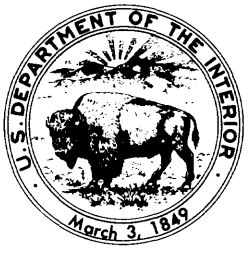
# GROUND-WATER QUALITY DATA FROM THE SOUTHEASTERN COASTAL PLAIN, MISSISSIPPI, ALABAMA, GEORGIA, SOUTH CAROLINA, AND NORTH CAROLINA

By Roger W. Lee

---

U.S. GEOLOGICAL SURVEY

Open-File Report 84-237




Atlanta, Georgia

1984

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

---

For additional information write to:

Regional Hydrologist
U.S. Geological Survey
75 Spring Street, S.W., Suite 772
Atlanta, Georgia 30303

Copies of this report can be purchased from:

Open-File Services Section
Western Distribution Branch
U.S. Geological Survey
Box 25425, Federal Center
Denver, Colorado 80225
(Telephone: (303) 234-5888)

CONTENTS



ILLUSTRATIONS



TABLES

## CONVERSION FACTORS

To convert inch-pound units in this report to equivalent metric units, multiply by the following factors:

| Multiply | By | To obtain |
|---|---|---|
| foot (ft) | 0.3048 | meter (m) |

temperature, degrees Celsius (°C) = 0.556 (°F - 32)

# GROUND-WATER QUALITY DATA FROM THE SOUTHEASTERN COASTAL PLAIN, MISSISSIPPI, ALABAMA, GEORGIA, SOUTH CAROLINA, AND NORTH CAROLINA

By Roger W. Lee

## ABSTRACT

Water-quality data from major aquifers of the southeastern Coastal Plain, U.S., were collected from 1981 through 1983, as part of the Southeastern Sand Aquifer Study of the Regional Aquifer-System Analysis of the U.S. Geological Survey. Samples were obtained from 104 wells and 1 spring. The report contains six tables of data and one map showing geographic locations of the sample sites. Major and minor chemical constituents, trace metals, radiochemical data including tritium and carbon-14, carbon-13, deuterium, oxygen-18, and dissolved gases were collected employing the best available collection techniques and analytical methods. Values for pH, bicarbonate and carbonate, and temperature (uphole) were determined at the sampling site. The data will be used to calculate mineral saturation and mass transfer in aquifers of the southeastern Coastal Plain.

## INTRODUCTION

The purpose of this report is to present the results of chemical analyses of water samples collected from aquifers of the southeastern Coastal Plain from January 1981 to March 1983. During this period, 105 samples were collected as part of an interpretative geochemical study for the Sand Aquifer Study, Regional Aquifer-System Analysis (SAS-RASA) for the Geological Survey. All of the physical and chemical data are contained in tables 1 to 6 at the end of the text. The majority of samples were from wells used for municipal or domestic purposes. Wells MRN 77, MRN 78, and DOR 211 were wells drilled and sampled as a specific part of the SAS-RASA project.

The population of wells represents most of the major water producing zones in the southeastern Coastal Plain. Many of the wells represent a single aquifer source. Well-site selection for sampling was based on existing hydrologic and geologic information. The well sites follow ground-water flow lines in the respective regional aquifers (fig. 1). Assignments of geologic unit source for each well were made according to interpretation and definition of the geology of the southeastern Coastal Plain through 1983, as contained in the Geological Survey computerized data base, WATSTORE (tables 1 and 2). The geologic unit assignments are somewhat subjective and may change as more information becomes available.

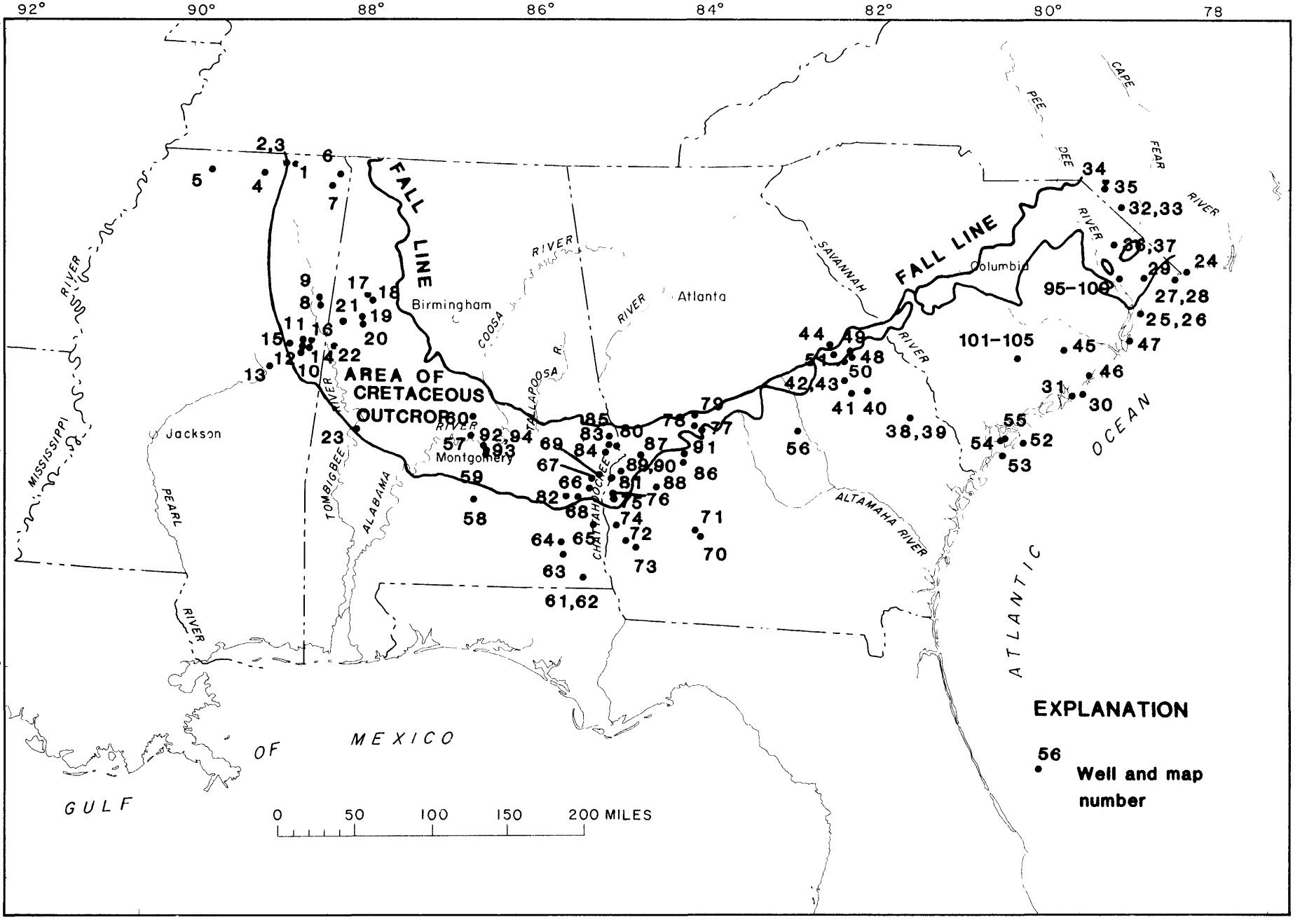



Figure 1.--Locations of ground-water sites sampled for chemical analyses.

## Acknowledgments

I should like to thank personnel of the Mississippi, Alabama, Georgia, and South Carolina Districts of WRD for providing this project with the appropriate well information and for their guidance in well selection. My special thanks to Stephen Kalkhoff of the Mississippi District, A. K. Sparkes and David Byrd of the Alabama District, Keith McFadden of the Georgia District, and Kathy Jones and Bryan McDonald of the South Carolina District, for providing much needed field assistance in the collection and handling of the water samples. I am especially grateful for the excellent assistance of the late Doris Jean Zellner, who compiled and edited the data tables.

## Data Collection

Water samples collected were analyzed by laboratories of the Geological Survey in Doraville, Ga., Arvada, Colo., and Reston, Va. Samples were collected and analyzed by established procedures (Skougstad and others, 1979). Temperature, pH, and bicarbonate and carbonate were field-determined (table 3) (Wood, 1976). The pH values were measured to $\pm$0.02 units and are reported to two decimal places accordingly. Ion chromatography was the method used to determine the major anions (Erdmann and others, 1982), although the reported phosphate ($PO_4$) value is from the standard nutrient method (tables 3 and 4). Samples for trace metals were field prepared for inductively coupled plasma atomic emission spectroscopy (ICP) analysis (plasma-jet analyzer) by filtration through 0.45 µm pore size filters (table 5). Dissolved gas samples (table 6) were collected in an evacuated glass tube (Hobba and others, 1977) preliminary to gas chromatographic analyses. The stable and radioactive isotope samples, and radiochemical samples were collected according to previously established methods within the Geological Survey (table 6) (Busby and others, 1983).

Most of the analytical values are in standard reporting units such as milligrams per liter (mg/L) or micrograms per liter (µg/L). The stable isotopes carbon-13, deuterium, oxygen-18, and carbon-14 (table 6), are reported in values referred to an internationally recognized standard. For carbon-13, deuterium, and oxygen-18, the reported value is calculated from the equation

$$\delta_x = \frac{R_x}{R_{std}} - 1 \times 10^3 \qquad \text{(Fritz and Fontes, 1980)}$$

where

$R_x$ = isotopic ratio $^{13}C/^{12}C$, $^{2}H/^{1}H$, $^{18}O/^{16}O$
$R_{std}$ = corresponding ratio in a standard
$R_{std}$ C-13 - Pee Dee Belemnite (PDB)
$R_{std}$ deuterium and oxygen-18 - Vienna Standard Mean Ocean Water (V-SMOW)

The $\delta$-value is expressed in parts per thousand (per mil, $^{o}/oo$).
Carbon-14 is reported as percentage of modern atmospheric carbon-14 (Fritz and Fontes, 1980).

All of the data will reside in the Geological Survey's WATSTORE Computer system in Reston, Va., and may be accessed using Survey access and retrieval programs.

## SELECTED REFERENCES


Busby, J. F., Lee, R. W., and Hanshaw, B. B., 1983, Major geochemical processes related to the hydrology of the Madison Aquifer System and associated rocks in parts of Montana, South Dakota, and Wyoming: U.S. Geological Survey Open-File Report 83-4093.

Erdmann, D. E., Anthony, E. R., and Perryman, G. R., 1982, 1983 Water Quality Laboratory Services Catalog: U.S. Geological Survey Open-File Report 82-766.

Fishman, M. J., and Pyen, Grace, 1979, Determination of selected anions in water by ion chromatography: U.S. Geological Survey Water-Resources Investigations 79-101.

Fritz, P., and Fontes, J. C., 1980, Handbook of Environmental Isotope Geochemistry: Amsterdam, The Netherlands, Elsevier Scientific Publishing Company, 545 p.

Hobba, W. A., Chemerys, J. C., Fisher, D. W., and Pearson, F. J., Jr., 1977, Geochemical and hydrologic data for wells and springs in the thermal spring areas of the Appalachians, U.S. Geological Survey Water-Resources Investigations 77-25.

Skougstad, M. W., Fishman, M. J., Friedman, L. C., Erdmann, D. E., and Duncan, S. S., 1979, Methods for the analyses of inorganic substances in water and fluvial sediment: Techniques of Water-Resources Investigations of the U.S. Geological Survey, book 5, chap. A, 626 p.

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

Table 1.--Geologic unit codes from WATSTORE

| Aquifer code (from WATSTORE) | Geologic unit and age |
|---|---|
| 110 QTRN | Recent sediment, Quaternary |
| 124 BRNL | Barnwell, Upper Eocene, Tertiary |
| 124 LSBN | Lisbon, Middle Eocene, Tertiary |
| 124 TLLT | Tallahatta, Middle Eocene, Tertiary |
| 124 CLBR | Claiborne, Middle Eocene, Tertiary |
| 124 BKMG | Black Mingo, Lower Eocene and Paleocene, Tertiary |
| 125 CLTN | Clayton, Paleocene, Tertiary |
| 211 PVDC | Providence, Upper Cretaceous |
| 211 RPLY | Ripley, Upper Cretaceous |
| 211 CSST | Cusseta, Upper Cretaceous |
| 211 PEED | Pee Dee, Upper Cretaceous |
| 211 COFF | Coffee, Upper Cretaceous |
| 211 SELM | Selma, Upper Cretaceous |
| 211 BKCK | Black Creek, Upper Cretaceous |
| 211 BLFN | Blufftown, Upper Cretaceous |
| 211 MCSN | McShan, Upper Cretaceous |
| 211 EUTW | Eutaw, Upper Cretaceous |
| 211 MDDF | Middendorf, Upper Cretaceous |
| 211 GORD | Gordo, Upper Cretaceous |
| 211 COKR | Coker, Upper Cretaceous |
| 211 MSSV | Massive Sand, Upper Cretaceous |
| 211 TSCL | Tuscaloosa, Upper Cretaceous |
| 300 SPRL, GNSS | Saprolite, Gneiss, Paleozoic |

TABLE 2. Physical Well Data for geochemical samples.

| Map No. | SITE NAME | SITE I.D. | DATE SAMPLED | GEOLOGIC UNIT | SCREEN INTERVAL(feet) | DEPTH (feet) | SP.COND. (micromhos) | TEMP. (°C) |
|---|---|---|---|---|---|---|---|---|
| | | | MISSISSIPPI | | | | | |
| 001 | MATHIS WELL | 345600088482601 | 1-08-81 | 211RPLY | ------ | 125 | 40 | 17.0 |
| 002 | WALNUT TOWN WELL | 345724088540001 | 1-06-81 | 211COFF | 901-961 | 961 | 270 | 21.9 |
| 003 | WALNUT STANDBY WELL | 345657088534901 | 1-08-81 | 211RPLY | 117-147 | 147 | 335 | 17.5 |
| 004 | ASHLAND TOWN WELL | 345100089104803 | 1-07-81 | 211RPLY | 740-920 | 920 | 309 | 22.1 |
| 005 | BYHALIA TOWN WELL | 345220089462301 | 1-07-81 | 211RPLY | 1,550-1,640 | 1,640 | 760 | 26.4 |
| 006 | CORPS OF ENGINEERS WELL | 345145088173201 | 1-08-81 | 211EUTW | ------ | 100 | 30 | 15.7 |
| 007 | HOLCUT-CAIRO WATER ASSOC. | 344455088214001 | 1-09-81 | 211GORD | 255-305 | 305 | 130 | 16.5 |
| 008 | COLUMBUS AIR FORCE BASE 2 | 333732088263602 | 1-09-81 | 211GORD | 402-442 | 442 | 122 | 18.8 |
| 009 | COLUMBUS AFB RECEIVER | 333930088283008 | 1-09-81 | 211EUTW | ------ | 125 | 65 | 19.1 |
| 010 | ABRAMS WELL | 331145088370401 | 1-10-81 | 211EUTW | 720-868 | 868 | 1,340 | 20.7 |
| 011 | HOFFMAN WELL | 331528088370701 | 1-10-81 | 211MCSN | 21-560 | 760 | 1,265 | 21.2 |
| 012 | MILLER WELL (DIAMOND SEED) | 331308088365101 | 1-10-81 | 211MSSV | 1,540-1,620 | 1,620 | 171 | 24.7 |
| 013 | MASHULAVILLE WELL | 330528088443001 | 1-11-81 | 211COKR | 1,792-1,832 | 1,832 | 1,200 | 31.1 |
| 014 | BUTLER WELL | 331357088340802 | 1-11-81 | 211EUTW | 450-708 | 708 | 1,260 | 20.3 |
| 015 | BROOKSVILLE TOWN WELL | 331357088455202 | 1-12-81 | 211EUTW | ------ | 942 | 300 | 25.0 |
| 016 | BLACK BELT WELL | 331531088334101 | 1-12-81 | 211GORD | 1,248-1,288 | 1,288 | 205 | 25.2 |
| | | | ALABAMA | | | | | |
| 017 | C. HUBBERT WELL | 334420087545101 | 1-13-81 | 211GORD | 45-46 | 46 | 30 | 16.8 |
| 018 | WALLACE WELL | 334113087522501 | 1-14-81 | 211COKR | 85-90 | 90 | 50 | 18.5 |
| 019 | SKELTON WELL | 333109087575901 | 1-15-81 | 211GORD | ------ | 100 | 40 | 17.8 |
| 020 | JUNKIN WELL | 332649087562901 | 1-15-81 | 211COKR | ------ | 222 | 90 | 18.1 |
| 021 | BAIN WELL | 332847088123702 | 1-16-81 | 211MCSN | ------ | 160 | 140 | 17.7 |
| 022 | HICKMAN WELL | 331637088154902 | 1-16-81 | 211EUTW | ------ | 107 | 170 | 18.9 |
| 023 | DEMOPOLIS AIRPORT WELL | 322801087572101 | 4-15-83 | 211GORD | 1,395-1,475 | 1,475 | 21,400 | 27.5 |
| 057 | NEIGHBORS' FLOWING WELL | 322833086410301 | 7-07-82 | 211EUTW | 40-180 | 180 | 55 | 19.5 |
| 058 | GREENVILLE CITY WELL | 314947086364001 | 7-08-82 | 211RPLY | 473-579 | 579 | 560 | 22.4 |
| 059 | HAYNEVILLE CITY WELL | 321058086343201 | 7-08-82 | 211GORD | 1,020-1,061 | 1,061 | 310 | 26.9 |
| 060 | VIDA WELL | 323648086401601 | 7-08-82 | 211GORD | ------ | 120 | 40 | 18.8 |
| 061 | OLYMPIA SPA GOLF COURSE | 310712085242401 | 7-12-82 | 124LSBN | ------ | 280 | 240 | 21.9 |
| 062 | OLYMPIA SPA MINERAL WELL | 310715085242201 | 7-13-82 | 211EUTW | 2,855-2,924 | 2,924 | 3,200 | 25.0 |
| 063 | NEWTON TOWN WELL | 311921085353301 | 7-13-82 | 211PVDC | 623-695 | 695 | 360 | 23.4 |
| 064 | OZARK CITY WELL 2 | 312723085384201 | 7-13-82 | 211RPLY | 805-845 | 845 | 340 | 23.3 |
| 065 | ROBINSON WELL | 313738085163001 | 7-13-82 | 125CLTN | 341-360 | 360 | 395 | 20.0 |
| 066 | WYECOTT PLANTATION WELL | 315814085192201 | 7-14-82 | 211EUTW | ------ | 300 | 380 | 19.4 |
| 067 | COMER SCHOOL WELL | 320431085193201 | 7-14-82 | 211TSCL | ------ | 1,200 | 200 | 25.6 |
| 068 | CITY OF CLAYTON | 315208085264801 | 7-14-82 | 211PVDC | 175-195 | 195 | 115 | 19.5 |
| 069 | BOWDEN FLOWING WELL | 320519085125401 | 7-15-82 | 211BLFN | 40-350 | 350 | 550 | 20.1 |
| 080 | LADONIA-CRAWFORD WELL | 322242085044801 | 7-27-82 | 211TSCL | 276-377 | 377 | 172 | 19.9 |
| 081 | BOWDEN SPRING | 320410085055501 | 7-27-82 | 211CSST | ------ | 0 | 80 | 19.2 |
| 082 | GREEN STORE WELL | 315308085355701 | 7-28-82 | 211RPLY | ------ | 181 | 270 | 20.3 |
| 083 | CROUCH WELL | 322322085071301 | 7-28-82 | 211EUTW | ------ | 105 | 165 | 19.9 |
| 084 | MCARTHUR HOUSE WELL | 321945085100502 | 7-28-82 | 211BLFN | ------ | 85 | 30 | 19.7 |
| 085 | TOM SMITH WELL | 322741085074101 | 7-29-82 | 211TSCL | 118-138 | 138 | 100 | 19.9 |
| 092 | BURKVILLE A-2 | 321830086312502 | 1-14-81 | 211GORD | 650-740 | 740 | 88 | 23.0 |
| 093 | BURKVILLE B-2 | 321612086311302 | 4-14-81 | 211EUTW | 250-520 | 520 | 2,140 | 21.9 |
| 094 | BURKVILLE D-1 | 321951086314101 | 4-14-81 | 211COKR | 725-1,104 | 1,104 | 175 | 23.9 |

TABLE 2. Physical well data for geochemical samples (Continued).

| Map No. | SITE NAME | SITE I.D. | DATE SAMPLED | GEOLOGIC UNIT | SCREEN INTERVAL(feet) | DEPTH (feet) | SP.COND. (micromhos) | TEMP. (°C) |
|---|---|---|---|---|---|---|---|---|
| | | | GEORGIA | | | | | |
| 038 | KING FINISHING NO.1 | 323614081442701 | 8-19-81 | 211BKCK | 1,115-1,224 | 1,224 | 215 | 27.2 |
| 039 | KING FINISHING NO.2 | 323612081442501 | 8-19-81 | 124CLBR | 253-670 | 670 | 182 | 26.4 |
| 040 | MIDVILLE WELL | 324859082140101 | 8-20-81 | 124CLBR | 200-482 | 482 | 248 | 20.6 |
| 041 | WADLEY NO.1 | 325140082242601 | 8-20-81 | 124CLBR | 370-473 | 473 | 174 | 21.0 |
| 042 | J.P. STEVENS NO.4 | 330014082273901 | 8-20-81 | 124CLBR | 170-420 | 420 | 110 | 20.4 |
| 043 | J.P. STEVENS NO.1A | 330024082272902 | 8-20-81 | 211MDDF | 450-530 | 530 | 60 | 21.2 |
| 044 | CHALKER WELL | 332000082380801 | 8-21-81 | 300SPRL | ----- | 20 | 140 | 19.9 |
| 048 | WRENS NO.3 | 331157082232501 | 9-03-81 | 124BRNL | 100-140 | 140 | 100 | 19.0 |
| 049 | J.M. HUBER NO.2 | 331652082243401 | 9-03-81 | 211MDDF | 200-312 | 312 | 25 | 17.7 |
| 050 | THIELE NO.1 | 331049082271101 | 9-04-81 | 211MDDF | 145-150 | 150 | 90 | 18.9 |
| 051 | GIBSON NO.3 | 331359082355601 | 9-04-81 | 211MDDF | ----- | 203 | 60 | 19.3 |
| 056 | Ga. DNR LAURENS NO. 2 | 323030083030003 | 1-28-82 | 211MDDF | 1,060-1,240 | 1,240 | 120 | 24.8 |
| 070 | ALBANY WELL TW-1 | 313105084064201 | 7-19-82 | 211CSST | 1,433-1,474 | 1,474 | 2,450 | 21.3 |
| 071 | ALBANY WELL TW-10 | 313534084103003 | 7-20-82 | 211PVDC | 810-845 | 845 | 560 | 22.4 |
| 072 | KOLOMOKI STATE PARK 2 | 312805084554001 | 7-20-82 | 124TLLT | 130-145 | 145 | 280 | 20.0 |
| 073 | SINGLETARY-BANCROFT | 312445084494101 | 7-20-82 | 125CLTN | 624-767 | 770 | 285 | 20.5 |
| 074 | FT. GAINES CITY WELL 3 | 313638085032101 | 7-21-82 | 211PVDC | 310-360 | 360 | 400 | 21.6 |
| 075 | GEORGETOWN 2 | 315312085045201 | 7-21-82 | 211TSCL | 1,420-1,760 | 1,760 | 370 | 30.4 |
| 076 | GEORGETOWN 1 | 315306085060601 | 7-21-82 | 211TSCL | 1,335-1,365 | 1,365 | 510 | 27.9 |
| 077 | PLANT LAUREL 2 | 323058084071901 | 7-22-82 | 211BLFN | 190-194 | 193 | 35 | 18.9 |
| 078 | WAINWRIGHT 2 | 323304084101101 | 7-22-82 | 211BLFN | ----- | 607 | 25 | 19.3 |
| 079 | WAINWRIGHT HOUSE WELL | 324012084110401 | 7-22-82 | 300GNSS | ----- | 70 | 60 | 19.7 |
| 086 | ELLAVILLE 5 | 321408084182001 | 8-03-82 | 211CSST | 510-640 | 640 | 80 | 21.3 |
| 087 | CUSSETA 1 | 321807084462201 | 8-03-82 | 211TSCL | 746-1,220 | 1,220 | 140 | 24.9 |
| 088 | WESTON 1 | 315841084365501 | 8-04-82 | 125CLTN | 238-268 | 268 | 280 | 19.4 |
| 089 | OMAHA SCHOOL | 320906085002501 | 8-04-82 | 211TSCL | ----- | 316 | 345 | 23.7 |
| 090 | OMAHA 1 | 320859085003701 | 8-04-82 | 211TSCL | 818-968 | 968 | 220 | 24.7 |
| 091 | BREELAND HOUSE WELL | 321747084172401 | 8-05-82 | 211PVDC | ----- | 128 | 26 | 19.7 |
| | | | SOUTH CAROLINA | | | | | |
| 025 | BROOKGREEN NO.1 | 333113079053501 | 8-05-81 | 211PEED | 80-110 | 110 | 375 | 19.2 |
| 026 | BROOKGREEN NO.2 | 333059079053200 | 8-05-81 | 211BKCK | ----- | 675 | 1,020 | 23.9 |
| 027 | N. MYRTLE BEACH 3 | 334919078402703 | 8-06-81 | 211PEED | 95-105 | 105 | 1,180 | 20.5 |
| 028 | N. MYRTLE BEACH 2 | 334919078402702 | 8-06-81 | 110QTRN | 35-40 | 40 | 1,040 | 19.9 |
| 029 | CONWAY, WLAT | 335101079040800 | 8-06-81 | 211MDDF | 611-672 | 672 | 780 | 23.4 |
| 030 | ISLE OF PALMS | 324715079491700 | 8-07-81 | 211MDDF | 1,790-2,000 | 2,000 | 2,200 | 37.3 |
| 031 | CHARLESTON 64 | 324708079555500 | 8-07-81 | 211BKCK | ----- | 1,335 | 1,620 | 30.3 |
| 036 | MARION TWN 3 | 341026079234200 | 8-13-81 | 211MDDF | 350-570 | 570 | 203 | 20.5 |
| 037 | MARION TWN 2 | 341101079234700 | 8-13-81 | 211BKCK | 170-200 | 200 | 175 | 19.3 |
| 045 | MONCK'S CORNER NO.2 | 331150080004000 | 8-24-81 | 124BKMG | 140-160 | 160 | 440 | 20.6 |
| 046 | HODGE WELL | 325535079441600 | 8-24-81 | 124BKMG | 230-425 | 425 | 720 | 21.6 |
| 047 | ESTHERVILLE LAKE | 331508079162400 | 8-25-81 | 211TSCL | 1,270-1,295 | 1,295 | 3,650 | 20.1 |
| 052 | FRIPP ISLAND GOLF COURSE | 321939080274200 | 9-10-81 | 211MDDF | 2,410-2,730 | 2,730 | 1,940 | 35.9 |
| 053 | HILTON HEAD PLANTATION | 321446080444000 | 9-10-81 | 211MDDF | 2,722-3,034 | 3,034 | 1,900 | 43.5 |
| 054 | USMC DEEP WELL-2 PARRIS IS. | 321946080422600 | 9-11-81 | 211MDDF | 2,660-2,972 | 2,972 | 1,800 | 40.0 |
| 055 | USMC DEEP WELL-1 PARRIS IS. | 322110080412200 | 9-11-81 | 211MDDF | 2,611-2,786 | 2,786 | 1,675 | 40.1 |
| 095 | BRITTON'S NECK MRN-77 | 335143079195000 | 5-02-82 | 211BKCK | 345-355 | 355 | 550 | 20.4 |
| 096 | BRITTON'S NECK MRN-78-1 | 335143079195001 | 4-01-82 | 211TSCL | 1,120-1,140 | 1,140 | 5,800 | 21.6 |
| 097 | BRITTON'S NECK MRN-78-2 | 335143079195001 | 4-09-82 | 211TSCL | 1,010-1,030 | 1,030 | 2,880 | 23.0 |
| 098 | BRITTON'S NECK MRN-78-3 | 335143079195001 | 4-19-82 | 211TSCL | 811-831 | 831 | 2,550 | 23.7 |
| 099 | BRITTON'S NECK MRN-78-4 | 335143079195001 | 4-24-82 | 211MDDF | 748-768 | 768 | 765 | 23.2 |
| 100 | BRITTON'S NECK MRN-78-5 | 335143079195001 | 4-30-82 | 211BKCK | 517-537 | 537 | 850 | 21.4 |
| 101 | ST. GEORGE DOR-211-1 | 330925080311800 | 10-04-82 | 211TSCL | 1,828-1,848 | 1,848 | 1,360 | 31.7 |
| 102 | ST. GEORGE DOR-211-2 | 330925080311800 | 10-15-82 | 211TSCL | 1,765-1,785 | 1,785 | 1,280 | 26.3 |
| 103 | ST. GEORGE DOR-211-3 | 330925080311800 | 10-25-82 | 211BKCK | 1,326-1,346 | 1,346 | 1,810 | 26.6 |
| 104 | ST. GEORGE DOR-211-4 | 330925080311800 | 11-02-82 | 124BKMG | 580-600 | 600 | 278 | 24.0 |
| 105 | ST. GEORGE DOR-211-5 | 330925080311800 | 12-14-82 | 211TSCL | 1,831-1,851 | 1,851 | 1,290 | 26.6 |

TABLE 2. Physical well data for geochemical samples (Continued).

| Map No. | SITE NAME | SITE I.D. | DATE SAMPLED | GEOLOGIC UNIT | SCREEN INTERVAL(feet) | DEPTH (feet) | SP.COND. (micromhos) | TEMP. (°C) |
|---|---|---|---|---|---|---|---|---|
| | | | NORTH CAROLINA | | | | | |
| 024 | CALABASH J-2 | 335333078352002 | 1-05-81 | 211TSCL | 1,042-1,052 | 1,052 | 9,100 | 21.0 |
| 032 | ROWLAND NO.1 | 343238079174302 | 8-12-81 | 211MDDF | 120-270 | 270 | 100 | 18.5 |
| 033 | ROWLAND NO.2 | 343221079170201 | 8-12-81 | 211MDDF | 270-300 | 300 | 160 | 17.8 |
| 034 | LAURINBURG WELL | 344702079263001 | 8-12-81 | 211MDDF | 80-130 | 140 | 80 | 18.0 |
| 035 | CAROLINA WELDING WELL | 344418079271301 | 8-12-81 | 211BKCK | ----- | 25 | 40 | 19.3 |

TABLE 3. Concentrations of major cations and anions in geochemical samples.
[All values are dissolved and in milligrams per liter unless otherwise specified.
The values pH, HCO3, and CO3 are field determinations. (*) Denotes lab determination
of pH, and HCO3 by difference. (+) Denotes determination by ion chromatography.
(ROE-residue on evaporation)].

| MAP NO. | SITE NAME | SITE-ID | TEMP (°C) | pH (units) | SOLIDS (ROE) | NH4 | CA | MG | NA | K | HCO3 | CO3 | +CL | +SO4 | +F | SIO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MISSISSIPPI | | | | | | | | | | |
| 001 | MATHIS WELL | 345600088482601 | 17.0 | 5.00 | 34 | <.01 | 1.3 | .6 | 2 | .5 | 6 | 0 | 1.92 | 0 | 0 | 16 |
| 002 | WALNUT TOWN WELL | 345724088540001 | 21.9 | 8.15 | 165 | .28 | 25 | 6.9 | 18 | 4.8 | 148 | 0 | 2.32 | 18.1 | .11 | 13 |
| 003 | WALNUT STANDBY WELL | 345657088534901 | 17.5 | 7.55 | 202 | .01 | 58 | 4.9 | 2.4 | 1.5 | 214 | 0 | 1.1 | 5.81 | 0 | 24 |
| 004 | ASHLAND TOWN WELL | 345100089104803 | 22.1 | 7.70 | 184 | .22 | 47 | 4.8 | 8.4 | 1.9 | 192 | 0 | 1.43 | 8.6 | .2 | 19 |
| 005 | BYHALIA TOWN WELL | 345220089462301 | 26.4 | 8.69 | 470 | .62 | 1.3 | .29 | 190 | 1.4 | 480 | 8 | 1.41 | 4.97 | .45 | 13 |
| 006 | CORPS OF ENGINEERS | 345145088173201 | 15.7 | 5.25 | 40 | <.01 | .9 | .82 | 1.9 | 1.4 | 8 | 0 | 1.13 | 2.47 | .04 | 26 |
| 007 | HOLCUT-CAIRO WATER ASN | 344455088214001 | 16.5 | 6.60 | 67 | 1.7 | 8.1 | 1.6 | 3.7 | 2.6 | 71 | 0 | 1.1 | 7.02 | .27 | 25 |
| 008 | COLUMBUS AFB 2 | 333732088263602 | 18.8 | 6.35 | 58 | .04 | 6.5 | 2.2 | 3.9 | 5.1 | 71 | 0 | 1.82 | .73 | .21 | 11 |
| 009 | COLUMBUS AFB RECEIVER | 333930088283008 | 19.1 | 5.30 | 47 | .01 | 2.1 | .72 | 6 | .58 | 8 | 0 | 10 | 0 | .08 | 14 |
| 010 | ABRAMS WELL | 331145088370401 | 20.7 | 8.60 | 762 | .3 | 2.3 | .83 | 320 | 2.9 | 484 | 5 | 185 | .85 | 2.58 | 11 |
| 011 | HOFFMAN WELL | 331528088370701 | 21.2 | 8.30 | 795 | .55 | 5.1 | 2.2 | 310 | 4 | 396 | 0 | 102 | 178 | 2.68 | 10 |
| 012 | MILLER WELL | 331308088365101 | 24.7 | 7.75 | 97 | .63 | 14.0 | 2.9 | 12 | 4.7 | 90 | 0 | 2.89 | 2.41 | .12 | 13 |
| 013 | MASHULAVILLE WELL | 330528088443001 | 31.1 | 7.83 | 666 | .66 | 9.0 | 1.7 | 260 | 3.6 | 198 | 0 | 294 | 0 | .41 | 14 |
| 014 | BUTLER WELL | 331357088340802 | 20.3 | 8.50 | 701 | .28 | 2.3 | .78 | 290 | 3.1 | 466 | 4 | 161 | 0 | 2.47 | 11 |
| 015 | BROOKSVILLE TOWN WELL | 331357088345202 | 25.0 | 8.30 | 162 | .12 | 1.2 | .35 | 57 | 1.4 | 133 | 0 | 21.2 | .72 | .16 | 12 |
| 016 | BLACK BELT WELL | 331531088334101 | 25.2 | 7.65 | 95 | .01 | 4.6 | .98 | 26 | 3.3 | 80 | 0 | 3.4 | 3.71 | .05 | 13 |
| | | | | | | ALABAMA | | | | | | | | | | |
| 017 | C HUBBERT WELL | 334420087545101 | 16.8 | 5.38 | 33 | <.01 | 2.7 | .59 | 1.6 | .88 | 10 | 0 | 3.09 | .55 | .16 | 8.5 |
| 018 | WALLACE WELL | 334113087522501 | 18.5 | 5.51 | 42 | .01 | .9 | 1.1 | 2.1 | 2.7 | 5 | 0 | 3.07 | 7.04 | 0 | 13 |
| 019 | SHELTON WELL | 333109087575901 | 17.8 | 4.90 | 22 | .45 | .8 | 1.0 | 2.5 | .75 | 2 | 0 | 4.34 | 0 | 0 | 9.2 |
| 020 | JUNKIN WELL | 332649087562901 | 18.1 | 6.30 | 53 | .03 | 1.3 | 1.7 | 1.2 | 4.6 | 46 | 0 | 1.52 | 4.89 | .15 | 22 |
| 021 | BAIN WELL | 332847088123702 | 17.7 | 6.37 | 96 | .07 | 8.9 | 3.9 | 4 | 1.7 | 66 | 0 | 6.19 | 7.44 | .08 | 35 |
| 022 | HICKMAN WELL | 331637088154902 | 18.9 | 7.62 | 94 | .59 | 8.5 | 2.5 | 16 | 7.1 | 94 | 0 | 1.89 | 5.62 | .09 | 14 |
| 023 | DEMOPOLIS AIRPORT WELL | 322801087572101 | 27.5 | 7.18 | 14,900 | 11.0 | 520 | 130 | 5,000 | 38 | 130 | 0 | 8,400 | 13 | .8 | 11 |
| 057 | NEIGHBORS' FLOWING | 322833086410301 | 19.5 | 5.95 | 13 | .09 | 3.3 | .85 | 1.2 | 3.5 | 16.9 | 0 | 1.31 | .81 | <.01 | 25 |
| 058 | GREENVILLE CITY WELL | 314947086364001 | 22.4 | 8.98 | 32 | .3 | 2.8 | .84 | 150 | 2.2 | 250 | 10.4 | 75.1 | 27.4 | .52 | 10 |
| 059 | HAYNEVILLE CITY WELL | 321058086343201 | 26.9 | 8.89 | 186 | .21 | 1.5 | .10 | 57 | .6 | 125 | 4.2 | 18.9 | 5.8 | .1 | 14 |
| 060 | VIDA WELL | 323648086401601 | 18.8 | 6.11 | 54 | .04 | 3.1 | .58 | 1.3 | 2.2 | 15.9 | 0 | 1.18 | .75 | <.01 | 34 |
| 061 | OLYMPIA SPA GOLF | 310712085242401 | 21.9 | 7.80 | 151 | .03 | 37 | 4.5 | 2.6 | .5 | 131 | 0 | 2.3 | 7.7 | <.01 | 16 |
| 062 | *OLYMPIA SPA MINERAL | 310715085242201 | 25.0 | 8.00 | 2,380 | 1.2 | 35 | 8 | 870 | 5.7 | 210 | 0 | 1,300 | 5.8 | 1.35 | 23 |
| 063 | NEWTON TOWN WELL | 311921085353301 | 23.4 | 7.66 | 191 | .05 | 45 | 6.2 | 8.6 | 2.1 | 178 | 0 | 2.4 | 11 | <.01 | 20 |
| 064 | OZARK CITY WELL 2 | 312723085384201 | 23.3 | 9.00 | 199 | .23 | 2.6 | .9 | 65 | 1.4 | 165 | 10.4 | 4.5 | 8.9 | <.01 | 11 |
| 065 | ROBINSON WELL | 313738085163001 | 20.0 | 7.48 | 241 | .03 | 69 | 3.6 | 1.9 | 1.9 | 227 | 0 | 2.9 | 11 | <.01 | 21 |
| 066 | WYECOTT PLANTATION | 315814085192201 | 19.4 | 8.15 | 235 | .33 | 15 | 1.6 | 60 | 2.8 | 201 | 0 | 4.4 | 20 | .4 | 14 |
| 067 | COMER SCHOOL WELL | 320431085193201 | 25.6 | 9.42 | 131 | .17 | .7 | .1 | 45 | .4 | 78.2 | 16.6 | 4.1 | 2.3 | .2 | 16 |
| 068 | CITY OF CLAYTON | 315208085264801 | 19.5 | 6.20 | 103 | .01 | 15 | .6 | 2.2 | .8 | 35.9 | 0 | 7.2 | .6 | <.01 | 16 |
| 069 | BOWDEN FLOWING WELL | 320519085125401 | 20.1 | 8.70 | 336 | .44 | 17 | .4 | 93 | 1.8 | 52 | 2.1 | 54 | 122 | .6 | 13 |
| 080 | LADONIA-CRAWFORD WELL | 322242085044801 | 19.9 | 6.83 | 157 | .12 | 19 | .61 | 11 | 5.1 | 68.7 | 0 | 3 | 24.4 | <.01 | 53 |
| 081 | BOWDEN SPRING | 320410085055501 | 19.2 | 4.75 | 66 | .04 | 4.1 | 2.4 | 2.7 | 1.1 | 1.06 | 0 | 5.9 | <.2 | <.01 | 7.3 |
| 082 | GREEN STORE WELL | 315308085355701 | 20.3 | 7.92 | 167 | .21 | 29 | 4.7 | 13 | 5 | 156 | 0 | 1.75 | 6.83 | <.01 | 22 |
| 083 | CROUCH WELL | 322322085071301 | 19.9 | 5.70 | 115 | .17 | 17 | 1.7 | 4.1 | 3.3 | 30.7 | 0 | 5.33 | 32.3 | <.01 | 34 |
| 084 | MCARTHUR HOUSE WELL | 321945085100502 | 19.7 | 5.62 | 30 | .05 | 1.9 | .68 | .9 | .97 | 5.29 | 0 | 2.42 | <.2 | .01 | 5.1 |
| 085 | TOM SMITH WELL | 322741085074101 | 19.9 | 6.02 | 138 | .04 | 6.6 | 1.1 | 6.4 | 4.9 | 40.2 | 0 | 3.4 | 4.8 | <.01 | 58 |
| 092 | BURKVILLE A-2 | 321830086312502 | 23.0 | 6.81 | 69 | .01 | 2.2 | .2 | 16 | 1.8 | 45 | 0 | 2.2 | 2.8 | .1 | 19 |
| 093 | BURKVILLE B-2 | 321612086311302 | 21.9 | 7.70 | 1,210 | .79 | 19 | 3.3 | 470 | 3.6 | 630 | 0 | 351 | 0 | 4.0 | 17 |
| 094 | BURKVILLE D-1 | 321951086314101 | 23.9 | 9.40 | 112 | .3 | .9 | .2 | 41 | .5 | 48 | 24 | 1.4 | 6.8 | .1 | 17 |

TABLE 3. Concentrations of major cations and anions in geochemical samples.
[All values are dissolved and in milligrams per liter unless otherwise specified.
The values pH, HCO3, and CO3 are field determinations. (*) Denotes lab determination
of pH, and HCO3 by difference. (+) Denotes determination by ion chromatography.
(ROE-residue on evaporation)] (Continued).

| MAP NO. | SITE NAME | SITE-ID | TEMP (°C) | pH (units) | SOLIDS (ROE) | NH4 | CA | MG | NA | K | HCO3 | CO3 | +CL | +SO4 | +F | SIO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | GEORGIA | | | | | | | | | | |
| 038 | KING FINISHING NO.1 | 323614081442701 | 27.2 | 8.40 | 131 | 0 | 7.5 | 1.1 | 27 | 3.3 | 111 | 1 | 2.76 | 5.64 | .15 | 15 |
| 039 | KING FINISHING NO.2 | 323612081442501 | 26.4 | 8.13 | 127 | 0 | 13 | 2.3 | 27 | 4.5 | 107 | 0 | 3.11 | 7.52 | .28 | 16 |
| 040 | MIDVILLE WELL | 324859082140101 | 20.6 | 7.72 | 183 | .04 | 47 | 2.7 | 3.5 | 2.3 | 144 | 0 | 2.14 | 8.86 | .14 | 43 |
| 041 | WADLEY NO.1 | 325140082242601 | 21.0 | 6.98 | 148 | 0 | 33 | 2 | 2.3 | 1.8 | 105 | 0 | 2.22 | 6.55 | .13 | 46 |
| 042 | J.P STEVENS NO.4 | 330014082273901 | 20.4 | 6.28 | 98 | 0 | 16 | 1.2 | 1.6 | .57 | 46 | 0 | 2.21 | 6.85 | .16 | 41 |
| 043 | J.P STEVENS NO.1A | 330024082272902 | 21.2 | 5.40 | 58 | 0 | 5.1 | .69 | 2.3 | .48 | 12 | 0 | 2.07 | 8.52 | .07 | 31 |
| 044 | CHALKER WELL | 332000082380801 | 19.9 | 5.90 | 133 | 0 | 1.6 | 1.1 | 21 | 1.6 | 15 | 0 | 18.4 | 5.1 | .09 | 60 |
| 048 | WRENS NO.3 | 331157082232501 | 19 | 5.37 | 86 | .01 | 6.9 | 1.4 | 4.3 | .35 | 7 | 0 | 11.5 | .23 | .16 | 23 |
| 049 | J.M HUBER NO.2 | 331652082243401 | 17.7 | 4.80 | 27 | .01 | .5 | .32 | .2 | .09 | 2 | 0 | 1.62 | 3.03 | .08 | 11 |
| 050 | THIELE NO.1 | 331049082271101 | 18.9 | 6.03 | 88 | .08 | 11 | .88 | .3 | .35 | 28 | 0 | 2.61 | 6.33 | .15 | 32 |
| 051 | GIBSON NO.3 | 331359082355601 | 19.3 | 4.60 | 47 | .05 | .6 | 1.2 | 2.8 | .22 | 1 | 0 | 6.26 | .2 | .1 | 9.6 |
| 056 | GA. DNR LAURENS NO. 2 | 323030083030003 | 24.9 | 6.35 | 56 | .02 | 7.8 | .7 | 4.2 | 7 | 35.5 | 0 | 1 | 8.80 | 2.3 | 13 |
| 070 | ALBANY WELL TW-1 | 313105084064201 | 21.3 | 8.13 | 1,620 | 1 | 4.6 | 1.9 | 610 | 5.8 | 1,036 | 0 | 443 | <.2 | 4.7 | 13 |
| 071 | ALBANY WELL TW-10 | 313534084103003 | 22.6 | 9.40 | 242 | .26 | 1.3 | .17 | 83 | 3.6 | 180 | 25 | 2.72 | 7.41 | .56 | 12 |
| 072 | KOLOMOKI STATE PARK 2 | 312805084554001 | 20.0 | 7.61 | 193 | .06 | 48 | 1.7 | 2 | 1.2 | 153 | 0 | 2.2 | 9.5 | <.01 | 37 |
| 073 | SINGLETARY-BANCROFT | 312445084494101 | 20.5 | 8.18 | 170 | .14 | 19 | 6.2 | 29 | 3 | 161 | 0 | 2.68 | 9.2 | .3 | 31 |
| 074 | FT GAINES CITY WELL 3 | 313638085032101 | 21.6 | 8.60 | 240 | .23 | 5 | .94 | 86 | 1.5 | 206 | 6.2 | 9.85 | 6.7 | .8 | 15 |
| 075 | GEORGETOWN 2 | 315312085045201 | 30.4 | 9.35 | 214 | .3 | .77 | .07 | 84 | .53 | 162 | 23.9 | 8.63 | 1.05 | .36 | 17 |
| 076 | GEORGETOWN 1 | 315306085060601 | 27.9 | 9.06 | 281 | .33 | 1.8 | .15 | 120 | .94 | 276 | 19.8 | 8.13 | .25 | .52 | 15 |
| 077 | PLANT LAUREL 2 | 323058084071901 | 18.9 | 4.70 | 20 | .03 | .7 | .2 | 1.1 | .1 | 2.11 | 0 | 1 | 2 | <.01 | 8.7 |
| 078 | WAINWRIGHT 2 | 323304084101101 | 19.3 | 4.90 | 21 | .03 | .8 | .28 | 1.8 | .17 | 2.11 | 0 | 1.65 | .44 | <.01 | 6.7 |
| 079 | WAINWRIGHT HOUSE WELL | 324012084110401 | 19.7 | 4.50 | 34 | .03 | .84 | 1.2 | 4 | .52 | .53 | 0 | <.2 | <.2 | <.01 | 5.1 |
| 086 | ELLAVILLE 5 | 321408084182001 | 21.3 | 6.16 | 67 | .08 | 7.8 | 1.1 | 1.2 | 2.7 | 25.4 | 0 | 2.49 | 9.39 | <.06 | 30 |
| 087 | CUSSETA 1 | 321807084462201 | 24.9 | 6.90 | 124 | .06 | 11 | .63 | 12 | 3.5 | 56 | 0 | 7.89 | 7.47 | <.01 | 58 |
| 088 | WESTON 1 | 315841084365501 | 19.4 | 7.63 | 178 | .01 | 56 | 2.7 | 1.4 | 1.1 | 177 | 0 | 2.28 | 6.1 | <.01 | 19 |
| 089 | OMAHA SCHOOL | 320906085002501 | 23.7 | 7.50 | 200 | .09 | 36 | 5 | 26 | 6.2 | 206 | 0 | 1.89 | 6.16 | <.01 | 16 |
| 090 | OMAHA #1 | 320859085003701 | 24.7 | 9.25 | 130 | .09 | 1.9 | .06 | 40 | .54 | 87.8 | 8.8 | 7.63 | 6.91 | <.01 | 15 |
| 091 | BREELAND HOUSE WELL | 321747084172401 | 19.7 | 4.88 | 19 | .01 | .89 | .59 | 1.3 | .2 | 1.59 | 0 | 1.06 | <.2 | <.01 | 6.7 |
| | | | | | | SOUTH CAROLINA | | | | | | | | | | |
| 025 | BROOKGREEN NO.1 | 333113079053501 | 19.2 | 7.82 | 197 | .01 | 50 | 1.5 | 27 | .86 | 186 | 0 | 20 | 6 | .13 | 8.1 |
| 026 | BROOKGREEN NO.2 | 333059079053201 | 23.9 | 8.75 | 677 | .3 | 4.5 | 1,6 | 300 | 5.6 | 597 | 20 | 47 | 1.8 | 4.16 | 20 |
| 027 | N MYRTLE BEACH 3 | 334919078402703 | 20.5 | 7.20 | 796 | 2.1 | 73 | 6.1 | 220 | 2.6 | 585 | 0 | 95 | 16 | .02 | 7.7 |
| 028 | N MYRTLE BEACH 2 | 334919078402702 | 19.9 | 7.59 | 589 | .32 | 32 | 4.9 | 240 | 5 | 412 | 0 | 108 | 12 | 2.12 | 8.2 |
| 029 | CONWAY, WLAT | 335101079040800 | 23.4 | 8.55 | 621 | .17 | 1.7 | .53 | 310 | 2.8 | 460 | 12 | 91 | 7.9 | 2.95 | 13 |
| 030 | ISLE OF PALMS | 324715079491700 | 37.3 | 8.51 | 1,290 | .7 | 1.5 | .33 | 620 | 3.7 | 1,051 | 22 | 184 | .2 | 7.08 | 18 |
| 031 | CHARLESTON 64 | 324708079555500 | 30.3 | 8.61 | 976 | .54 | 1.4 | .23 | 480 | 3.1 | 885 | 20 | 69 | .2 | 4.47 | 18 |
| 036 | MARION TWN 3 | 341026079234200 | 19.3 | 7.00 | 133 | .08 | 2.5 | .71 | 33 | 4.7 | 92 | 0 | 3.59 | .2 | .34 | 45 |
| 037 | MARION TWN 2 | 341101079234700 | 20.5 | 7.48 | 150 | .05 | 1.1 | .18 | 47 | 3 | 111 | 0 | 5.29 | 2.42 | .64 | 40 |
| 045 | MONCK'S CORNER NO.2 | 3311500800 4000 | 20.6 | 7.62 | 259 | .24 | 32 | 20 | 27 | 13 | 258 | 0 | 21.2 | 3.55 | 1.19 | 27 |
| 046 | HODGE WELL | 325535079441600 | 21.6 | 8.41 | 474 | .79 | 4.5 | 3.9 | 160 | 16 | 291 | 5 | 108 | 9.36 | 1.64 | 34 |
| 047 | ESTHERVILLE LAKE | 331508079162400 | 20.1 | 7.91 | 2,390 | 1.1 | 6 | 2.7 | 830 | 9.9 | 1,240 | 0 | 766 | .2 | 4.17 | 13 |
| 052 | FRIPP ISLAND GOLF | 321939080274200 | 35.9 | 8.10 | 1,410 | 1.0 | 2.1 | 1.9 | 560 | 4.9 | 1,430 | 0 | 61.9 | 2.08 | 7.59 | 19 |
| 053 | HILTON HEAD PLANT | 321446080444000 | 43.5 | 8.20 | 1,310 | .91 | 2.6 | 2.1 | 520 | 4.2 | 1,095 | 0 | 230 | .77 | 5.19 | 20 |
| 054 | USMC WELL-2 PARRIS IS | 321946080422600 | 40.0 | 8.22 | 1,120 | .85 | 1.5 | 1.4 | 480 | 3.9 | 1,245 | 0 | 43.4 | .98 | 5.82 | 19 |
| 055 | USMC WELL-1 PARRIS IS | 322110080412200 | 40.1 | 8.39 | 1,040 | .8 | 1.2 | 1.2 | 420 | 3.4 | 1,076 | 20 | 13.3 | .65 | 4.1 | 19 |
| 095 | BRITTON'S NECK MRN-77 | 335143079195000 | 20.4 | 8.72 | 313 | .14 | 1.4 | .2 | 120 | 4.1 | 287 | 21.8 | 5.3 | 6.2 | 1.2 | 14 |
| 096 | BRITTON'S NECK MRN78-1 | 335143079195001 | 21.6 | 8.00 | 3,470 | .89 | 42 | 12 | 1,000 | 12 | 428 | 0 | 1,300 | 525 | 6.7 | 9.5 |
| 097 | BRITTON'S NECK MRN78-2 | 335143079195001 | 23.0 | 7.52 | 1,700 | .54 | 9.9 | 2.6 | 480 | 6.6 | 886 | 0 | 373 | 124 | .6 | 32 |
| 098 | BRITTON'S NECK MRN78-3 | 335143079195001 | 23.7 | 7.60 | 1,540 | .46 | 12 | 3.4 | 580 | 6.1 | 819 | 0 | 359 | 118 | .6 | 34 |
| 099 | BRITTON'S NECK MRN78-4 | 335143079195001 | 23.2 | 8.10 | 450 | .13 | 1.7 | .4 | 180 | 2.2 | 380 | 0 | 57 | 13 | 2.7 | 24 |
| 100 | BRITTON'S NECK MRN78-5 | 335143079195001 | 21.4 | 8.57 | 496 | .27 | 2.3 | .5 | 190 | 3.7 | 485 | 11.9 | 36 | <.2 | 4.7 | 17 |
| 101 | ST GEORGE DOR-211-1 | 330925080311800 | 31.7 | 8.51 | 788 | .37 | 2.3 | .41 | 320 | 2.8 | 424 | 9.8 | 138 | 102 | 2.59 | 18 |
| 102 | ST GEORGE DOR-211-2 | 330925080311800 | 26.3 | 8.53 | 783 | .3 | 3.2 | .89 | 330 | 3.6 | 457 | 11 | 144 | 298 | 2.25 | 17 |
| 103 | ST GEORGE DOR-211-3 | 330925080311800 | 26.6 | 7.72 | 1,160 | .68 | 6.9 | 1.5 | 530 | 6.3 | 1,126 | 0 | 91.2 | 5.64 | 1.92 | 17 |
| 104 | ST GEORGE DOR-211-4 | 330925080311800 | 24.0 | 9.02 | 180 | .24 | 2 | .48 | 59 | 3 | 152 | 11.8 | 6.2 | 27.5 | 1.9 | 13 |
| 105 | ST GEORGE DOR-211-5 | 330925080311800 | 26.6 | 9.21 | 846 | .41 | 2.6 | .34 | 340 | 4 | 339 | 47.2 | 144 | 111 | 1.12 | 18 |

TABLE 3. Concentrations of major cations and anions in geochemical samples.
[All values are dissolved and in milligrams per liter unless otherwise specified.
The values pH, HCO3, and CO3 are field determinations. (*) Denotes lab determination
of pH, and HCO3 by difference. (+) Denotes determination by ion chromatography.
(ROE-residue on evaporation)] (Continued).

| MAP NO. | SITE NAME | SITE-ID | TEMP (°C) | pH (units) | SOLIDS (ROE) | NH4 | CA | MG | NA | K | HCO3 | CO3 | +CL | +SO4 | +F | SIO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | NORTH CAROLINA | | | | | | | |
| 024 | CALABASH J-2 | 335333078352002 | 21.0 | 7.69 | 6,430 | 2.4 | 41 | 21 | ~~1,000~~ 2,300 | 26 | 462 | 0 | 3,400 | 18 | .5 | 12 |
| 032 | ROWLAND NO.1 | 343238079174302 | 17.8 | 6.52 | 94 | .04 | 18 | 1.5 | 5.7 | 1.8 | 69 | 0 | 2.85 | 4.55 | .18 | 15 |
| 033 | ROWLAND NO.2 | 343221079170201 | 18.5 | 6.35 | 63 | .03 | 6.2 | .84 | 11 | 2.5 | 48 | 0 | 2.28 | 3.1 | .1 | 15 |
| 034 | LAURINBURG WELL | 344702079263001 | 18.0 | 4.41 | 43 | .03 | 1 | .65 | 8.3 | .25 | 0 | 0 | 8.28 | 12 | .09 | 9.1 |
| 035 | CAROLINA WELDING WELL | 344418079271301 | 19.3 | 4.50 | 20 | .03 | .9 | .92 | 1.1 | .67 | 0 | 0 | 2.5 | .2 | .06 | 5.1 |

TABLE 4. Dissolved concentrations of minor constituents, nutrients, and gases for geochemical samples.
[All values are in milligrams per liter. (*) Denotes atmospheric contamination. (+) Denotes determination by ion chromatography].

| MAP NO. | SITE NAME | SITE-ID | DOC | +BR | I | NO3+NO2 (as N) | NH4 | ORG-N (as N) | PO4 | HS (total) | N2 | O2 | CO2 | CH4 | AR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | MISSISSIPPI | | | | | | | | | |
| 001 | MATHIS WELL | 345600088482601 | .8 | 0 | .50 | .79 | <.01 | .1 | 5.8 | 0 | 20 | 10 | 40 | 0 | .74 |
| 002 | WALNUT TOWN WELL | 345724088540001 | .4 | 0 | 0 | .01 | .28 | .01 | 0 | .4 | 26 | .03 | 2.4 | .004 | 1 |
| 003 | WALNUT STANDBY WELL | 345657088534901 | 9.9 | 0 | 0 | <.01 | .01 | 0 | 0 | 0 | 22 | .37 | 11 | trace | .88 |
| 004 | ASHLAND TOWN WELL | 345100089104803 | 1.6 | 0 | 0 | .08 | .22 | .02 | 0 | .3 | 25 | .1 | 7.6 | 0 | .95 |
| 005 | BYHALIA TOWN WELL | 345220089462301 | .8 | 0 | 0 | .03 | .62 | 0 | 0 | .3 | 26 | .37 | 1.9 | .03 | 1 |
| 006 | CORPS OF ENGINEERS WELL | 345145088173201 | .4 | 0 | 0 | .06 | <.01 | 0 | 0 | 0 | 23 | 13 | 44 | 0 | .9 |
| 007 | HOLCUT-CAIRO WATER ASSOC. | 344455088214001 | 1.6 | 0 | 0 | .01 | 1.7 | 0 | 0 | 0 | 22 | .06 | 48 | 0 | .9 |
| 008 | COLUMBUS AIR FORCE BASE 2 | 333732088263602 | .6 | 0 | 0 | .05 | .04 | 0 | 0 | .3 | 23 | .06 | 35 | .09 | .91 |
| 009 | COLUMBUS AFB RECEIVER | 333930088283008 | .5 | 0 | 0 | .92 | .01 | 0 | 0 | 0 | 15 | 3.2 | 62 | 0 | .64 |
| 010 | ABRAMS WELL | 331145088370401 | 1.1 | .99 | 0 | <.01 | .3 | .54 | 0 | .4 | 22 | .04 | 2.5 | 3.3 | .88 |
| 011 | HOFFMAN WELL | 331528088370701 | 2.2 | .61 | 0 | .06 | .55 | 0 | 0 | .4 | 22 | .12 | 2.5 | 1.7 | .84 |
| 012 | MILLER WELL (DIAMOND SEED) | 331308088365101 | .6 | 0 | 0 | .03 | .63 | 0 | 0 | .3 | 22 | .13 | 1.9 | .008 | .88 |
| 013 | MASHULAVILLE WELL | 330528088443001 | 1.2 | 1.83 | 0 | .02 | .66 | 0 | 0 | .5 | 24 | .13 | 3.6 | .26 | .95 |
| 014 | BUTLER WELL | 331357088340802 | 1.5 | 1.07 | .50 | <.01 | .28 | .55 | 0 | .6 | 23 | .18 | 2.2 | 3.7 | .9 |
| 015 | BROOKSVILLE TOWN WELL | 331357088455202 | .4 | 0 | 0 | .01 | .12 | 0 | 0 | .4 | 24 | .29 | 1.3 | .02 | .92 |
| 016 | BLACK BELT WELL | 331531088334101 | .4 | 0 | 0 | <.01 | .01 | 0 | 0 | .4 | 26 | 1.8 | 1.4 | .01 | .94 |
| | | | | | | ALABAMA | | | | | | | | | |
| 017 | C. HUBBERT WELL | 334420087545101 | 2.0 | 0 | 0 | ---- | <.01 | .01 | 0 | 0 | 19 | 10 | 15 | trace | .7 |
| 018 | WALLACE WELL | 334113087522501 | .4 | 0 | 0 | 1.80 | .01 | 0 | 0 | 0 | 11 | 2.6 | 27 | .01 | .52 |
| 019 | SKELTON WELL | 333109087575901 | .6 | 0 | 0 | 1.60 | .45 | 0 | 0 | 0 | 19 | 10 | 42 | 0 | .77 |
| 020 | JUNKIN WELL | 332649087562901 | <.3 | 0 | 0 | <.01 | .03 | .31 | 0 | 0 | 20 | .08 | 36 | .01 | .79 |
| 021 | BAIN WELL | 332847088123702 | <.3 | 0 | 0 | <.01 | .07 | 0 | 0 | .3 | 24 | .09 | 46 | .009 | .87 |
| 022 | HICKMAN WELL | 331637088154902 | .6 | 0 | 0 | <.01 | .59 | 0 | 0 | 0 | 25 | .54 | 2.2 | .008 | .94 |
| 023 | DEMOPOLIS AIRPORT WELL | 322801087572101 | <.1 | 84 | 2.3 | <.01 | 11 | 0 | <.5 | <.5 | 21 | .2 | 11 | 32 | .73 |
| 057 | NEIGHBORS' FLOWING WELL | 322833086410301 | .5 | <.1 | <.1 | <.01 | .09 | .23 | .09 | <.5 | 21 | 5.3 | 31 | 0 | .8 |
| 058 | GREENVILLE CITY WELL | 314947086364001 | .3 | .47 | .02 | <.01 | .3 | 0 | .09 | <.5 | 22 | 1.3 | 1 | .02 | .84 |
| 059 | HAYNEVILLE CITY WELL | 321058086343201 | <.3 | .14 | <.1 | <.01 | .21 | .04 | .06 | <.5 | 24 | .8 | .5 | .01 | .95 |
| 060 | VIDA WELL | 323648086401601 | .4 | <.1 | <.1 | <.01 | .04 | .17 | .03 | <.5 | 21 | 8.3 | 21 | 0 | .76 |
| 061 | OLYMPIA SPA GOLF COURSE | 310712085242401 | .5 | <.1 | .01 | <.01 | .03 | .38 | <.03 | <.5 | 25 | 2.4 | 3.8 | 0 | .92 |
| 062 | OLYMPIA SPA MINERAL WELL | 310715085242201 | 4.9 | 6.65 | .23 | <.01 | 1.2 | .3 | .09 | <.5 | --- | --- | --- | --- | --- |
| 063 | NEWTON TOWN WELL | 311921085353301 | <.3 | <.1 | .01 | <.01 | .05 | .26 | .18 | <.5 | 21 | .2 | 7.4 | 0 | .84 |
| 064 | OZARK CITY WELL 2 | 312723085384201 | .4 | <.1 | .02 | <.01 | .23 | .22 | .09 | <.5 | 22 | .1 | .5 | .01 | .92 |
| 065 | ROBINSON WELL | 313738085163001 | .3 | <.1 | .01 | <.01 | .03 | 0 | .09 | <.5 | 23 | .1 | 18 | 0 | .92 |
| 066 | WYECOTT PLANTATION WELL | 315814085192201 | <.3 | <.1 | .08 | <.01 | .33 | .14 | <.03 | <.5 | 25 | .08 | 3.5 | .01 | .99 |
| 067 | COMER SCHOOL WELL | 320431085193201 | .4 | <.1 | .08 | <.01 | .17 | 1.9 | .09 | <.5 | 25 | .07 | .1 | .2 | .99 |
| 068 | CITY OF CLAYTON | 315208085264801 | <.3 | <.1 | .01 | 11.5 | .01 | .19 | .06 | <.5 | 20 | 5.8 | 45 | 0 | .79 |
| 069 | BOWDEN FLOWING WELL | 320519085125401 | .6 | <.1 | .11 | <.01 | .44 | .26 | <.03 | <.5 | 26 | .3 | .5 | .02 | 1 |
| 080 | LADONIA-CRAWFORD WELL | 322242085044801 | .4 | <.1 | .01 | <.01 | .12 | .11 | .15 | <.5 | 25 | <.02 | 18 | 0 | 1 |
| 081 | BOWDEN SPRING | 320410085055501 | .5 | <.1 | .01 | 25.6 | .04 | .27 | <.03 | <.5 | 20 | 9.3 | 25 | 0 | .8 |
| 082 | GREEN STORE WELL | 315308085355701 | .3 | <.1 | .01 | <.01 | .21 | .14 | .06 | <.5 | 19 | 4.6 | 3.9 | 0 | .73 |
| 083 | CROUCH WELL | 322322085071301 | <.3 | <.1 | .01 | .49 | .17 | .07 | .03 | <.5 | 23 | .6 | 110 | 0 | .89 |
| 084 | MCARTHUR HOUSE WELL | 321945085100502 | <.3 | <.1 | <.01 | 1.3 | .05 | .26 | <.03 | <.5 | 21 | 11 | 15 | 0 | .81 |
| 085 | TOM SMITH WELL | 322741085074101 | .3 | <.1 | .01 | <.01 | .04 | .47 | .28 | <.5 | 22 | 1.1 | 62 | 0 | .85 |
| 092 | BURKVILLE A-2 | 321830086312502 | .5 | 0 | 0 | .07 | .01 | 0 | <.03 | 0 | 14 | 4.3 | 11 | 0 | .65 |
| 093 | BURKVILLE B-2 | 321612086311302 | --- | 1.8 | .12 | .09 | .79 | .1 | .12 | .2 | --- | --- | --- | --- | --- |
| 094 | BURKVILLE D-1 | 321951086314101 | .3 | 0 | 0 | <.01 | .3 | 0 | .06 | 0 | 26 | .3 | .9 | .02 | .97 |

TABLE 4. Dissolved concentrations of minor constituents, nutrients, and gases for geochemical samples. [All values are in milligrams per liter. (*) Denotes atmospheric contamination. (+) Denotes determination by ion chromatography] (Continued).

| MAP NO. | SITE NAME | SITE-ID | DOC | +BR | I | NO3+NO2 (as N) | NH4 | ORG-N (as N) | PO4 | HS (total) | N2 | O2 | CO2 | CH4 | AR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | GEORGIA | | | | | | | | | |
| 038 | KING FINISHING NO.1 | 323614081442701 | .6 | <.1 | .01 | .01 | .18 | .12 | .06 | <.1 | 22 | .01 | 1.8 | .01 | .85 |
| 039 | KING FINISHING NO.2 | 323612081442501 | .3 | <.1 | 0 | .01 | .15 | .2 | .03 | <.1 | *113 | 27 | 2.5 | 0 | 2.6 |
| 040 | MIDVILLE WELL | 324859082140101 | .6 | <.1 | 0 | .01 | .04 | 0 | .03 | <.1 | 24 | .2 | 4.1 | 0 | .97 |
| 041 | WADLEY NO.1 | 325140082242601 | .7 | <.1 | 0 | .01 | .01 | .44 | .49 | <.1 | 24 | .02 | 18 | .01 | .92 |
| 042 | J.P. STEVENS NO.4 | 330014082273901 | .4 | <.1 | .01 | <.01 | .01 | .09 | .34 | <.1 | 22 | .2 | 42 | 0 | .84 |
| 043 | J.P. STEVENS NO.1A | 330024082272902 | .6 | <.1 | 0 | <.01 | .01 | <.09 | .18 | <.1 | 22 | .1 | 57 | 0 | .85 |
| 044 | CHALKER WELL | 332000082380801 | .7 | <.1 | .01 | 12.8 | .01 | .29 | .19 | <.1 | 20 | 7.7 | 31 | 0 | .84 |
| 048 | WRENS NO.3 | 331157082232501 | .8 | <.1 | 0 | 3.5 | .01 | 0 | .29 | .2 | 20 | 6.6 | 40 | 0 | .74 |
| 049 | J.M. HUBER NO.2 | 331652082243401 | .4 | <.1 | <0 | .13 | .01 | 0 | <.01 | .2 | 22 | 7.3 | 41 | 0 | .82 |
| 050 | THIELE NO.1 | 331049082271101 | <.3 | <.1 | 0 | .56 | .08 | .04 | .39 | 0 | 22 | 3.1 | 44 | 0 | .87 |
| 051 | GIBSON NO.3 | 331359082355601 | 3.2 | <.1 | <0 | 2.9 | .05 | .25 | <.01 | 0 | 19 | 9 | 31 | 0 | .77 |
| 056 | Ga. DNR LAURENS NO. 2 | 323030083030003 | .9 | <.1 | <.01 | .39 | .03 | .35 | .3 | <.5 | 25 | .14 | 33 | 0 | .98 |
| 070 | ALBANY WELL TW-1 | 313105084064201 | 7.4 | 2.1 | 1.2 | <.10 | 1 | .11 | .12 | <.5 | 20 | .01 | 12 | 17 | .8 |
| 071 | ALBANT WELL TW-10 | 313534084103003 | .3 | <.1 | .04 | <.10 | .26 | .3 | .06 | .8 | 20 | 1.1 | .4 | .1 | .82 |
| 072 | KOLOMOKI STATE PARK 2 | 312805084554001 | <.3 | <.1 | .01 | <.10 | .06 | .05 | .03 | <.5 | --- | --- | --- | --- | --- |
| 073 | SINGLETARY-BANCROFT | 312445084494101 | .3 | <.1 | .01 | <.10 | .14 | .29 | .06 | <.5 | 24 | .03 | 2.7 | 0 | .95 |
| 074 | FT. GAINES CITY WELL 3 | 313638085032101 | .5 | <.1 | .1 | <.10 | .23 | .22 | .06 | <.5 | 23 | .03 | 1.4 | .01 | .91 |
| 075 | GEORGETOWN 2 | 315312085045201 | <.3 | <.1 | .03 | <.10 | .3 | .17 | .18 | <.5 | 22 | .04 | .4 | .31 | .88 |
| 076 | GEORGETOWN 1 | 315306085060601 | .9 | <.1 | .16 | <.10 | .33 | .04 | .21 | <.5 | 24 | .09 | .6 | 2.3 | .96 |
| 077 | PLANT LAUREL 2 | 323058084071901 | .7 | <.1 | .01 | <.10 | .03 | .28 | .03 | <.5 | 21 | 7 | 33 | 0 | .8 |
| 078 | WAINWRIGHT 2 | 323304084101101 | <.3 | <.1 | .01 | 1.1 | .03 | .08 | .03 | <.5 | 19 | 8.9 | 20 | 0 | .72 |
| 079 | WAINWRIGHT HOUSE WELL | 324012084110401 | <.3 | <.1 | .01 | 2.2 | .03 | .08 | <.03 | <.5 | 20 | 9.5 | 46 | 0 | .79 |
| 086 | ELLAVILLE 5 | 321408084182001 | .9 | <.1 | .01 | <.10 | .08 | .14 | .09 | <.5 | 22 | .13 | 35 | 0 | .9 |
| 087 | CUSSETA 1 | 321807084462201 | .8 | <.1 | .01 | <.10 | .06 | .15 | .12 | <.5 | 24 | .37 | 13 | 0 | .96 |
| 088 | WESTON 1 | 315841084365501 | <.3 | <.1 | <.01 | .12 | .01 | 0 | .06 | <.5 | 25 | .09 | 9.6 | 0 | .94 |
| 089 | OMAHA SCHOOL | 320906085002501 | .9 | <.1 | .01 | .11 | .09 | .43 | .18 | <.5 | 21 | 1.9 | 13 | 0 | .8 |
| 090 | OMAHA 1 | 320859085003701 | .9 | <.1 | .01 | <.10 | .09 | .53 | .12 | <.5 | 24 | .12 | .4 | 0 | .97 |
| 091 | BREELAND HOUSE WELL | 321747084172401 | <.3 | <.1 | <.01 | 1.5 | .01 | 0 | <.03 | <.5 | --- | --- | --- | --- | --- |
| | | | | | | SOUTH CAROLINA | | | | | | | | | |
| 025 | BROOKGREEN NO.1 | 333113079053501 | 11 | <.1 | .01 | .18 | .01 | .83 | .06 | <.1 | *94 | 29 | 6 | 0 | 2.2 |
| 026 | BROOKGREEN NO.2 | 333059079053200 | 1.1 | .17 | .06 | .02 | .3 | .28 | .20 | .3 | 18 | 3.4 | 2.6 | 1.2 | .5 |
| 027 | N. MYRTLE BEACH 3 | 334919078402703 | 49 | .35 | .02 | .01 | 2.1 | 1 | .18 | .1 | 29 | <.02 | 60 | 1.5 | 1 |
| 028 | N. MYRTLE BEACH 2 | 334919078402702 | 4.2 | .39 | .02 | .13 | .32 | .3 | .09 | <.1 | 24 | <.03 | 19 | .03 | .9 |
| 029 | CONWAY, WLAT | 335101079040800 | 1.3 | .26 | .02 | .02 | .17 | .25 | .11 | .1 | 23 | .06 | 2.1 | .02 | .9 |
| 030 | ISLE OF PALMS | 324715079491700 | 11 | .65 | .03 | .03 | .7 | .25 | .21 | <.1 | 23 | <.02 | 6.6 | .02 | .9 |
| 031 | CHARLESTON 64 | 324708079555500 | 2.9 | .22 | .03 | .01 | .54 | .23 | .06 | <.1 | 23 | .02 | 3.9 | .48 | .9 |
| 036 | MARION TWN 3 | 341026079234200 | <.3 | <.1 | .01 | .87 | .08 | .08 | 1.7 | <.1 | 25 | .02 | 5.8 | 0 | .96 |
| 037 | MARION TWN 2 | 341101079234700 | <.3 | <.1 | .01 | .02 | .05 | 0 | 1 | <.1 | 25 | .07 | 15 | .06 | .96 |
| 045 | MONCK'S CORNER NO.2 | 331150080004000 | 1.2 | <.1 | .05 | <.01 | .24 | .2 | .01 | <.5 | 25 | .01 | 12 | .02 | .91 |
| 046 | HODGE WELL | 325535079441600 | 1.8 | .12 | .01 | <.01 | .79 | .14 | .01 | <.5 | 24 | .01 | 2.2 | .06 | .92 |
| 047 | ESTHERVILLE LAKE | 331508079162400 | 1.4 | 2.39 | .09 | <.01 | 1.1 | 8.3 | .04 | <.5 | 21 | .03 | 22 | .3 | .83 |
| 052 | FRIPP ISLAND GOLF COURSE | 321939080274200 | --- | .25 | .04 | .12 | 1.0 | 1.8 | .07 | 1.4 | 21 | .02 | 11 | .08 | .79 |
| 053 | HILTON HEAD PLANTATION | 321446080444000 | .6 | .2 | .05 | <.01 | .91 | .06 | .05 | .1 | 22 | .06 | 8.5 | .02 | .8 |
| 054 | USMC DEEP WELL-2 PARRIS IS. | 321946080422600 | .3 | <.1 | .04 | <.01 | .85 | .16 | .07 | .2 | 21 | <.02 | 7.4 | .02 | .a |
| 055 | USMC DEEP WELL-1 PARRIS IS. | 322110080412200 | .6 | <.1 | .05 | <.01 | .8 | .11 | .05 | .2 | *107 | 26 | 4.2 | .02 | 2.5 |
| 095 | BRITTON'S NECK MRN-77 | 335143079195000 | 1.3 | <.1 | .01 | <.10 | .14 | .3 | <.09 | <.5 | 25 | .02 | 1.1 | .02 | 1 |
| 096 | BRITTON'S NECK MRN-78-1 | 335143079195001 | .7 | 5.6 | .33 | <.01 | .89 | 1.6 | <.03 | <.5 | *94 | 17 | 9.8 | .01 | 1 |
| 097 | BRITTON'S NECK MRN-78-2 | 335143079195001 | 2.7 | 1.7 | .04 | <.10 | .54 | 0 | <.37 | <.5 | 25 | .04 | 24 | trace | .92 |
| 098 | BRITTON'S NECK MRN-78-3 | 335143079195001 | .5 | 1.7 | .04 | <.10 | .46 | .03 | <.25 | <.5 | 24 | .02 | 32 | trace | .91 |
| 099 | BRITTON'S NECK MRN-78-4 | 335143079195001 | 1.1 | .26 | .01 | <.10 | .13 | .08 | <.8 | <.5 | 24 | .36 | 5.6 | .02 | .91 |
| 100 | BRITTON'S NECK MRN-78-5 | 335143079195001 | 1.9 | <.1 | .01 | <.10 | .27 | .25 | .43 | <.5 | 22 | .07 | 2.6 | .08 | .92 |
| 101 | ST. GEORGE DOR-211-1 | 330925080311800 | .5 | <.1 | .01 | <.10 | .24 | .11 | .12 | <.5 | 26 | <.01 | .4 | .02 | .95 |
| 102 | ST. GEORGE DOR-211-2 | 330925080311800 | 1.5 | .36 | .12 | <.10 | .68 | .07 | .09 | <.5 | 27 | <.01 | 25 | .1 | .94 |
| 103 | ST. GEORGE DOR-211-3 | 330925080311800 | 1.8 | .65 | .03 | <.10 | .3 | .17 | .21 | .6 | 26 | <.01 | 2.5 | .02 | .94 |
| 104 | ST. GEORGE DOR-211-4 | 330925080311800 | .8 | .54 | .03 | <.10 | .37 | 0 | .15 | <.5 | 23 | <.01 | 1.9 | trace | .85 |
| 105 | ST. GEORGE DOR-211-5 | 330925080311800 | 1.1 | .56 | .03 | <.10 | .41 | .38 | .18 | <.5 | 25 | .13 | .6 | .01 | .92 |

TABLE 4. Dissolved concentrations of minor constituents, nutrients, and gases for geochemical samples. [All values are in milligrams per liter. (*) Denotes atmospheric contamination. (+) Denotes determination by ion chromatography] (Continued).

| MAP NO. | SITE NAME | SITE-ID | DOC | +BR | I | NO3+NO2 (as N) | NH4 | ORG-N (as N) | PO4 | HS (total) | N2 | O2 | CO2 | CH4 | AR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | NORTH CAROLINA | | | | | | | | | |
| 024 | CALABASH J-2 | 335333078352002 | 4 | 14 | .42 | .03 | 2.4 | .3 | .02 | <.5 | 22 | .07 | 15 | .18 | .8 |
| 032 | ROWLAND NO.1 | 343238079174302 | 3.8 | <.1 | 0 | .01 | .04 | 0 | .03 | <.1 | 24 | .01 | 35 | trace | .9 |
| 033 | ROWLAND NO.2 | 343221079170201 | <.3 | <.1 | 0 | .02 | .03 | 0 | <.01 | <.1 | 25 | .04 | 30 | 0 | .95 |
| 034 | LAURINBURG WELL | 344702079263001 | <.3 | <.1 | 0 | .86 | .03 | 0 | .03 | <.1 | 27 | .3 | 40 | 0 | .88 |
| 035 | CAROLINA WELDING WELL | 344418079271301 | 5.6 | <.1 | .01 | 2 | .03 | 0 | .01 | <.1 | 12 | 6.3 | 31 | 0 | .58 |

TABLE 5. Concentrations of dissolved trace metals in geochemical samples.
[All values are in micrograms per liter].

| MAP NO. | SITE NAME | SITE-ID | AL | BA | BE | B | CD | CO | CU | FE | PB | LI | MN | HG | MO | SE | SR | V | ZN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | MISSISSIPPI | | | | | | | | | | | |
| 001 | MATHIS WELL | 345600088482601 | 10 | 10 | <1 | 0 | <1 | <3 | <10 | 11 | 16 | 4 | <1 | <.1 | 10 | 0 | 4 | <6 | <4 |
| 002 | WALNUT TOWN WELL | 345724088540001 | 0 | 200 | <1 | 30 | 2 | <3 | <10 | 52 | 22 | 20 | 50 | <.1 | 10 | 0 | 1,300 | <6 | <4 |
| 003 | WALNUT STANDBY WELL | 345657088534901 | 0 | 40 | <1 | 0 | 3 | <3 | <10 | 660 | 26 | 11 | 19 | <.1 | 10 | 0 | 220 | <6 | <4 |
| 004 | ASHLAND TOWN WELL | 345100089104803 | 0 | 50 | <1 | 0 | 2 | <3 | <10 | 280 | 16 | 5 | 22 | <.1 | 10 | 0 | 460 | <6 | <4 |
| 005 | BYHALIA TOWN WELL | 345220089462301 | 0 | 8 | <1 | 440 | 3 | <3 | <10 | 14 | 22 | 37 | 4 | <.1 | 10 | 0 | 52 | <6 | <4 |
| 006 | CORPS OF ENGINEERS WELL | 345145088173201 | 20 | 7 | <1 | 0 | 4 | <3 | <10 | 41 | 19 | 4 | 8 | <.1 | 10 | 0 | 6 | <6 | 16 |
| 007 | HOLCUT-CAIRO WATER ASSOC. | 344455088214001 | 0 | 50 | <1 | 0 | 5 | <3 | <10 | 15,000 | 10 | 15 | 550 | <.1 | 10 | 0 | 70 | 8 | <4 |
| 008 | COLUMBUS AIR FORCE BASE 2 | 333732088263602 | 0 | 110 | <1 | 0 | 5 | <3 | <10 | 12,000 | 20 | 9 | 160 | <.1 | 10 | 0 | 250 | <6 | <4 |
| 009 | COLUMBUS AFB RECEIVER | 333930088283008 | 0 | 30 | <1 | 20 | <1 | <3 | <10 | 100 | 17 | 4 | 20 | <.1 | 10 | 0 | 130 | <6 | 43 |
| 010 | ABRAMS WELL | 331145088370401 | 0 | 10 | <1 | 640 | 3 | <3 | <10 | 18 | 19 | 12 | 2 | <.1 | 10 | 0 | 220 | <6 | <4 |
| 011 | HOFFMAN WELL | 331528088370701 | 70 | 20 | <1 | 2,000 | 2 | <3 | <10 | 19 | 21 | 15 | <1 | <.1 | 10 | 0 | 480 | <6 | <4 |
| 012 | MILLER WELL (DIAMOND SEED) | 331308088365101 | 10 | 80 | <1 | 10 | 3 | <3 | <10 | 170 | 16 | 14 | 87 | <.1 | 10 | 0 | 310 | <6 | 6 |
| 013 | MASHULAVILLE WELL | 330528088443001 | 10 | 70 | <1 | 200 | <1 | <3 | <10 | 170 | 10 | 22 | 14 | .2 | 10 | 0 | 400 | <6 | <4 |
| 014 | BUTLER WELL | 331357088340802 | 10 | 20 | <1 | 500 | 3 | <3 | <10 | 22 | 20 | 11 | 3 | .2 | 10 | 0 | 230 | <6 | <4 |
| 015 | BROOKSVILLE TOWN WELL | 331357088455202 | 40 | 10 | <1 | 40 | 3 | <3 | <10 | 69 | 15 | 6 | 5 | <.1 | 10 | 0 | 60 | <6 | <4 |
| 016 | BLACK BELT WELL | 331531088334101 | 0 | 30 | <1 | 10 | 3 | <3 | <10 | 160 | 20 | 7 | 16 | <.1 | 10 | 0 | 170 | <6 | <4 |
| | | | | | | | | ALABAMA | | | | | | | | | | | |
| 017 | C. HUBBERT WELL | 334420087545101 | 0 | 30 | <1 | 10 | 2 | <3 | 81 | 24 | 15 | <4 | 5 | <.1 | <10 | 0 | 12 | <6 | 41 |
| 018 | WALLACE WELL | 334113087522501 | 0 | 70 | <1 | 0 | 4 | 4 | 29 | 1,800 | 24 | <4 | 260 | <.1 | <10 | 0 | 16 | 7 | 88 |
| 019 | SKELTON WELL | 333109087575901 | 0 | 40 | <1 | 0 | 3 | <3 | 96 | 11 | 27 | <4 | 10 | <.1 | <10 | 0 | 13 | 7 | 20 |
| 020 | JUNKIN WELL | 332649087562901 | 10 | 20 | <1 | 10 | 5 | <3 | <10 | 14,000 | 18 | 9 | 830 | <.1 | <10 | 0 | 13 | 6 | 9 |
| 021 | BAIN WELL | 332847088123702 | 20 | 80 | <1 | 0 | 5 | <3 | <10 | 5,900 | 16 | 11 | 430 | <.1 | <10 | 0 | 470 | <6 | 6 |
| 022 | HICKMAN WELL | 331637088154902 | 0 | 50 | <1 | 0 | 4 | <3 | <10 | 130 | 22 | <4 | 140 | <.1 | <10 | 0 | 590 | <6 | <4 |
| 023 | DEMOPOLIS AIRPORT WELL | 322801087572101 | 10 | 5,000 | <1 | 2,000 | 1 | 3 | 10 | 5,400 | 10 | --- | 250 | .7 | 10 | <1 | 36,000 | 6 | 690 |
| 057 | NEIGHBORS' FLOWING WELL | 322833086410301 | <10 | 14 | <1 | 10 | <1 | <3 | <10 | 12 | <10 | 7 | <1 | <.1 | 10 | <1 | 54 | <6 | 44 |
| 058 | GREENVILLE CITY WELL | 314947086364001 | 10 | 7 | <1 | 410 | <1 | <3 | <10 | 20 | <10 | 7 | <1 | <.1 | <10 | <1 | 230 | <6 | <4 |
| 059 | HAYNEVILLE CITY WELL | 321058086343201 | <10 | 5 | <1 | 20 | <1 | <3 | <10 | 13 | <10 | <4 | 5 | <.1 | <10 | <1 | 47 | <6 | <4 |
| 060 | VIDA WELL | 323648086401601 | <10 | 38 | <1 | 10 | <1 | <3 | <10 | 11 | <10 | 9 | <1 | <.1 | <10 | <1 | 130 | <6 | 12 |
| 061 | OLYMPIA SPA GOLF COURSE | 310712085242401 | <10 | 35 | <1 | 10 | <1 | <3 | <10 | 6 | <10 | <4 | <1 | <.1 | <10 | 4 | 140 | <6 | 180 |
| 062 | OLYMPIA SPA MINERAL WELL | 310715085242201 | 10 | 100 | <1 | 2,200 | 11 | <3 | <10 | 15 | <10 | 40 | 72 | <.1 | 10 | <1 | 1,800 | <6 | 80 |
| 063 | NEWTON TOWN WELL | 311921085353301 | <10 | 43 | <1 | 20 | <1 | <3 | <10 | 100 | 10 | <4 | 2 | <.1 | <10 | <1 | 450 | <6 | 11 |
| 064 | OZARK CITY WELL 2 | 312723085384201 | 20 | 4 | <1 | 160 | <1 | <3 | <10 | 7 | <10 | <4 | <1 | <.1 | <10 | <1 | 160 | <6 | <4 |
| 065 | ROBINSON WELL | 313738085163001 | <100 | 28 | <1 | 10 | <1 | <3 | <10 | 1,700 | <10 | 7 | 35 | <.1 | <10 | <1 | 110 | <6 | 300 |
| 066 | WYECOTT PLANTATION WELL | 315814085192201 | <10 | 15 | <1 | 310 | <1 | <3 | <10 | 29 | <10 | 14 | <1 | <.1 | <10 | <1 | 180 | <6 | 9 |
| 067 | COMER SCHOOL WELL | 320431085193201 | <10 | <2 | <1 | 90 | <1 | <3 | <10 | 18 | <10 | <4 | <1 | <.1 | <10 | <1 | 18 | <6 | <4 |
| 068 | CITY OF CLAYTON | 315208085264801 | <10 | 16 | <1 | 10 | <1 | <3 | <10 | 9 | <10 | 5 | <1 | <.1 | <10 | <1 | 14 | <6 | 11 |
| 069 | BOWDEN FLOWING WELL | 320519085125401 | <10 | 5 | <1 | 420 | <1 | <3 | <10 | 14 | <10 | 13 | <1 | <.1 | 10 | <1 | 240 | <6 | <4 |
| 080 | LADONIA-CRAWFORD WELL | 322242085044801 | <10 | 56 | <1 | 10 | 2 | <3 | <10 | 130 | <10 | <4 | 40 | <.1 | <10 | <1 | 290 | <6 | 5 |
| 081 | BOWDEN SPRING | 320410085055501 | 50 | 72 | <1 | <10 | <1 | <3 | <10 | 9 | <10 | <4 | 18 | <.1 | <10 | <1 | 41 | <6 | 5 |
| 082 | GREEN STORE WELL | 315308085355701 | 10 | 140 | <1 | 30 | <1 | <3 | <10 | 78 | <10 | <4 | 22 | <.1 | <10 | <1 | 370 | <6 | 170 |
| 083 | CROUCH WELL | 322322085071301 | 10 | 55 | <1 | <10 | <1 | <3 | <10 | 140 | <10 | 28 | 3 | <.1 | <10 | <1 | 92 | <6 | 200 |
| 084 | MCARTHUR HOUSE WELL | 321945085100502 | <10 | 11 | <1 | <10 | <1 | <3 | <10 | 7 | <10 | <4 | <1 | <.1 | <10 | <1 | 20 | <6 | 31 |
| 085 | TOM SMITH WELL | 322741085074101 | <10 | 23 | <1 | <10 | <1 | <3 | <10 | 11 | <10 | <4 | 3 | <.1 | <10 | <1 | 89 | <6 | 67 |
| 092 | BURKVILLE A-2 | 321830086312502 | 10 | 9 | <1 | -- | 3 | <3 | <10 | 36 | 13 | <4 | 7 | --- | <10 | -- | 38 | <6 | <4 |
| 093 | BURKVILLE B-2 | 321612086311302 | 30 | 70 | <1 | 490 | <1 | <3 | <10 | 250 | <10 | 19 | 13 | .9 | <10 | <1 | 1,100 | <6 | <4 |
| 094 | BURKVILLE D-1 | 321951086314101 | 20 | 6 | 1 | 30 | 1 | 3 | 10 | 5 | 16 | 4 | 3 | <.1 | 10 | 0 | 21 | 6 | 4 |

TABLE 5. Concentrations of dissolved trace metals in geochemical samples.
[All values are in micrograms per liter] (Continued).

| MAP NO. | SITE NAME | SITE-ID | AL | BA | BE | B | CD | CO | CU | FE | PB | LI | MN | HG | MO | SE | SR | V | ZN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | GEORGIA | | | | | | | | | | | | |
| 038 | KING FINISHING NO.1 | 323614081442701 | <10 | 30 | <1 | 70 | 2 | <3 | <10 | 24 | 10 | 4 | 9 | <.1 | 10 | <1 | 160 | <6 | <4 |
| 039 | KING FINISHING NO.2 | 323612081442501 | <10 | 60 | <1 | 40 | 2 | <3 | <10 | 30 | <10 | <4 | 16 | <.1 | 14 | <1 | 270 | <6 | <4 |
| 040 | MIDVILLE WELL | 324859082140101 | <10 | 8 | <1 | 30 | 3 | <3 | <10 | 39 | <10 | 5 | 18 | <.1 | <10 | <1 | 240 | <6 | <4 |
| 041 | WADLEY NO.1 | 325140082242601 | 200 | 20 | <1 | 20 | <1 | 17 | <10 | 1,900 | <10 | 5 | 130 | <.1 | <10 | <1 | 150 | <6 | <4 |
| 042 | J.P. STEVENS NO.4 | 330014082273901 | 400 | 20 | <1 | 10 | <1 | 11 | <10 | 1,200 | <10 | 8 | 37 | <.1 | 14 | <1 | 61 | <6 | 7 |
| 043 | J.P. STEVENS NO.1A | 330024082272902 | 200 | 20 | <1 | 10 | <1 | 13 | <10 | 1,500 | 10 | 5 | 25 | <.1 | 10 | <1 | 23 | <6 | 5 |
| 044 | CHALKER WELL | 332000082380801 | <10 | 40 | <1 | 10 | 3 | <3 | <10 | 11 | <10 | 9 | <1 | <.1 | <10 | 1 | 30 | <6 | 7 |
| 048 | WRENS NO.3 | 331157082232501 | 100 | 20 | <1 | <10 | <1 | <3 | <10 | 7 | 10 | 4 | 8 | .4 | 10 | <1 | 31 | <6 | 44 |
| 049 | J.M. HUBER NO.2 | 331652082243401 | 100 | 2 | <1 | <10 | 3 | <3 | 16 | 15 | 10 | 4 | 4 | <.1 | 10 | <1 | 16 | <6 | 25 |
| 050 | THIELE NO.1 | 331049082271101 | 100 | 10 | <1 | <10 | <1 | <3 | <10 | 7 | 10 | 4 | <1 | <.1 | 10 | 1 | 63 | <6 | 81 |
| 051 | GIBSON NO.3 | 331359082355601 | 100 | 20 | <1 | <10 | 3 | <3 | <10 | 130 | 10 | 4 | 19 | <.1 | 10 | <1 | 9 | <6 | 26 |
| 056 | Ga. DNR LAURENS NO. 2 | 323030083030003 | <100 | 40 | <1 | 70 | <1 | <3 | <10 | 4,200 | <10 | <4 | 83 | <.1 | 20 | <1 | 72 | <6 | 680 |
| 070 | ALBANY WELL TW-1 | 313105084064201 | 200 | 10 | <1 | 5,600 | 2 | <3 | <10 | 1,600 | <10 | 46 | 15 | .2 | <10 | <1 | 410 | <6 | 5 |
| 071 | ALBANY WELL TW-10 | 313534084103003 | 40 | <2 | <1 | 260 | <1 | <3 | <10 | 22 | <10 | 10 | <1 | <.1 | <10 | <1 | 46 | <6 | <4 |
| 072 | KOLOMOKI STATE PARK 2 | 312805084554001 | 20 | 4 | <1 | 20 | <1 | <3 | <10 | 67 | <10 | <4 | 2 | <.1 | <10 | <1 | 150 | <6 | <4 |
| 073 | SINGLETARY-BANCROFT | 312445084494101 | 10 | 11 | <1 | 50 | <1 | <3 | <10 | 50 | <10 | 9 | 5 | <.1 | <10 | <1 | 360 | <6 | <4 |
| 074 | FT. GAINES CITY WELL 3 | 313638085032101 | 20 | 6 | <1 | 410 | <1 | <3 | <10 | 39 | <10 | 6 | 2 | <.1 | <10 | <1 | 100 | <6 | <4 |
| 075 | GEORGETOWN 2 | 315312085045201 | 30 | 3 | <1 | 180 | <1 | <3 | <10 | 16 | <10 | 4 | <1 | <.1 | 20 | <1 | 19 | <6 | <4 |
| 076 | GEORGETOWN 1 | 315306085060601 | 20 | 5 | <1 | 360 | <1 | <3 | <10 | 14 | <10 | 5 | 4 | .2 | <10 | <1 | 38 | <6 | <4 |
| 077 | PLANT LAUREL 2 | 323058084071901 | 20 | 6 | <1 | 10 | <1 | <3 | <10 | 47 | <10 | <4 | 4 | <.1 | <10 | <1 | 17 | <6 | 25 |
| 078 | WAINWRIGHT 2 | 323304084101101 | 20 | 8 | <1 | <10 | <1 | <3 | <10 | 55 | <10 | <4 | 5 | <.1 | <10 | <1 | 9 | <6 | 14 |
| 079 | WAINWRIGHT HOUSE WELL | 324012084110401 | 150 | 27 | <1 | <10 | <1 | <3 | 130 | 79 | <10 | <4 | 7 | <.1 | <10 | <1 | 12 | <6 | 31 |
| 086 | ELLAVILLE 5 | 321408084182001 | 100 | 37 | <1 | 20 | <1 | <3 | <10 | 2,200 | <10 | 19 | 20 | <.1 | <10 | <1 | 47 | <6 | 52 |
| 087 | CUSSETA 1 | 321807084462201 | 20 | 17 | <1 | 30 | <1 | <3 | <10 | 590 | 10 | <4 | 34 | <.1 | <10 | <1 | 180 | <6 | 31 |
| 088 | WESTON 1 | 315841084365501 | 10 | 24 | <1 | 20 | <1 | <3 | <10 | 10 | 20 | 6 | <1 | <.1 | 10 | <1 | 98 | <6 | 28 |
| 089 | OMAHA SCHOOL | 320906085002501 | 10 | 88 | <1 | 100 | <1 | <3 | 30 | 5 | <10 | 11 | <1 | <.1 | <10 | <1 | 520 | <6 | 79 |
| 090 | OMAHA 1 | 320859085003701 | 30 | 4 | <1 | 80 | <1 | <3 | <10 | <3 | 10 | <4 | <1 | <.1 | <10 | <1 | 33 | <6 | 6 |
| 091 | BREELAND HOUSE WELL | 321747084172401 | 20 | 13 | <1 | 10 | <1 | <3 | <10 | 23 | 10 | <4 | 6 | <.1 | <10 | <1 | 13 | <6 | 140 |
| | | | | | | | SOUTH CAROLINA | | | | | | | | | | | | |
| 025 | BROOKGREEN NO.1 | 333113079053501 | 10 | 30 | <1 | 160 | <1 | <3 | <10 | 5 | 16 | 4 | 13 | .2 | <10 | <1 | 240 | <6 | <4 |
| 026 | BROOKGREEN NO.2 | 333059079053200 | 10 | 150 | <1 | 1,700 | <1 | <3 | <10 | 46 | <10 | 13 | 7 | .1 | <10 | <1 | 79 | <6 | <4 |
| 027 | N. MYRTLE BEACH 3 | 334919078402703 | 400 | 70 | <1 | 1,600 | <1 | 20 | <10 | 1,800 | 14 | <4 | 61 | .2 | 60 | <1 | 350 | 35 | 45 |
| 028 | N. MYRTLE BEACH 2 | 334919078402702 | 10 | 30 | <1 | 1,500 | <1 | <3 | <10 | 18 | 12 | <4 | 110 | .1 | <10 | <1 | 200 | <6 | 10 |
| 029 | CONWAY, WLAT | 335101079040800 | 20 | 40 | <1 | 3,100 | <1 | <3 | <10 | 11 | <10 | 9 | 4 | <.1 | <10 | <1 | 64 | <6 | <4 |
| 030 | ISLE OF PALMS | 324715079491700 | 50 | 30 | <1 | 5,200 | <1 | <3 | <10 | 21 | <10 | 28 | 2 | .1 | <10 | <1 | 65 | <6 | 6 |
| 031 | CHARLESTON 64 | 324708079555500 | 30 | 50 | <1 | 2,700 | <1 | <3 | <10 | 45 | 10 | 18 | <1 | .1 | <10 | <1 | 51 | <6 | <4 |
| 036 | MARION TWN 3 | 341026079234200 | <100 | 10 | <1 | 60 | 1 | <3 | <10 | 280 | <10 | 5 | 16 | <.1 | <10 | <1 | 43 | <6 | <4 |
| 037 | MARION TWN 2 | 341101079234700 | 100 | 10 | <1 | 120 | <1 | <3 | <10 | 54 | <10 | <4 | 13 | <.1 | <10 | <1 | 18 | <6 | <4 |
| 045 | MONCK'S CORNER NO.2 | 331150080004000 | 20 | 5 | <1 | 100 | 3 | <3 | <10 | 9 | <10 | 14 | <1 | <.1 | <10 | <1 | 290 | <6 | 5 |
| 046 | HODGE WELL | 325535079441600 | 10 | 3 | <1 | 380 | 8 | <3 | <10 | 8 | <10 | 17 | <1 | .1 | <10 | <1 | 68 | <6 | <4 |
| 047 | ESTHERVILLE LAKE | 331508079162400 | 20 | 220 | <1 | 8,600 | 5 | <3 | <10 | 150 | <10 | 39 | 1 | <.1 | 18 | <1 | 350 | <6 | 5 |
| 052 | FRIPP ISLAND GOLF COURSE | 321939080274200 | 250 | 20 | 1 | 6,500 | 4 | 3 | 10 | 100 | 10 | 31 | 1 | <.1 | 10 | <1 | 130 | 6 | 5 |
| 053 | HILTON HEAD PLANTATION | 321446080444000 | 30 | 2 | 1 | 3,800 | 5 | 3 | 10 | 51 | 10 | 25 | 3 | <.1 | 10 | <1 | 160 | 6 | 4 |
| 054 | USMC DEEP WELL-2 PARRIS IS. | 321946080422600 | 40 | 2 | 1 | 4,300 | 4 | 3 | 10 | 49 | 10 | 19 | 2 | <.1 | 10 | <1 | 75 | 6 | 4 |
| 055 | USMC DEEP WELL-1 PARRIS IS. | 322110080412200 | 30 | 2 | 1 | 3,400 | 3 | 3 | 10 | 28 | 10 | 31 | 1 | <.1 | 10 | <1 | 58 | 6 | 4 |
| 095 | BRITTON'S NECK MRN-77 | 335143079195000 | 10 | 11 | <1 | 510 | <1 | <3 | <10 | 11 | <10 | 5 | 1 | .2 | <10 | <1 | 39 | <6 | <4 |
| 096 | BRITTON'S NECK MRN-78-1 | 335143079195001 | 200 | 170 | <1 | 4,700 | 1 | <3 | <10 | 1,600 | <10 | 80 | 400 | .1 | 10 | <1 | 1,500 | <6 | 24 |
| 097 | BRITTON'S NECK MRN-78-2 | 335143079195001 | 10 | 60 | <1 | 8,000 | <1 | 15 | <10 | 5,500 | <10 | 21 | 91 | .3 | 40 | <1 | 320 | <6 | 110 |
| 098 | BRITTON'S NECK MRN-78-3 | 335143079195001 | 300 | 64 | <3 | 5,200 | <3 | <9 | <30 | 2,200 | <30 | 28 | 89 | .3 | <30 | <1 | 440 | <6 | 190 |
| 099 | BRITTON'S NECK MRN-78-4 | 335143079195001 | 20 | 18 | 1 | 2,000 | <1 | <3 | <10 | 120 | <10 | <4 | 10 | .1 | 10 | <1 | 51 | <6 | 13 |
| 100 | BRITTON'S NECK MRN-78-5 | 335143079195001 | 10 | 31 | <1 | 1,900 | <1 | <3 | <10 | 44 | <10 | <4 | 2 | .2 | 10 | <1 | 71 | <6 | <4 |
| 101 | ST. GEORGE DOR-211-1 | 330925080311800 | 70 | 27 | 1 | 2,800 | 1 | 3 | 10 | 3 | 10 | 18 | 18 | <.1 | 30 | <1 | 67 | 6 | 4 |
| 102 | ST. GEORGE DOR-211-2 | 330925080311800 | 110 | 100 | <1 | 2,800 | 1 | <3 | <10 | 86 | 20 | 21 | 15 | .2 | 50 | <1 | 96 | <6 | <4 |
| 103 | ST. GEORGE DOR-211-3 | 330925080311800 | 20 | 270 | <1 | 3,400 | <1 | <3 | <10 | 1,200 | <10 | 41 | 66 | .1 | 50 | <1 | 220 | <6 | 10 |
| 104 | ST. GEORGE DOR-211-4 | 330925080311800 | <10 | 23 | 1 | 170 | 1 | 3 | 10 | 3 | 10 | 5 | 1 | <.1 | 10 | <1 | 35 | 6 | 4 |
| 105 | ST. GEORGE DOR-211-5 | 330925080311800 | 30 | 99 | <1 | 630 | <1 | <3 | <10 | 20 | 40 | 16 | 3 | <.1 | 30 | <1 | 89 | <6 | <4 |

TABLE 5. Concentrations of dissolved trace metals in geochemical samples.
[All values are in micrograms per liter] (Continued).

| MAP NO. | SITE NAME | SITE-ID | AL | BA | BE | B | CD | CO | CU | FE | PB | LI | MN | HG | MO | SE | SR | V | ZN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | NORTH CAROLINA | | | | | | | | | | | | |
| 024 | CALABASH J-2 | 335333078352002 | 300 | 590 | <1 | 6,100 | 14 | 18 | <10 | 1,400 | 31 | 110 | 48 | 0 | <10 | <1 | 2,500 | <6 | <4 |
| 032 | ROWLAND NO.1 | 343238079174300 | <100 | 70 | <1 | 10 | <1 | 20 | <10 | 2,500 | <10 | <4 | 51 | <.1 | <10 | <1 | 120 | <6 | <4 |
| 033 | ROWLAND NO.2 | 343221079170201 | <100 | 60 | <1 | 20 | <1 | 7 | <10 | 960 | <10 | <4 | 24 | <.1 | <10 | <1 | 46 | <6 | <4 |
| 034 | LAURINBURG WELL | 344702079263001 | 200 | 30 | <1 | 10 | <1 | 28 | <10 | 2,000 | 33 | <4 | 24 | <.1 | <10 | <1 | 11 | <6 | 39 |
| 035 | CAROLINA WELDING WELL | 344418079271301 | 250 | 40 | <1 | <10 | <1 | <3 | 17 | 34 | 35 | <4 | 6 | <.1 | <10 | <1 | 8 | <6 | 69 |

TABLE 6. Radiochemical values and isotope data for geochemical samples.
[Values are as tabulated. PM is percent modern].

| MAP NO. | SITE NAMES | SITE-ID | GROSS ALPHA (as U-NAT, UG/L) | GROSS BETA (SR-90 PCI/L) | TRITIUM (PCI/L) | δ13 C (‰ vs PDB) | C14 (PM) | δ D (‰ vs SMOW) | δ18O (‰ vs SMOW) |
|---|---|---|---|---|---|---|---|---|---|
| | | | MISSISSIPPI | | | | | | |
| 001 | MATHIS WELL | 345600088482601 | 2.2 | 1.6 | 43 | -19.3 | 86.1 | -30 | -5 |
| 002 | WALNUT TOWN WELL | 345724088540001 | <4 | 4 | 3 | -16.3 | 2.8 | -33.5 | -5.6 |
| 003 | WALNUT STANDBY WELL | 345657088534901 | <5 | <2.3 | 3 | -12.4 | 25.8 | -29 | -5.2 |
| 004 | ASHLAND TOWN WELL | 345100089104803 | <5.9 | <3.9 | 3 | -13.2 | 16.7 | -30 | -5.2 |
| 005 | BYHALIA TOWN WELL | 345220089462301 | <11 | <5.4 | 1 | -12.1 | 2.4 | -32 | -5.6 |
| 006 | CORPS OF ENGINEERS WELL | 345145088173201 | <.7 | 1.2 | 99 | --- | --- | -30 | -5.1 |
| 007 | HOLCUT-CAIRO WATER ASSOC. | 344455088214001 | <2.1 | 2.3 | 6 | -18.7 | 59.3 | -32 | -5.3 |
| 008 | COLUMBUS AIR FORCE BASE 2 | 333732088263602 | <4.2 | 6.2 | 3 | -18.3 | 13.3 | -28 | -5 |
| 009 | COLUMBUS AFB RECEIVER | 333930088283008 | <.8 | .6 | 82 | --- | --- | -27.5 | -4.5 |
| 010 | ABRAMS WELL | 331145088370401 | <19 | <9.8 | 5 | -9.6 | 19.1 | -30.5 | -5.4 |
| 011 | HOFFMAN WELL | 331528088370701 | <19 | <9.8 | 3 | -5.2 | 6.4 | -28.5 | -5.1 |
| 012 | MILLER WELL (DIAMOND SEED) | 331308088365101 | <2 | 4.1 | 1 | -16.3 | 8.6 | -30 | -5.3 |
| 013 | MASHULAVILLE WELL | 330528088443001 | <16 | <9.6 | 1 | -15.9 | 1.5 | -32.5 | -5.5 |
| 014 | BUTLER WELL | 331357088340802 | <15 | <8.7 | 3 | -8.2 | 2 | -30.5 | -5.4 |
| 015 | BROOKSVILLE TOWN WELL | 331357088455202 | <3.3 | <1.9 | 2 | -17.5 | 6.8 | -32.5 | -5.4 |
| 016 | BLACK BELT WELL | 331531088334101 | <2.3 | 3.1 | 3 | -19.6 | 38.3 | -29.5 | -5 |
| | | | ALABAMA | | | | | | |
| 017 | C. HUBBERT WELL | 334420087545101 | 1 | 1.2 | 69 | -17.7 | --- | -29.5 | -5.3 |
| 018 | WALLACE WELL | 334113087522501 | 5.1 | 4.1 | 29 | -17.9 | --- | -27 | -4.9 |
| 019 | SKELTON WELL | 333109087575901 | 1.8 | 1.4 | 124 | -19.2 | --- | -27 | -4.8 |
| 020 | JUNKIN WELL | 332649087562901 | <2 | 4.1 | 4 | -18.6 | 99.5 | -27.5 | -4.9 |
| 021 | BAIN WELL | 332847088123702 | <2.7 | 1.9 | 27 | -18.9 | 69.7 | -27.5 | -4.7 |
| 022 | HICKMAN WELL | 331637088154902 | <2.1 | 5.7 | 2 | -19.1 | 9.5 | -29 | -5.2 |
| 023 | DEMOPOLIS AIRPORT WELL | 322801087572101 | <730 | <250 | <1 | -6.3 | --- | -29.5 | -4.65 |
| 057 | NEIGHBORS' FLOWING WELL | 322833086410301 | <2.1 | 2.7 | 3 | -23.2 | 90.5 | -22.5 | -4.4 |
| 058 | GREENVILLE CITY WELL | 314947086364001 | <10 | <3.9 | <1 | -8.8 | <.7 | -23 | -4.4 |
| 059 | HAYNEVILLE CITY WELL | 321058086343201 | <4.8 | <2 | <1 | -15.6 | <.7 | -26 | -4.4 |
| 060 | VIDA WELL | 323648086401601 | <1.9 | 1.6 | 2 | -24.2 | 17.6 | -22 | -4.6 |
| 061 | OLYMPIA SPA GOLF COURSE | 310712085242401 | <5.1 | <1.7 | 2 | -6.8 | 14.6 | -20 | -3.9 |
| 062 | OLYMPIA SPA MINERAL WELL | 310715085242201 | --- | --- | --- | --- | --- | --- | --- |
| 063 | NEWTON TOWN WELL | 311921085353301 | <6.7 | <2.6 | 3 | -9.5 | 1.8 | -19 | -4 |
| 064 | OZARK CITY WELL 2 | 312723085384201 | <6.1 | <2.4 | 2 | -6.5 | .8 | -23.5 | -4.3 |
| 065 | ROBINSON WELL | 313738085163001 | <5 | <2.8 | 1 | -11.8 | 25.7 | -24 | -4.2 |
| 066 | WYECOTT PLANTATION WELL | 315814085192201 | <7.5 | <2.7 | 6 | -10.7 | .7 | -23 | -4.45 |
| 067 | COMER SCHOOL WELL | 320431085193201 | <3.5 | 1.4 | <1 | -17.8 | .7 | -24.5 | -5 |
| 068 | CITY OF CLAYTON | 315208085264801 | <2.9 | <1 | 6 | -20 | 84.8 | -24.5 | -4.6 |
| 069 | BOWDEN FLOWING WELL | 320519085125401 | <7.8 | <3.8 | <1 | -8.5 | 7.1 | -26 | -4.6 |
| 080 | LADONIA-CRAWFORD WELL | 322242085044801 | <3.1 | 4.4 | 9 | -19.3 | 9.8 | -25.5 | -4.7 |
| 081 | BOWDEN SPRING | 320410085055501 | 2.4 | 1.5 | 87 | -19.9 | 78.8 | -23.5 | -4.5 |
| 082 | GREEN STORE WELL | 315308085355701 | <5.6 | 4 | 3 | -13.2 | 8.9 | -21.5 | -4.3 |
| 083 | CROUCH WELL | 322322085071301 | 5.6 | 3.4 | 1 | -21.5 | 86.7 | -22 | -4.4 |
| 084 | MCARTHUR HOUSE WELL | 321945085100502 | 4.6 | 2.7 | 89 | -21 | 54.8 | -24.5 | -4.6 |
| 085 | TOM SMITH WELL | 322741085074101 | <1.6 | 3.2 | 2 | -22.5 | 60 | -22.5 | -4.1 |
| 092 | BURKVILLE A-2 | 321830086312502 | 20 | <13 | 4 | -16.7 | 24.5 | -26.5 | -4.5 |
| 093 | BURKVILLE B-2 | 321612086311302 | <20 | <13 | <3 | -10.3 | 2.3 | -25 | -4.4 |
| 094 | BURKVILLE D-1 | 321951086314101 | <2 | <.9 | <3 | -19.1 | 6.5 | -29 | -5.1 |

TABLE 6. Radiochemical values and isotope data for geochemical samples.
[Values are as tabulated. PM is percent modern] (Continued).

| MAP NO. | SITE NAMES | SITE-ID | GROSS ALPHA (as U-NAT. UG/L) | GROSS BETA (SR-90 PCI/L) | TRITIUM (PCI/L) | δ13 C (‰.vs.PDB) | C14 (PM) | δD (‰.vs.SMOW) | δ18D (‰.vs.SMOW) |
|---|---|---|---|---|---|---|---|---|---|
| | | | GEORGIA | | | | | | |
| 038 | KING FINISHING NO.1 | 323614081442701 | <2.4 | 2.3 | 1 | -16.4 | 1.65 | -27 | -4.4 |
| 039 | KING FINISHING NO.2 | 323612081442501 | <3.1 | 3.6 | 2 | -16.8 | 6.2 | -28 | -4.9 |
| 040 | MIDVILLE WELL | 324859082140101 | <4 | 1.8 | 0 | -10.5 | 2.6 | -26 | -4.6 |
| 041 | WADLEY NO.1 | 325140082242601 | <4.1 | <2.2 | 2 | -14.1 | 3.8 | -23.5 | -3.6 |
| 042 | J.P. STEVENS NO.4 | 330014082273901 | <1.9 | 1.3 | 3 | -19.1 | 33.4 | -25.5 | -4.4 |
| 043 | J.P. STEVENS NO.1A | 330024082272902 | <1.2 | 1 | 3 | -24.4 | 37.9 | -26 | -4.6 |
| 044 | CHALKER WELL | 332000082380801 | <2.2 | 2.1 | 210 | -21.8 | ---- | -29 | -4.9 |
| 048 | WRENS NO.3 | 331157082232501 | <1.5 | <.6 | 120 | -22.9 | 77.9 | -28.5 | -4.7 |
| 049 | J.M. HUBER NO.2 | 331652082243401 | 4 | 2.9 | 2 | -25.7 | 63 | -29 | -5.1 |
| 050 | THIELE NO.1 | 331049082271101 | <1.5 | <.6 | 20 | -19.1 | 83 | -27.5 | -4.6 |
| 051 | GIBSON NO.3 | 331359082355601 | 4.6 | 2.7 | 280 | -25.4 | 100 | -27 | -4.6 |
| 056 | Ga. DNR LAURENS NO. 2 | 323030083030003 | <1.6 | 6.8 | <1 | -20.6 | 8.6 | -26.5 | -4.7 |
| 070 | ALBANY WELL TW-1 | 313105084064201 | <53 | <21 | 3 | -2 | <.7 | -21.5 | -3.9 |
| 071 | ALBANY WELL TW-10 | 313534084103003 | <8.3 | 5 | 2 | -4.8 | 3.1 | -20.5 | -4.4 |
| 072 | KOLOMOKI STATE PARK 2 | 312805084554001 | <4.9 | <2 | 2 | -12.2 | 28 | -18.5 | -3.9 |
| 073 | SINGLETARY-BANCROFT | 312445084494101 | <3.8 | <2.1 | <1 | -6.3 | 4 | -21.5 | -4 |
| 074 | FT. GAINES CITY WELL 3 | 313638085032101 | <6.8 | <2.8 | 2 | -4.2 | <.7 | -22 | -4.05 |
| 075 | GEORGETOWN 2 | 315312085045201 | <4.2 | <2.6 | 1 | -17.3 | 4.8 | -25.5 | -5 |
| 076 | GEORGETOWN 1 | 315306085060601 | <8.5 | <3.5 | 2 | -10.4 | .7 | -25 | -5 |
| 077 | PLANT LAUREL 2 | 323058084071901 | 10 | 6.8 | 4 | -23.2 | 78.2 | -23.5 | -3.0 |
| 078 | WAINWRIGHT 2 | 323304084101101 | 5 | 1.7 | 26 | -20.9 | 46 | -25.5 | -4.5 |
| 079 | WAINWRIGHT HOUSE WELL | 324012084110401 | 15 | 6.1 | 112 | -22.4 | 84.8 | -23.5 | -4.45 |
| 086 | ELLAVILLE 5 | 321408084182001 | <3 | 3 | 2 | -22.3 | 35.4 | -21.5 | -4.4 |
| 087 | CUSSETA 1 | 321807084462201 | <3.7 | 2.9 | <1 | -20.7 | --- | -25.5 | -5 |
| 088 | WESTON 1 | 315841084365501 | <6.4 | <2.1 | 3 | -9.1 | 27.2 | -24 | -4.4 |
| 089 | OMAHA SCHOOL | 320906085002501 | <4.3 | 2.7 | 6 | -13.4 | 13.8 | -20 | -4.4 |
| 090 | OMAHA 1 | 320859085003701 | <2.1 | <1.5 | <1 | -16.2 | <.7 | -25 | -4.8 |
| 091 | BREELAND HOUSE WELL | 321747084172401 | 3.2 | 1.6 | 17 | -20.4 | 92.8 | -24 | -4.4 |
| | | | SOUTH CAROLINA | | | | | | |
| 025 | BROOKGREEN NO.1 | 333113079053501 | <5.3 | <2.6 | 110 | -11.1 | 53 | -24.5 | -4 |
| 026 | BROOKGREEN NO.2 | 333059079053200 | <12 | <8.1 | 1 | -5.2 | 3.6 | -26 | -4.3 |
| 027 | N. MYRTLE BEACH 3 | 334919078402703 | <17 | <7.8 | 120 | -9.6 | 43.4 | -26.5 | -4.4 |
| 028 | N. MYRTLE BEACH 2 | 334919078402702 | <22 | <11 | 57 | -10.1 | 38.8 | -24.5 | -4 |
| 029 | CONWAY, WLAT | 335101079040800 | <11 | <5.4 | 0 | -8.9 | 1.7 | -27.5 | -4.9 |
| 030 | ISLE OF PALMS | 324715079491700 | <34 | <17 | 3 | -6.6 | 2.9 | -27 | -4.4 |
| 031 | CHARLESTON 64 | 324708079555500 | <22 | <12 | 3 | -6.6 | 1.6 | -25 | -4.5 |
| 036 | MARION TWN 3 | 341026079234200 | <2.8 | 3.8 | 2 | -19.3 | 26.7 | -20 | -3.4 |
| 037 | MARION TWN 2 | 341101079234700 | 6.7 | 3.4 | 3 | -16.8 | 2.85 | -20.5 | -3.2 |
| 045 | MONCK'S CORNER NO.2 | 331150080004000 | <6.2 | 9.5 | 16 | -7.7 | 3.55 | -19 | -3.3 |
| 046 | HODGE WELL | 325535079441600 | <10 | 12 | 1 | -4.6 | 2.05 | -15 | -3.3 |
| 047 | ESTHERVILLE LAKE | 331508079162400 | <54 | <26 | 1 | -6.8 | <.55 | -25.5 | -4.3 |
| 052 | FRIPP ISLAND GOLF COURSE | 321939080274200 | <31 | <14 | 3 | -6.8 | 2.8 | -25 | -4.1 |
| 053 | HILTON HEAD PLANTATION | 321446080444000 | <29 | <14 | 1 | -6.8 | 2.3 | -28 | -4.6 |
| 054 | USMC DEEP WELL-2 PARRIS IS. | 321946080422600 | <29 | <12 | 1 | -6 | 1.7 | -26 | -4 |
| 055 | USMC DEEP WELL-1 PARRIS IS. | 322110080412200 | <24 | <12 | 1 | -5.6 | 1.1 | -26 | -4.5 |
| 095 | BRITTON'S NECK MRN-77 | 335143079195000 | <14 | <13 | 2 | -5.55 | <.7 | -23 | -4.6 |
| 096 | BRITTON'S NECK MRN-78-1 | 335143079195001 | <97 | <63 | 2 | -13.55 | 4.7 | -23 | -3.9 |
| 097 | BRITTON'S NECK MRN-78-2 | 335143079195001 | <57 | <29 | 2 | -12.9 | 6 | -24.5 | -4.05 |
| 098 | BRITTON'S NECK MRN-78-3 | 335143079195001 | <51 | <23 | 3 | -12.2 | 2.4 | -25 | -4.35 |
| 099 | BRITTON'S NECK MRN-78-4 | 335143079195001 | <12 | <5.6 | 2 | -10.25 | 2.5 | -24 | -4.55 |
| 100 | BRITTON'S NECK MRN-78-5 | 335143079195001 | <15 | <6.7 | 0 | -7.25 | 2.9 | -24 | -4.4 |
| 101 | ST. GEORGE DOR-211-1 | 330925080311800 | <27 | <12 | 3 | -9.6 | <.7 | -27 | -4.6 |
| 102 | ST. GEORGE DOR-211-2 | 330925080311800 | 48 | <11 | 2 | -9.1 | 8.4 | -24 | -4.4 |
| 103 | ST. GEORGE DOR-211-3 | 330925080311800 | <36 | <2.2 | 4 | -5.7 | 5 | -24.5 | -4.6 |
| 104 | ST. GEORGE DOR-211-4 | 330925080311800 | <6.1 | <2.2 | 2 | -8.8 | 2.5 | -26 | -4.7 |
| 105 | ST. GEORGE DOR-211-5 | 330925080311800 | <25 | <10 | 2 | -9.8 | 6.6 | -26 | -4.6 |

TABLE 6. Radiochemical values and isotope data for geochemical samples.
[Values are as tabulated. PM is percent modern] (Continued).

| MAP NO. | SITE NAMES | SITE-ID | GROSS ALPHA (as U-NAT. UG/L) | GROSS BETA (SR-90 PCI/L) | TRITIUM (PCI/L) | δ13 C (%.vs.PDB) | C14 (PM) | δD (%.vs.SMOW) | δ18D (%.vs.SMOW) |
|---|---|---|---|---|---|---|---|---|---|
| | | | NORTH CAROLINA | | | | | | |
| 024 | CALABASH J-2 | 335333078352002 | <170 | <84 | 4 | -9 | <.5 | -22.5 | -3.7 |
| 032 | ROWLAND NO.1 | 343238079174302 | 2.9 | 3.1 | 9 | 13.4 | 44.5 | -23 | -4.1 |
| 033 | ROWLAND NO.2 | 343221079170201 | 2.7 | 3 | 8 | -18.3 | 32.6 | -19.5 | -3.2 |
| 034 | LAURINBURG WELL | 344702079263001 | 25 | 7.5 | 60 | 22.7 | 71.5 | 29.5 | -5.1 |
| 035 | CAROLINA WELDING WELL | 344418079271301 | <.5 | .7 | 120 | 21.5 | 96.3 | 30.5 | -5.1 |