMN 110SDMN BEDROCK	SDGL CLAY
WAW 142	--	424	--	0 40	40 --	110SDMN BEDROCK	SDCL
WAW 143	--	140	--	125	--	BEDROCK	
WAW 144	--	120	--	110	--	BEDROCK	
WAW 145	--	421	--	0 10	10 --	112TILL BEDROCK	TILL
WAW 146	--	225	--	0 87	87 --	110SDMN BEDROCK	SDGL
WAW 147	--	45	--	--	--	110SDMN	SAND
WAW 149	10.7	10.7	--	--	--	--	
WAW 150	14.9	14.9	--	--	--	--	
WAW 151	15.7	15.7	--	--	--	--	
WAW 152	9.5	9.5	--	--	--	--	
WAW 153	8	8	--	--	--	--	
WAW 154	22	22	--	--	--	--	
WAW 155	80	--	--	--	--	--	
WAW 156	11.3	11.3	--	--	--	--	
WAW 157	78	49	78	7 13 77	13 77 --	112SRFD 112SRFD 112TILL	SAND VF OVER CS SAND LAYERS M TO VFS TILL
<b>WOLFEBORO</b>							
WRW 28	--	518	--	0 80	80 --	112TILL BEDROCK	TILL
WRW 38	--	128	--	0 18	18 --	112TILL BEDROCK	TILL
WRW 50	--	402	--	0 19	19 --	110SDMN BEDROCK	SAND
WRW 63	--	304	--	0 4	4 --	110SDMN BEDROCK	SAND
WRW 65	--	182	--	0 42	42 --	112TILL BEDROCK	TILL
WRW 98	--	202	--	0 22	22 --	112TILL BEDROCK	TILL
WRW 135	--	322	--	0 74	74 --	112TILL BEDROCK	TILL
WRW 140	--	125	--	0 30	30 --	110SDMN BEDROCK	SAND
WRW 144	--	702	--	0 28	28 --	112TILL BEDROCK	TILL CLAY, HARDPAN
WRW 156	--	142	--	0 70.5	70.5 --	110SDMN BEDROCK	CLAY

**Table 2-1.** Stratigraphic logs of wells and borings in the Saco and Ossipee River Basins, east-central New Hampshire--Continued

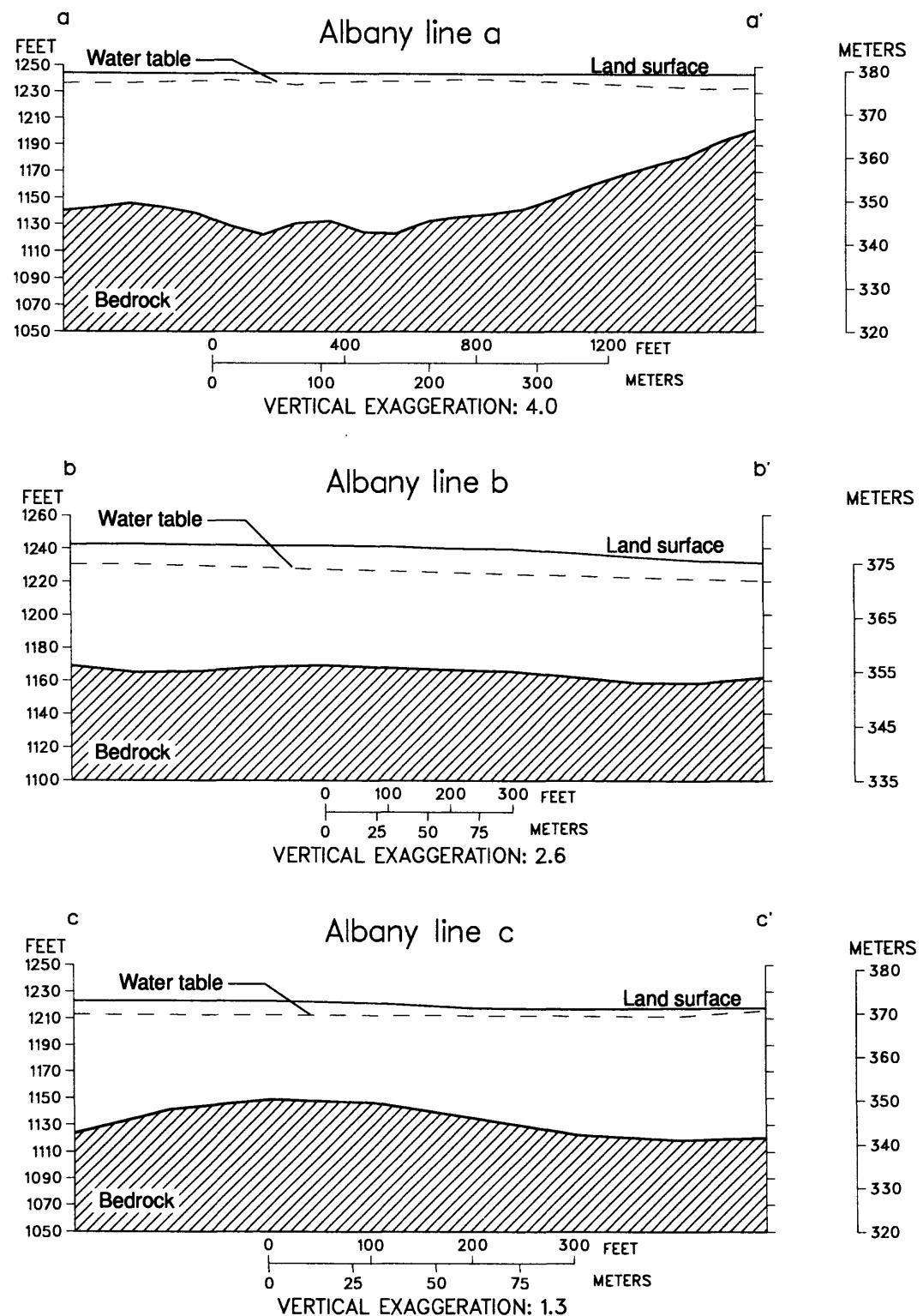
Local site No.	Depth drilled (feet)	Depth of well (feet)	Depth to refusal (feet)	Depth to top (feet)	Depth to bottom (feet)	Aquifer code	Lithology
COOS COUNTY							
CARROLL							
CFB 7	8	--	8	0 4 8	4 8 --	112SRFD 112TILL 112TILL	SDGL SAND AND GRAVEL TILL TILL, SANDY AND BOULDERS TILL REFUSAL

---

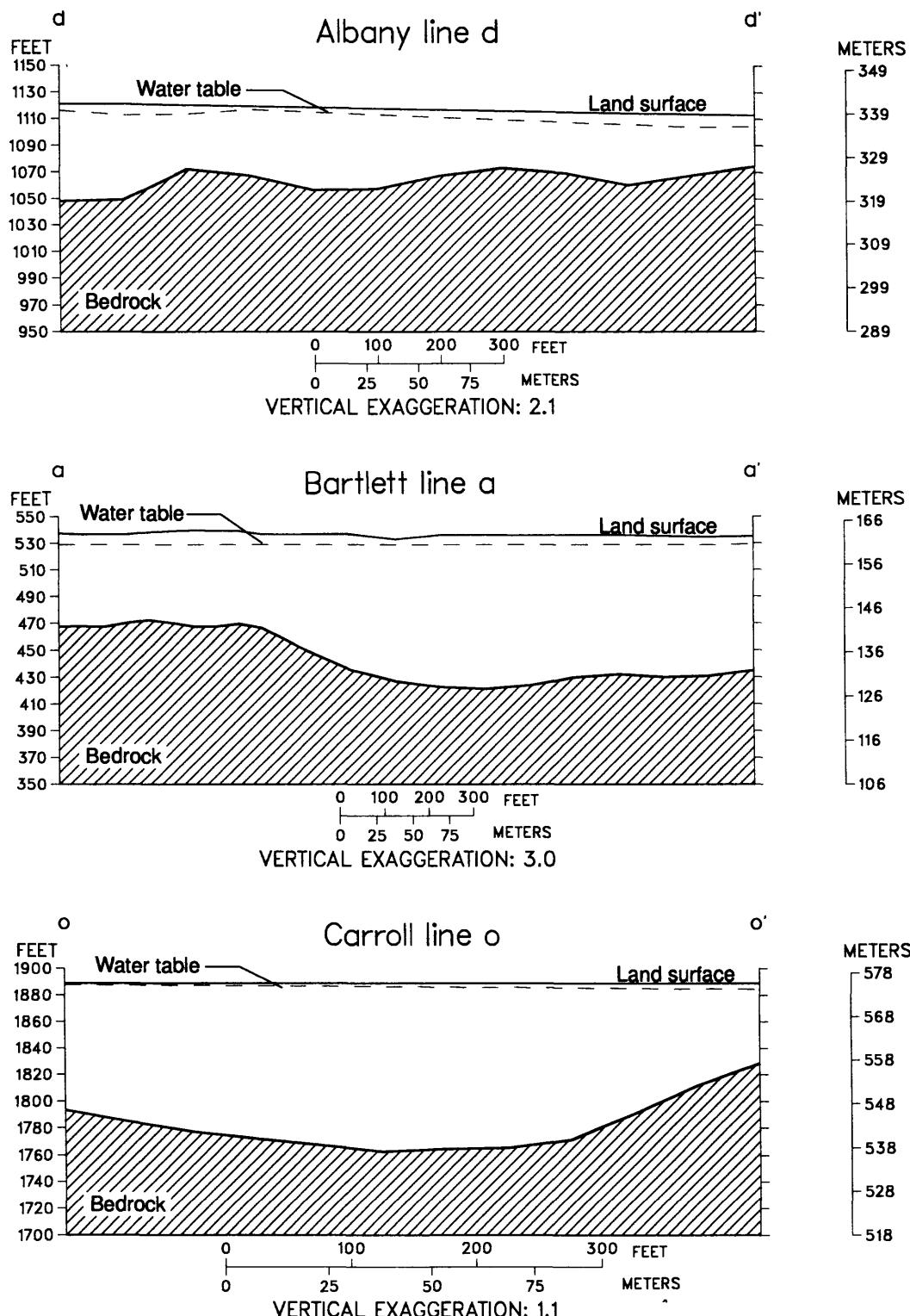
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**APPENDIX 3. Geohydrologic sections interpreted  
from seismic-refraction data, east-central  
New Hampshire**

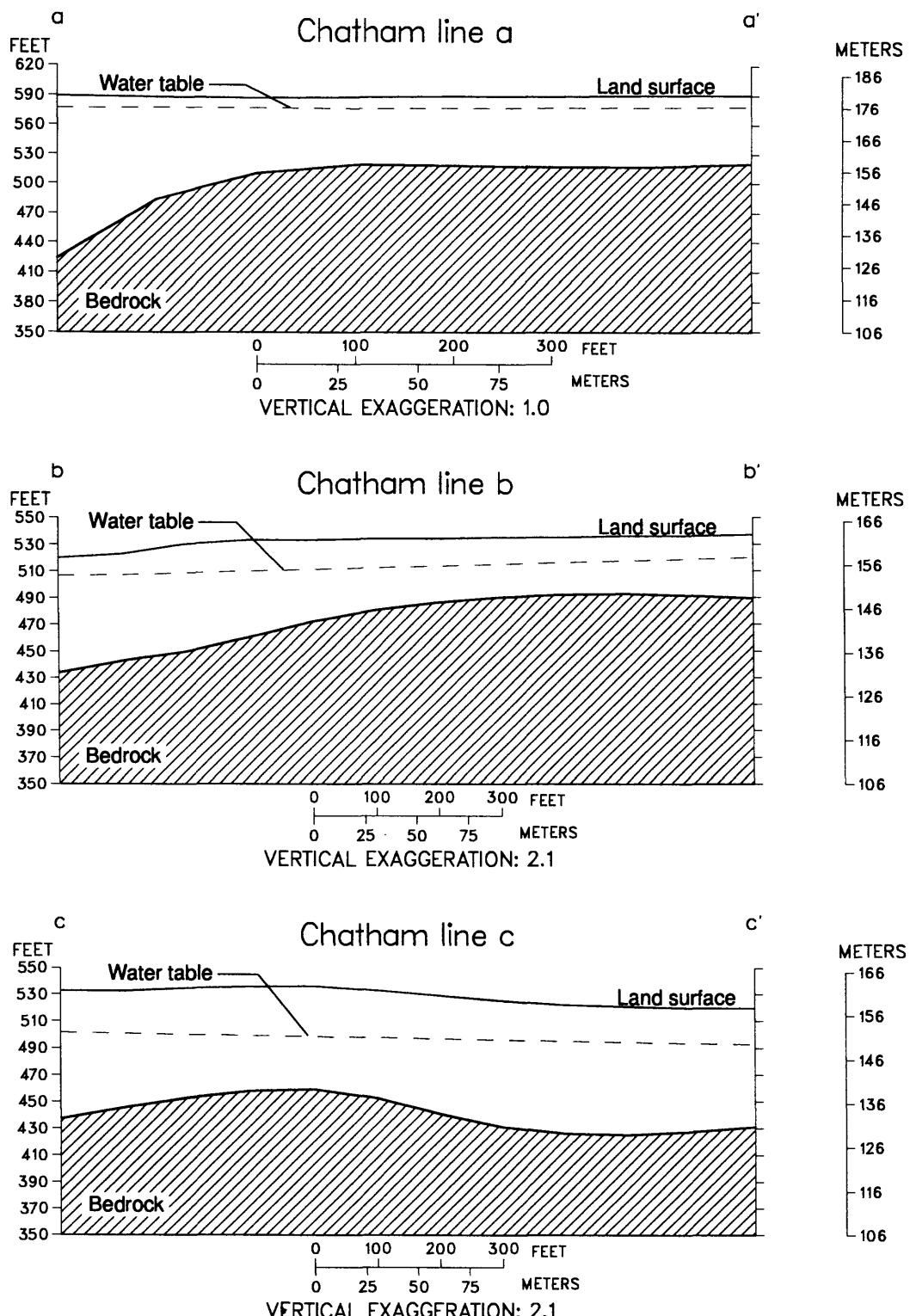
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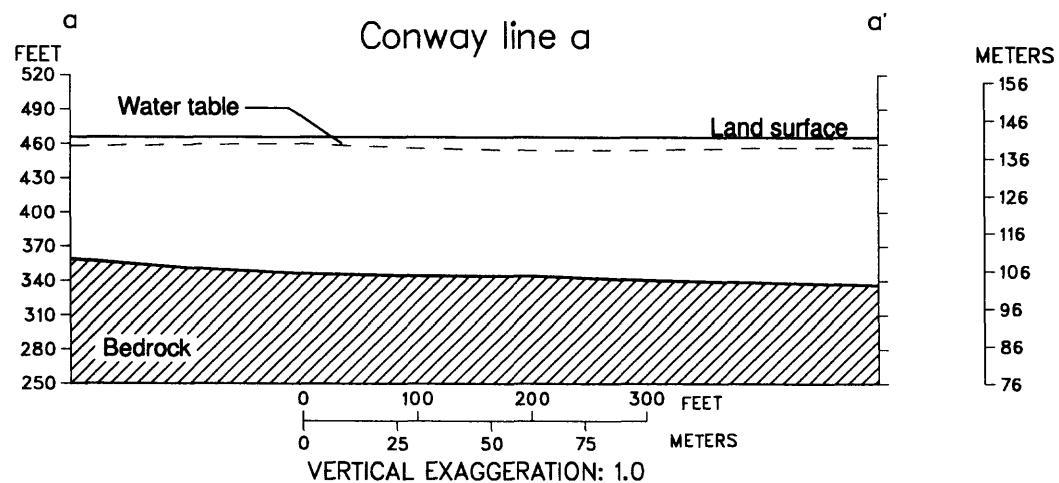
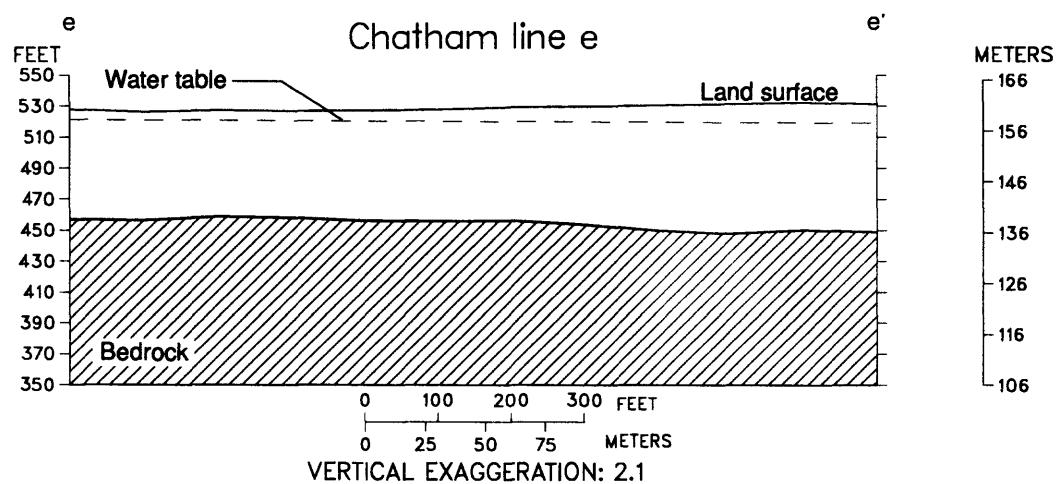
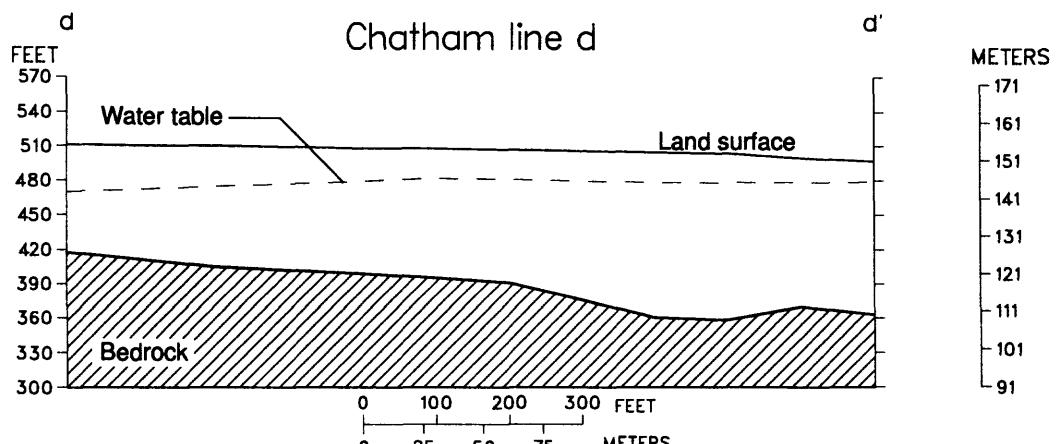
**Figure 3-1.** Geohydrologic sections interpreted from seismic-refraction data for Albany lines a-a', b-b', and c-c' (locations shown on plate 1).



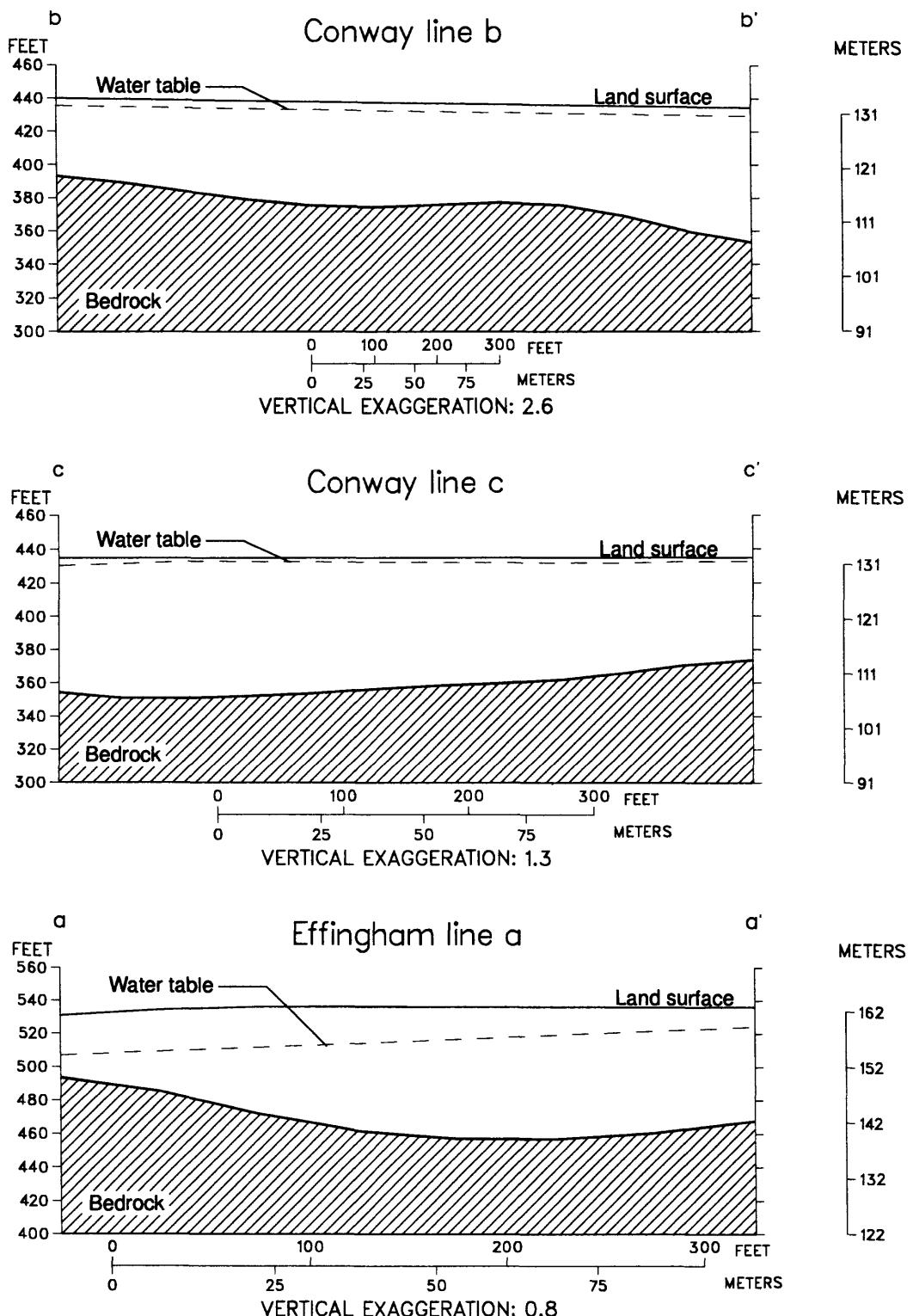
**Figure 3-2.** Geohydrologic sections interpreted from seismic-refraction data for Albany line d-d', Bartlett line a-a', and Carroll line o-o' (locations shown on plate 1).



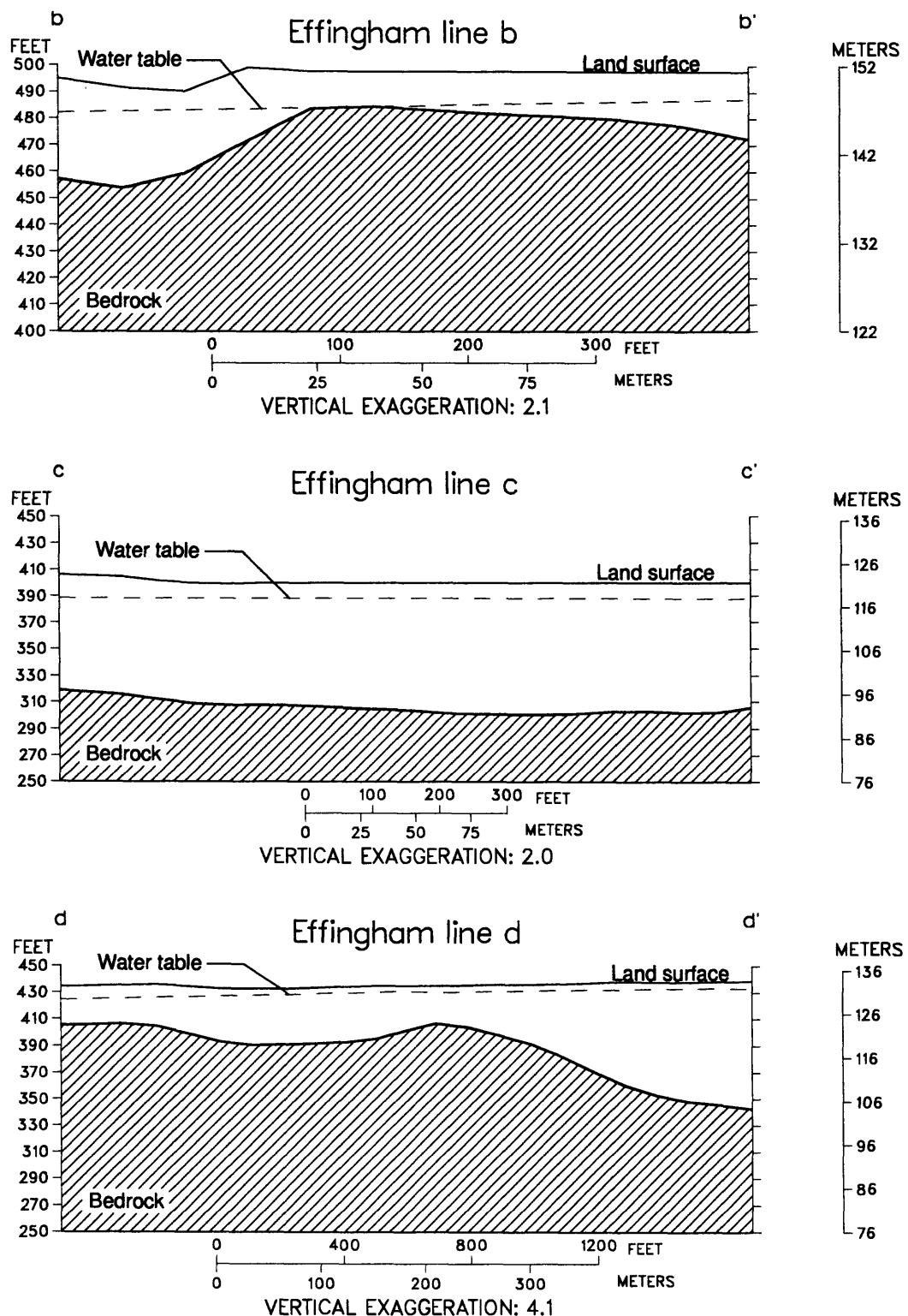
**Figure 3-3.** Geohydrologic sections interpreted from seismic-refraction data for Chatham lines a-a', b-b', and c-c' (locations shown on plate 1).



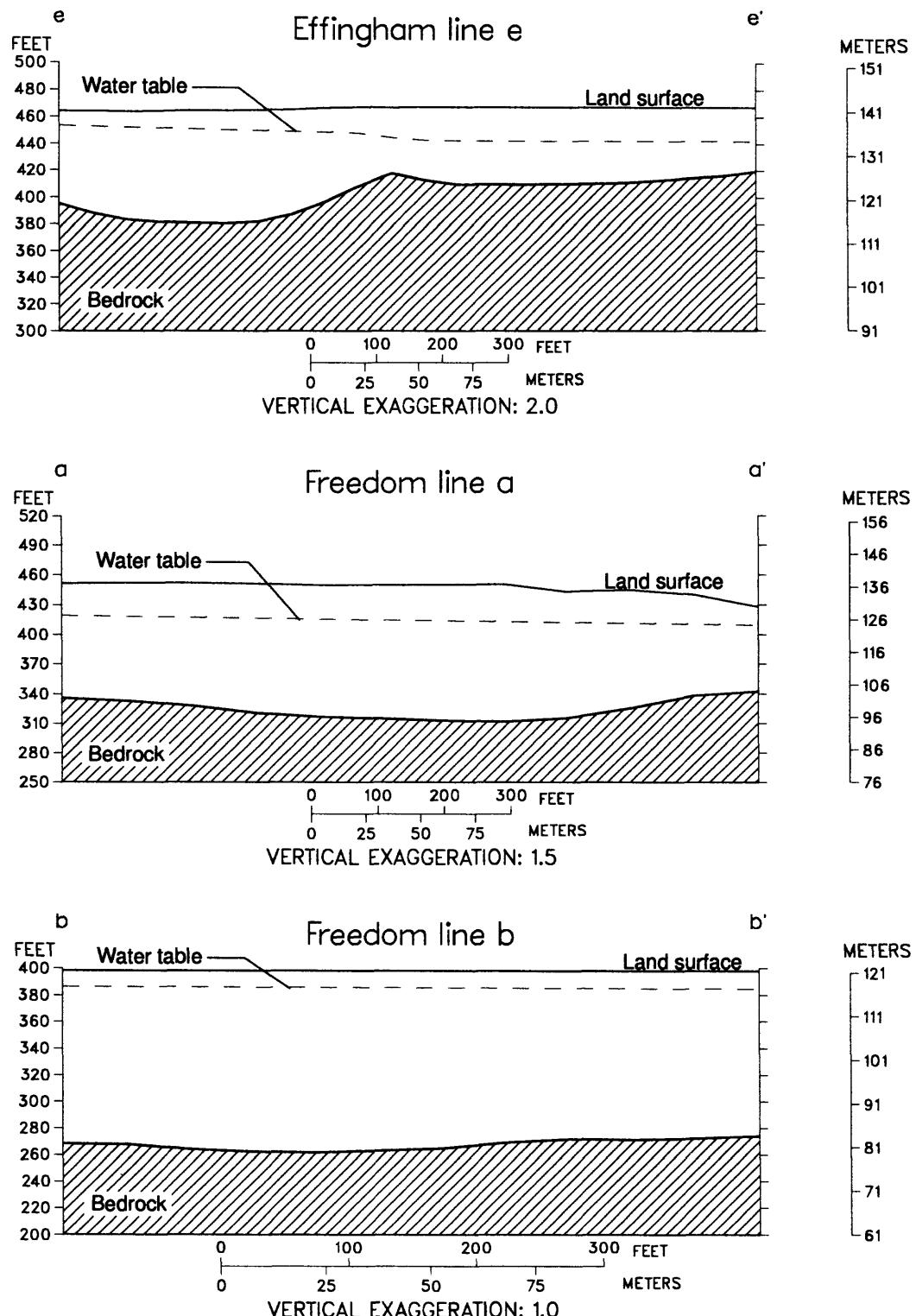
**Figure 3-4.** Geohydrologic sections interpreted from seismic-refraction data for Chatham lines d-d' and e-e', and Conway line a-a' (locations shown on plate 1).



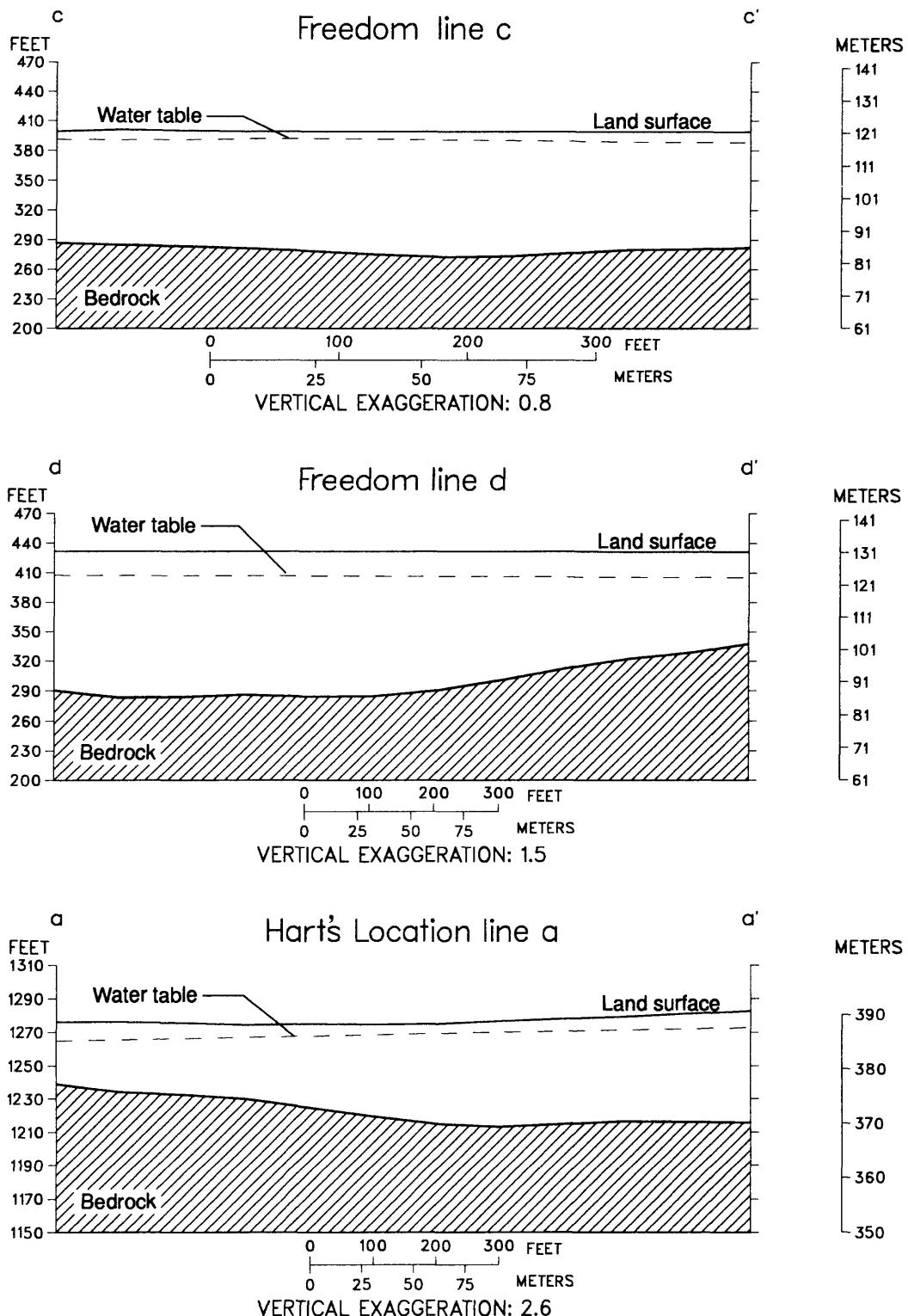
**Figure 3-5.** Geohydrologic sections interpreted from seismic-refraction data for Conway lines b-b', and c-c', and Effingham line a-a' (locations shown on plates 1 and 2).



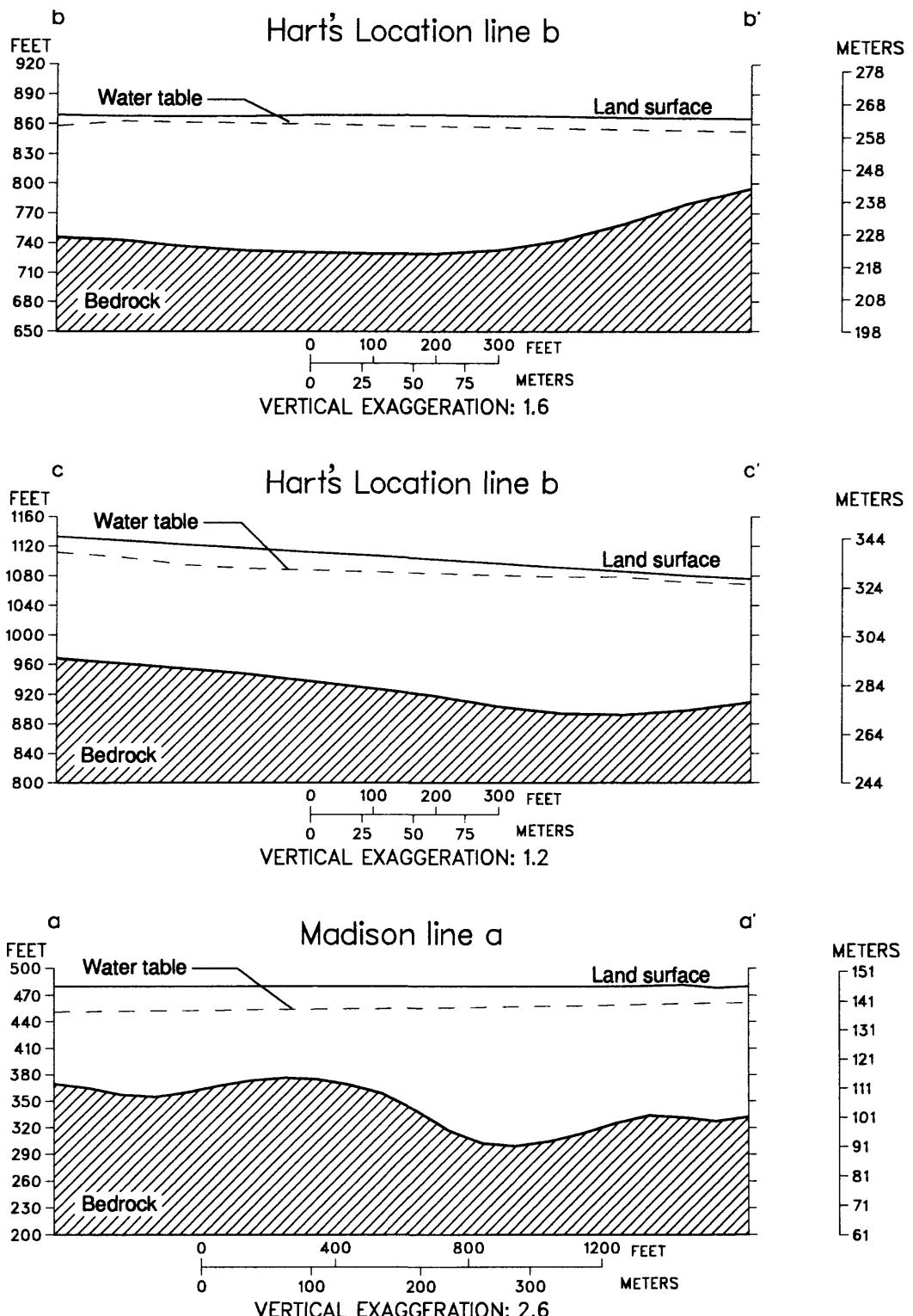
**Figure 3-6.** Geohydrologic sections interpreted from seismic-refraction data for Effingham lines b-b', c-c', and d-d' (locations shown on plate 2).



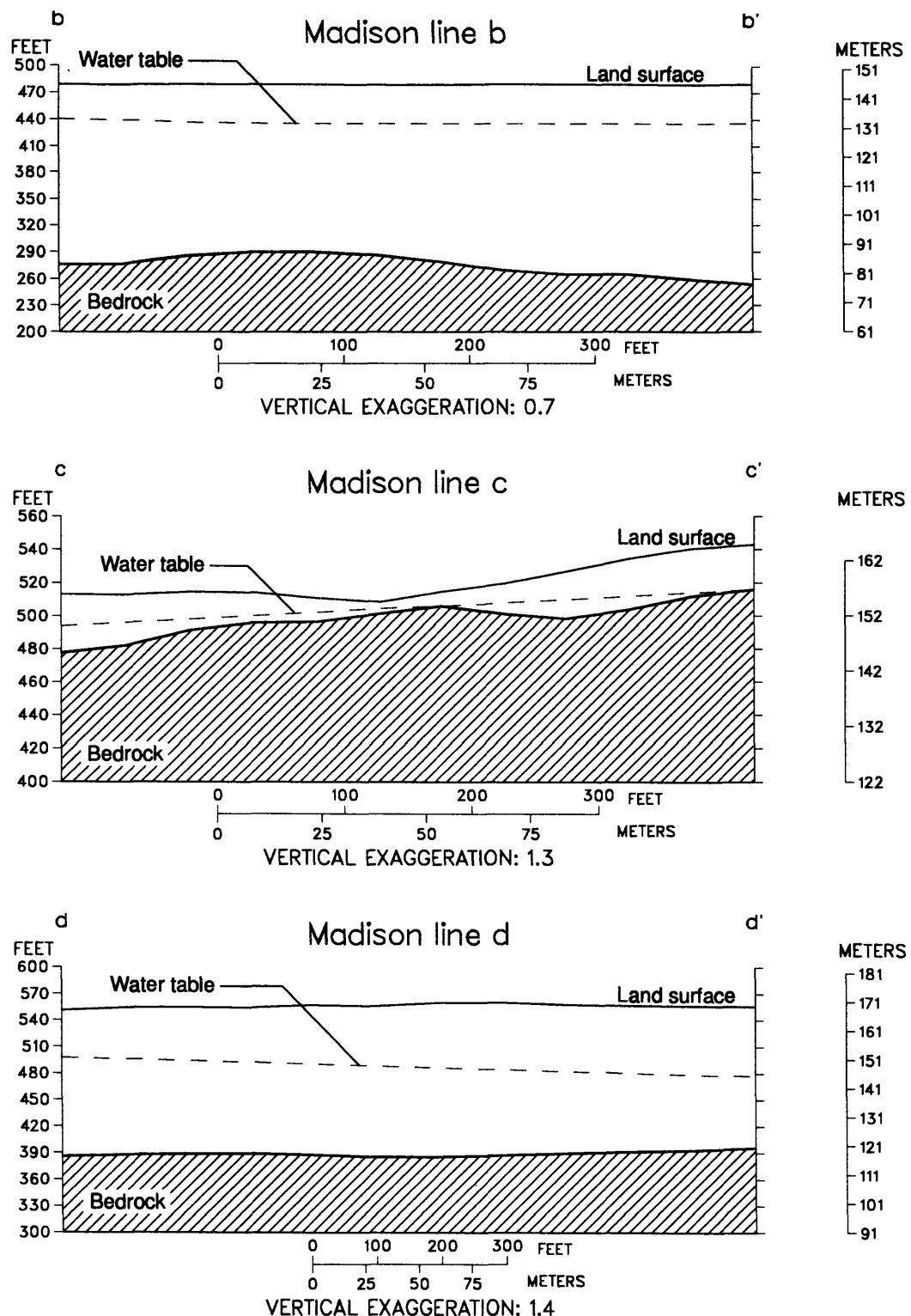
**Figure 3-7.** Geohydrologic sections interpreted from seismic-refraction data for Effingham line e-e', and Freedom line a-a' and b-b' (locations shown on plate 2).



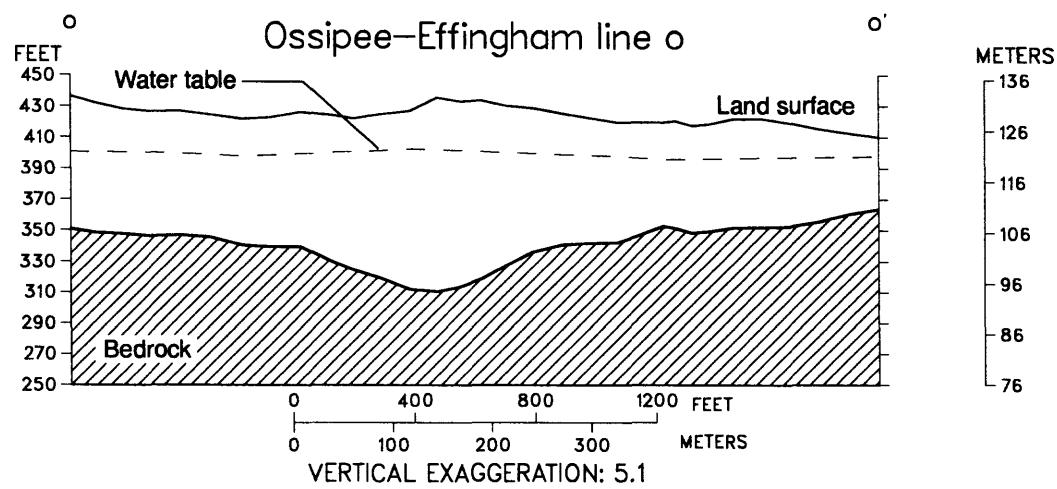
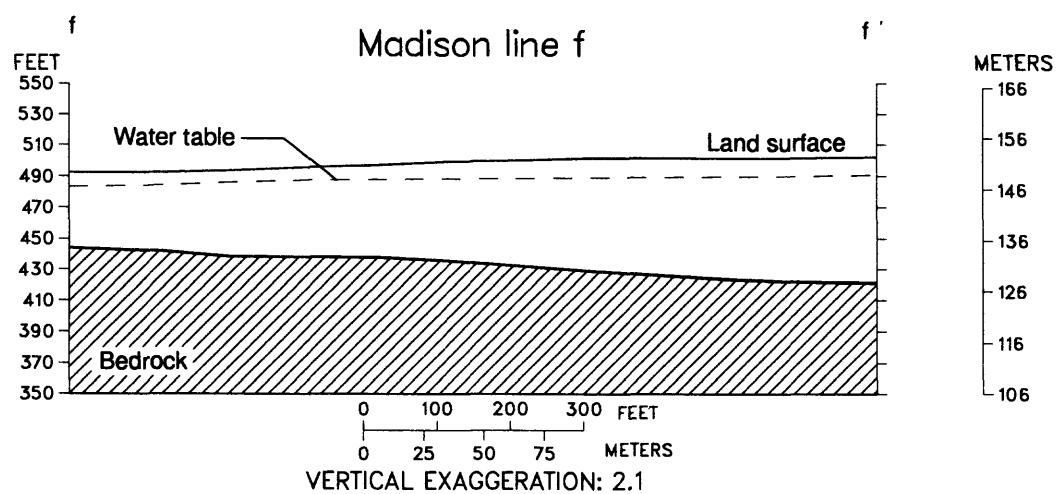
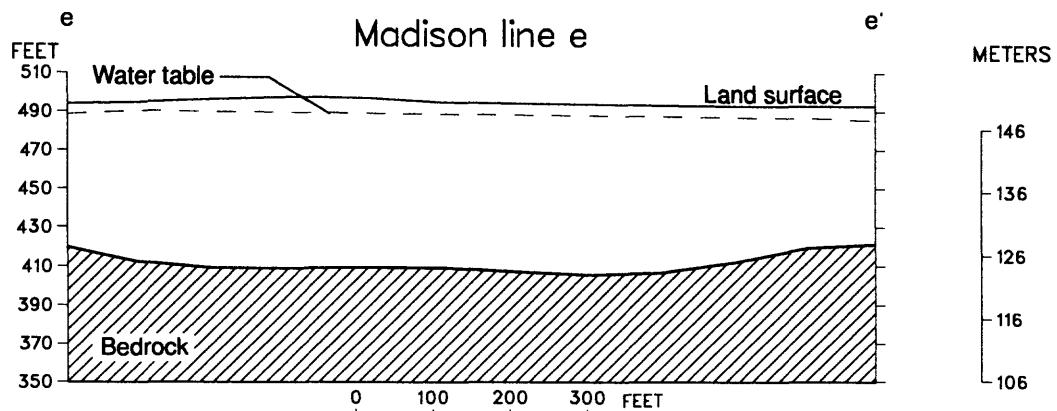
**Figure 3-8.** Geohydrologic sections interpreted from seismic-refraction data for Freedom lines c-c' and d-d', and Hart's Location line a-a' (locations shown on plates 1 and 2).



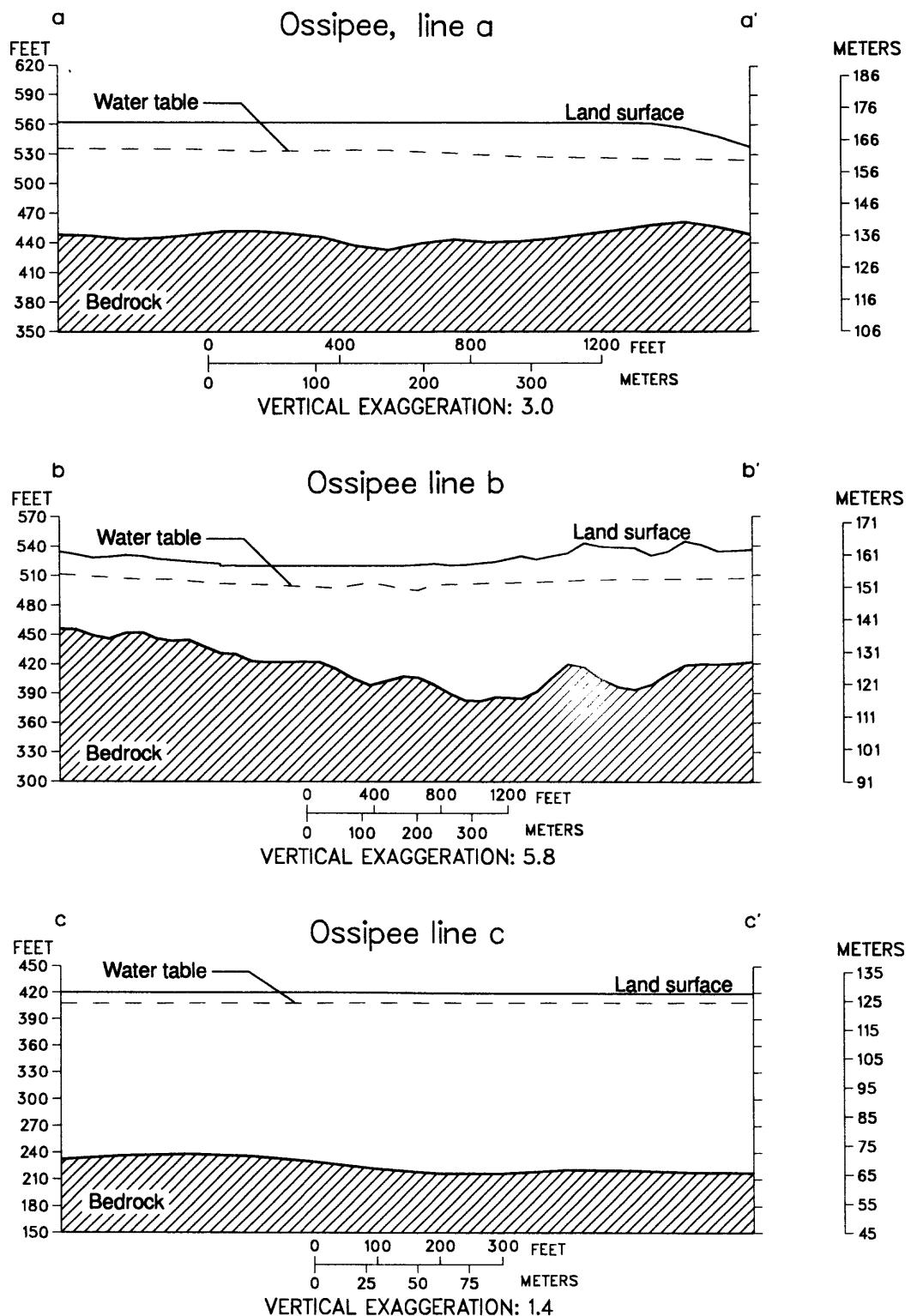
**Figure 3-9.** Geohydrologic sections interpreted from seismic-refraction data for Hart's Location lines b-b' and c-c', and Madison line a-a' (locations shown on plates 1 and 2).



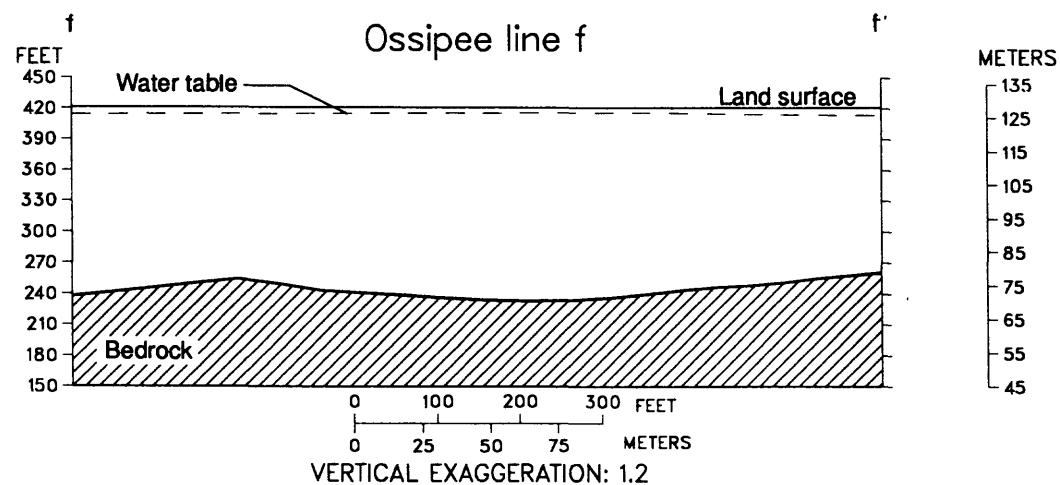
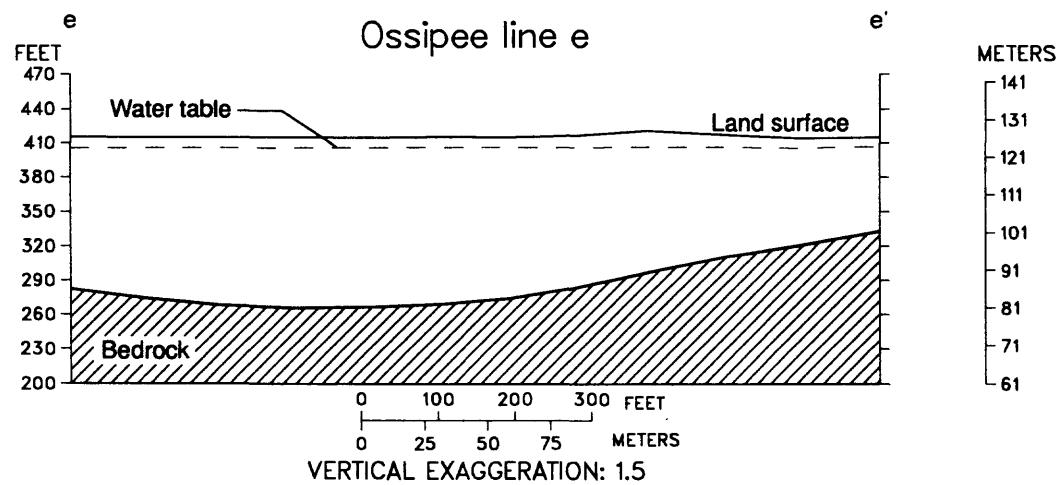
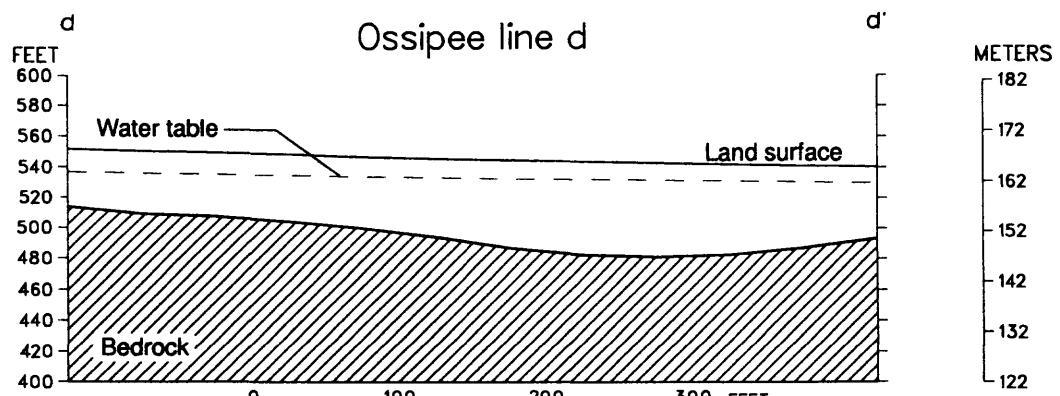
**Figure 3-10.** Geohydrologic sections interpreted from seismic-refraction data for Madison lines b-b', c-c', and d-d' (locations shown on plate 2).



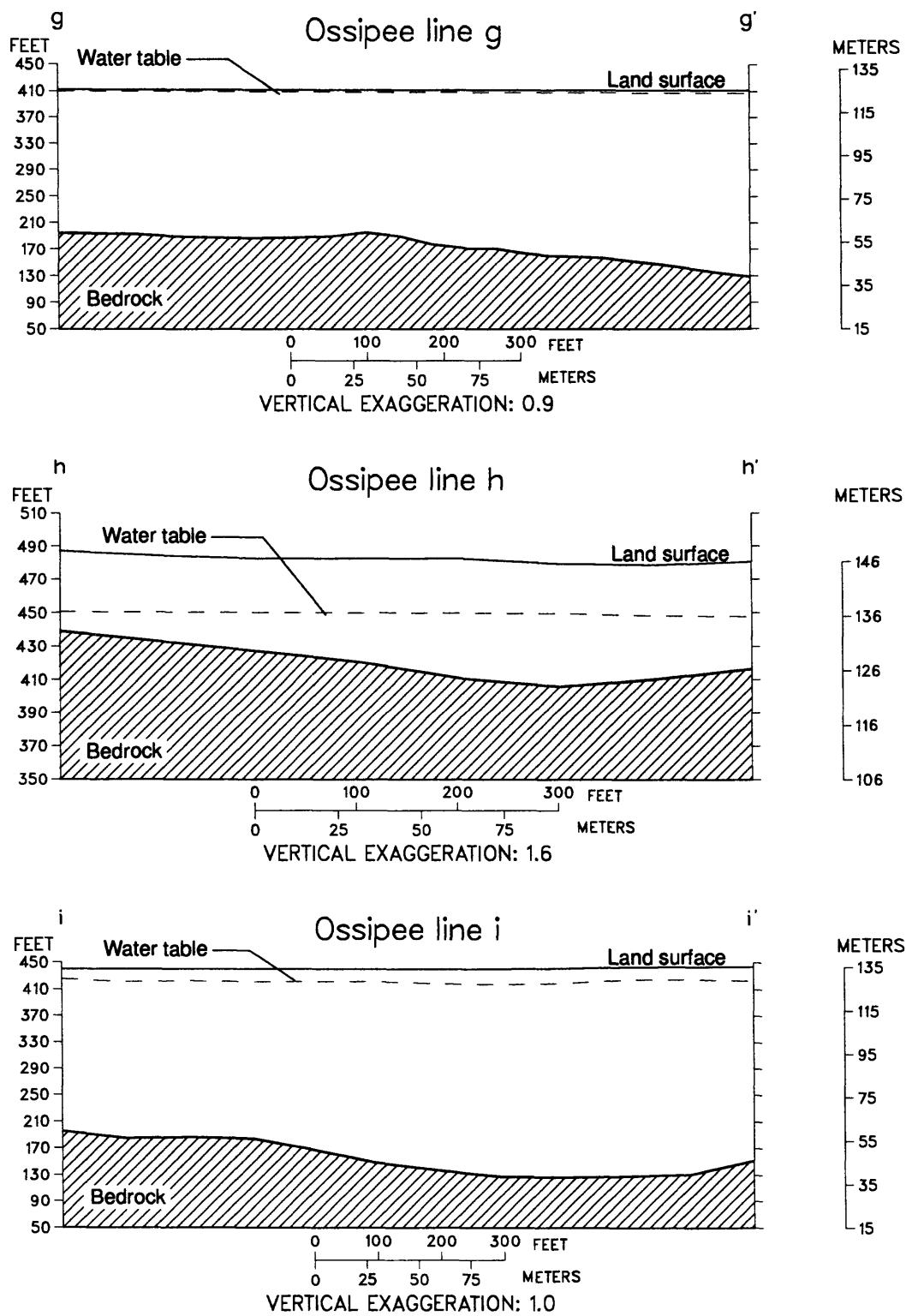
**Figure 3-11.** Geohydrologic sections interpreted from seismic-refraction data for Madison lines e-e' and f-f', and Ossipee-Effingham line o-o' (locations shown on plate 2).



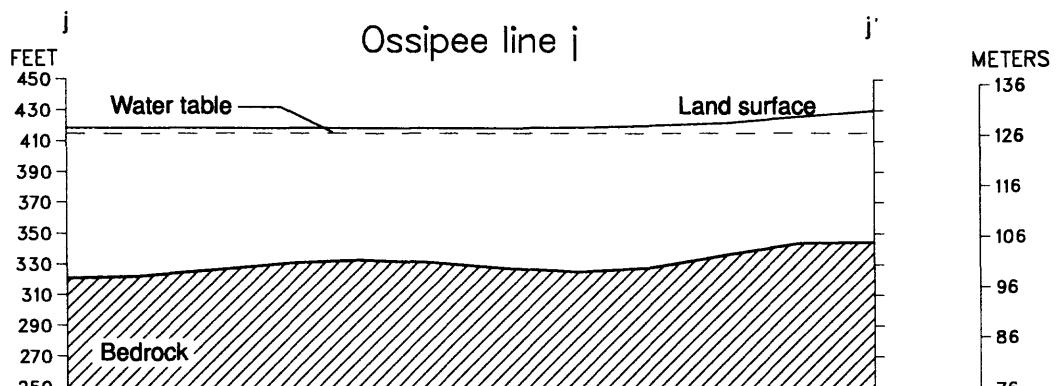
**Figure 3-12.** Geohydrologic sections interpreted from seismic-refraction data for Ossipee lines a-a', b-b', and c-c' (locations shown on plate 2).



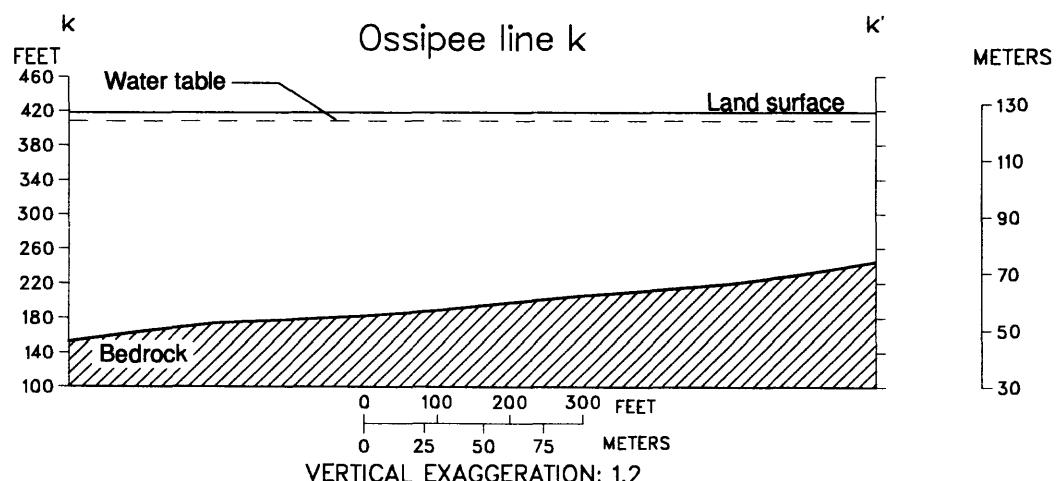
**Figure 3-13.** Geohydrologic sections interpreted from seismic-refraction data for Ossipee lines d-d', e-e', and f-f' (locations shown on plate 2).



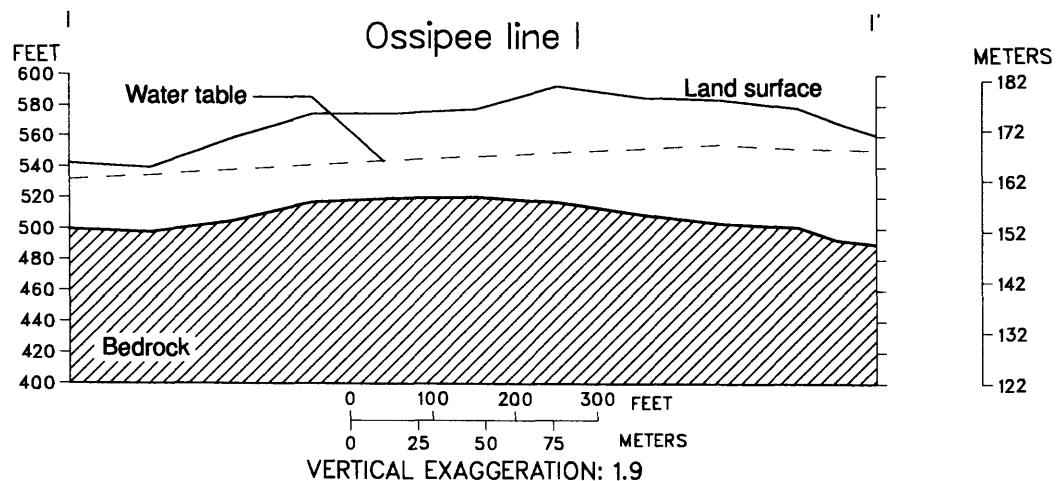
**Figure 3-14.** Geohydrologic sections interpreted from seismic-refraction data for Ossipee lines g-g', h-h', and i-i' (locations shown on plate 2).



VERTICAL EXAGGERATION: 2.1

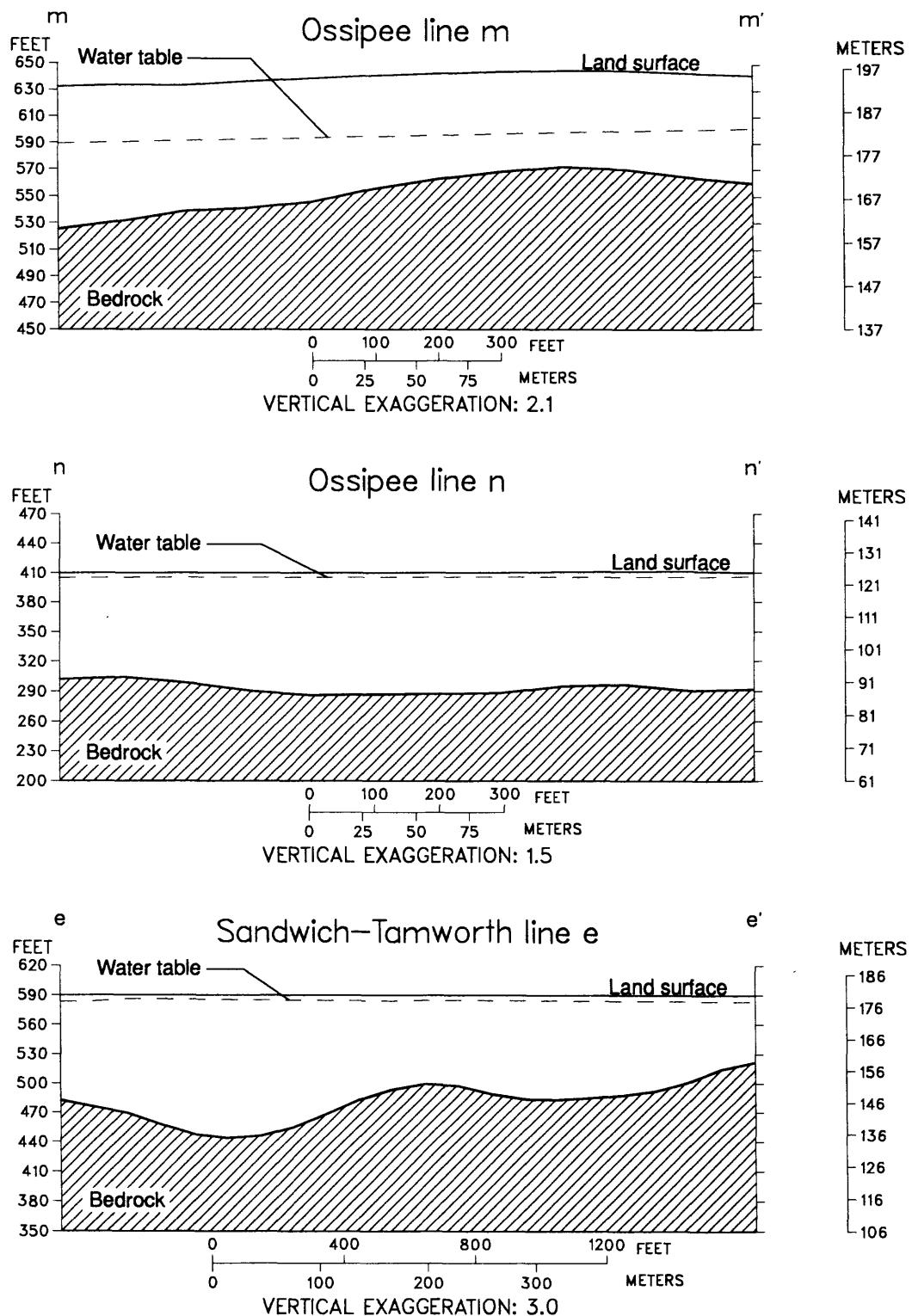


VERTICAL EXAGGERATION: 1.2

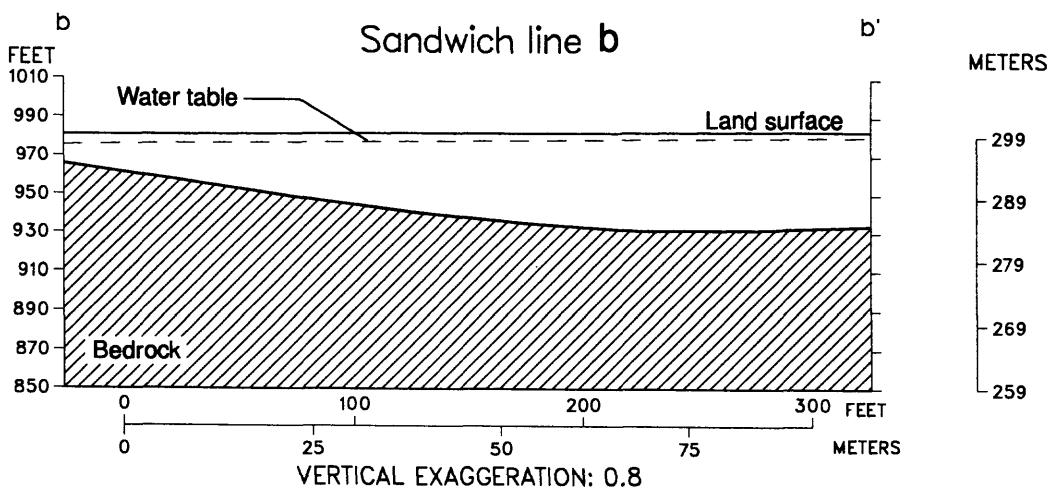
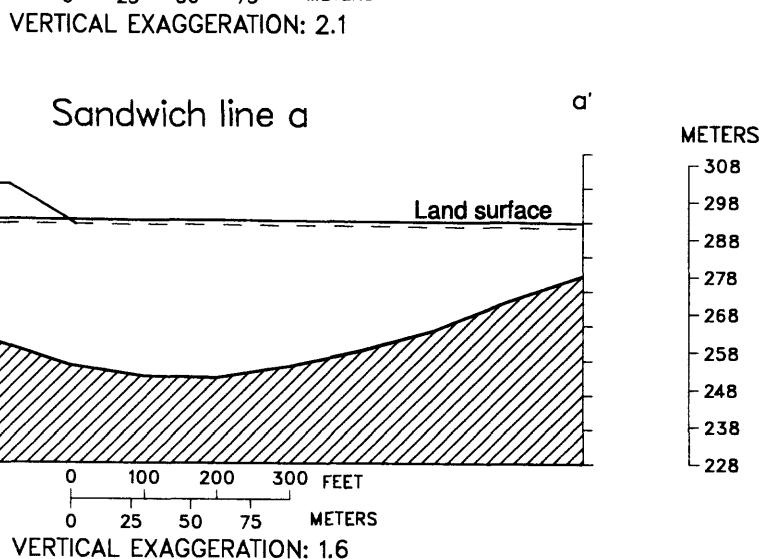
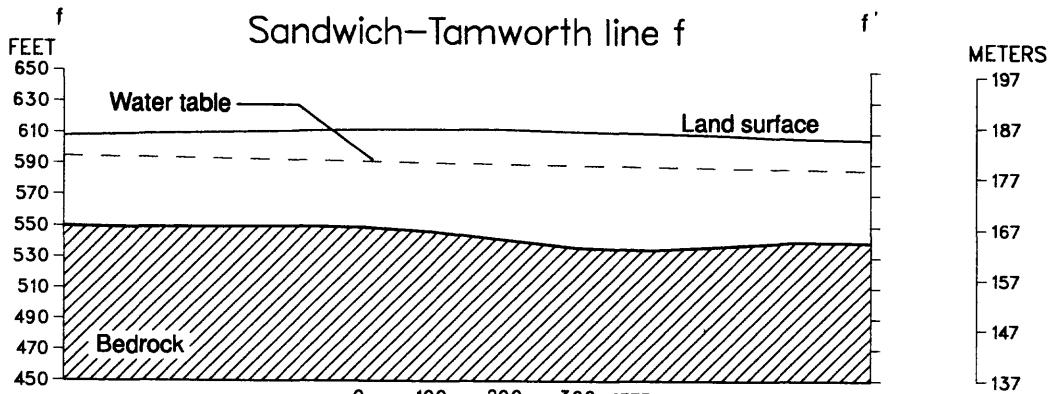


VERTICAL EXAGGERATION: 1.9

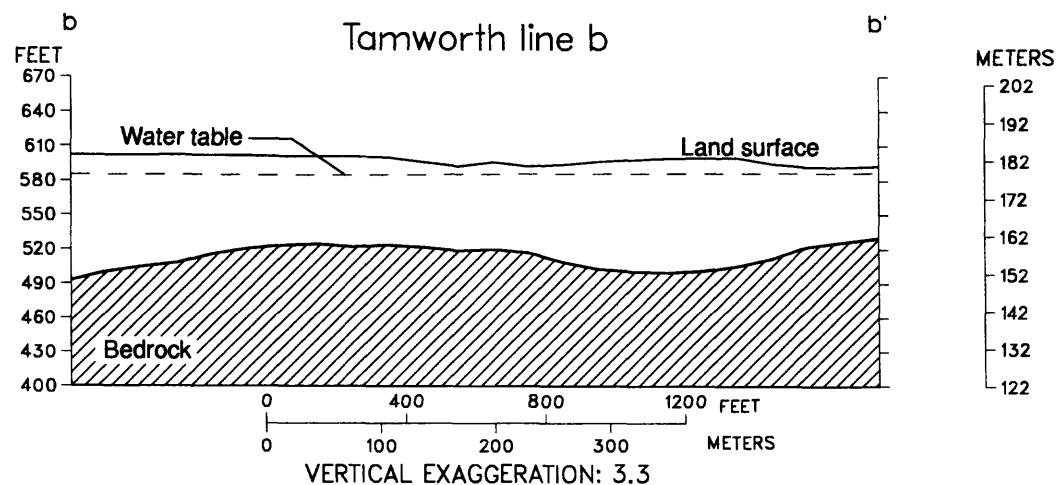
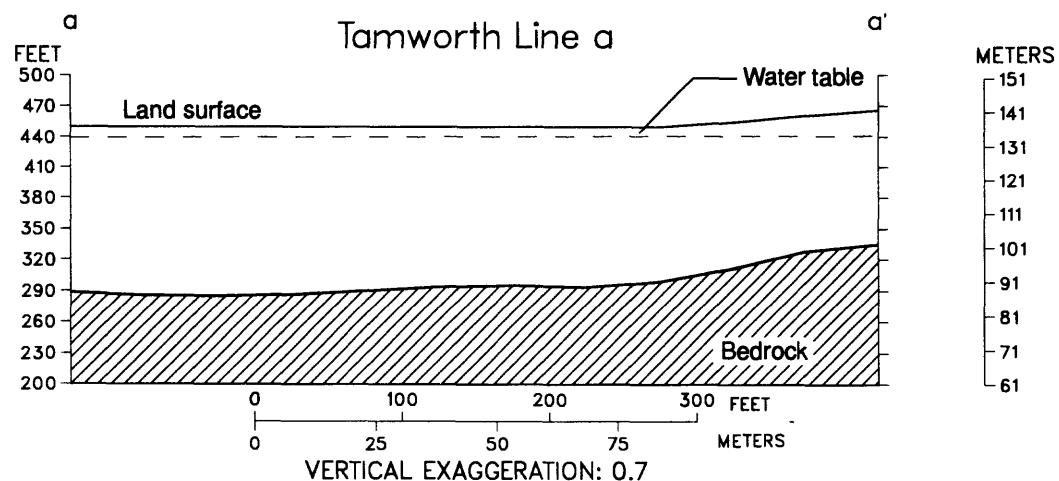
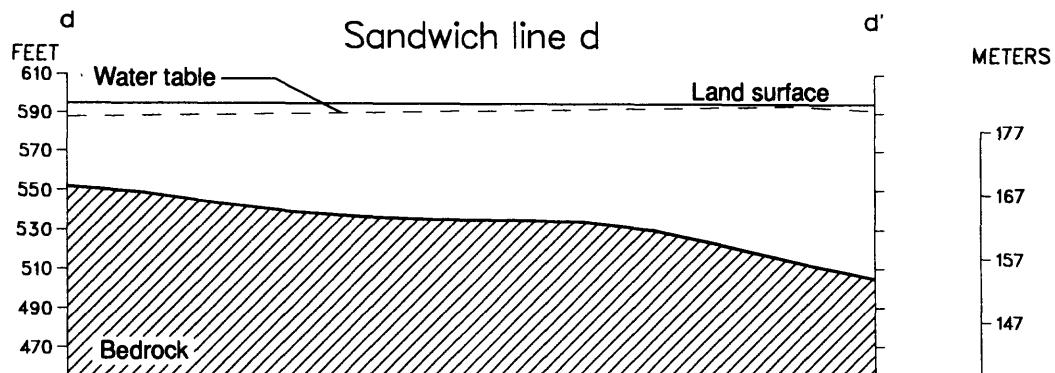
**Figure 3-15.** Geohydrologic sections interpreted from seismic-refraction data for Ossipee lines j-j', k-k', and l-l' (locations shown on plate 2).



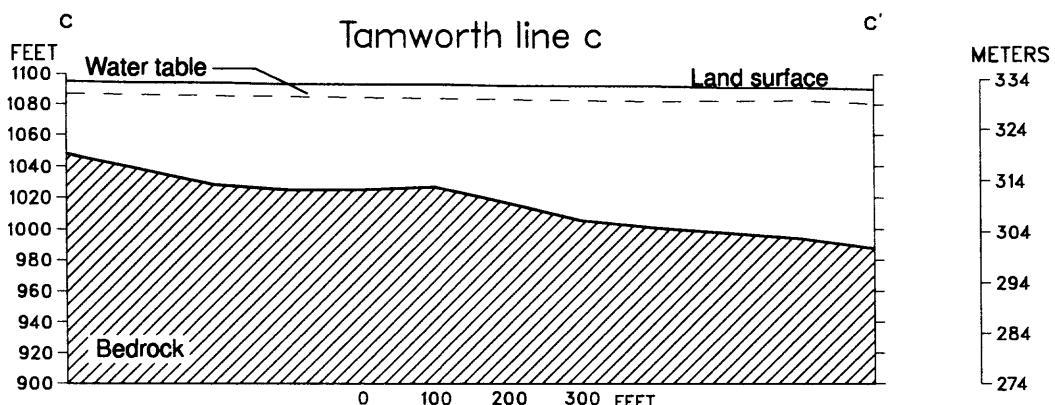
**Figure 3-16.** Geohydrologic sections interpreted from seismic-refraction data for Ossipee lines m-m' and n-n', and Sandwich-Tamworth line e-e' (locations shown on plate 2).



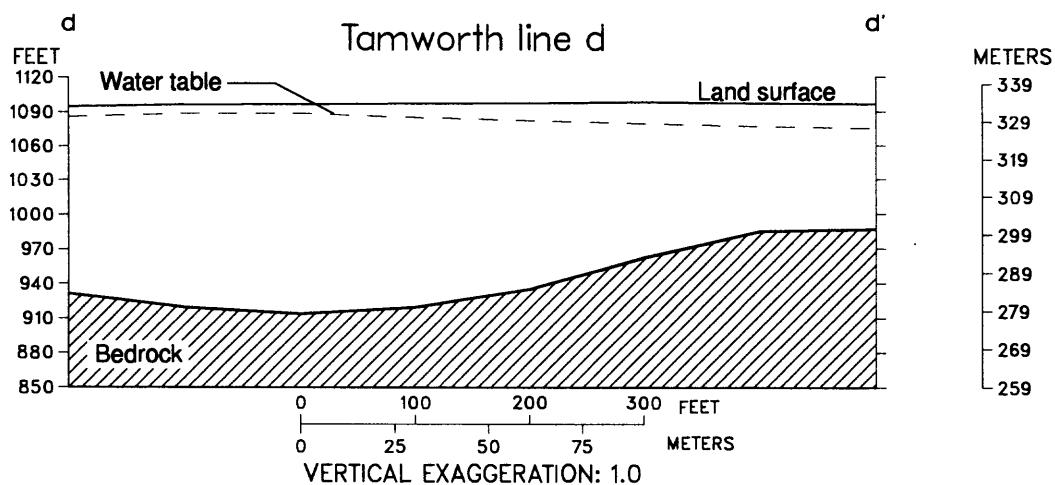
**Figure 3-17.** Geohydrologic sections interpreted from seismic-refraction data for Sandwich-Tamworth line f-f', Sandwich lines a-a' and b-b' (locations shown on plate 2).



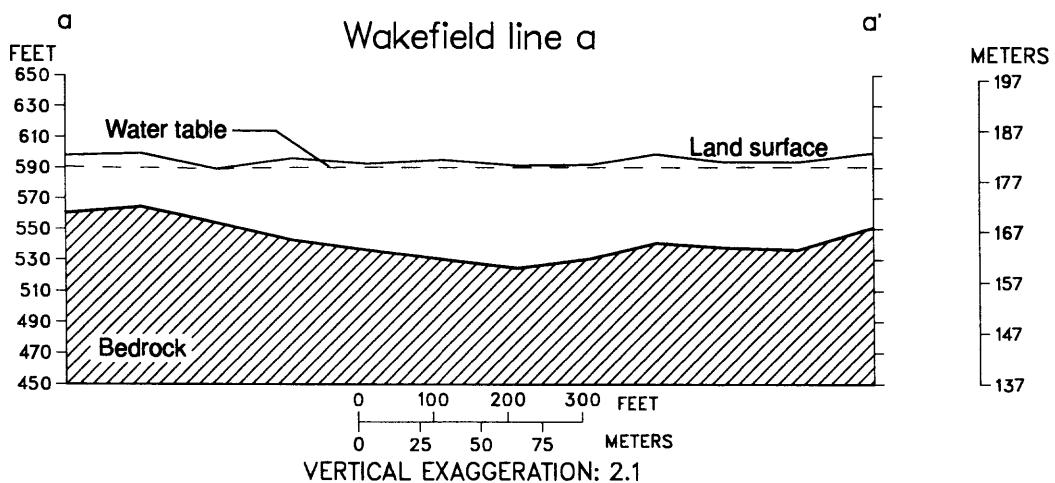
**Figure 3-18.** Geohydrologic sections interpreted from seismic-refraction data for Sandwich line d-d', Tamworth lines a-a' and b-b' (locations shown on plate 2).



VERTICAL EXAGGERATION: 2.1

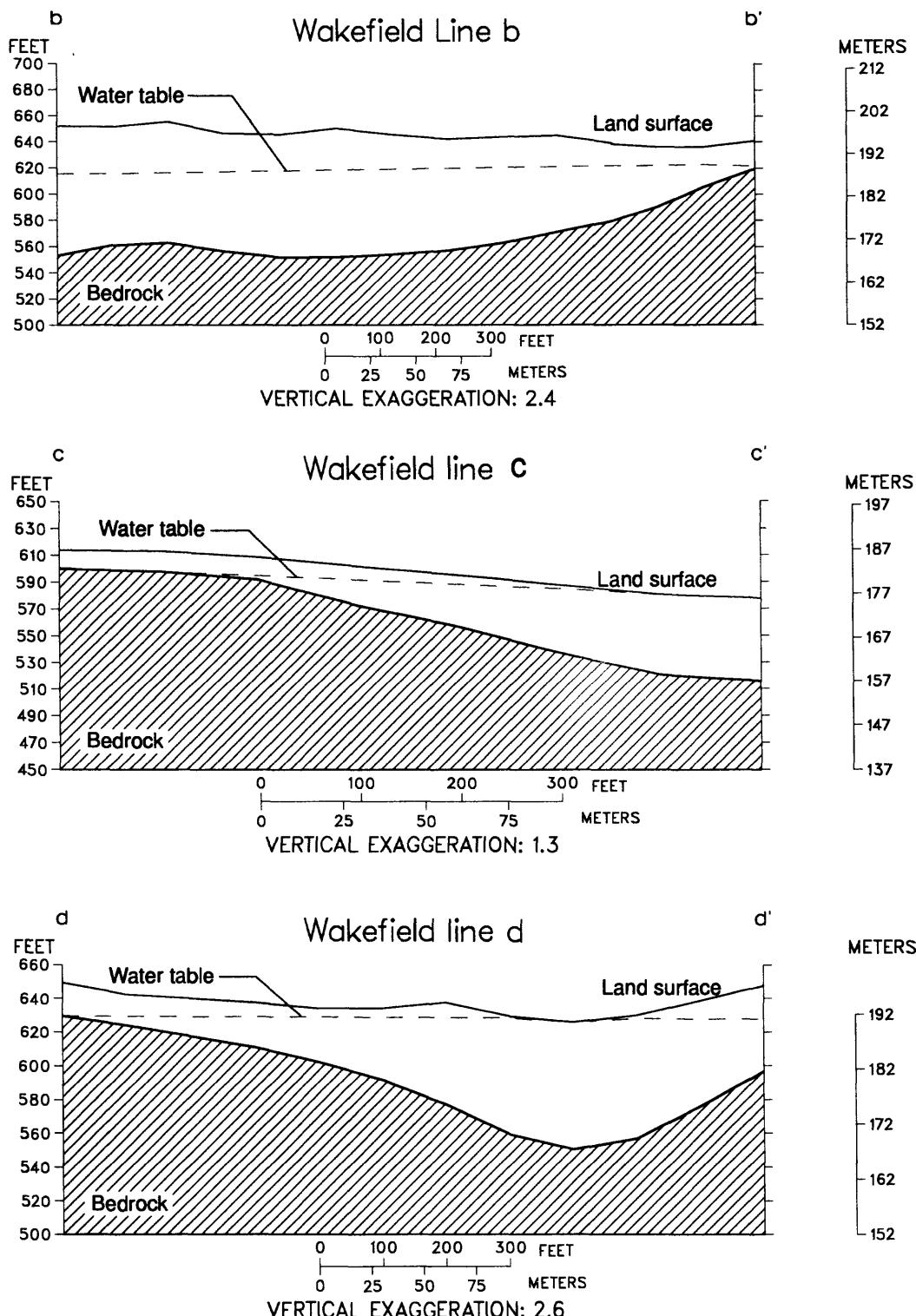


VERTICAL EXAGGERATION: 1.0

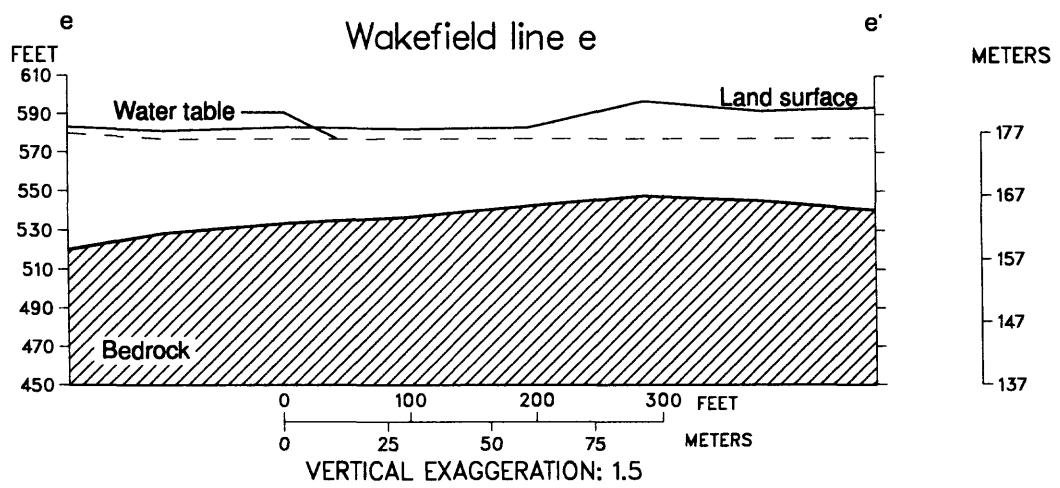


VERTICAL EXAGGERATION: 2.1

**Figure 3-19.** Geohydrologic sections interpreted from seismic-refraction data for Tamworth lines c-c', d-d' and Wakefield line a-a' (locations shown on plate 2).



**Figure 3-20.** Geohydrologic sections interpreted from seismic-refraction data for Wakefield lines b-b', c-c', and d-d' (locations shown on plate 2).



**Figure 3-21.** Geohydrologic sections interpreted from seismic-refraction data for Wakefield line e-e' (locations shown on plate 2).

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**APPENDIX 4. Low streamflow measurements at  
miscellaneous sites in the Saco and Ossipee River  
Basins, east-central New Hampshire**

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**Table 4-1.** Low streamflow measurements at miscellaneous sites in the Saco and Ossipee River Basins, east-central New Hampshire

[° ' ", degree, minute, second; mm-dd-yy, month-day-year; ft<sup>3</sup>/s, cubic foot per second]

Name of brook or river (reference number on plates 1 and 2)	Tributary to	Latitude ° ' "	Longitude ° ' "	Measurements	
				Date (mm-dd-yy)	Discharge (ft <sup>3</sup> /s)
Saco River (1)	Atlantic Ocean	44 04 55	71 18 31	07-22-91	23.3
Albany Brook (2)	Saco River	44 04 27	71 18 04	07-22-91	.57
Stony Brook (3)	Saco River	44 04 43	71 14 20	07-22-91	.04
Stony Brook (4)	Saco River	44 04 56	71 14 18	07-22-91	.08
East Branch Saco River (5)	Saco River	44 06 27	71 08 32	07-22-91	3.98
East Branch Saco River (6)	Saco River	44 06 02	71 08 59	07-22-91	3.52
East Branch Saco River (7)	Saco River	44 05 54	71 09 32	07-22-91	2.52
East Branch Saco River (8)	Saco River	44 05 50	71 09 39	07-22-91	.16
East Branch Saco River (9)	Saco River	44 05 43	71 09 54	07-22-91	.59
Saco River (10)	Atlantic Ocean	44 05 41	71 09 50	07-22-91	47.7
Saco River (11)	Atlantic Ocean	44 04 03	71 08 55	07-22-91	58.5
Lucy Brook (12)	Saco River	44 04 12	71 10 23	07-22-91	.61
Lucy Brook (13)	Saco River	44 04 15	71 10 12	07-22-91	.61
Lucy Brook (14)	Saco River	44 04 02	71 09 33	07-22-91	.32
Saco River (15)	Atlantic Ocean	44 02 15	71 08 21	07-22-91	63.5
Saco River (16)	Atlantic Ocean	44 00 22	71 07 00	07-22-91	72.7
White Lot Brook (17)	Black Brook	44 02 03	71 01 44	07-22-91	.28
White Lot Brook (18)	Black Brook	44 01 53	71 01 38	07-22-91	.20
Pine River (19)	Ossipee Lake	43 38 51	71 02 54	07-22-91	2.56
Youngs Brook (20)	Pine River	43 39 35	71 04 13	07-22-91	2.21
Pine River (21)	Ossipee Lake	43 40 10	71 04 27	07-22-91	3.38
Pine River (22)	Ossipee Lake	43 41 03	71 04 47	07-22-91	8.46
Poland Brook (23)	Pine River	43 41 04	71 04 53	07-22-91	.08
Wilkinson Brook (24)	Pine River	43 43 10	71 01 47	07-22-91	.15
Wilkinson Brook (25)	Pine River	43 43 31	71 04 23	07-22-91	3.27
Pine River (26)	Ossipee Lake	43 44 36	71 05 20	07-22-91	10.5
Whiteface River (27)	Cold River	43 52 55	71 23 35	07-22-91	2.43
Bearcamp River (28)	Ossipee Lake	43 49 29	71 18 39	07-22-91	0
Cold Brook (29)	Bearcamp River	43 48 57	71 17 50	07-22-91	.34
Mill Brook (30)	Swift River	43 51 19	71 18 30	07-22-91	.60
Mill Brook (31)	Swift River	43 50 22	71 15 51	07-22-91	2.40
Swift River (32)	Bearcamp River	43 53 30	71 17 58	07-22-91	11.1
Swift River (33)	Bearcamp River	43 50 50	71 16 01	07-22-91	10.7
Bearcamp River (34)	Ossipee Lake	43 49 20	71 12 45	07-22-91	25.2
Lovell River (35)	Ossipee Lake	43 46 42	71 09 25	07-22-91	1.24
West Branch River (36)	Ossipee Lake	43 50 51	71 10 19	07-22-91	1.97

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**APPENDIX 5. Chemical analysis of the ground-water samples from the Saco and Ossipee River Basins, east-central, New Hampshire**

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**Table 5-1.** Chemical analysis of ground-water samples from the Saco and Ossipee River Basins, east-central New Hampshire

[° ′ ″, degree, minute, second; ft, foot; µS/cm, microsiemens per centimeter at 25 degrees Celsius; °C, degrees Celsius; mg/L, milligrams per liter; µg/L, micrograms per liter; <, less than; --, no data available]

Local site number		Date	Time	Latitude ° ′ ″	Longitude ° ′ ″	Depth of well, total (ft)	Altitude of land surface datum (ft above sea level)	Specific conductance (µS/cm)	pH, field measurement (standard units)
ADW	13	08-27-92	1700	43 55 24	071 13 26	52.4	625	68	6.1
ADW	14	09-01-92	1330	43 59 48	071 22 03	79.5	1,250	158	6.8
ADW	15	09-01-92	1430	43 59 48	07 122 03	18.0	1,250	44	5.3
ADW	16	09-01-92	1130	43 59 36	071 21 04	49.5	1,250	54	5.9
CKW	9	09-03-92	1230	44 14 52	071 00 51	30.0	535	16	5.9
CKW	10	09-03-92	1430	44 13 57	071 00 50	60.0	510	25	5.8
CKW	11	09-03-92	1700	44 10 04	071 00 40	59.0	530	1,190	6.5
CWW	66	08-28-92	1330	43 58 15	071 08 23	50.0	465	40	5.9
CWW	67	09-04-92	1115	44 04 23	071 01 00	69.0	430	50	6.6
CWW	70	09-04-92	1015	44 04 30	071 01 11	19.0	435	60	5.6
EFW	9	09-02-92	1700	43 46 08	071 06 40	74.5	420	24	6.0
FLW	25	09-05-92	1130	43 48 56	071 09 40	39.5	415	21	5.5
MBW	10	08-28-92	1100	43 50 54	071 11 32	59.0	480	61	5.6
OXS	1	09-06-92	1315	43 47 09	071 11 39	--	590	42	6.2
OXS	5	09-06-92	1500	43 39 09	071 03 50	--	575	39	6.4
OXW	34	08-26-92	1330	43 49 16	071 10 54	69.0	450	48	6.1
OXW	35	09-05-92	1430	43 43 44	071 09 04	18.5	510	62	6.1
OXW	36	09-04-92	1800	43 46 53	071 06 38	90.0	420	152	5.9
OXW	38	09-05-92	1600	43 42 21	071 05 15	114.7	550	35	6.4
SES	1	09-06-92	1030	43 52 38	071 24 01	--	900	88	7.3
SEW	26	08-27-92	1100	43 49 59	071 20 42	30.0	590	28	5.8
TAS	1	09-06-92	1730	43 50 38	071 15 28	--	450	64	5.7
TAW	31	08-27-92	1330	43 50 16	071 14 06	114.0	450	26	5.7
TAW	32	09-02-92	1400	43 50 05	071 19 45	42.0	600	40	7.1
TAW	33	08-27-92	1530	43 50 00	071 13 37	67.5	450	53	5.8
TAW	34	08-26-92	1700	43 50 13	071 15 21	40.0	450	46	6.6
WAW	23	09-05-92	1800	43 38 20	071 03 19	49.0	620	24	--
MBW	57	09-04-92	1530	43 57 15	071 09 13	49.0	470	124	6.3
MBW	55	09-04-92	1400	43 56 42	071 09 14	49.0	475	70	5.8

**Table 5-1.** Chemical analysis of ground-water samples from the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site number		Temperature of water (°C)	Oxygen, dissolved (mg/L)	Hardness total (mg/L as CaCO <sub>3</sub> )	Acidity (mg/L as H)	Calcium dissolved (mg/L as Ca)	Magnesium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)	Sodium percent	Potassium, dissolved (mg/L as K)
ADW	13	9.5	4.9	15	0.1	5.1	0.56	6.2	45	0.90
ADW	14	7.5	4.6	33	<.1	11	1.3	17	52	1.5
ADW	15	7.5	10.4	3	.1	1.2	.11	5.6	75	.40
ADW	16	7.5	9.9	14	.1	5.1	.35	3.8	35	1.0
CKW	9	7.0	11.5	4	.1	1.3	.14	1.8	47	.40
CKW	10	7.5	9.5	7	.3	2.0	.47	3.3	48	.60
CKW	11	7.5	10.0	18	.2	5.6	.97	220	96	3.5
CWW	66	9.5	8.5	8	.3	2.4	.38	3.6	47	1.0
CWW	67	9.5	7.9	25	.1	5.5	2.7	4.6	26	2.6
CWW	70	9.0	2.0	20	.9	6.0	1.3	4.4	28	3.6
EFW	9	8.0	11.7	5	.2	1.7	.21	1.9	42	.50
FLW	25	8.5	11.6	4	<.1	1.2	.14	4.6	72	.30
MBW	10	10.0	10.7	7	<.1	2.2	.27	8.3	71	.60
OXS	1	11.5	--	13	.1	4.5	.40	5.4	47	.50
OXS	5	10.0	--	12	<.1	3.8	.62	5.2	47	.40
OXW	34	9.5	1.8	12	.1	3.7	.61	3.0	34	.90
OXW	35	9.5	11.7	12	.2	4.2	.41	7.0	52	1.3
OXW	36	8.5	1.8	25	.8	7.6	1.4	12	50	1.2
OXW	38	8.0	11.4	10	.1	3.2	.55	2.7	35	.60
SES	1	9.0	--	29	<.1	8.0	2.2	7.2	34	1.3
SEW	26	14.5	1.8	7	<.1	2.0	.37	1.7	34	.50
TAS	1	11.5	--	13	.1	4.2	.49	6.1	49	1.1
TAW	31	7.5	0	7	<.1	2.1	.32	1.5	32	.40
TAW	32	10.0	7.8	3	<.1	.80	.29	3.7	64	1.1
TAW	33	9.5	1.7	10	.3	3.3	.35	2.7	37	.40
TAW	34	9.0	5.4	14	<.1	4.3	.70	3.1	32	.80
WAW	23	8.5	11.8	6	<.1	1.8	.26	2.4	45	.70
MBW	57	10.5	10.1	30	<.1	10	1.1	9.4	40	1.4
MBW	55	10.0	11.2	22	.2	7.3	.82	4.2	29	.90

**Table 5-1.** Chemical analysis of ground-water samples from the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site number		Sulfate dissolved (mg/L as SO <sub>4</sub> )	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica dissolved (mg/L as SiO <sub>2</sub> )	Solids, residue at 180 °C dissolved (mg/L)	Solids, sum of constituents, dissolved (mg/L)	Nitrogen, nitrite dissolved (mg/L as N)	Nitrogen, NO <sub>2</sub> +NO <sub>3</sub> dissolved (mg/L as N)	Nitrogen, ammonia dissolved (mg/L as N)
ADW	13	3.2	7.6	1.2	15	46	49	--	--	--
ADW	14	2.6	23	2.9	16	89	97	<.010	.110	.010
ADW	15	3.3	6.4	.40	8.9	31	30	<.010	.180	.020
ADW	16	2.5	1.8	2.1	15	39	43	<.010	.420	.010
CKW	9	1.9	.30	<.10	6.4	11	18	<.010	.310	<.010
CKW	10	3.7	.40	.10	9.3	24	26	<.010	.120	<.010
CKW	11	55	300	.20	11	602	612	<.010	.140	.010
CWW	66	2.0	3.5	.40	14	37	35	--	--	--
CWW	67	2.5	.50	1.6	40	67	80	<.010	.200	.010
CWW	70	6.4	1.1	.10	10	39	48	<.010	.620	<.010
EFW	9	1.6	.60	<.10	11	18	24	<.010	<.050	.010
FLW	25	.30	3.3	.20	8.8	21	23	<.010	<.050	<.010
MBW	10	1.1	13	<.10	11	52	41	--	--	--
OXS	1	2.8	.40	1.2	16	33	42	<.010	<.050	<.010
OXS	5	1.7	3.5	.10	11	32	35	<.010	.081	.020
OXW	34	2.9	2.3	.80	17	34	42	--	--	--
OXW	35	1.4	10	<.10	12	39	49	<.010	.730	<.010
OXW	36	1.2	32	.20	17	95	87	<.010	<.050	.090
OXW	38	1.0	2.2	.20	13	33	33	<.010	<.050	.010
SES	1	5.2	.70	1.3	20	58	70	<.010	.280	<.010
SEW	26	4.0	1.0	.10	7.8	17	22	--	--	--
TAS	1	3.5	9.8	.20	9.5	39	45	<.010	1.30	<.010
TAW	31	2.9	.50	<.10	7.5	19	21	--	--	--
TAW	32	3.4	.40	.20	11	29	30	<.010	.180	.020
TAW	33	2.3	1.4	<.10	16	33	41	--	--	--
TAW	34	4.7	.40	.70	18	38	43	--	--	--
WAW	23	<.10	.60	<.10	15	23	--	<.010	<.050	<.010
MBW	57	2.3	26	1.3	16	84	78	<.010	.210	.010
MBW	55	5.1	8.5	.40	11	50	51	<.010	1.30	<.010

**Table 5-1.** Chemical analysis of ground-water samples from the Saco and Ossipee River Basins, east-central New Hampshire--Continued

Local site number	Nitrogen, ammonia + organic dissolved (mg/L as N)	Phosphorus dissolved (mg/L as P)	Phosphorus, ortho, dissolved (mg/L as P)	Barium, dissolved (mg/L as Ba)	Beryllium, dissolved (µg/L as Be)	Cadmium, dissolved (µg/L as Cd)	Cobalt, dissolved (µg/L as Co)	Copper, dissolved (µg/L as Cu)
ADW 13	--	--	--	7	< 0.5	<1.0	<3	<10
ADW 14	<0.20	0.020	<0.010	10	<.5	<1.0	<3	<10
ADW 15	< .20	< .010	< .010	8	.9	<1.0	<3	<10
ADW 16	< .20	< .010	< .010	7	.7	<1.0	<3	<10
CKW 9	< .20	.010	< .010	7	< .5	1.0	<3	<10
CKW 10	< .20	.020	< .010	6	< .5	1.0	<3	<10
CKW 11	< .20	.020	< .010	30	< .5	4.0	4	<10
CWW 66	--	--	--	6	< .5	<1.0	<3	<10
CWW 67	< .20	.170	< .010	40	< .5	<1.0	<3	<10
CWW 70	< .20	.050	< .010	15	< .5	<1.0	<3	<10
EFW 9	< .20	< .010	< .010	6	< .5	<1.0	<3	<10
FLW 25	< .20	.010	< .010	11	< .5	<1.0	<3	<10
MBW 10	--	--	--	6	< .5	<1.0	<3	<10
OXS 1	< .20	.010	< .010	10	< .5	1.0	<3	<10
OXS 5	< .20	.020	< .010	9	< .5	<1.0	<3	<10
OXW 34	--	--	--	6	< .5	<1.0	3	<10
OXW 35	< .20	.020	< .010	7	< .5	<1.0	<3	<10
OXW 36	< .20	.010	< .010	17	.8	1.0	<3	<10
OXW 38	< .20	.010	.010	6	< .5	<1.0	<3	<10
SES 1	< .20	.050	.040	7	< .5	<1.0	<3	<10
SEW 26	--	--	--	11	< .5	<1.0	<3	<10
TAS 1	< .20	.020	< .010	18	.6	<1.0	<3	<10
TAW 31	--	--	--	5	< .5	<1.0	<3	<10
TAW 32	< .20	< .010	.010	5	< .5	<1.0	<3	<10
TAW 33	--	--	--	7	.7	1.0	<3	<10
TAW 34	--	--	--	6	< .5	<1.0	<3	<10
WAW 23	< .20	.010	< .010	6	< .5	<1.0	<3	<10
MBW 57	< .20	< .010	< .010	7	< .5	<1.0	<3	<10
MBW 55	< .20	< .010	< .010	6	.6	<1.0	<3	<10

**Table 5-1.** Chemical analysis of ground-water samples from the Saco and Ossipee River Basins, east-central New Hampshire—Continued

Local site number		Iron, dissolved ( $\mu\text{g/L}$ as Fe)	Lead, dissolved ( $\mu\text{g/L}$ as Pb)	Lithium, dissolved ( $\mu\text{g/L}$ as Li)	Manganese, dissolved ( $\mu\text{g/L}$ as Mn)	Molybdenum, dissolved ( $\mu\text{g/L}$ as Mo)	Strontium, dissolved ( $\mu\text{g/L}$ as Sr)	Vanadium, dissolved ( $\mu\text{g/L}$ as V)	Zinc, dissolved ( $\mu\text{g/L}$ as Zn)
ADW	13	3	<10	<4	2	<10	22	<6	5
ADW	14	<3	<10	6	24	10	58	<6	<3
ADW	15	<3	<10	<4	9	<10	9	<6	<3
ADW	16	<3	<10	4	20	<10	19	<6	3
CKW	9	9	<10	<4	16	<10	12	<6	<3
CKW	10	5	<10	<4	48	<10	20	<6	4
CKW	11	9	<10	<4	330	<10	79	<6	6
CWW	66	5	<10	<4	77	<10	16	<6	4
CWW	67	7,100	<10	17	500	<10	32	10	50
CWW	70	9	<10	<4	48	<10	63	<6	11
EFW	9	4	<10	<4	1	<10	17	<6	6
FLW	25	<3	<10	<4	15	<10	10	<6	<3
MBW	10	4	<10	<4	1	<10	22	<6	<3
OXS	1	25	<10	<4	720	<10	33	<6	13
OXS	5	3	<10	<4	8	<10	29	<6	<3
OXW	34	890	<10	<4	370	<10	30	<6	5
OXW	35	<3	<10	<4	<1	<10	81	<6	<3
OXW	36	8,700	<10	<4	260	<10	80	<6	<3
OXW	38	<3	<10	<4	<1	<10	27	<6	4
SES	1	<3	<10	7	<1	<10	56	<6	<3
SEW	26	83	<10	<4	63	<10	22	<6	3
TAS	1	4	<10	<4	10	<10	42	<6	10
TAW	31	<3	<10	<4	1	<10	15	<6	<3
TAW	32	19	<10	<4	26	<10	8	<6	4
TAW	33	5,300	<10	<4	62	<10	25	<6	16
TAW	34	51	<10	5	4	<10	28	<6	<3
WAW	23	<3	<10	<4	5	<10	19	<6	4
MBW	57	5	<10	8	28	<10	41	<6	5
MBW	55	<3	<10	<4	36	<10	38	<6	4