UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

# WATER-QUALITY DATA FOR AQUIFERS, STREAMS, AND LAKES IN THE VICINITY OF KEECHI, MOUNT SYLVAN, OAKWOOD, AND PALESTINE SALT DOMES, NORTHEAST TEXAS SALT-DOME BASIN

Compiled by Jerry E. Carr, Stephen J. Halasz, and Fred Liscum

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UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

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## METRIC CONVERSIONS

Metric equivalents of the inch-pound measurements used in this report may be calculated by use of the following conversion factors:

| Multiply inch-pound unit | By | To obtain metric unit |
|---|---|---|
| cubic foot per second ($ft^3/s$) | 0.02832 | cubic meter per second |
| foot | 0.3048 | meter |
| mile | 1.609 | kilometer |
| yard | 0.9144 | meter |

# WATER-QUALITY DATA FOR AQUIFERS, STREAMS, AND LAKES IN THE VICINITY OF KEECHI, MOUNT SYLVAN, OAKWOOD, AND PALESTINE SALT DOMES, NORTHEAST TEXAS SALT-DOME BASIN

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## ABSTRACT

This report contains water-quality data for aquifers, streams, and lakes in the vicinity of Keechi, Mount Sylvan, Oakwood, and Palestine Salt Domes in the northeast Texas salt-dome basin. Water-quality data were compiled for aquifers in the Wilcox Group, the Carrizo Sand, and the Queen City Sand. The data include analyses for dissolved solids, pH, temperature, hardness, calcium, magnesium, sodium, bicarbonate, chloride, and sulfate. Water-quality and streamflow data were obtained from 63 surface-water sites in the vicinity of the domes. These data include water discharge, specific conductance, pH, water temperature, and dissolved oxygen. Samples were collected at selected sites for analysis of principal and selected minor dissolved constituents.

## INTRODUCTION

The U.S. Department of Energy is considering the feasibility of using salt domes in the northeast Texas salt-dome basin (figs. 1-2) as repositories for radioactive wastes that may require complete confinement for as much as 250,000 years. Four of fourteen known shallow piercement salt domes within the basin--Keechi, Mount Sylvan, Oakwood, and Palestine Salt Domes--have been selected as candidate domes for further study and possible selection as storage sites.

The salt within these domes has penetrated as much as 20,000 feet of Mesozoic and Cenozoic strata and presently extends to within 120 to 800 feet of the land surface. The salt penetrates or closely underlies major freshwater and salinewater aquifers within the basin. To provide a safe repository for radioactive wastes within one or more of these domes, a thorough understanding of the geohydrology needs to be obtained, and the hydrologic stability of the domes needs to be established for the expected life of the storage facility.

## PURPOSE AND SCOPE OF THIS REPORT

This report was prepared in cooperation with the U.S. Department of Energy in conjunction with other studies designed to determine the feasibility of using salt domes in the northeast Texas salt-dome basin for the terminal storage of nuclear wastes. The purpose of this report is to present water-quality data for aquifers, streams, and lakes in the vicinity of Keechi, Mount Sylvan, Oakwood, and Palestine Salt Domes.

Water samples from freshwater aquifers were collected from the Wilcox Group of Paleocene and Eocene age in 21 counties, from the Carrizo Sand of Eocene age in 15 counties, and from the Queen City Sand of Eocene age in 14 counties. These ground-water samples were analyzed for dissolved solids, pH, temperature, hardness, calcium, magnesium, sodium, bicarbonate, chloride, and sulfate. The data are presented in tables 1-3.

Water-quality and streamflow data were obtained from 63 surface-water sites in the vicinity of the four salt domes. The number of sites associated with each salt dome and the types of data obtained are indicated in the following tabulation:

| Salt dome | Total number of sites | Number of sites where only field measurements were made | Number of sites where samples for laboratory analysis were collected |
|---|---|---|---|
| Keechi | 13 | 9 | 4 |
| Mount Sylvan | 16 | 10 | 4 |
| Oakwood | 18 | 7 | 5 |
| Palestine | 16 | 5 | 9 |

Locations of the salt domes and the associated data-collection sites are shown on figures 3-6, and are described in table 4. Results of streamflow measurements and on-site and laboratory water-quality analyses are given in table 5.

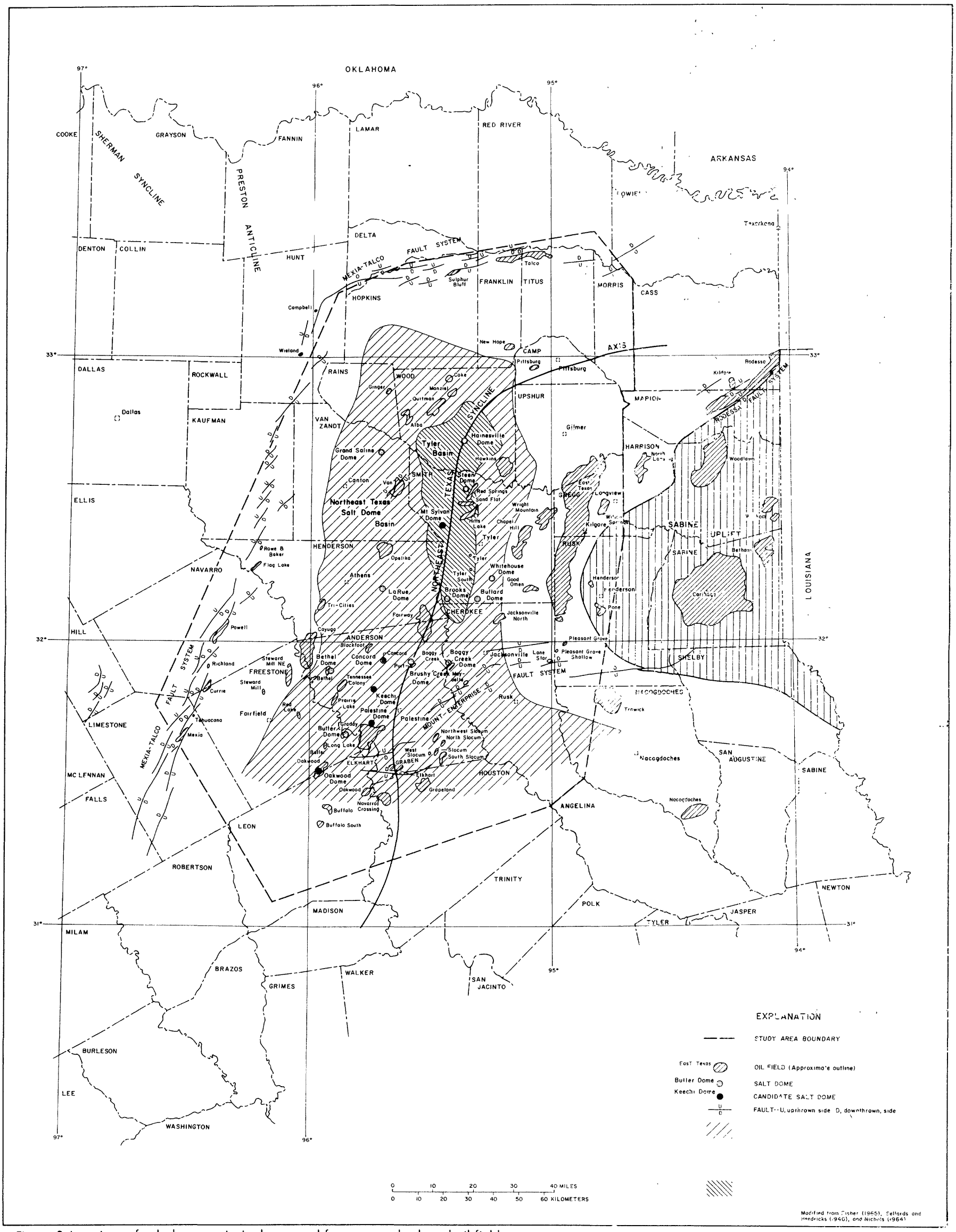
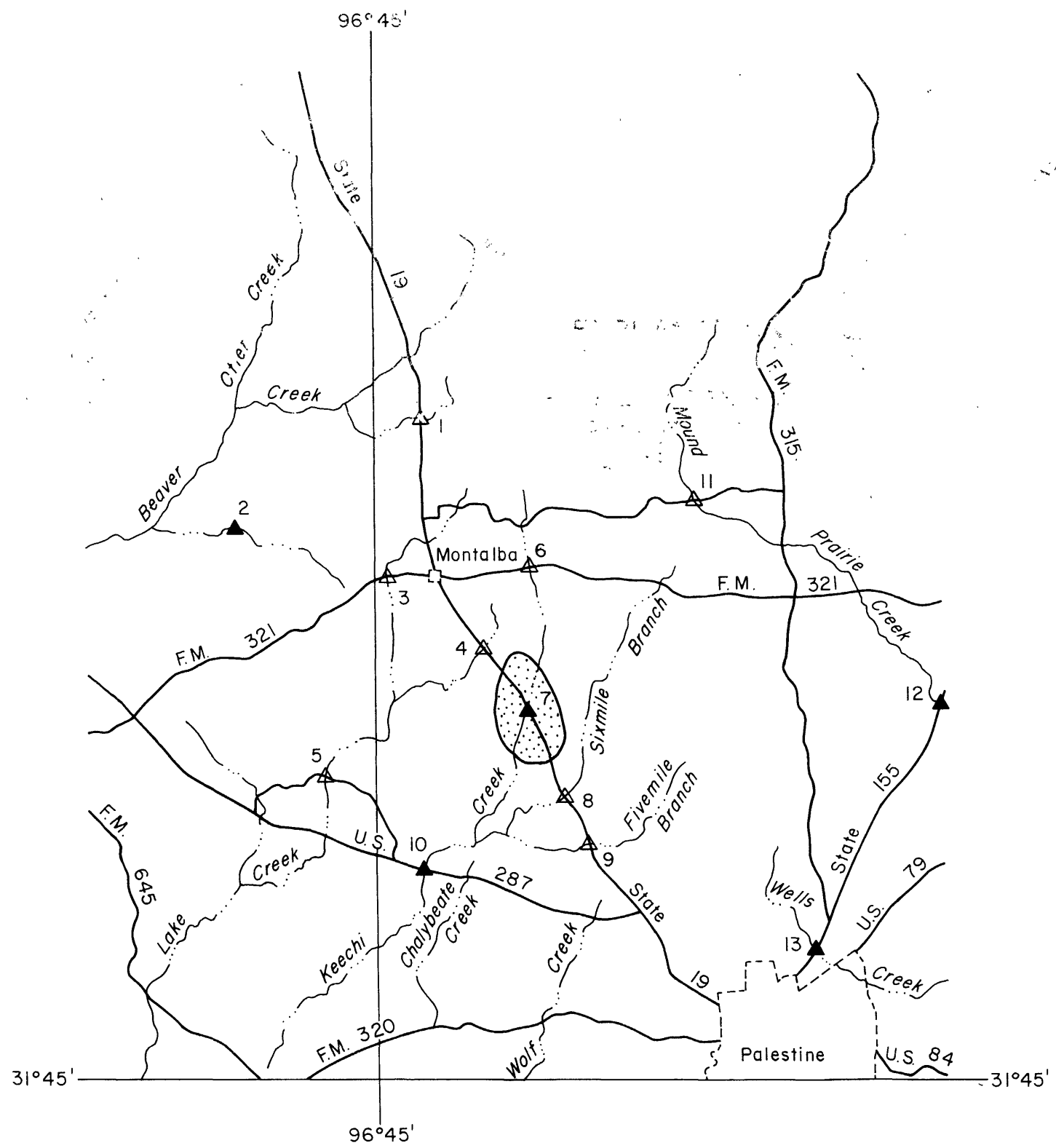



Figure 2.-Locations of salt domes, principal structural features, and selected oil fields




## EXPLANATION

△ WATER-QUALITY SITE-- Data consist of on-site measurements only

▲ WATER-QUALITY SITE-- Data consist of on-site measurements and laboratory analyses

2 NUMBER REFERS TO DATA-COLLECTION SITE IN TABLES 4 AND 5

APPROXIMATE OUTLINE OF SALT CORE-- at 2000 feet below National Geodetic Vertical Datum of 1929. From Netherland, Sewell, and Associates, Inc., (1976)

0 2 4 6 MILES
0 2 4 6 8 KILOMETERS

Base from Texas General Highway Map

Figure 3.-Locations of surface-water data-collection sites for Keechi Salt Dome

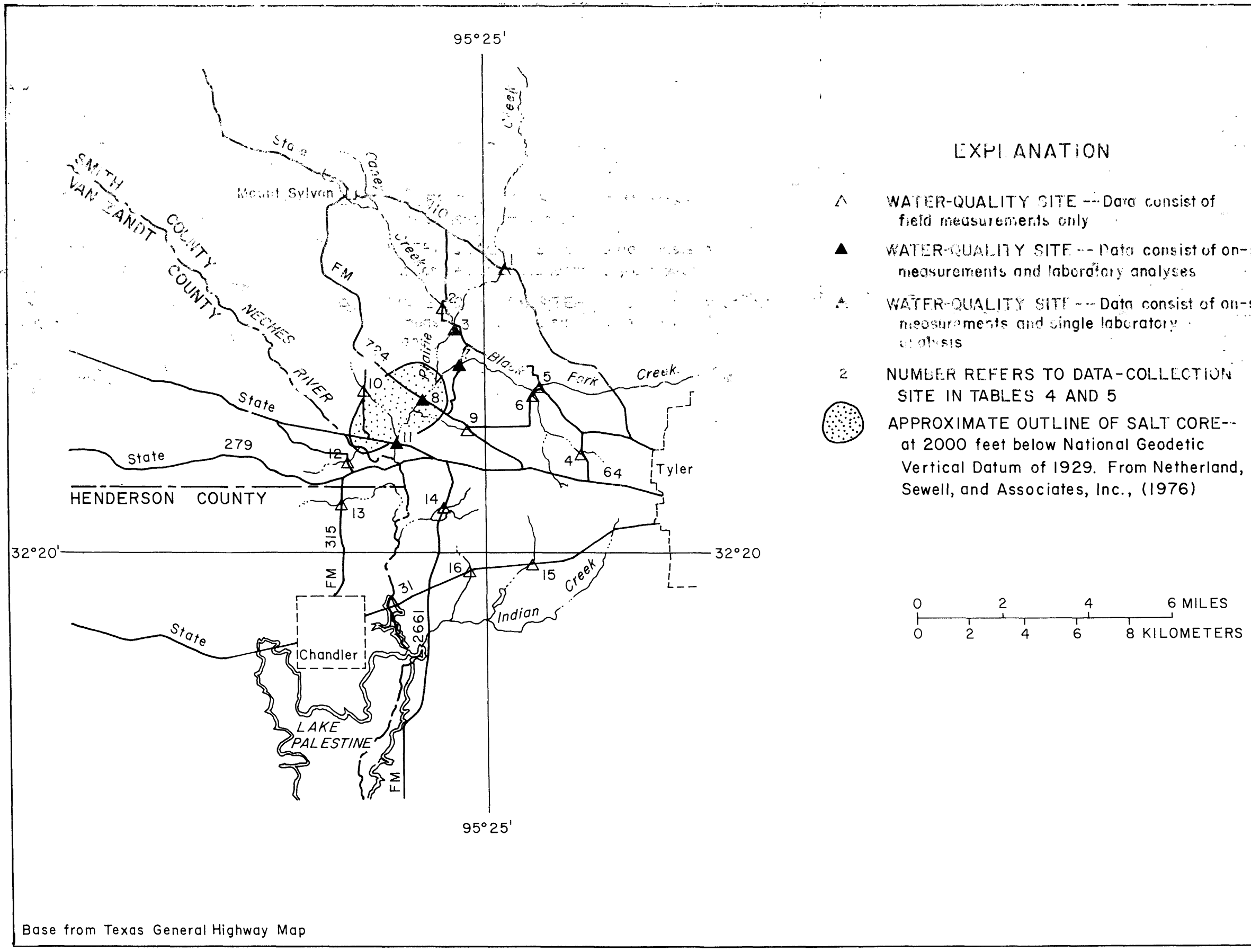
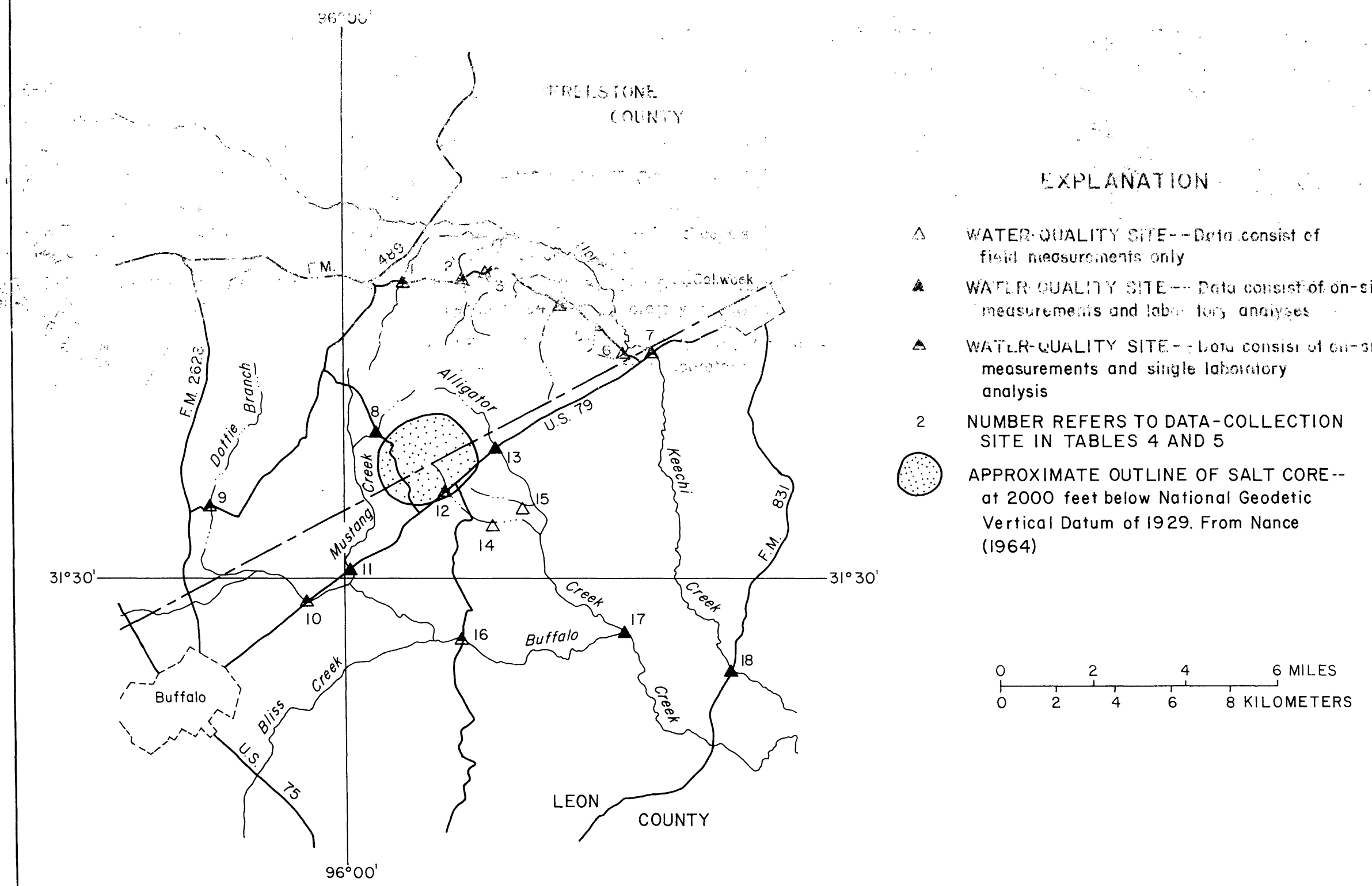



Figure 4.-Locations of surface-water data-collection sites for Mount Sylvan Salt Dome



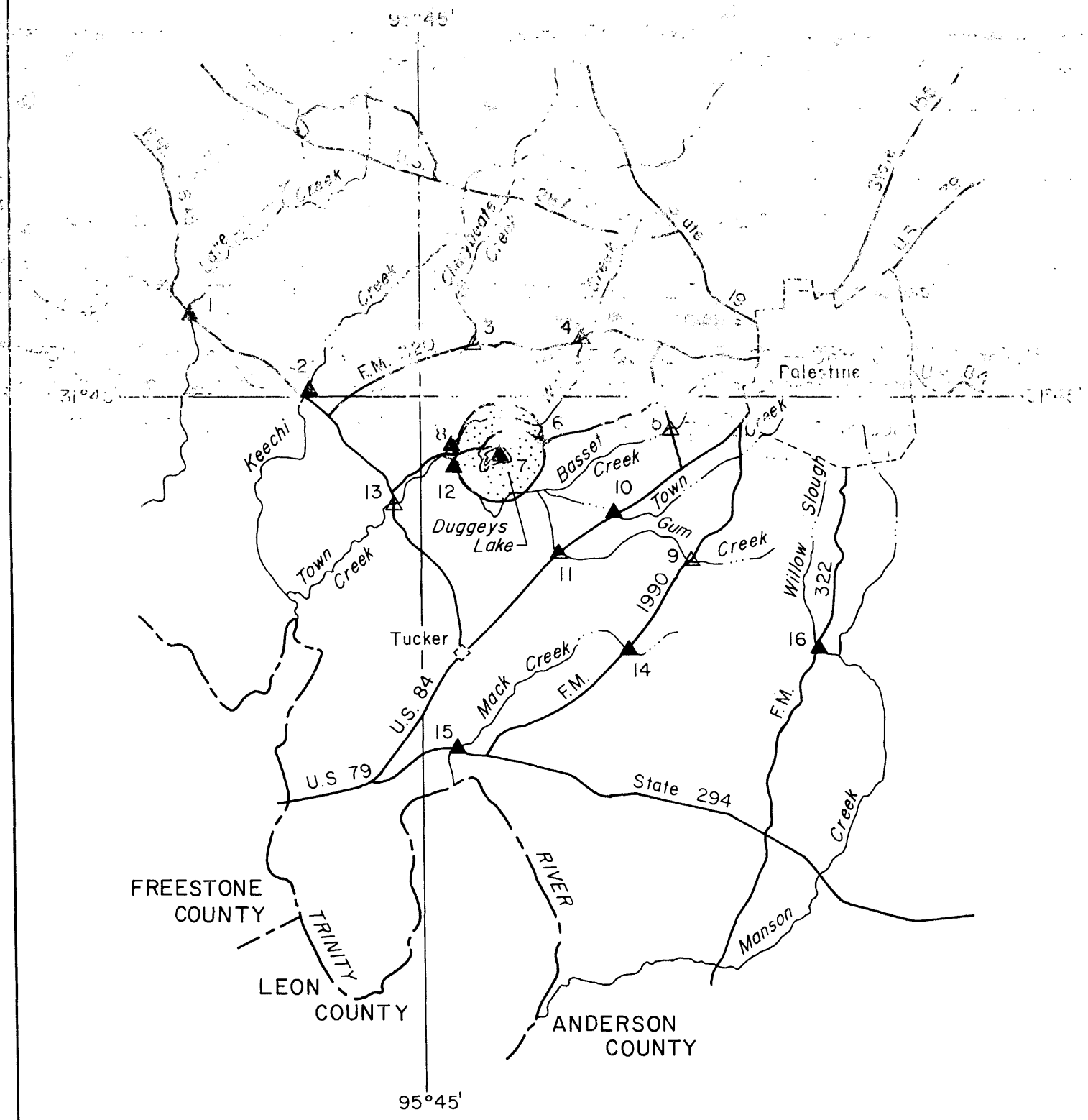

## EXPLANATION

- △ WATER-QUALITY SITE--Data consist of field measurements only
- ▲ WATER-QUALITY SITE--Data consist of on-site measurements and laboratory analyses
- ▲ WATER-QUALITY SITE--Data consist of on-site measurements and single laboratory analysis
- 2 NUMBER REFERS TO DATA-COLLECTION SITE IN TABLES 4 AND 5
- APPROXIMATE OUTLINE OF SALT CORE--at 2000 feet below National Geodetic Vertical Datum of 1929. From Nance (1964)

0 2 4 6 MILES
0 2 4 6 8 KILOMETERS

Base from Texas General Highway Map

Figure 5.-Locations of surface-water data-collection sites for Oakwood Salt Dome




## EXPLANATION

△ WATER-QUALITY SITE -- Data consist of field measurements only

▲ WATER-QUALITY SITE -- Data consist of on-site measurements and laboratory analyses

▲ WATER-QUALITY SITE -- Data consist of on-site measurements and single laboratory analysis

2 NUMBER REFERS TO DATA-COLLECTION SITE IN TABLES 4 AND 5

APPROXIMATE OUTLINE OF SALT CORE-- at 2000 feet below National Geodetic Vertical Datum of 1929. From Netherland, Sewell, and Associates, Inc., (1976)

0 2 4 6 MILES
0 2 4 6 8 KILOMETERS

Base from Texas General Highway Map

Figure 6.-Locations of surface-water data-collection sites for Palestine Salt Dome


Figure 1.-Location of the study area

Sites were selected on the basis of public access, proximity to selected salt domes, likelihood of flow, similarity of drainage, and results of on-site water-quality measurements at other nearby sites. Most sites selected for a given salt dome were within about a 5-mile radius of the salt dome.

A series of six water-quality surveys (during August, September, October, and November 1978, and January and February 1979) were made for most sites at each salt dome. A seventh survey was made in April 1979 to obtain additional data at a few selected sites. Four surveys were made during low-flow periods; two surveys were made during periods of surface runoff.

Each dome was surveyed as a unit. The duration of a survey was held to a minimum to insure similar hydrologic conditions for all sites associated with that dome. During each survey, water discharge, specific conductance, pH, water temperature, and dissolved oxygen were measured at each site. Samples for the analysis of the principal dissolved constituents and selected minor dissolved constituents were collected at selected sites.

SUMMARY OF CHEMICAL ANALYSES OF GROUND-WATER SAMPLES

Table 1.--Summary of chemical analyses of water from the Wilcox Group

Dissolved solids, residue on evaporation (ROE) at 180°C (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 7,000 | 562 | 324 | 228 | 37 | 617 |
| County | | | | | | |
| Anderson | 1,190 | 805 | 499 | 226 | 77 | 44 |
| Camp | 490 | -- | 330 | -- | 327 | 3 |
| Cherokee | 1,240 | 837 | 695 | 544 | 243 | 16 |
| Franklin | 604 | 320 | 202 | 169 | 113 | 12 |
| Freestone | 5,030 | 661 | 339 | 265 | 100 | 143 |
| Gregg | 2,240 | 744 | 583 | 441 | 276 | 35 |
| Henderson | 7,000 | 362 | 270 | 191 | 37 | 116 |
| Hopkins | 330 | 313 | 243 | 150 | 113 | 9 |
| Houston | 1,130 | -- | -- | -- | -- | 1 |
| Leon | 563 | 478 | 271 | 211 | 168 | 15 |
| Limestone | 826 | 326 | 281 | 263 | 195 | 6 |
| Morris | 383 | 352 | 231 | 162 | 71 | 12 |
| Nacogdoches | 973 | 507 | 364 | 282 | 55 | 24 |
| Navarro | 1,840 | 1,660 | 797 | 461 | 287 | 9 |
| Rains | 6,380 | 595 | 336 | 198 | 122 | 18 |
| Rusk | 982 | 451 | 303 | 224 | 69 | 27 |
| Smith | 1,960 | 430 | 255 | 150 | 114 | 20 |
| Titus | 1,150 | 828 | 523 | 310 | 103 | 6 |
| Upshur | 2,020 | 594 | 297 | 240 | 128 | 10 |
| Van Zandt | 2,740 | 111 | 55 | 21 | 9 | 59 |
| Wood | 3,820 | 432 | 265 | 217 | 68 | 32 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

pH (units)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 9.3 | 8.3 | 7.9 | 7.4 | 4.2 | 563 |
| County | | | | | | |
| Anderson | 9.3 | 8.4 | 8.3 | 8.1 | 5.8 | 44 |
| Camp | 8.5 | -- | 7.5 | -- | 7.3 | 3 |
| Cherokee | 9.0 | 8.6 | 8.3 | 7.9 | 6.4 | 16 |
| Franklin | 8.3 | 8.0 | 7.5 | 7.1 | 5.6 | 12 |
| Freestone | 8.7 | 8.0 | 7.7 | 7.0 | 5.7 | 123 |
| Gregg | 8.9 | 8.5 | 8.2 | 8.0 | 7.1 | 28 |
| Henderson | 9.0 | 8.4 | 8.2 | 7.9 | 5.8 | 91 |
| Hopkins | 8.3 | 8.2 | 7.9 | 7.4 | 7.1 | 9 |
| Houston | 8.4 | -- | -- | -- | -- | 1 |
| Leon | 8.5 | 8.3 | 8.0 | 7.6 | 6.8 | 15 |
| Limestone | 8.4 | 7.9 | 7.8 | 7.7 | 7.5 | 6 |
| Morris | 8.2 | 8.1 | 7.7 | 6.9 | 5.4 | 12 |
| Nacogdoches | 8.8 | 8.6 | 8.2 | 7.5 | 4.2 | 24 |
| Navarro | 7.6 | 7.5 | 7.2 | 7.1 | 6.7 | 9 |
| Rains | 8.7 | 8.0 | 7.3 | 6.9 | 5.9 | 18 |
| Rusk | 8.9 | 8.5 | 8.2 | 7.4 | 4.9 | 27 |
| Smith | 8.7 | 8.2 | 8.0 | 7.5 | 6.3 | 20 |
| Titus | 8.2 | 8.0 | 7.6 | 7.1 | 6.3 | 6 |
| Upshur | 8.6 | 8.2 | 8.0 | 7.5 | 6.9 | 9 |
| Van Zandt | 8.9 | 7.9 | 7.7 | 7.3 | 5.4 | 59 |
| Wood | 8.7 | 7.9 | 7.2 | 6.9 | 5.9 | 31 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

Temperature (°C)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 36.5 | 23.5 | 22.0 | 21.0 | 14.5 | 269 |
| County | | | | | | |
| Anderson | 36.0 | 30.5 | 25.0 | 22.0 | 21.5 | 16 |
| Camp | 27.0 | -- | -- | -- | 22.5 | 2 |
| Cherokee | 28.5 | 25.0 | 22.0 | 21.0 | 20.0 | 9 |
| Franklin | 25.5 | -- | 22.0 | -- | 19.0 | 4 |
| Freestone | 26.5 | 23.5 | 23.0 | 21.5 | 14.5 | 92 |
| Gregg | 25.5 | 24.5 | 22.5 | 21.5 | 20.5 | 11 |
| Henderson | 29.0 | 23.5 | 22.0 | 21.0 | 20.0 | 49 |
| Hopkins | -- | -- | -- | -- | -- | 0 |
| Houston | 36.5 | -- | -- | -- | -- | 1 |
| Leon | 26.5 | 24.5 | 24.5 | 24.5 | 21.0 | 5 |
| Limestone | 25.0 | 24.5 | 24.0 | 24.0 | 24.0 | 6 |
| Morris | 26.5 | 25.5 | 23.0 | 20.5 | 18.5 | 10 |
| Nacogdoches | -- | -- | -- | -- | -- | 0 |
| Navarro | 23.5 | -- | -- | -- | -- | 1 |
| Rains | 28.0 | 21.0 | 20.0 | 20.0 | 14.5 | 8 |
| Rusk | 26.0 | 23.5 | 22.0 | 20.5 | 20.0 | 14 |
| Smith | 30.0 | 24.5 | 24.0 | 22.0 | 20.0 | 6 |
| Titus | 22.0 | -- | -- | -- | 20.5 | 2 |
| Upshur | 28.0 | -- | -- | -- | 22.0 | 2 |
| Van Zandt | 23.5 | 21.5 | 21.0 | 20.0 | 15.5 | 15 |
| Wood | 25.0 | 21.5 | 20.5 | 20.0 | 18.5 | 16 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

Hardness (calcium, magnesium) as calcium carbonate (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 3,800 | 110 | 34 | 14 | 1 | 612 |
| County | | | | | | |
| Anderson | 340 | 26 | 16 | 9 | 4 | 44 |
| Camp | 12 | -- | 10 | -- | 9 | 3 |
| Cherokee | 170 | 15 | 11 | 8 | 3 | 16 |
| Franklin | 80 | 44 | 17 | 11 | 6 | 12 |
| Freestone | 3,300 | 290 | 130 | 47 | 4 | 143 |
| Gregg | 170 | 25 | 8 | 4 | 2 | 35 |
| Henderson | 3,400 | 90 | 35 | 17 | 5 | 115 |
| Hopkins | 230 | 110 | 73 | 25 | 19 | 9 |
| Houston | 8 | -- | -- | -- | -- | 1 |
| Leon | 170 | 87 | 29 | 14 | 11 | 15 |
| Limestone | 260 | 170 | 54 | 28 | 16 | 6 |
| Morris | 150 | 80 | 40 | 22 | 10 | 12 |
| Nacogdoches | 470 | 27 | 14 | 11 | 6 | 24 |
| Navarro | 1,300 | 970 | 500 | 180 | 96 | 9 |
| Rains | 3,800 | 150 | 65 | 24 | 7 | 18 |
| Rusk | 150 | 63 | 10 | 6 | 4 | 27 |
| Smith | 110 | 34 | 24 | 10 | 5 | 18 |
| Titus | 690 | 96 | 58 | 27 | 24 | 6 |
| Upshur | 54 | 21 | 14 | 8 | 1 | 9 |
| Van Zandt | 2,700 | 110 | 55 | 21 | 9 | 59 |
| Wood | 3,000 | 99 | 22 | 14 | 7 | 31 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

Dissolved calcium (Ca) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 720 | 33 | 9.0 | 4.0 | 0.0 | 613 |
| County | | | | | | |
| Anderson | 110 | 6.5 | 4.0 | 2.0 | 1.0 | 44 |
| Camp | 3.0 | -- | 3.0 | -- | 2.0 | 3 |
| Cherokee | 56 | 3.0 | 2.0 | 2.0 | 1.0 | 17 |
| Franklin | 26 | 13 | 5.0 | 2.5 | 1.0 | 12 |
| Freestone | 720 | 83 | 35 | 12 | 1.0 | 143 |
| Gregg | 65 | 5.0 | 2.0 | 1.0 | .0 | 32 |
| Henderson | 670 | 24 | 9.0 | 5.0 | 1.0 | 116 |
| Hopkins | 81 | 38 | 26 | 7.5 | 5.0 | 9 |
| Houston | 3.0 | -- | -- | -- | -- | 1 |
| Leon | 50 | 25 | 10 | 4.0 | 3.0 | 15 |
| Limestone | 67 | 51 | 16 | 10 | 5.0 | 6 |
| Morris | 47 | 24 | 7.5 | 5.0 | 3.0 | 12 |
| Nacogdoches | 110 | 6.5 | 3.0 | 2.0 | 1.0 | 24 |
| Navarro | 480 | 310 | 170 | 110 | 26 | 9 |
| Rains | 660 | 46 | 17 | 7.0 | 2.0 | 18 |
| Rusk | 47 | 25 | 2.5 | 2.0 | 1.0 | 27 |
| Smith | 28 | 9.0 | 5.0 | 3.0 | 2.0 | 20 |
| Titus | 160 | 25 | 23 | 8.0 | 8.0 | 6 |
| Upshur | 16 | 5.5 | 4.5 | 3.0 | 2.0 | 8 |
| Van Zandt | 430 | 39 | 17 | 7.0 | 3.0 | 59 |
| Wood | 600 | 20 | 7.0 | 5.0 | 2.0 | 32 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

Dissolved magnesium (Mg) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 510 | 7.0 | 3.0 | 1.0 | 0.0 | 612 |
| County | | | | | | |
| Anderson | 19 | 2.5 | 2.0 | 1.2 | 1.0 | 44 |
| Camp | 1.0 | -- | 1.0 | -- | .0 | 3 |
| Cherokee | 16 | 2.0 | 1.0 | 1.0 | .0 | 17 |
| Franklin | 6.0 | 2.5 | 1.5 | 1.0 | .0 | 12 |
| Freestone | 370 | 22 | 7.0 | 4.0 | .0 | 143 |
| Gregg | 6.0 | 1.0 | .5 | .0 | .0 | 33 |
| Henderson | 450 | 5.0 | 2.5 | 1.0 | .0 | 116 |
| Hopkins | 7.0 | 4.5 | 1.5 | 1.0 | 1.0 | 9 |
| Houston | 1.0 | -- | -- | -- | -- | 1 |
| Leon | 12 | 6.0 | 2.5 | 1.0 | 1.0 | 15 |
| Limestone | 23 | 11 | 3.0 | 1.0 | 1.0 | 6 |
| Morris | 9.0 | 6.0 | 4.5 | 2.5 | 1.0 | 12 |
| Nacogdoches | 47 | 3.0 | 1.5 | 1.0 | .0 | 24 |
| Navarro | 57 | 34 | 15 | 12 | 7.0 | 9 |
| Rains | 510 | 7.5 | 3.0 | 1.5 | 1.0 | 18 |
| Rusk | 13 | 1.0 | 1.0 | 1.0 | 1.0 | 25 |
| Smith | 10 | 2.5 | 1.5 | 1.0 | .0 | 20 |
| Titus | 72 | 8.0 | 5.0 | 2.0 | 1.0 | 6 |
| Upshur | 3.0 | 1.5 | 1.0 | .0 | .0 | 8 |
| Van Zandt | 410 | 7.0 | 3.0 | 1.0 | 1.0 | 59 |
| Wood | 380 | 5.0 | 2.0 | 110 | 1.0 | 32 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

Dissolved sodium (Na) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 1,400 | 170 | 98 | 52 | 2.0 | 618 |
| County | | | | | | |
| Anderson | 470 | 320 | 180 | 77 | 10 | 44 |
| Camp | 200 | -- | 130 | -- | 121 | 3 |
| Cherokee | 510 | 360 | 280 | 190 | 12 | 17 |
| Franklin | 240 | 110 | 71 | 41 | 17 | 12 |
| Freestone | 1,400 | 140 | 79 | 48 | 2.0 | 143 |
| Gregg | 880 | 320 | 250 | 120 | 22 | 35 |
| Henderson | 1,100 | 130 | 94 | 48 | 2.0 | 116 |
| Hopkins | 120 | 99 | 20 | 6.5 | 5.0 | 9 |
| Houston | 460 | -- | -- | -- | -- | 1 |
| Leon | 240 | 200 | 79 | 45 | 22 | 15 |
| Limestone | 200 | 120 | 82 | 62 | 45 | 6 |
| Morris | 150 | 110 | 75 | 23 | 4.0 | 12 |
| Nacogdoches | 420 | 170 | 130 | 83 | 3.0 | 24 |
| Navarro | 240 | 260 | 140 | 63 | 45 | 9 |
| Rains | 710 | 170 | 92 | 28 | 5.0 | 18 |
| Rusk | 400 | 190 | 110 | 32 | 2.0 | 27 |
| Smith | 770 | 180 | 84 | 41 | 24 | 20 |
| Titus | 330 | 240 | 110 | 92 | 11 | 6 |
| Upshur | 770 | 230 | 120 | 88 | 37 | 10 |
| Van Zandt | 300 | 110 | 70 | 46 | 3.0 | 59 |
| Wood | 300 | 130 | 100 | 61 | 8.0 | 32 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

Bicarbonate ($HCO_3$) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 1,000 | 330 | 220 | 160 | 0 | 618 |
| County | | | | | | |
| Anderson | 1,000 | 620 | 420 | 200 | 22 | 44 |
| Camp | 420 | -- | 280 | -- | 250 | 3 |
| Cherokee | 990 | 860 | 710 | 370 | 100 | 17 |
| Franklin | 390 | 250 | 190 | 72 | 48 | 12 |
| Freestone | 840 | 300 | 230 | 170 | 6 | 143 |
| Gregg | 740 | 600 | 540 | 410 | 140 | 35 |
| Henderson | 480 | 240 | 190 | 130 | 6 | 116 |
| Hopkins | 280 | 220 | 200 | 100 | 21 | 9 |
| Houston | 1,100 | -- | -- | -- | -- | 1 |
| Leon | 580 | 470 | 200 | 150 | 87 | 15 |
| Limestone | 250 | 250 | 240 | 180 | 170 | 6 |
| Morris | 360 | 330 | 240 | 120 | 1 | 12 |
| Nacogdoches | 990 | 400 | 280 | 180 | 0 | 24 |
| Navarro | 590 | 530 | 290 | 130 | 91 | 9 |
| Rains | 390 | 260 | 200 | 120 | 29 | 18 |
| Rusk | 700 | 380 | 260 | 130 | 6 | 27 |
| Smith | 750 | 410 | 160 | 120 | 45 | 20 |
| Titus | 410 | 290 | 230 | 160 | 17 | 6 |
| Upshur | 400 | 310 | 210 | 180 | 120 | 10 |
| Van Zandt | 450 | 230 | 170 | 130 | 8 | 59 |
| Wood | 440 | 300 | 220 | 150 | 14 | 32 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

| Area | Dissolved chloride (Cl) (milligrams per liter) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 2,400 | 71 | 23 | 10 | 1.0 | 618 |
| County | | | | | | |
| Anderson | 430 | 82 | 22 | 10 | 4.0 | 44 |
| Camp | 66 | -- | 32 | -- | 18 | 3 |
| Cherokee | 220 | 37 | 17 | 11 | 8.0 | 17 |
| Franklin | 160 | 30 | 15 | 5.5 | 4.0 | 12 |
| Freestone | 1,900 | 160 | 39 | 20 | 6.0 | 143 |
| Gregg | 960 | 390 | 34 | 13 | 8.0 | 35 |
| Henderson | 2,400 | 58 | 25 | 11 | 3.0 | 116 |
| Hopkins | 40 | 39 | 26 | 10 | 3.0 | 9 |
| Houston | 100 | -- | -- | -- | -- | 1 |
| Leon | 64 | 39 | 14 | 8.0 | 5.0 | 15 |
| Limestone | 220 | 37 | 33 | 14 | 12 | 6 |
| Morris | 47 | 27 | 13 | 6.0 | 5.0 | 12 |
| Nacogdoches | 190 | 16 | 9.0 | 6.0 | 2.0 | 24 |
| Navarro | 470 | 202 | 110 | 94 | 40 | 9 |
| Rains | 1,600 | 79 | 38 | 13 | 7.0 | 18 |
| Rusk | 220 | 19 | 12 | 5.0 | 3.0 | 27 |
| Smith | 820 | 26 | 14 | 8.0 | 3.0 | 20 |
| Titus | 320 | 280 | 110 | 20 | 7.0 | 6 |
| Upshur | 1,100 | 140 | 22 | 13 | 2.0 | 10 |
| Van Zandt | 200 | 65 | 27 | 8.0 | 1.0 | 59 |
| Wood | 1,600 | 56 | 18 | 8.5 | 4.0 | 32 |

See footnotes at end of table.

Table 1.--Summary of chemical analyses of water from the Wilcox Group--Continued

| Area | Dissolved sulfate ($SO_4$) (milligrams per liter) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 2,900 | 44 | 19 | 7.0 | 0.0 | 617 |
| County | | | | | | |
| Anderson | 260 | 16 | 6.5 | 4.0 | .0 | 44 |
| Camp | 48 | -- | 10 | -- | 4.0 | 3 |
| Cherokee | 190 | 45 | 4.5 | 4.0 | 1.0 | 16 |
| Franklin | 90 | 17 | 5.5 | 4.0 | .0 | 12 |
| Freestone | 1,400 | 61 | 30 | 14 | 4.0 | 143 |
| Gregg | 150 | 34 | 23 | 14 | .0 | 35 |
| Henderson | 2,900 | 42 | 16 | 6.5 | 2.0 | 116 |
| Hopkins | 45 | 34 | 16 | 4.0 | 4.0 | 9 |
| Houston | 4.0 | -- | -- | -- | -- | 1 |
| Leon | 180 | 45 | 12 | 4.0 | .0 | 15 |
| Limestone | 170 | 33 | 33 | 12 | 8.0 | 6 |
| Morris | 40 | 32 | 15 | 12 | 4.0 | 12 |
| Nacogdoches | 250 | 49 | 14 | 6.0 | .0 | 24 |
| Navarro | 760 | 580 | 97 | 55 | 37 | 9 |
| Rains | 2,700 | 47 | 15 | 5.0 | 4.0 | 18 |
| Rusk | 150 | 26 | 17 | 7.0 | 4.0 | 27 |
| Smith | 65 | 29 | 19 | 11 | 4.0 | 20 |
| Titus | 440 | 59 | 25 | 5.5 | 4.0 | 6 |
| Upshur | 44 | 34 | 30 | 19 | 7.0 | 10 |
| Van Zandt | 2,700 | 72 | 32 | 10 | .0 | 59 |
| Wood | 940 | 63 | 18 | 5.0 | .0 | 32 |

[1] Upper quartile - 75 percent of the samples had a concentration less than the amount shown.
[2] Median - 50 percent of the samples had a concentration less than the amount shown.
[3] Lower quartile - 25 percent of the samples had a concentration less than the amount shown.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand

Dissolved solids, residue on evaporation (ROE) at 180°C (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 961 | 455 | 263 | 169 | 29 | 220 |
| County | | | | | | |
| Anderson | 566 | 263 | 192 | 160 | 35 | 32 |
| Camp | 251 | -- | -- | -- | 92 | 2 |
| Cherokee | 780 | 499 | 457 | 290 | 33 | 58 |
| Freestone | 867 | 361 | 285 | 260 | 127 | 5 |
| Gregg | 886 | -- | 419 | -- | 375 | 4 |
| Henderson | 366 | 239 | 144 | 100 | 41 | 14 |
| Hopkins | -- | -- | -- | -- | -- | 0 |
| Houston | 961 | 466 | 368 | 338 | 178 | 12 |
| Leon | 310 | 252 | 222 | 180 | 149 | 8 |
| Nacogdoches | 575 | 293 | 184 | 148 | 29 | 45 |
| Rusk | 287 | -- | 72 | -- | 56 | 4 |
| Smith | 394 | 264 | 189 | 146 | 105 | 19 |
| Upshur | 920 | -- | 728 | -- | 338 | 4 |
| Van Zandt | 273 | -- | 148 | -- | 101 | 4 |
| Wood | 619 | 540 | 222 | 149 | 107 | 8 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

pH (units)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 9.4 | 8.2 | 7.8 | 7.1 | 3.6 | 207 |
| County | | | | | | |
| Anderson | 9.4 | 8.2 | 7.7 | 7.2 | 5.0 | 31 |
| Camp | 7.6 | -- | -- | -- | 6.7 | 2 |
| Cherokee | 8.8 | 8.4 | 8.0 | 7.7 | 5.5 | 55 |
| Freestone | 8.4 | 7.2 | 7.2 | 5.9 | 5.8 | 5 |
| Gregg | 8.6 | -- | 8.4 | -- | 7.4 | 4 |
| Henderson | 8.4 | 8.2 | 8.0 | 6.8 | 6.7 | 11 |
| Hopkins | 6.2 | -- | -- | -- | -- | 1 |
| Houston | 8.5 | 8.4 | 8.1 | 7.8 | 7.7 | 12 |
| Leon | 8.1 | 7.9 | 7.7 | 7.3 | 6.8 | 8 |
| Nacogdoches | 8.8 | 8.0 | 7.1 | 6.3 | 3.6 | 45 |
| Rusk | 7.0 | -- | 6.7 | -- | 6.4 | 4 |
| Smith | 8.7 | 8.4 | 8.0 | 7.7 | 7.1 | 17 |
| Upshur | 8.0 | -- | -- | -- | 7.9 | 2 |
| Van Zandt | 8.1 | -- | 7.8 | -- | 7.6 | 4 |
| Wood | 7.8 | 7.1 | 6.7 | 6.4 | 5.9 | 6 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

Temperature (°C)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 29.0 | 24.0 | 23.0 | 21.0 | 12.0 | 70 |
| County | | | | | | |
| Anderson | 29.0 | 23.5 | 22.0 | 20.0 | 19.5 | 13 |
| Camp | -- | -- | -- | -- | -- | 0 |
| Cherokee | 28.5 | 24.0 | 23.0 | 22.0 | 21.0 | 32 |
| Freestone | 25.5 | -- | 23.0 | -- | 20.0 | 3 |
| Gregg | -- | -- | -- | -- | -- | 0 |
| Henderson | 23.5 | -- | 23.5 | -- | 20.5 | 4 |
| Hopkins | -- | -- | -- | -- | -- | 0 |
| Houston | 26.5 | 25.0 | 24.5 | 23.0 | 20.0 | 6 |
| Leon | 23.5 | -- | -- | -- | 12.0 | 2 |
| Nacogdoches | -- | -- | -- | -- | -- | 0 |
| Rusk | 23.0 | -- | -- | -- | 19.0 | 2 |
| Smith | -- | -- | -- | -- | -- | 0 |
| Upshur | -- | -- | -- | -- | -- | 0 |
| Van Zandt | 25.0 | -- | -- | -- | 20.2 | 2 |
| Wood | 19.5 | -- | -- | -- | 18.5 | 2 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

Hardness (calcium, magnesium) as calcium carbonate (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 390 | 48 | 18 | 8 | 2 | 217 |
| County | | | | | | |
| Anderson | 170 | 64 | 33 | 16 | 3 | 31 |
| Camp | 38 | -- | -- | -- | 17 | 2 |
| Cherokee | 160 | 19 | 11 | 7 | 2 | 58 |
| Freestone | 200 | 160 | 110 | 49 | 17 | 5 |
| Gregg | 35 | -- | 7 | -- | 4 | 4 |
| Henderson | 200 | 49 | 36 | 12 | 10 | 14 |
| Hopkins | 39 | -- | -- | -- | -- | 1 |
| Houston | 72 | 20 | 9 | 4 | 3 | 11 |
| Leon | 160 | 50 | 29 | 15 | 2 | 8 |
| Nacogdoches | 180 | 75 | 15 | 7 | 2 | 45 |
| Rusk | 85 | -- | 46 | -- | 21 | 4 |
| Smith | 91 | 29 | 22 | 5 | 3 | 18 |
| Upshur | 100 | -- | 35 | -- | 15 | 4 |
| Van Zandt | 160 | -- | 64 | -- | 15 | 4 |
| Wood | 390 | 260 | 78 | 52 | 30 | 8 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

Dissolved calcium (Ca) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 160 | 13 | 5.0 | 2.0 | 0.0 | 214 |
| County | | | | | | |
| Anderson | 35 | 14 | 7.0 | 4.0 | 1.0 | 32 |
| Camp | 14 | -- | -- | -- | 5.0 | 2 |
| Cherokee | 53 | 4.0 | 2.0 | 1.0 | 1.0 | 58 |
| Freestone | 68 | 47 | 35 | 16 | 5.0 | 5 |
| Gregg | 9.0 | -- | 2.5 | -- | 1.0 | 4 |
| Henderson | 75 | 19 | 9.5 | 4.0 | 2.0 | 14 |
| Hopkins | -- | -- | -- | -- | -- | 0 |
| Houston | 160 | 4.5 | 2.0 | 1.0 | .0 | 12 |
| Leon | 45 | 13 | 7.5 | 4.0 | 1.0 | 8 |
| Nacogdoches | 56 | 15 | 3.0 | 2.0 | 1.0 | 45 |
| Rusk | 26 | -- | 23 | -- | 7.0 | 4 |
| Smith | 23 | 12 | 6.0 | 2.0 | 1.0 | 19 |
| Upshur | 32 | -- | 12 | -- | 4.0 | 3 |
| Van Zandt | -- | -- | -- | -- | -- | 0 |
| Wood | 100 | 65 | 21 | 8.5 | 7.0 | 8 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

Dissolved magnesium (Mg) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 77 | 4.0 | 2.0 | 1.0 | 0.0 | 217 |
| County | | | | | | |
| Anderson | 9.0 | 5.5 | 3.0 | 2.0 | 1.0 | 31 |
| Camp | 1.0 | -- | -- | -- | 1.0 | 2 |
| Cherokee | 15 | 2.0 | 1.0 | 1.0 | .0 | 58 |
| Freestone | 9.0 | 8.0 | 6.0 | 2.0 | 1.0 | 5 |
| Gregg | 4.0 | -- | 1.5 | -- | .0 | 4 |
| Henderson | 15 | 4.5 | 1.5 | 1.0 | .0 | 14 |
| Hopkins | -- | -- | -- | -- | -- | 0 |
| Houston | 77 | 1.5 | 1.0 | .0 | .0 | 12 |
| Leon | 12 | 4.5 | 2.5 | 1.0 | .0 | 8 |
| Nacogdoches | 14 | 8.5 | 2.0 | 1.0 | .0 | 45 |
| Rusk | 5.0 | -- | 1.5 | -- | 1.0 | 4 |
| Smith | 8.0 | 2.5 | 2.0 | 1.0 | 1.0 | 18 |
| Upshur | 6.0 | -- | 3.0 | -- | 1.0 | 4 |
| Van Zandt | 3.0 | -- | 1.0 | -- | 1.0 | 4 |
| Wood | 31 | 25 | 9.0 | 5.0 | 3.0 | 8 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

| Area | Dissolved sodium (Na) (milligrams per liter) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 360 | 150 | 66 | 33 | 1.0 | 220 |
| County | | | | | | |
| Anderson | 240 | 88 | 58 | 35 | 5.0 | 32 |
| Camp | 72 | -- | -- | -- | 8.0 | 2 |
| Cherokee | 350 | 200 | 180 | 110 | 1.0 | 58 |
| Freestone | 350 | 37 | 32 | 29 | 19 | 5 |
| Gregg | 340 | -- | 170 | -- | 150 | 4 |
| Henderson | 130 | 60 | 27 | 12 | 4.0 | 14 |
| Hopkins | 4.0 | -- | -- | -- | -- | 1 |
| Houston | 210 | 160 | 150 | 120 | 41 | 12 |
| Leon | 100 | 97 | 65 | 48 | 23 | 8 |
| Nacogdoches | 240 | 88 | 55 | 20 | 3.0 | 45 |
| Rusk | 43 | -- | 5.5 | -- | 3.0 | 4 |
| Smith | 140 | 99 | 64 | 43 | 20 | 19 |
| Upshur | 360 | -- | 170 | -- | 130 | 4 |
| Van Zandt | 64 | -- | 21 | -- | 3.0 | 4 |
| Wood | 81 | 53 | 33 | 22 | 17 | 8 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

Bicarbonate ($HCO_3$) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 580 | 320 | 160 | 100 | 0 | 220 |
| County | | | | | | |
| Anderson | 550 | 210 | 160 | 120 | 4 | 32 |
| Camp | 150 | -- | -- | -- | 46 | 2 |
| Cherokee | 390 | 220 | 190 | 81 | 3 | 58 |
| Freestone | 350 | 37 | 32 | 29 | 19 | 5 |
| Gregg | 340 | -- | 170 | -- | 150 | 4 |
| Henderson | 240 | 160 | 120 | 58 | 12 | 14 |
| Hopkins | 16 | -- | -- | -- | -- | 1 |
| Houston | 460 | 390 | 330 | 280 | 150 | 12 |
| Leon | 310 | 220 | 170 | 150 | 100 | 8 |
| Nacogdoches | 580 | 180 | 110 | 60 | 0 | 45 |
| Rusk | 55 | -- | 29 | -- | 23 | 4 |
| Smith | 330 | 240 | 160 | 120 | 92 | 19 |
| Upshur | 430 | -- | 300 | -- | 280 | 4 |
| Van Zandt | 150 | -- | 120 | -- | 95 | 4 |
| Wood | 120 | 120 | 53 | 14 | 4 | 8 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

Dissolved chloride (Cl) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 390 | 21 | 12 | 7.0 | 2.0 | 217 |
| County | | | | | | |
| Anderson | 80 | 17 | 7.0 | 6.0 | 5.0 | 32 |
| Camp | 45 | -- | -- | -- | 7.0 | 2 |
| Cherokee | 65 | 25 | 19 | 13 | 2.0 | 57 |
| Freestone | 120 | 67 | 49 | 23 | 17 | 5 |
| Gregg | 380 | -- | 9.5 | -- | 8.0 | 4 |
| Henderson | 190 | 21 | 9.0 | 5.0 | 4.0 | 14 |
| Hopkins | -- | -- | -- | -- | -- | 0 |
| Houston | 86 | 20 | 16 | 8.5 | 6.0 | 12 |
| Leon | 16 | 12 | 11 | 8.5 | 6.0 | 8 |
| Nacogdoches | 52 | 16 | 11 | 7.5 | 2.0 | 45 |
| Rusk | 90 | -- | 9.5 | -- | 6.0 | 4 |
| Smith | 43 | 18 | 10 | 6.0 | 3.0 | 19 |
| Upshur | 390 | -- | 240 | -- | 11 | 4 |
| Van Zandt | 13 | -- | 7.0 | -- | 6.0 | 3 |
| Wood | 79 | 51 | 26 | 14 | 6.0 | 8 |

See footnotes at end of table.

Table 2.--Summary of chemical analyses of water from the Carrizo Sand--Continued

| Area | Dissolved sulfate ($SO_4$) (milligrams per liter) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 400 | 45 | 20 | 11 | 0.0 | 219 |
| County | | | | | | |
| Anderson | 150 | 29 | 15 | 13 | 4.0 | 32 |
| Camp | 42 | -- | -- | -- | 6.0 | 2 |
| Cherokee | 220 | 54 | 40 | 5.5 | 2.0 | 57 |
| Freestone | 38 | 26 | 18 | 5.0 | 4.0 | 5 |
| Gregg | 23 | -- | 15 | -- | 13 | 4 |
| Henderson | 40 | 18 | 12 | 7.5 | 5.0 | 14 |
| Hopkins | 25 | -- | -- | -- | -- | 1 |
| Houston | 400 | 53 | 32 | 23 | 11 | 12 |
| Leon | 55 | 25 | 22 | 13 | 4.0 | 8 |
| Nacogdoches | 140 | 55 | 25 | 16 | .0 | 45 |
| Rusk | 16 | -- | 5.5 | -- | 4.0 | 4 |
| Smith | 99 | 22 | 12 | 9.0 | 7.0 | 19 |
| Upshur | 39 | -- | 21 | -- | 4.0 | 4 |
| Van Zandt | 60 | -- | 4.5 | -- | 2.0 | 4 |
| Wood | 270 | 90 | 50 | 30 | 2.0 | 8 |

[1] Upper quartile - 75 percent of the samples had a concentration less than the amount shown.
[2] Median - 50 percent of the samples had a concentration less than the amount shown.
[3] Lower quartile - 25 percent of the samples had a concentration less than the amount shown.

Table 3.--Summary of chemical analyses of water from the Queen City Sand

Dissolved solids, residue on evaporation (ROE) at 180°C (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 8,200 | 277 | 164 | 106 | 23 | 266 |
| County | | | | | | |
| Anderson | 733 | 229 | 168 | 107 | 56 | 51 |
| Cherokee | 806 | 247 | 142 | 97 | 39 | 55 |
| Franklin | 107 | -- | -- | -- | -- | 1 |
| Freestone | 385 | 244 | 194 | 164 | 141 | 5 |
| Gregg | 1,060 | 368 | 174 | 118 | 65 | 7 |
| Henderson | 8,200 | 394 | 182 | 122 | 39 | 42 |
| Houston | 515 | 393 | 252 | 218 | 129 | 11 |
| Leon | 554 | 336 | 277 | 251 | 102 | 11 |
| Nacogdoches | 657 | 585 | 431 | 204 | 80 | 6 |
| Rusk | 371 | -- | -- | -- | -- | 1 |
| Smith | 255 | 143 | 124 | 79 | 41 | 17 |
| Upshur | 631 | 227 | 138 | 75 | 30 | 20 |
| Van Zandt | 615 | 462 | 177 | 140 | 85 | 7 |
| Wood | 1,610 | 213 | 152 | 88 | 23 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

pH (units)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 9.0 | 7.5 | 6.8 | 6.1 | 4.0 | 239 |
| County | | | | | | |
| Anderson | 8.0 | 7.0 | 6.5 | 6.0 | 4.0 | 51 |
| Cherokee | 9.0 | 7.0 | 7.0 | 6.0 | 5.0 | 51 |
| Franklin | 5.0 | -- | -- | -- | -- | 1 |
| Freestone | 8.0 | 7.0 | 7.0 | 7.0 | 6.0 | 6 |
| Gregg | 8.0 | 7.0 | 7.0 | 6.5 | 6.0 | 6 |
| Henderson | 8.0 | 7.0 | 7.0 | 6.0 | 5.0 | 24 |
| Houston | 8.5 | 8.0 | 8.0 | 7.0 | 6.0 | 11 |
| Leon | 8.0 | 8.0 | 8.0 | 7.0 | 6.0 | 11 |
| Nacogdoches | 8.0 | 8.0 | 7.0 | 6.0 | 6.0 | 6 |
| Rusk | 7.0 | -- | -- | -- | -- | 1 |
| Smith | 8.0 | 7.0 | 7.0 | 6.0 | 5.0 | 16 |
| Upshur | 8.0 | 8.0 | 6.0 | 5.0 | 4.5 | 17 |
| Van Zandt | 8.0 | 8.0 | 7.5 | 6.5 | 6.0 | 7 |
| Wood | 8.0 | 7.0 | 7.0 | 6.0 | 5.0 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

| Area | Temperature (°C) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 35.0 | 23.5 | 21.5 | 20.0 | 14.5 | 96 |
| County | | | | | | |
| Anderson | 26.0 | 23.5 | 21.5 | 19.5 | 19.0 | 18 |
| Cherokee | 24.5 | 22.0 | 21.0 | 20.0 | 19.0 | 31 |
| Franklin | 18.5 | -- | -- | -- | -- | 1 |
| Freestone | 21.5 | -- | -- | -- | 15.5 | 2 |
| Gregg | 21.5 | -- | 21.5 | -- | 21.0 | 4 |
| Henderson | 25.5 | 24.0 | 21.5 | 20.5 | 20.0 | 10 |
| Houston | 35.0 | 31.0 | 25.5 | 23.5 | 23.5 | 6 |
| Leon | 24.0 | 24.0 | 23.5 | 23.5 | 22.0 | 8 |
| Nacogdoches | -- | -- | -- | -- | -- | 0 |
| Rusk | -- | -- | -- | -- | -- | 0 |
| Smith | 24.0 | 22.0 | 20.0 | 19.0 | 18.0 | 5 |
| Upshur | 26.5 | 25.0 | 24.0 | 22.0 | 21.0 | 5 |
| Van Zandt | 23.5 | -- | -- | -- | 24.0 | 2 |
| Wood | 21.5 | -- | 19.5 | -- | 14.5 | 4 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

Hardness (calcium, magnesium) as calcium carbonate (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 3,320 | 100 | 55 | 23 | 2.0 | 265 |
| County | | | | | | |
| Anderson | 460 | 100 | 55 | 33 | 4.0 | 51 |
| Cherokee | 530 | 110 | 64 | 19 | 4.0 | 54 |
| Franklin | 42 | -- | -- | -- | -- | 1 |
| Freestone | 150 | 110 | 110 | 90 | 68 | 6 |
| Gregg | 86 | 62 | 46 | 22 | 6.0 | 7 |
| Henderson | 3,320 | 140 | 75 | 40 | 13 | 42 |
| Houston | 94 | 64 | 9.0 | 3.0 | 2.0 | 11 |
| Leon | 200 | 170 | 120 | 59 | 26 | 11 |
| Nacogdoches | 160 | 37 | 31 | 21 | 6.0 | 6 |
| Rusk | 200 | -- | -- | -- | -- | 1 |
| Smith | 150 | 66 | 52 | 26 | 14 | 17 |
| Upshur | 180 | 28 | 20 | 10 | 6.0 | 20 |
| Van Zandt | 350 | 290 | 180 | 100 | 25 | 7 |
| Wood | 940 | 82 | 34 | 17 | 9.0 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

| Area | Dissolved calcium (Ca) (milligrams per liter) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 470 | 31 | 15 | 6.0 | 0.0 | 263 |
| County | | | | | | |
| Anderson | 160 | 34 | 16 | 6.0 | 1.0 | 51 |
| Cherokee | 130 | 33 | 20 | 3.0 | 1.0 | 55 |
| Franklin | 12 | -- | -- | -- | -- | 1 |
| Freestone | 48 | 47 | 30 | 26 | 24 | 6 |
| Gregg | 20 | 16 | 8.5 | 5.5 | 2 | 7 |
| Henderson | 470 | 51 | 21 | 10 | .0 | 42 |
| Houston | 26 | 15 | 6.5 | 1.0 | 1.0 | 11 |
| Leon | 56 | 49 | 35 | 18 | 9 | 11 |
| Nacogdoches | 42 | 27 | 7.5 | 2.0 | 2.0 | 6 |
| Rusk | 73 | -- | -- | -- | -- | 1 |
| Smith | 60 | 19 | 14 | 5.5 | 3.0 | 17 |
| Upshur | 44 | 12 | 6.0 | 2.0 | 1.0 | 17 |
| Van Zandt | 110 | 90 | 68 | 35 | 6.0 | 7 |
| Wood | 220 | 30 | 11 | 4.0 | 2.0 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

Dissolved magnesium (Mg) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 530 | 7.0 | 3.0 | 1.0 | 0.0 | 265 |
| County | | | | | | |
| Anderson | 20 | 9.0 | 4.0 | 2.0 | 1.0 | 51 |
| Cherokee | 72 | 4.0 | 2.0 | 1.0 | .0 | 55 |
| Franklin | 2.0 | -- | -- | -- | -- | 1 |
| Freestone | 9.0 | 7.5 | 4.5 | 2.0 | 1.0 | 6 |
| Gregg | 10 | 5.0 | 1.5 | 1.0 | 1.0 | 7 |
| Henderson | 530 | 8.5 | 5.0 | 2.0 | 1.0 | 42 |
| Houston | 7.0 | 6.0 | 1.0 | 1.0 | 1.0 | 11 |
| Leon | 15 | 13 | 4.0 | 2.5 | 1.0 | 11 |
| Nacogdoches | 14 | 3.5 | 2.5 | 2.0 | 1.0 | 6 |
| Rusk | 6.0 | -- | -- | -- | -- | 1 |
| Smith | 8.0 | 5.5 | 3.0 | 2.0 | 1.0 | 17 |
| Upshur | 17 | 3.0 | 2.0 | 1.0 | .0 | 19 |
| Van Zandt | 31 | 11 | 4.0 | 2.5 | 1.0 | 7 |
| Wood | 94 | 4.0 | 2.0 | 1.0 | 1.0 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

| Area | Dissolved sodium (Na) (milligrams per liter) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 1,400 | 52 | 16 | 7.5 | 1.0 | 266 |
| County | | | | | | |
| Anderson | 100 | 24 | 15 | 8.0 | 3.0 | 51 |
| Cherokee | 210 | 29 | 11 | 6.0 | 2.0 | 55 |
| Franklin | 8.0 | -- | -- | -- | -- | 1 |
| Freestone | 88 | 54 | 14 | 8.0 | 6.0 | 6 |
| Gregg | 420 | 130 | 17 | 7.0 | 2.0 | 7 |
| Henderson | 1,400 | 100 | 22 | 9.5 | 3.0 | 42 |
| Houston | 200 | 150 | 100 | 58 | 13 | 11 |
| Leon | 210 | 84 | 54 | 24 | 10 | 11 |
| Nacogdoches | 260 | 230 | 120 | 14 | 10 | 6 |
| Rusk | 13 | -- | -- | -- | -- | 1 |
| Smith | 34 | 21 | 8.0 | 5.0 | 3.0 | 17 |
| Upshur | 250 | 72 | 17 | 2.5 | 1.0 | 20 |
| Van Zandt | 65 | 38 | 12 | 5.5 | 4.0 | 7 |
| Wood | 150 | 43 | 15 | 4.0 | 1.0 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

Bicarbonate ($HCO_3$) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 670 | 140 | 68 | 21 | 0 | 265 |
| County | | | | | | |
| Anderson | 360 | 130 | 53 | 17 | 0 | 51 |
| Cherokee | 490 | 160 | 82 | 220 | 0 | 55 |
| Franklin | 10 | -- | -- | -- | -- | 1 |
| Freestone | 170 | 120 | 100 | 86 | 22 | 6 |
| Gregg | 540 | 250 | 120 | 33 | 5 | 7 |
| Henderson | 290 | 100 | 49 | 28 | 3 | 41 |
| Houston | 420 | 330 | 230 | 180 | 35 | 11 |
| Leon | 410 | 210 | 190 | 130 | 16 | 11 |
| Nacogdoches | 670 | 510 | 280 | 37 | 27 | 6 |
| Rusk | 77 | -- | -- | -- | -- | 1 |
| Smith | 170 | 84 | 35 | 9 | 4 | 17 |
| Upshur | 330 | 150 | 18 | 6 | 0 | 20 |
| Van Zandt | 310 | 200 | 140 | 67 | 27 | 7 |
| Wood | 220 | 94 | 39 | 12 | 1 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

Dissolved chloride (Cl) (milligrams per liter)

| Area | Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 1,900 | 28 | 14 | 8.0 | 0.0 | 266 |
| County | | | | | | |
| Anderson | 170 | 30 | 16 | 10 | 3.0 | 51 |
| Cherokee | 180 | 17 | 11 | 7.0 | 3.0 | 55 |
| Franklin | 12 | -- | -- | -- | -- | 1 |
| Freestone | 170 | 21 | 15 | 13 | 5.0 | 6 |
| Gregg | 420 | 21 | 12 | 7.5 | 3.0 | 7 |
| Henderson | 1,900 | 140 | 35 | 11 | 4.0 | 42 |
| Houston | 26 | 17 | 15 | 9.0 | 4.0 | 11 |
| Leon | 120 | 72 | 38 | 27 | .0 | 11 |
| Nacogdoches | 32 | 22 | 19 | 15 | 9.0 | 6 |
| Rusk | 26 | -- | -- | -- | -- | 1 |
| Smith | 70 | 16 | 8.0 | 5.0 | 4.0 | 17 |
| Upshur | 190 | 25 | 14 | 5.0 | 2.0 | 20 |
| Van Zandt | 76 | 29 | 20 | 12 | 7.0 | 7 |
| Wood | 200 | 33 | 8.5 | 4.0 | 1.0 | 31 |

See footnotes at end of table.

Table 3.--Summary of chemical analyses of water from the Queen City Sand--Continued

| Area | Dissolved sulfate ($SO_4$) (milligrams per liter) Maximum | Upper quartile[1] | Median[2] | Lower quartile[3] | Minimum | No. of samples |
|---|---|---|---|---|---|---|
| Region | 3,700 | 34 | 14 | 80 | 0.0 | 266 |
| County | | | | | | |
| Anderson | 190 | 30 | 15 | 4.0 | .0 | 51 |
| Cherokee | 270 | 34 | 12 | 5.0 | 4.0 | 55 |
| Franklin | 13 | -- | -- | -- | -- | 1 |
| Freestone | 34 | 22 | 15 | 8.5 | 3.0 | 6 |
| Gregg | 40 | 29 | 26 | 17 | 5.0 | 7 |
| Henderson | 3,700 | 36 | 9.5 | 5.0 | 4.0 | 42 |
| Houston | 75 | 56 | 27 | 11 | 4.0 | 11 |
| Leon | 120 | 72 | 38 | 27 | .0 | 11 |
| Nacogdoches | 140 | 64 | 35 | 14 | 6.0 | 6 |
| Rusk | 130 | -- | -- | -- | -- | 1 |
| Smith | 40 | 25 | 15 | 6.5 | 4.0 | 17 |
| Upshur | 53 | 28 | 8 | 3.5 | .0 | 20 |
| Van Zandt | 290 | 100 | 20 | 4.5 | 4.0 | 7 |
| Wood | 750 | 33 | 12 | 6.0 | 1.0 | 31 |

[1] Upper quartile - 75 percent of the samples had a concentration less than the amount shown.
[2] Median - 50 percent of the samples had a concentration less than the amount shown.
[3] Lower quartile - 25 percent of the samples had a concentration less than the amount shown.

WATER-QUALITY AND STREAMFLOW DATA FROM SURFACE-WATER COLLECTION SITES

Table 4.--Locations of surface-water data-collection sites

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Keechi Salt Dome | |
| 1 | Unnamed tributary to Beaver Creek at State Highway 19 near Montalba | Lat. 31°54'48", long. 95°44'13", Anderson County, at culvert on State Highway 19, 2.7 miles north of Montalba. | |
| 2 | Unnamed tributary to Beaver Creek near Montalba | Lat. 31°53'12", long. 95°47'19", Anderson County, at culvert on county road, 3.5 miles northwest of Montalba. | |
| 3 | Lake Creek at FM 321 near Montalba | Lat. 31°52'29", long. 95°44'41", Anderson County, at culvert on FM 321, 0.8 mile west of Montalba. | |
| 4 | Unnamed tributary to Lake Creek at State Highway 19 near Montalba | Lat. 31°51'25", long. 95°43'05", Anderson County, at culvert on State Highway 19, 1.8 miles southeast of Montalba. | |
| 5 | Lake Creek above U.S. Highway 287 near Montalba | Lat. 31°49'33", long. 95°45'51", Anderson County, at bridge on county road, 1.3 miles northeast of U.S. Highway 287, and 4.4 miles southeast of Montalba. | |
| 6 | Keechi Creek at FM 321 near Montalba | Lat. 31°52'37", long. 95°42'18", Anderson County, at culvert on FM 321, 2.0 miles east of Montalba. | |
| 7 | Keechi Creek at State Highway 19 near Montalba | Lat. 31°50'23", long. 95°42'20", Anderson County, at culvert on State Highway 19, 3.3 miles southeast of Montalba. | |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Keechi Salt Dome--Continued | |
| 8 | Sixmile Branch at State Highway 19 near Montalba | Lat. 31°49'08", long. 95°41'45", Anderson County, at bridge on State Highway 19, 4.5 miles southeast of Montalba. | |
| 9 | Fivemile Branch at State Highway 19 near Palestine | Lat. 31°48'34", long. 95°41'24", Anderson County, at culvert on State Highway 19, 5.0 miles northwest of Palestine. | |
| 10 | Keechi Creek at U.S. Highway 287 near Montalba | Lat. 31°48'17", long. 95°44'07", Anderson County, at bridge on U.S. Highway 287, 5.1 miles south of Montalba. | |
| 11 | Mound Prairie Creek near Montalba | Lat. 31°53'36", long. 95°39'25", Anderson County, at bridge on county road, 4.7 miles east of Montalba. | |
| 12 | Mound Prairie Creek at State Highway 155 near Palestine | Lat. 31°50'38", long. 95°35'09", Anderson County, at bridge on State Highway 155, 6.5 miles northeast of Palestine. | |
| 13 | Wells Creek at State Highway 155 at Palestine | Lat. 31°46'55", long. 95°37'22", Anderson County, at culvert on State Highway 155, 0.4 mile northeast of Loop 256 in Palestine. | Site is located in an area of urban development. |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Mount Sylvan Salt Dome | |
| 1 | Prairie Creek at State Highway 110 near Mount Sylvan | Lat. 32°25'54", long. 95°24'38", Smith County, at bridge on State Highway 110, 4.2 miles southeast of Mount Sylvan. | |
| 2 | Caney Creek near Mount Sylvan | Lat. 32°25'06", long 95°26'00", Smith County, at bridge on county road, 3.0 miles southeast of Mount Sylvan. | |
| 3 | Prairie Creek below Caney Creek near Mount Sylvan | Lat. 32°24'44", long 95°25'45", Smith County, at bridge on county road, 4.0 miles southeast of Mount Sylvan. | |
| 4 | Unnamed tributary no. 1 to Black Fork Creek near Tyler | Lat. 32°22'09", long. 95°22'41", Smith County, at bridge on county road, 4.4 miles west of Tyler. | |
| 5 | Black Fork Creek above waste-treatment plant near Tyler | Lat. 32°23'30", long. 95°23'39", Smith County, at bridge on county road, 6.5 miles northwest of Tyler. | |
| 6 | Unnamed tributary no. 2 to Black Fork Creek near Tyler | Lat. 32°23'53", long. 95°25'37", Smith County, at bridge on county road, 6.5 miles northwest of Tyler, and 0.3 mile southwest of site 5 (above). | |
| 7 | Black Fork Creek below waste-treatment plant near Chandler | Lat. 32°23'53", long. 95°25'37", Smith County, at bridge on county road, 7.1 miles northeast of Chandler. | Waste-treatment plant approximately 0.5 mile upstream. |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Mount Sylvan Salt Dome--Continued | |
| 8 | Prairie Creek at FM 724 near Chandler | Lat. 32°23'14", long. 95°26'30", Smith County, at bridge on FM 724, 5.8 miles northeast of Chandler. | |
| 9 | Unnamed tributary no. 1 to Prairie Creek near Chandler | Lat. 32°22'45", long. 95°25'35", Smith County, at culvert on FM 724, 6.0 miles northeast of Chandler. | |
| 10 | Unnamed tributary no. 2 to Prairie Creek near Mount Sylvan | Lat. 32°23'22", long. 95°27'54", Smith County, at culvert on county road, 4.4 miles south of Mount Sylvan. | |
| 11 | Prairie Creek at State Highway 64 near Chandler | Lat. 32°22'18", long. 95°27'13", Smith County, at bridge on State Highway 64, 5.1 miles northeast of Chandler. | |
| 12 | Unnamed tributary no. 1 to Neches River north of FM 279 near Chandler | Lat. 32°21'55", long. 95°28'20", Van Zandt County, at bridge on county road, 4.0 miles north of Chandler. | |
| 13 | Unnamed tributary no. 2 to Neches River at FM 315 near Chandler | Lat. 32°21'01", long. 95°28'30", Henderson County, at culvert on FM 315, 3.2 miles north of Chandler. | |
| 14 | Unnamed tributary no. 3 to Neches River at FM 2661 near Chandler | Lat. 32°20'51", long. 95°26'05", Smith County, at culvert on FM 2661, 3.9 miles northeast of Chandler. | |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Mount Sylvan Salt Dome--Continued | |
| 15 | Unnamed tributary no. 1 to Indian Creek at State Highway 31 near Chandler | Lat. 32°19'49", long. 95°24'01", Smith County, at culvert on State Highway 31, 4.8 miles east of Chandler. | Site is located downstream from developing residential area. |
| 16 | Unnamed tributary no. 2 to Indian Creek at State Highway 31 near Chandler | Lat. 32°19'39", long. 95°25'24", Smith County, at culvert on State Highway 31, 3.4 miles east of Chandler. | |
| | | Oakwood Salt Dome | |
| 1 | Brook Spring Branch near Oakwood | Lat. 31°35'40", long. 95°58'46", Freestone County, at bridge on county road, 7.8 miles northwest of Oakwood. | |
| 2 | Unnamed tributary no. 1 to Brook Spring Branch near Oakwood | Lat. 31°35'46", long. 95°57'25", Freestone County, at culvert on county road, 6.6 miles northwest of Oakwood. | |
| 3 | Unnamed tributary no. 2 to Brook Spring Branch near Oakwood | Lat. 31°35'50", long. 95°56'57", Freestone County, at culvert on county road, 5.9 miles northwest of Oakwood. | |
| 4 | Unnamed tributary no. 1 to Upper Keechi Creek near Oakwood | Lat. 31°35'13", long. 95°55'12", Freestone County, at bridge on county road, 4.3 miles northwest of Oakwood. | |
| 5 | Unnamed tributary no. 2 to Upper Keechi Creek near Oakwood | Lat. 31°34'51", long. 95°54'28", Freestone County, at culvert on county road, 3.2 miles northwest of Oakwood. | |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Oakwood Salt Dome--Continued | |
| 6 | Unnamed tributary no. 3 to Upper Keechi Creek near Oakwood | Lat. 31°34'19", long. 95°53'52", Freestone County, at culvert on county road, 2.8 miles west of Oakwood. | |
| 7 | Upper Keechi Creek near Oakwood | Lat. 31°34'19", long. 95°53'05", Leon County, at bridge on U.S. Highway 79, 2.4 miles west of Oakwood. | |
| 8 | Unnamed tributary to Mustang Creek near Buffalo | Lat. 31°32'49", long. 95°59'21", Freestone County, at bridge on county road, 7.6 miles northeast of Buffalo. | |
| 9 | Dottie Branch near Buffalo | Lat. 31°31'26", long. 96°02'51", Freestone County, at bridge on county road, 4.6 miles northeast of Buffalo. | |
| 10 | Buffalo Creek at U.S. Highway 79 near Buffalo | Lat. 31°29'33", long. 96°00'52", Leon County, at bridge on U.S. Highway 79, 3.6 miles northeast of Buffalo. | |
| 11 | Mustang Creek at U.S. Highway 79 near Buffalo | Lat. 31°30'09", long. 95°59'59", Leon County, at bridge on U.S. Highway 79, 4.6 miles northeast of Buffalo. | |
| 12 | Unnamed tributary no. 2 to Alligator Creek near Oakwood | Lat. 31°31'38", long. 95°57'49", Leon County, at culvert on U.S. Highway 79, 7.9 miles southwest of Oakwood. | Site is located downstream from Oakwood dome oil field. |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Oakwood Salt Dome--Continued | |
| 13 | Alligator Creek at U.S. Highway 79 near Oakwood | Lat. 31°32'24", long. 95°56'44", Leon County, at culvert on U.S. Highway 79, 6.1 miles southwest of Oakwood. | |
| 14 | Unnamed tributary no. 3 to Alligator Creek near Oakwood | Lat. 31°30'59", long. 95°56'46", Leon County, at culvert on county road, 7.6 miles southwest of Oakwood. | |
| 15 | Unnamed tributary no. 1 to Alligator Creek near Oakwood | Lat. 31°31'21", long. 95°56'14", Leon County, at bridge on county road, 6.6 miles southwest of Oakwood. | |
| 16 | Buffalo Creek below Bliss Creek near Buffalo | Lat. 31°28'46", long. 96°57'38", Leon County, at bridge on county road, 6.5 miles east of Buffalo. | |
| 17 | Buffalo Creek below Alligator Creek near Oakwood | Lat. 31°28'40", long. 95°53'54", Leon County, 100 feet below confluence of Buffalo Creek and Alligator Creek, 7.5 miles southwest of Oakwood, and 2.5 miles west of FM 831. | |
| 18 | Upper Keechi Creek at FM 831 near Oakwood | Lat. 31°28'06", long. 95°51'39", Leon County, at bridge on FM 831, 8.5 miles south of Oakwood. | Oakwood Oil Field is in lower part of drainage area, within 3.6 miles of data-collection site. |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Palestine Salt Dome | |
| 1 | Lake Creek at FM 645 near Tennessee Colony | Lat. 31°46'12", long. 95°49'02", Anderson County, at bridge on FM 645, 4.9 miles southeast of Tennessee Colony. | |
| 2 | Keechi Creek near Tennessee Colony | Lat. 31°45'23", long. 95°46'52", Anderson County, at bridge on FM 645, 6.6 miles southeast of Tennessee Colony. | |
| 3 | Chalybeate Creek at FM 320 near Palestine | Lat. 31°45'48", long. 95°44'00", Anderson County, at culvert on FM 320, 6.0 miles west of Palestine. | |
| 4 | Wolfe Creek at FM 320 near Palestine | Lat. 31°45'55", long. 95°42'12", Anderson County, at culvert on FM 320, 4.4 miles west of Palestine. | |
| 5 | Basset Creek near Palestine | Lat. 31°44'28", long. 95°40'33", Anderson County, at culvert on county road, 3.0 miles southwest of Palestine. | Site is located in a partly urbanized drainage area. |
| 6 | Unnamed tributary no. 1 to Wolfe Creek near Palestine | Lat. 31°44'23", long. 95°43'03", Anderson County, at bridge on Old Salt Works Road, 6.7 miles southwest of Palestine. | |
| 7 | Duggey's Lake near Palestine | Lat. 31°44'03", long. 95°43'50", Anderson County, 6.3 miles southwest of Palestine on Old Salt Works Road. | Lake was used in operating a now-closed salt mine. |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Palestine Salt Dome--Continued | |
| 8 | Wolfe Creek at Old Salt Works Road near Palestine | Lat. 31°44'09", long. 95°44'25", Anderson County, at bridge on Old Salt Works Road, 7.0 miles southwest of Palestine. | |
| 9 | Gum Creek at FM 1990 near Palestine | Lat. 31°42'35", long. 95°40'20", Anderson County, at culvert on FM 1990, 4.5 miles southwest of Palestine. | |
| 10 | Town Creek at U.S. Highway 79 near Palestine | Lat. 31°43'16", long. 95°41'40", Anderson County, at culvert on U.S. Highway 79, 5.0 miles southwest of Palestine. | |
| 11 | Gum Creek at U.S. Highway 79 near Palestine | Lat. 31°42'36", long. 95°42'34", Anderson County, at bridge on U.S. Highway 79, 5.8 miles southwest of Palestine. | |
| 12 | Town Creek above Wolfe Creek near Palestine | Lat. 31°43'55", long. 95°44'28", Anderson County, 70 yards upstream from confluence of Wolfe Creek and Town Creek, 7.7 miles southwest of Palestine. | |
| 13 | Town Creek at FM 645 near Palestine | Lat. 31°43'22", long. 95°45'31", Anderson County, at bridge on FM 645, 8.0 miles southwest of Palestine. | |
| 14 | Mack Creek at FM 1990 near Palestine | Lat. 31°41'13", long. 95°41'24", Anderson County, at culvert on FM 1990, 6.7 miles southeast of Palestine. | Oil-field operations in progress upstream from site. |

Table 4.--Locations of surface-water data-collection sites--Continued

| Site no. | Site name | Location | Remarks |
|---|---|---|---|
| | | Palestine Salt Dome--Continued | |
| 15 | Mack Creek at State Highway 294 near Palestine | Lat. 31°39'38", long. 95°44'25", Anderson County, at bridge on State Highway 294, 10.0 miles southwest of Palestine. | Oil-field operations in progress upstream from site. |
| 16 | Willow Slough at FM 322 near Palestine | Lat. 31°41'13", long. 95°38'00", Anderson County, at culvert on FM 322, 3.5 miles south of Palestine. | |

Table 5.--Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979

EXPLANATION OF UNITS

| | |
|---|---|
| $FT^3/S$ | = cubic feet per second. |
| MICROMHOS | = micromhos per centimeter at 25° Celsius. |
| DEG C | = degrees Celsius. |
| MG/L | = milligrams per liter. |
| UG/L | = micrograms per liter. |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979.

Keechi Salt Dome

Site 1

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | 1202 | 0.16 | 235 | 6.5 | 29.0 | 6.4 | 84 |
| SEP | | | | | | | |
| 13... | 0840 | .13 | 270 | 6.3 | 23.5 | 6.6 | 80 |
| OCT | | | | | | | |
| 04... | 1130 | .20 | 275 | 6.4 | 21.5 | 7.0 | 81 |
| NOV | | | | | | | |
| 15... | 1115 | .16 | 260 | 6.5 | 15.5 | 8.2 | 85 |
| JAN , 1979 | | | | | | | |
| 17... | 1230 | .60 | 240 | 6.4 | 13.5 | 9.3 | 92 |
| FEB | | | | | | | |
| 14... | 1625 | .84 | 240 | 6.6 | 18.5 | 8.4 | 92 |

Site 2

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 16... | 1040 | 0.14 | 122 | 6.9 | 25.0 | 6.8 | 84 | 22 | 8 | 5.6 |
| SEP | | | | | | | | | | |
| 13... | 0945 | 1.6 | 200 | 6.8 | 24.5 | 6.5 | 79 | 37 | 27 | 8.2 |
| OCT | | | | | | | | | | |
| 04... | 1335 | .95 | 148 | 6.3 | 21.0 | 7.7 | 89 | 27 | 19 | 5.8 |
| NOV | | | | | | | | | | |
| 15... | 1025 | .83 | 135 | 6.8 | 15.5 | 9.8 | 101 | 23 | 6 | 4.8 |
| FEB , 1979 | | | | | | | | | | |
| 14... | 1520 | 1.6 | 159 | 6.4 | 15.5 | 8.7 | 90 | 27 | 17 | 6.4 |
| APR | | | | | | | | | | |
| 12... | 1425 | 2.0 | 122 | 6.6 | 21.0 | 8.6 | 99 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 2.0 | 12 | 1.1 | 2.6 | 18 | 0 | 13 | 18 | 0.1 |
| SEP | | | | | | | | | |
| 13... | 4.1 | 17 | 1.2 | 3.5 | 12 | 0 | 38 | 23 | .1 |
| OCT | | | | | | | | | |
| 04... | 3.1 | 15 | 1.3 | 3.5 | 10 | 0 | 23 | 22 | .1 |
| NOV | | | | | | | | | |
| 15... | 2.6 | 12 | 1.1 | 3.9 | 20 | 0 | 16 | 22 | .0 |
| FEB , 1979 | | | | | | | | | |
| 14... | 2.7 | 14 | 1.2 | 2.7 | 12 | 0 | 26 | 18 | .1 |
| APR | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 0.2 | 0.01 | 31 | 94 | 50 | 50 | 9 | 0 | 60 |
| SEP | | | | | | | | | |
| 13... | .2 | .01 | 30 | 131 | 50 | 330 | 10 | 200 | 70 |
| OCT | | | | | | | | | |
| 04... | .6 | .00 | 28 | 107 | 40 | 280 | 10 | 140 | 50 |
| NOV | | | | | | | | | |
| 15... | .2 | .01 | 27 | 99 | 30 | 490 | 7 | 70 | 40 |
| FEB , 1979 | | | | | | | | | |
| 14... | .1 | .01 | 26 | 103 | 30 | 300 | 20 | 140 | 80 |
| APR | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Keechi Salt Dome

Site 3

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 13... | 1030 | .01 | 770 | 5.5 | 25.5 | 1.4 | 18 |
| OCT | | | | | | | |
| 04... | 1350 | .02 | 740 | 4.5 | 22.0 | 7.2 | 85 |
| NOV | | | | | | | |
| 15... | 0945 | .02 | 680 | 4.2 | 16.5 | 3.3 | 35 |
| JAN , 1979 | | | | | | | |
| 17... | 1020 | .21 | 506 | 6.7 | 10.0 | 9.8 | 90 |
| FEB | | | | | | | |
| 14... | 1445 | .67 | 400 | 6.6 | 19.5 | 11.0 | 124 |

Site 4

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | 1300 | 0.05 | 150 | 7.4 | 28.5 | 7.8 | 101 |
| SEP | | | | | | | |
| 13... | 1300 | .12 | 170 | 6.9 | 26.0 | 6.8 | 85 |
| OCT | | | | | | | |
| 04... | 1055 | .13 | 150 | 6.7 | 20.5 | 8.1 | 92 |
| NOV | | | | | | | |
| 15... | 0935 | .14 | 160 | 6.5 | 17.0 | 8.6 | 91 |
| JAN , 1979 | | | | | | | |
| 17... | 1120 | .55 | 190 | 6.1 | 12.0 | 9.7 | 93 |
| FEB | | | | | | | |
| 14... | 1215 | .51 | 170 | 6.5 | 17.0 | 8.8 | 94 |

Site 5

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | 1610 | 0.25 | 280 | 4.5 | 26.0 | 5.2 | 65 |
| SEP | | | | | | | |
| 13... | 1105 | 6.7 | 270 | 6.8 | 26.5 | 3.6 | 46 |
| OCT | | | | | | | |
| 04... | 1205 | 5.0 | 208 | 6.1 | 21.0 | 2.8 | 21 |
| NOV | | | | | | | |
| 14... | 1650 | 2.1 | 174 | 6.2 | 21.0 | 4.1 | 47 |
| JAN , 1979 | | | | | | | |
| 17... | 1000 | 5.9 | 211 | 6.3 | 10.0 | 9.3 | 85 |
| FEB | | | | | | | |
| 14... | 1630 | 6.4 | 200 | 6.8 | 16.0 | 9.5 | 99 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Keechi Salt Dome

Site 6

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | 1030 | 0.07 | 390 | 4.5 | 28.5 | 7.8 | 101 |
| SEP | | | | | | | |
| 13... | 1110 | .40 | 240 | 6.4 | 24.5 | 6.5 | 79 |
| OCT | | | | | | | |
| 04... | 1305 | .19 | 240 | 6.5 | 22.5 | 7.0 | 82 |
| NOV | | | | | | | |
| 15... | 0940 | .43 | 245 | 6.1 | 15.5 | 8.9 | 92 |
| JAN , 1979 | | | | | | | |
| 17... | 1355 | .60 | 151 | 6.5 | 13.5 | 9.3 | 92 |
| FEB | | | | | | | |
| 15... | 0840 | .73 | 130 | 6.4 | 13.5 | 9.0 | 89 |

Site 7

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 16... | 0845 | 0.00 | 200 | 6.8 | 25.5 | 4.9 | 61 | 61 | 12 | 13 |
| SEP | | | | | | | | | | |
| 13... | 1220 | .53 | 170 | 7.1 | 26.5 | 7.7 | 97 | 41 | 24 | 7.5 |
| OCT | | | | | | | | | | |
| 04... | 1020 | .40 | 180 | 6.5 | 21.0 | 7.8 | 89 | 48 | 29 | 8.4 |
| NOV | | | | | | | | | | |
| 14... | 1220 | .37 | 167 | 7.2 | 20.0 | 8.4 | 95 | 52 | 28 | 9.0 |
| JAN , 1979 | | | | | | | | | | |
| 17... | 1220 | 1.8 | 190 | 7.3 | 12.0 | 9.1 | 88 | 49 | 27 | 8.3 |
| FEB | | | | | | | | | | |
| 14... | 1125 | 2.4 | 166 | 7.3 | 14.0 | 10.1 | 101 | 44 | 18 | 7.8 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 6.9 | 12 | 0.7 | 3.1 | 60 | 0 | 21 | 19 | 0.1 |
| SEP | | | | | | | | | |
| 13... | 5.3 | 10 | .7 | 3.8 | 20 | 0 | 29 | 17 | .1 |
| OCT | | | | | | | | | |
| 04... | 6.6 | 11 | .7 | 3.9 | 24 | 0 | 28 | 23 | .1 |
| NOV | | | | | | | | | |
| 14... | 7.2 | 12 | .7 | 3.5 | 30 | 0 | 31 | 22 | .1 |
| JAN , 1979 | | | | | | | | | |
| 17... | 6.8 | 11 | .7 | 2.2 | 26 | 0 | 28 | 20 | .1 |
| FEB | | | | | | | | | |
| 14... | 6.0 | 9.8 | .6 | 2.1 | 32 | 0 | 23 | 14 | .0 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 0.2 | 0.03 | 21 | 127 | 30 | 20 | 20 | 490 | 100 |
| SEP | | | | | | | | | |
| 13... | .2 | .01 | 22 | 105 | 50 | 100 | 10 | 40 | 50 |
| OCT | | | | | | | | | |
| 04... | .3 | .01 | 23 | 116 | 40 | 60 | 10 | 50 | 60 |
| NOV | | | | | | | | | |
| 14... | .1 | .01 | 25 | 125 | 30 | 90 | 20 | 70 | 60 |
| JAN , 1979 | | | | | | | | | |
| 17... | .1 | .02 | 19 | 109 | 30 | 130 | 7 | 160 | 80 |
| FEB | | | | | | | | | |
| 14... | .1 | .02 | 19 | 98 | 30 | 80 | 10 | 140 | 50 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Keechi Salt Dome

Site 8

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 13... | 1100 | 5.5 | 101 | 6.8 | 26.5 | 7.0 | 89 |
| OCT | | | | | | | |
| 04... | 0935 | .42 | 98 | 6.4 | 23.5 | 5.4 | 65 |
| NOV | | | | | | | |
| 14... | 1105 | 1.9 | 88 | 6.5 | 19.5 | 7.0 | 79 |
| JAN , 1979 | | | | | | | |
| 17... | 1330 | 3.8 | 100 | 6.6 | 7.0 | 11.8 | 100 |
| FEB | | | | | | | |
| 14... | 0950 | 2.1 | 105 | 6.6 | 11.5 | 10.6 | 100 |

Site 9

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | 0945 | 0.04 | 203 | 6.4 | 26.0 | 6.6 | 82 |
| SEP | | | | | | | |
| 13... | 0935 | .05 | 153 | 6.9 | 24.0 | 5.9 | 72 |
| OCT | | | | | | | |
| 03... | 1400 | .10 | 210 | 6.5 | 24.0 | 8.4 | 102 |
| NOV | | | | | | | |
| 14... | 0910 | .07 | 202 | 6.6 | 19.0 | 7.2 | 80 |
| JAN , 1979 | | | | | | | |
| 17... | 1425 | .70 | 378 | 6.5 | 13.5 | 10.0 | 99 |
| FEB | | | | | | | |
| 14... | 0855 | 1.4 | 319 | 6.5 | 14.0 | 9.6 | 96 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Keechi Salt Dome

Site 10

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | | |
| 15... | 1500 | 0.61 | 275 | 3.7 | 27.0 | 7.9 | 100 | -- | -- | -- |
| SEP | | | | | | | | | | |
| 13... | 0950 | 8.5 | 242 | 6.8 | 25.5 | 7.1 | 89 | 70 | 65 | 16 |
| OCT | | | | | | | | | | |
| 04... | 1025 | 2.2 | 200 | 6.7 | 21.0 | 6.6 | 76 | 46 | 24 | 10 |
| NOV | | | | | | | | | | |
| 14... | 1420 | 2.2 | 150 | 6.3 | 20.5 | 7.7 | 88 | 34 | 13 | 7.1 |
| JAN, 1979 | | | | | | | | | | |
| 17... | 1100 | 8.0 | 220 | 6.5 | 10.5 | 10.4 | 96 | 46 | 33 | 8.7 |
| FEB | | | | | | | | | | |
| 14... | 1335 | 11 | 220 | 6.8 | 13.5 | 9.8 | 97 | 51 | 30 | 10 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | 7.3 | 15 | 0.8 | 6.9 | 6 | 0 | 80 | 20 | 0.1 |
| OCT | | | | | | | | | |
| 04... | 5.2 | 15 | 1.0 | 4.9 | 28 | 0 | 31 | 25 | .1 |
| NOV | | | | | | | | | |
| 14... | 3.9 | 13 | 1.0 | 4.1 | 26 | 0 | 21 | 21 | .1 |
| JAN, 1979 | | | | | | | | | |
| 17... | 5.8 | 17 | 1.1 | 3.3 | 16 | 0 | 41 | 23 | .1 |
| FEB | | | | | | | | | |
| 14... | 6.2 | 18 | 1.1 | 3.3 | 25 | 0 | 37 | 28 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | 0.3 | 0.02 | 26 | 177 | 50 | 20 | 20 | 1900 | 110 |
| OCT | | | | | | | | | |
| 04... | .1 | .02 | 27 | 133 | 40 | 30 | 10 | 680 | 80 |
| NOV | | | | | | | | | |
| 14... | .2 | .01 | 23 | 107 | 30 | 250 | 10 | 210 | 50 |
| JAN, 1979 | | | | | | | | | |
| 17... | .2 | .01 | 18 | 126 | 30 | 120 | 10 | 260 | 90 |
| FEB | | | | | | | | | |
| 14... | .2 | .01 | 16 | 132 | 30 | 100 | 20 | 270 | 110 |

Site 11

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | |
| 16... | 1130 | 0.34 | 90 | 4.6 | 26.0 | 7.2 | 90 |
| SEP | | | | | | | |
| 12... | 1815 | 2.6 | 70 | 7.1 | 25.0 | 7.8 | 96 |
| OCT | | | | | | | |
| 04... | 1215 | .30 | 78 | 6.6 | 20.5 | 7.8 | 89 |
| NOV | | | | | | | |
| 15... | 0900 | .63 | 90 | 6.2 | 16.5 | 9.4 | 99 |
| JAN, 1979 | | | | | | | |
| 17... | 1500 | 2.6 | 109 | 6.7 | 12.5 | 10.6 | 103 |
| FEB | | | | | | | |
| 15... | 1000 | 4.2 | 112 | 6.6 | 14.0 | 9.4 | 94 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Keechi Salt Dome

Site 12

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) | HARDNESS (MG/L AS CACO3) | HARDNESS, NONCARBONATE (MG/L CACO3) | CALCIUM DISSOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 16... | 1045 | 0.34 | 152 | 6.5 | 26.5 | 5.7 | 72 | 41 | 16 | 9.5 |
| SEP | | | | | | | | | | |
| 12... | 1310 | 22 | 149 | 6.5 | 23.5 | 6.6 | 80 | 35 | 12 | 7.7 |
| OCT | | | | | | | | | | |
| 04... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | |
| 15... | 1115 | 3.8 | 138 | 6.9 | 18.0 | 5.4 | 59 | 28 | 4 | 6.1 |
| JAN , 1979 | | | | | | | | | | |
| 17... | 1030 | 12 | 145 | 6.1 | 8.5 | 11.5 | 102 | 36 | 23 | 7.8 |
| FEB | | | | | | | | | | |
| 15... | 0835 | 16 | 153 | 6.6 | 15.0 | 8.7 | 89 | 36 | 12 | 7.4 |

| DATE | MAGNESIUM, DISSOLVED (MG/L AS MG) | SODIUM, DISSOLVED (MG/L AS NA) | SODIUM ADSORPTION RATIO | POTASSIUM, DISSOLVED (MG/L AS K) | BICARBONATE (MG/L AS HCO3) | CARBONATE (MG/L AS CO3) | SULFATE DISSOLVED (MG/L AS SO4) | CHLORIDE, DISSOLVED (MG/L AS CL) | FLUORIDE, DISSOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 4.2 | 9.2 | 0.6 | 4.7 | 30 | 0 | 24 | 15 | 0.1 |
| SEP | | | | | | | | | |
| 12... | 3.7 | 10 | .7 | 4.7 | 28 | 0 | 22 | 15 | .1 |
| OCT | | | | | | | | | |
| 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 15... | 3.2 | 10 | .8 | 5.0 | 30 | 0 | 15 | 18 | .0 |
| JAN , 1979 | | | | | | | | | |
| 17... | 3.9 | 10 | .7 | 2.7 | 16 | 0 | 22 | 17 | .1 |
| FEB | | | | | | | | | |
| 15... | 4.3 | 11 | .8 | 2.8 | 30 | 0 | 20 | 14 | .0 |

| DATE | BROMIDE DISSOLVED (MG/L AS BR) | IODIDE, DISSOLVED (MG/L AS I) | SILICA, DISSOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) | BORON, DISSOLVED (UG/L AS B) | IRON, DISSOLVED (UG/L AS FE) | LITHIUM DISSOLVED (UG/L AS LI) | MANGANESE, DISSOLVED (UG/L AS MN) | STRONTIUM, DISSOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 0.2 | 0.02 | 23 | 105 | 30 | 170 | 20 | 230 | 80 |
| SEP | | | | | | | | | |
| 12... | .2 | .02 | 24 | 102 | 60 | 410 | 20 | 200 | 70 |
| OCT | | | | | | | | | |
| 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 15... | .1 | .01 | 25 | 98 | 30 | 470 | 10 | 130 | 50 |
| JAN , 1979 | | | | | | | | | |
| 17... | .1 | .01 | 19 | 91 | 20 | 160 | 20 | 230 | 70 |
| FEB | | | | | | | | | |
| 15... | .1 | .01 | 20 | 95 | 30 | 80 | 10 | 190 | 70 |

Site 13

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 12... | 1400 | 2.9 | 110 | 6.5 | 23.5 | 6.0 | 72 |
| OCT | | | | | | | |
| 04... | 0930 | .10 | 120 | 7.3 | 20.5 | 7.4 | 84 |
| NOV | | | | | | | |
| 15... | 1025 | .17 | 198 | 6.6 | 17.5 | 5.7 | 61 |
| JAN , 1979 | | | | | | | |
| 17... | 0945 | 2.7 | 177 | 6.6 | 12.0 | 9.9 | 95 |
| FEB | | | | | | | |
| 14... | 1335 | 3.6 | 148 | 6.9 | 17.0 | 9.2 | 98 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 1

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 17... | 1540 | 0.24 | 100 | 6.6 | 28.0 | 6.0 | 77 |
| SEP | | | | | | | |
| 12... | 0835 | 1.6 | 70 | 6.4 | 24.0 | 5.7 | 70 |
| OCT | | | | | | | |
| 05... | 1025 | .44 | 80 | 6.7 | 20.5 | 6.2 | 70 |
| NOV | | | | | | | |
| 16... | 0950 | 1.8 | 115 | 6.2 | 14.0 | 4.9 | 49 |
| JAN , 1979 | | | | | | | |
| 18... | 1220 | 11 | 131 | 6.5 | 11.0 | 8.7 | 81 |
| FEB | | | | | | | |
| 15... | 1700 | 7.9 | 123 | 6.4 | 16.0 | 8.3 | 86 |

Site 2

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 17... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 12... | -- | .00 | -- | -- | -- | -- | -- |
| OCT | | | | | | | |
| 05... | -- | .00 | -- | -- | -- | -- | -- |
| NOV | | | | | | | |
| 16... | -- | .00 | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | |
| 18... | 1000 | 3.4 | 176 | 6.6 | 9.5 | 9.8 | 88 |
| FEB | | | | | | | |
| 15... | 1550 | 2.4 | 167 | 6.4 | 15.0 | 8.9 | 91 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 5

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 17... | 1215 | 2.7 | 320 | 7.2 | 27.0 | 6.5 | 82 |
| SEP | | | | | | | |
| 12... | 1045 | 5.6 | 295 | 6.7 | 23.5 | 6.6 | 80 |
| OCT | | | | | | | |
| 05... | 1540 | 3.8 | 338 | 6.5 | 21.5 | 6.4 | 74 |
| NOV | | | | | | | |
| 16... | 1115 | 17 | 344 | 6.5 | 15.5 | 6.4 | 66 |
| JAN , 1979 | | | | | | | |
| 18... | 1030 | 46 | 316 | 6.9 | 10.5 | 7.4 | 69 |
| FEB | | | | | | | |
| 15... | 1810 | 23 | 366 | 6.9 | 15.5 | 7.3 | 75 |

Site 6

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 17... | 1115 | 0.44 | 140 | 5.9 | 26.5 | 8.1 | 103 | -- | -- | -- |
| SEP | | | | | | | | | | |
| 11... | 1700 | .73 | 89 | 6.9 | 25.0 | 6.9 | 85 | 22 | 0 | 6.3 |
| OCT | | | | | | | | | | |
| 05... | 1430 | .96 | 93 | 7.0 | 22.0 | 7.3 | 86 | -- | -- | -- |
| NOV | | | | | | | | | | |
| 16... | 1250 | 1.4 | 101 | 7.2 | 15.0 | 8.1 | 83 | -- | -- | -- |
| JAN , 1979 | | | | | | | | | | |
| 17... | 1355 | 3.0 | 95 | 6.9 | 8.5 | 10.4 | 92 | -- | -- | -- |
| FEB | | | | | | | | | | |
| 15... | 1410 | 3.6 | 106 | 6.8 | 15.0 | 9.1 | 93 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 11... | 1.6 | 7.0 | 0.6 | 1.5 | 34 | 0 | 5.4 | 9.1 | 0.1 |
| OCT | | | | | | | | | |
| 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 11... | 0.7 | 0.02 | 20 | 69 | 50 | 180 | 5 | 10 | 40 |
| OCT | | | | | | | | | |
| 05... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 3

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 17... | 1345 | 1.0 | 140 | 6.6 | 26.5 | 2.8 | 35 | 35 | 7 | 8.3 |
| SEP | | | | | | | | | | |
| 12... | 0935 | 1.1 | 110 | 6.4 | 23.5 | 1.7 | 20 | 34 | 5 | 8.0 |
| OCT | | | | | | | | | | |
| 05... | 0915 | .54 | 100 | 6.4 | 20.0 | 4.6 | 52 | 28 | 4 | 6.6 |
| NOV | | | | | | | | | | |
| 16... | 1425 | 2.1 | 105 | 6.9 | 15.0 | 6.2 | 63 | 27 | 0 | 6.4 |
| JAN , 1979 | | | | | | | | | | |
| 18... | 1110 | 13 | 131 | 6.4 | 9.0 | 10.0 | 89 | 28 | 17 | 6.1 |
| FEB | | | | | | | | | | |
| 15... | 1455 | 16 | 144 | 6.4 | 15.5 | 8.8 | 91 | 32 | 14 | 7.2 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 17... | 3.4 | 6.9 | 0.5 | 3.3 | 34 | 0 | 13 | 11 | 0.1 |
| SEP | | | | | | | | | |
| 12... | 3.4 | 6.6 | .5 | 3.5 | 36 | 0 | 14 | 12 | .1 |
| OCT | | | | | | | | | |
| 05... | 2.8 | 6.4 | .5 | 2.7 | 30 | 0 | 11 | 9.9 | .1 |
| NOV | | | | | | | | | |
| 16... | 2.7 | 6.2 | .5 | 3.5 | 36 | 0 | 8.6 | 9.2 | .1 |
| JAN , 1979 | | | | | | | | | |
| 18... | 3.1 | 10 | .8 | 2.1 | 14 | 0 | 19 | 15 | .1 |
| FEB | | | | | | | | | |
| 15... | 3.4 | 11 | .8 | 1.9 | 22 | 0 | 23 | 14 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 17... | 0.2 | 0.02 | 21 | 85 | 20 | 110 | 10 | 590 | 120 |
| SEP | | | | | | | | | |
| 12... | .1 | .01 | 22 | 89 | 70 | 230 | 10 | 610 | 120 |
| OCT | | | | | | | | | |
| 05... | .1 | .01 | 23 | 78 | 30 | 220 | 9 | 220 | 90 |
| NOV | | | | | | | | | |
| 16... | .1 | .02 | 22 | 77 | 30 | 670 | 8 | 150 | 60 |
| JAN , 1979 | | | | | | | | | |
| 18... | .1 | .01 | 19 | 82 | 20 | 80 | 7 | 160 | 70 |
| FEB | | | | | | | | | |
| 15... | .2 | .01 | 22 | 94 | 30 | 60 | 8 | 240 | 130 |

Site 4

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 17... | 1000 | 0.12 | 110 | 6.0 | 23.0 | 4.3 | 51 |
| SEP | | | | | | | |
| 11... | 1420 | .61 | 100 | 6.3 | 21.0 | 4.6 | 53 |
| OCT | | | | | | | |
| 05... | 1355 | .18 | 103 | 6.0 | 20.0 | 4.0 | 45 |
| NOV | | | | | | | |
| 16... | 1055 | .29 | 110 | 6.2 | 14.0 | 6.1 | 61 |
| JAN , 1979 | | | | | | | |
| 17... | 1700 | 1.1 | 77 | 6.2 | 8.0 | 9.4 | 82 |
| FEB | | | | | | | |
| 15... | 1500 | .88 | 76 | 6.1 | 14.5 | 9.5 | 96 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 7

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | | |
| 17... | 1100 | 7.5 | 613 | 6.9 | 28.0 | 1.6 | 21 | 62 | 0 | 18 |
| SEP | | | | | | | | | | |
| 12... | 1000 | 7.6 | 449 | 6.6 | 25.0 | 1.2 | 15 | 57 | 0 | 17 |
| 14... | 1500 | 30 | 450 | 6.5 | 26.0 | -- | -- | 75 | 18 | 24 |
| OCT | | | | | | | | | | |
| 05... | 1005 | 7.8 | 584 | 6.9 | 23.5 | .7 | 8 | 61 | 0 | 18 |
| NOV | | | | | | | | | | |
| 15... | 1400 | 34 | 460 | 7.0 | 18.5 | 1.9 | 21 | 66 | 0 | 20 |
| JAN, 1979 | | | | | | | | | | |
| 18... | 0945 | 48 | 390 | 6.9 | 11.5 | 7.1 | 67 | 67 | 13 | 20 |
| FEB | | | | | | | | | | |
| 15... | 1250 | 45 | 385 | 7.1 | 14.0 | 6.3 | 63 | 63 | 4 | 18 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 17... | 4.0 | 91 | 5.1 | 9.5 | 120 | 0 | 100 | 58 | 0.8 |
| SEP | | | | | | | | | |
| 12... | 3.6 | 75 | 4.3 | 8.3 | 94 | 0 | 68 | 58 | .6 |
| 14... | 3.7 | 57 | 2.9 | 6.1 | 70 | 0 | 70 | 58 | .4 |
| OCT | | | | | | | | | |
| 05... | 3.8 | 77 | 4.3 | 9.1 | 130 | 0 | 64 | 54 | .7 |
| NOV | | | | | | | | | |
| 15... | 3.9 | 48 | 2.6 | 8.2 | 88 | 0 | 40 | 55 | .2 |
| JAN, 1979 | | | | | | | | | |
| 18... | 4.2 | 41 | 2.2 | 5.0 | 66 | 0 | 45 | 50 | .2 |
| FEB | | | | | | | | | |
| 15... | 4.2 | 45 | 2.5 | 4.6 | 72 | 0 | 36 | 52 | .2 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 17... | 0.2 | 0.06 | 20 | 362 | 310 | 290 | 20 | 300 | 190 |
| SEP | | | | | | | | | |
| 12... | .4 | .05 | 22 | 300 | 190 | 210 | 20 | 220 | 180 |
| 14... | .3 | .04 | 22 | 277 | 140 | 110 | 10 | 440 | 180 |
| OCT | | | | | | | | | |
| 05... | .4 | .02 | 23 | 315 | 210 | 200 | 20 | 220 | 150 |
| NOV | | | | | | | | | |
| 15... | .4 | .04 | 20 | 240 | 120 | 260 | 10 | 330 | 160 |
| JAN, 1979 | | | | | | | | | |
| 18... | .3 | .04 | 18 | 217 | 80 | 90 | 20 | 290 | 140 |
| FEB | | | | | | | | | |
| 15... | .3 | .03 | 16 | 213 | 90 | 100 | 20 | 300 | 500 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 8

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | | |
| 16... | 1600 | 11 | 620 | 7.3 | 29.5 | 2.2 | 29 | 63 | 0 | 19 |
| SEP | | | | | | | | | | |
| 11... | 1830 | 14 | 590 | 6.9 | 26.0 | 2.7 | 34 | 57 | 0 | 17 |
| 14... | 1400 | 34 | 374 | 6.5 | 26.5 | -- | -- | 67 | 19 | 21 |
| OCT | | | | | | | | | | |
| 05... | 1205 | 9.7 | 538 | 6.9 | 23.0 | 2.9 | 35 | 55 | 0 | 16 |
| NOV | | | | | | | | | | |
| 16... | 0945 | 43 | 396 | 6.6 | 16.0 | 3.7 | 39 | 62 | 8 | 19 |
| JAN, 1979 | | | | | | | | | | |
| 18... | 1110 | 65 | 331 | 6.8 | 11.0 | 7.6 | 71 | 59 | 17 | 17 |
| FEB | | | | | | | | | | |
| 15... | 1050 | 37 | 338 | 7.1 | 13.0 | 6.1 | 60 | 57 | 5 | 16 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 16... | 3.7 | 85 | 4.7 | 8.9 | 120 | 0 | 94 | 52 | 0.7 |
| SEP | | | | | | | | | |
| 11... | 3.6 | 81 | 4.7 | 9.0 | 100 | 0 | 77 | 64 | .7 |
| 14... | 3.5 | 39 | 2.1 | 5.6 | 58 | 0 | 61 | 40 | .3 |
| OCT | | | | | | | | | |
| 05... | 3.6 | 70 | 4.1 | 8.7 | 110 | 0 | 62 | 53 | .6 |
| NOV | | | | | | | | | |
| 16... | 3.5 | 44 | 2.4 | 7.0 | 66 | 0 | 44 | 50 | .2 |
| JAN, 1979 | | | | | | | | | |
| 18... | 4.1 | 36 | 2.0 | 4.4 | 52 | 0 | 42 | 44 | .1 |
| FEB | | | | | | | | | |
| 15... | 4.2 | 39 | 2.2 | 3.9 | 64 | 0 | 38 | 45 | .2 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 16... | 0.4 | 0.04 | 19 | 343 | 220 | 510 | 20 | 140 | 170 |
| SEP | | | | | | | | | |
| 11... | .6 | .04 | 21 | 324 | 210 | 200 | 10 | 230 | 170 |
| 14... | .3 | .03 | 22 | 222 | 120 | 540 | 10 | 310 | 160 |
| OCT | | | | | | | | | |
| 05... | .5 | .03 | 22 | 291 | 190 | 150 | 20 | 120 | 140 |
| NOV | | | | | | | | | |
| 16... | .3 | .03 | 19 | 220 | 100 | 250 | 10 | 220 | 150 |
| JAN, 1979 | | | | | | | | | |
| 18... | .2 | .02 | 18 | 192 | 70 | 140 | 10 | 280 | 130 |
| FEB | | | | | | | | | |
| 15... | .3 | -- | 21 | 200 | 80 | 90 | 4 | 270 | 190 |

Site 9

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | |
| 17... | 0930 | 0.04 | 166 | 7.6 | 25.5 | 6.8 | 85 |
| SEP | | | | | | | |
| 12... | 1000 | .13 | 259 | 7.3 | 23.5 | 6.8 | 82 |
| OCT | | | | | | | |
| 05... | 1105 | .34 | 276 | 7.5 | 20.5 | 7.8 | 89 |
| NOV | | | | | | | |
| 16... | 1105 | .07 | 282 | 7.0 | 14.0 | 7.0 | 70 |
| JAN, 1979 | | | | | | | |
| 18... | 1305 | .52 | 233 | 7.0 | 15.0 | 9.7 | 99 |
| FEB | | | | | | | |
| 15... | 0930 | .47 | 211 | 7.1 | 12.5 | 10.5 | 102 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 10

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 12... | -- | .00 | -- | -- | -- | -- | -- |
| OCT | | | | | | | |
| 05... | -- | .00 | -- | -- | -- | -- | -- |
| NOV | | | | | | | |
| 16... | -- | .00 | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | |
| 18... | 1350 | .75 | 61 | 6.3 | 13.5 | 10.0 | 99 |
| FEB | | | | | | | |
| 15... | 1300 | .52 | 64 | 6.4 | 16.5 | 9.0 | 95 |

Site 11

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 16... | 1310 | 12 | 598 | 7.3 | 28.0 | 2.6 | 33 | 61 | 0 | 18 |
| SEP | | | | | | | | | | |
| 12... | 1210 | 16 | 530 | 6.9 | 25.0 | 3.0 | 37 | 57 | 0 | 17 |
| 14... | 1135 | 46 | 350 | 6.5 | 25.0 | -- | -- | 64 | 26 | 20 |
| OCT | | | | | | | | | | |
| 05... | 1135 | 14 | 461 | 7.0 | 22.5 | 3.3 | 39 | 55 | 0 | 16 |
| NOV | | | | | | | | | | |
| 16... | 1455 | 31 | 496 | 7.1 | 19.0 | 2.8 | 31 | 55 | 0 | 16 |
| JAN , 1979 | | | | | | | | | | |
| 17... | 1340 | 42 | 380 | 6.8 | 9.0 | 7.9 | 71 | 57 | 8 | 16 |
| FEB | | | | | | | | | | |
| 15... | 1230 | 59 | 333 | 6.7 | 15.5 | 5.7 | 59 | 60 | 7 | 17 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 3.9 | 81 | 4.5 | 8.9 | 120 | 0 | 100 | 50 | 0.8 |
| SEP | | | | | | | | | |
| 12... | 3.6 | 75 | 4.3 | 8.2 | 80 | 0 | 66 | 59 | .6 |
| 14... | 3.4 | 36 | 2.0 | 5.5 | 46 | 0 | 61 | 49 | .5 |
| OCT | | | | | | | | | |
| 05... | 3.6 | 66 | 3.9 | 8.3 | 98 | 0 | 55 | 50 | .6 |
| NOV | | | | | | | | | |
| 16... | 3.6 | 60 | 3.5 | 9.0 | 100 | 0 | 52 | 50 | .2 |
| JAN , 1979 | | | | | | | | | |
| 17... | 4.1 | 44 | 2.5 | 4.9 | 60 | 0 | 47 | 50 | .2 |
| FEB | | | | | | | | | |
| 15... | 4.1 | 39 | 2.2 | 4.2 | 64 | 0 | 42 | 41 | .2 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 16... | 0.5 | 0.05 | 20 | 343 | 210 | 170 | 20 | 80 | 190 |
| SEP | | | | | | | | | |
| 12... | .5 | .04 | 21 | 291 | 200 | 230 | 10 | 170 | 160 |
| 14... | .4 | .03 | 20 | 219 | 120 | 60 | 10 | 220 | 150 |
| OCT | | | | | | | | | |
| 05... | .4 | .04 | 22 | 271 | 180 | 240 | 20 | 70 | 140 |
| NOV | | | | | | | | | |
| 16... | .3 | .04 | 22 | 263 | 160 | 180 | 20 | 230 | 150 |
| JAN , 1979 | | | | | | | | | |
| 17... | .3 | .04 | 19 | 216 | 90 | 180 | 20 | 340 | 150 |
| FEB | | | | | | | | | |
| 15... | .4 | .03 | 17 | 197 | 80 | 40 | 20 | 240 | 160 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 12

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | 1415 | 0.06 | 100 | 4.3 | 27.0 | 6.2 | 78 |
| SEP | | | | | | | |
| 12... | 1355 | .15 | 86 | 6.9 | 22.0 | 6.5 | 76 |
| OCT | | | | | | | |
| 05... | 1205 | .09 | 88 | 6.1 | 20.0 | 4.5 | 51 |
| NOV | | | | | | | |
| 16... | 1005 | .12 | 78 | 5.4 | 13.0 | 7.2 | 71 |
| JAN , 1979 | | | | | | | |
| 17... | 1710 | .54 | 89 | 6.0 | 13.0 | 9.6 | 94 |
| FEB | | | | | | | |
| 15... | 1115 | 1.0 | 74 | 6.0 | 16.0 | 9.0 | 94 |

Site 13

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 16... | 1345 | 0.003 | 80 | 4.1 | 27.0 | 5.9 | 75 |
| SEP | | | | | | | |
| 12... | 1430 | .01 | 80 | 6.7 | 23.5 | 4.3 | 52 |
| OCT | | | | | | | |
| 05... | 0935 | .004 | 191 | 6.3 | 20.0 | 3.2 | 36 |
| NOV | | | | | | | |
| 16... | 1100 | .01 | 104 | 5.9 | 14.5 | 2.4 | 24 |
| JAN , 1979 | | | | | | | |
| 17... | 1630 | .32 | 70 | 6.1 | 7.0 | 9.6 | 81 |
| FEB | | | | | | | |
| 15... | 1020 | .45 | 70 | 6.1 | 15.0 | 8.6 | 88 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 14

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 17... | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 12... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | | |
| 04... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | |
| 16... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | | |
| 17... | 1300 | .11 | 142 | 6.3 | 9.0 | 10.4 | 93 | 36 | 31 | 5.9 |
| FEB | | | | | | | | | | |
| 15... | 1345 | .37 | 136 | 6.0 | 18.0 | 8.7 | 95 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 17... | 5.1 | 8.4 | 0.6 | 2.0 | 6 | 0 | 40 | 12 | 0.1 |
| FEB | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 04... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 17... | 0.1 | 0.01 | 20 | 97 | 20 | 280 | 20 | 250 | 70 |
| FEB | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Mount Sylvan Salt Dome

Site 15

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 17... | 0930 | 0.23 | 45 | 6.9 | 26.0 | 6.1 | 76 |
| SEP | | | | | | | |
| 12... | 1445 | .42 | 44 | 7.1 | 23.0 | 7.4 | 88 |
| OCT | | | | | | | |
| 04... | 1340 | .14 | 50 | 6.8 | 23.5 | 7.7 | 93 |
| NOV | | | | | | | |
| 16... | 1315 | .30 | 49 | 6.0 | 14.5 | 6.5 | 66 |
| JAN , 1979 | | | | | | | |
| 18... | 1430 | 1.4 | 71 | 6.7 | 15.5 | 9.8 | 101 |
| FEB | | | | | | | |
| 15... | 1515 | .88 | 71 | 6.1 | 19.0 | 7.8 | 87 |
| APR | | | | | | | |
| 12... | 1755 | 1.3 | 76 | 6.4 | 20.0 | 8.3 | 94 |

Site 16

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 17... | 1015 | 0.03 | 205 | 6.2 | 25.5 | 5.6 | 70 |
| SEP | | | | | | | |
| 12... | 1340 | .03 | 188 | 6.7 | 23.0 | 5.2 | 62 |
| OCT | | | | | | | |
| 04... | 1315 | .02 | 205 | 6.3 | 22.0 | 6.9 | 81 |
| NOV | | | | | | | |
| 16... | 1205 | .11 | 276 | 3.9 | 16.5 | 5.9 | 62 |
| JAN , 1979 | | | | | | | |
| 17... | 1350 | .63 | 192 | 5.7 | 11.0 | 8.8 | 82 |
| FEB | | | | | | | |
| 15... | 1430 | .41 | 166 | 5.6 | 17.5 | 7.3 | 78 |

Table 5. Results of water-quality and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 1

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | | |
| 15... | 1205 | 0.02 | 255 | 4.6 | 26.5 | 4.7 | 59 | 62 | 36 | 17 |
| SEP | | | | | | | | | | |
| 15... | 0840 | .24 | 265 | 6.2 | 25.0 | 4.7 | 58 | 49 | 39 | 11 |
| OCT | | | | | | | | | | |
| 02... | 1025 | .09 | 254 | 6.5 | 20.0 | 5.6 | 64 | -- | -- | -- |
| NOV | | | | | | | | | | |
| 13... | 1220 | .36 | 220 | 6.3 | 18.5 | 3.1 | 34 | -- | -- | -- |
| JAN, 1979 | | | | | | | | | | |
| 15... | 1530 | 1.4 | 285 | 5.9 | 4.5 | 11.2 | 90 | -- | -- | -- |
| FEB | | | | | | | | | | |
| 12... | 1705 | 1.7 | 286 | 5.8 | 14.5 | 9.0 | 91 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | 4.8 | 20 | 1.1 | 5.9 | 32 | 0 | 38 | 32 | 0.2 |
| SEP | | | | | | | | | |
| 15... | 5.1 | 22 | 1.4 | 5.6 | 12 | 0 | 49 | 30 | .1 |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN, 1979 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | 0.4 | 0.13 | 30 | 165 | 40 | 770 | 40 | 240 | 110 |
| SEP | | | | | | | | | |
| 15... | .2 | .03 | 37 | 168 | 60 | 1300 | 30 | 440 | 100 |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN, 1979 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 2

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 15... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | | |
| 02... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | |
| 13... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN, 1979 | | | | | | | | | | |
| 15... | 1630 | .17 | 245 | 5.5 | 6.5 | 10.8 | 91 | 46 | 40 | 10 |
| FEB | | | | | | | | | | |
| 13... | 0850 | .55 | 155 | 6.1 | 10.0 | 9.6 | 88 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN, 1979 | | | | | | | | | |
| 15... | 5.1 | 21 | 1.3 | 4.2 | 8 | 0 | 45 | 35 | 0.1 |
| FEB | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN, 1979 | | | | | | | | | |
| 15... | 0.2 | 0.04 | 16 | 142 | 40 | 560 | 10 | 540 | 110 |
| FEB | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Site 3

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | |
| 15... | 1130 | 0.01 | 275 | 4.3 | 25.5 | 0.6 | 8 |
| SEP | | | | | | | |
| 15... | 1210 | .12 | 260 | 6.1 | 25.0 | .3 | 4 |
| OCT | | | | | | | |
| 02... | 1215 | .02 | 260 | 6.3 | 21.5 | .4 | 5 |
| NOV | | | | | | | |
| 13... | 1405 | .16 | 300 | 6.1 | 21.5 | 4.0 | 47 |
| JAN, 1979 | | | | | | | |
| 15... | 1700 | .50 | 154 | 6.0 | 5.5 | 10.6 | 87 |
| FEB | | | | | | | |
| 13... | 1020 | 1.0 | 170 | 6.2 | 10.5 | 9.7 | 90 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 4

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 15... | 0940 | .58 | 310 | 4.3 | 27.0 | 6.7 | 85 |
| OCT | | | | | | | |
| 02... | -- | .00 | -- | -- | -- | -- | -- |
| NOV | | | | | | | |
| 13... | 1530 | .13 | 234 | 4.4 | 20.0 | 6.8 | 77 |
| JAN , 1979 | | | | | | | |
| 16... | 1130 | 2.1 | 150 | 6.1 | 7.0 | 11.2 | 95 |
| FEB | | | | | | | |
| 13... | 1155 | 2.5 | 159 | 5.0 | 12.5 | 9.1 | 88 |

Site 5

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | 1015 | 0.07 | 135 | 4.6 | 24.0 | 8.0 | 98 |
| SEP | | | | | | | |
| 15... | 1010 | .03 | 130 | 6.5 | 23.0 | 7.8 | 93 |
| OCT | | | | | | | |
| 02... | 1345 | .08 | 114 | 6.7 | 22.0 | 8.4 | 99 |
| NOV | | | | | | | |
| 13... | 1650 | .06 | 104 | 6.6 | 20.5 | 8.1 | 92 |
| JAN , 1979 | | | | | | | |
| 15... | 1630 | .04 | 163 | 6.2 | 8.0 | 9.8 | 85 |
| FEB | | | | | | | |
| 13... | 1330 | .05 | 130 | 6.5 | 14.0 | 9.0 | 90 |

Site 6

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 15... | 1035 | .08 | 140 | 6.3 | 27.0 | 4.9 | 62 |
| OCT | | | | | | | |
| 02... | 1325 | .001 | 105 | 6.4 | 27.5 | 7.1 | 91 |
| NOV | | | | | | | |
| 13... | 1510 | .06 | 95 | 6.6 | 23.0 | 8.7 | 104 |
| JAN , 1979 | | | | | | | |
| 15... | 1610 | .21 | 98 | 6.5 | 5.0 | 13.0 | 105 |
| FEB | | | | | | | |
| 13... | 1455 | .21 | 94 | 6.7 | 14.0 | 13.6 | 136 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 7

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| SEP, 1978 | | | | | | | | | | |
| 15... | 0750 | 30 | 250 | 6.4 | 26.0 | 5.9 | 74 | -- | -- | -- |
| OCT | | | | | | | | | | |
| 02... | 1250 | .60 | 325 | 6.0 | 26.0 | 9.1 | 114 | 79 | 54 | 18 |
| NOV | | | | | | | | | | |
| 13... | 1410 | 1.0 | 355 | 6.8 | 21.5 | 11.7 | 136 | -- | -- | -- |
| JAN, 1979 | | | | | | | | | | |
| 15... | 1355 | 58 | 355 | 6.5 | 2.5 | 12.0 | 91 | 90 | 75 | 20 |
| FEB | | | | | | | | | | |
| 13... | 1230 | 53 | 450 | 6.4 | 11.5 | 9.5 | 90 | 120 | 100 | 30 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| SEP, 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 02... | 8.2 | 25 | 1.2 | 4.9 | 30 | 0 | 62 | 36 | 0.2 |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN, 1979 | | | | | | | | | |
| 15... | 9.7 | 28 | 1.3 | 4.6 | 18 | 0 | 72 | 44 | .1 |
| FEB | | | | | | | | | |
| 13... | 12 | 35 | 1.4 | 4.3 | 26 | 0 | 96 | 52 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| SEP, 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 02... | 0.4 | 0.04 | 22 | 192 | 60 | 90 | 20 | 300 | 220 |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN, 1979 | | | | | | | | | |
| 15... | .2 | .01 | 15 | 203 | 80 | 150 | 30 | 330 | 230 |
| FEB | | | | | | | | | |
| 13... | .3 | .02 | 17 | 260 | 40 | 40 | 50 | 450 | 300 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 8

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 14... | 1500 | 0.08 | 120 | 7.4 | 27.0 | 5.8 | 73 | 18 | 5 | 4.1 |
| SEP | | | | | | | | | | |
| 14... | 1420 | .31 | 190 | 6.4 | 25.0 | 5.7 | 70 | 32 | 20 | 6.6 |
| OCT | | | | | | | | | | |
| 02... | 0800 | .17 | 110 | 6.4 | 20.0 | 6.2 | 70 | 15 | 9 | 3.3 |
| NOV | | | | | | | | | | |
| 13... | 1015 | .22 | 136 | 6.4 | 18.0 | 6.1 | 66 | 22 | 14 | 4.5 |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1315 | .59 | 170 | 6.3 | 7.5 | 11.2 | 97 | 31 | 26 | 5.9 |
| FEB | | | | | | | | | | |
| 12... | 1325 | .53 | 198 | 6.0 | 12.0 | 9.2 | 88 | 33 | 28 | 6.7 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | 1.8 | 10 | 1.0 | 4.1 | 16 | 0 | 11 | 17 | 0.1 |
| SEP | | | | | | | | | |
| 14... | 3.7 | 16 | 1.2 | 4.9 | 14 | 0 | 31 | 24 | .1 |
| OCT | | | | | | | | | |
| 02... | 1.7 | 11 | 1.2 | 3.9 | 8 | 0 | 13 | 18 | .1 |
| NOV | | | | | | | | | |
| 13... | 2.6 | 13 | 1.2 | 4.4 | 10 | 0 | 20 | 22 | .0 |
| JAN , 1979 | | | | | | | | | |
| 16... | 3.9 | 17 | 1.3 | 3.8 | 6 | 0 | 35 | 26 | .1 |
| FEB | | | | | | | | | |
| 12... | 3.9 | 19 | 1.4 | 3.9 | 6 | 0 | 33 | 24 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | 0.2 | 0.05 | 25 | 81 | 20 | 80 | 10 | 50 | 70 |
| SEP | | | | | | | | | |
| 14... | .3 | .02 | 31 | 125 | 50 | 300 | 10 | 140 | 60 |
| OCT | | | | | | | | | |
| 02... | .1 | .02 | 28 | 83 | 40 | 70 | 10 | 40 | 30 |
| NOV | | | | | | | | | |
| 13... | .2 | .01 | 29 | 101 | 30 | 180 | 9 | 110 | 40 |
| JAN , 1979 | | | | | | | | | |
| 16... | .2 | .01 | 26 | 122 | 20 | 280 | 20 | 240 | 70 |
| FEB | | | | | | | | | |
| 12... | .2 | .01 | 25 | 119 | 30 | 300 | 20 | 260 | 100 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-1979--Continued

Oakwood Salt Dome

Site 9

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 14... | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 14... | 1320 | .44 | 440 | 4.3 | 27.0 | 4.1 | 52 | 91 | 91 | 22 |
| OCT | | | | | | | | | | |
| 02... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | |
| 13... | 0835 | .04 | 580 | 4.5 | 17.0 | 4.5 | 48 | -- | -- | -- |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1450 | 1.4 | 316 | 6.1 | 8.5 | 11.6 | 103 | -- | -- | -- |
| FEB | | | | | | | | | | |
| 12... | 1520 | 3.2 | 290 | 6.0 | 18.5 | 11.4 | 125 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 14... | 8.7 | 27 | 1.2 | 7.2 | 0 | 0 | 100 | 38 | 0.1 |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 14... | 0.3 | 0.02 | 36 | 243 | 80 | 430 | 40 | 3000 | 160 |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 10 -

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG. 1978 | | | | | | | | | | |
| 14... | 1235 | 0.16 | 690 | 7.3 | 30.0 | 8.0 | 107 | -- | -- | -- |
| SEP | | | | | | | | | | |
| 14... | 1130 | 93 | 247 | 6.5 | 26.0 | 4.0 | 50 | 65 | 37 | 15 |
| OCT | | | | | | | | | | |
| 02... | 1530 | 2.2 | 516 | 6.7 | 22.0 | 6.9 | 81 | 140 | 81 | 31 |
| NOV | | | | | | | | | | |
| 13... | 1500 | 2.3 | 392 | 6.8 | 18.0 | 5.5 | 60 | -- | -- | -- |
| JAN. 1979 | | | | | | | | | | |
| 15... | 1050 | 34 | 440 | 7.1 | 2.0 | 12.2 | 91 | 120 | 89 | 27 |
| FEB | | | | | | | | | | |
| 12... | 1410 | 41 | 505 | 7.2 | 10.0 | 9.9 | 91 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1978 | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 14... | 6.6 | 17 | 0.9 | 6.7 | 34 | 0 | 46 | 27 | 0.1 |
| OCT | | | | | | | | | |
| 02... | 14 | 42 | 1.6 | 7.2 | 66 | 0 | 97 | 61 | .2 |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 1979 | | | | | | | | | |
| 15... | 12 | 32 | 1.3 | 5.0 | 34 | 0 | 90 | 53 | .1 |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1978 | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 14... | 1.0 | 0.02 | 30 | 169 | 20 | 2400 | 20 | 410 | 200 |
| OCT | | | | | | | | | |
| 02... | .2 | .06 | 26 | 312 | 100 | 40 | 30 | 230 | 430 |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 1979 | | | | | | | | | |
| 15... | .3 | .02 | 17 | 255 | 30 | 520 | 30 | 780 | 300 |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 11

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS (FT3/S) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| SEP , 1978 | | | | | | | | | | |
| 14... | 1000 | 0.51 | 165 | 5.9 | 24.0 | 1.9 | 23 | 32 | 21 | 8.0 |
| OCT | | | | | | | | | | |
| 02... | 1730 | .46 | 144 | 6.8 | 26.0 | 2.6 | 32 | 32 | 14 | 7.9 |
| NOV | | | | | | | | | | |
| 13... | 1610 | 4.2 | 126 | 5.9 | 21.0 | 5.9 | 68 | 25 | 13 | 5.7 |
| JAN , 1979 | | | | | | | | | | |
| 15... | 1230 | 3.2 | 163 | 6.8 | 2.0 | 12.4 | 93 | 35 | 28 | 8.2 |
| FEB | | | | | | | | | | |
| 12... | 1535 | 5.0 | 163 | 6.4 | 18.5 | 8.9 | 98 | 36 | 21 | 8.8 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| SEP , 1978 | | | | | | | | | |
| 14... | 3.0 | 12 | 0.9 | 4.9 | 14 | 0 | 30 | 19 | 0.1 |
| OCT | | | | | | | | | |
| 02... | 2.9 | 11 | .9 | 3.9 | 22 | 0 | 14 | 23 | .1 |
| NOV | | | | | | | | | |
| 13... | 2.5 | 10 | .9 | 4.1 | 14 | 0 | 16 | 20 | .0 |
| JAN , 1979 | | | | | | | | | |
| 15... | 3.5 | 13 | 1.0 | 3.6 | 8 | 0 | 29 | 23 | .0 |
| FEB | | | | | | | | | |
| 12... | 3.3 | 13 | .9 | 3.8 | 18 | 0 | 26 | 21 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| SEP , 1978 | | | | | | | | | |
| 14... | 0.2 | 0.01 | 26 | 111 | 60 | 190 | 10 | 480 | 60 |
| OCT | | | | | | | | | |
| 02... | .3 | .02 | 29 | 104 | 40 | 280 | 10 | 170 | 60 |
| NOV | | | | | | | | | |
| 13... | .1 | .01 | 23 | 89 | 30 | 200 | 8 | 130 | 50 |
| JAN , 1979 | | | | | | | | | |
| 15... | .1 | .01 | 20 | 105 | 20 | 600 | 7 | 210 | 70 |
| FEB | | | | | | | | | |
| 12... | .1 | .01 | 17 | 102 | 30 | 140 | 20 | 180 | 90 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 12

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 14... | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 14... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | | |
| 02... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | |
| 13... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | | |
| 15... | 1350 | .10 | 521 | 6.8 | 3.0 | 11.9 | 92 | 85 | 62 | 21 |
| FEB | | | | | | | | | | |
| 12... | 1640 | .20 | 384 | 7.0 | 19.0 | 8.1 | 90 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 15... | 7.9 | 63 | 3.0 | 3.9 | 28 | 0 | 30 | 130 | 0.1 |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 02... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 15... | 0.5 | 0.05 | 18 | 295 | 30 | 4800 | 10 | 1900 | 380 |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 13

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | | |
| 14... | 1540 | 0.21 | 240 | 6.8 | 30.0 | 6.3 | 84 | 40 | 33 | 9.4 |
| SEP | | | | | | | | | | |
| 14... | 1530 | .71 | 272 | 6.2 | 27.0 | 7.2 | 91 | 45 | 35 | 11 |
| OCT | | | | | | | | | | |
| 02... | 1650 | .39 | 220 | 6.9 | 24.0 | 8.1 | 99 | 40 | 33 | 10 |
| NOV | | | | | | | | | | |
| 13... | 1730 | .87 | 248 | 6.3 | 20.5 | -- | -- | 32 | 27 | 7.1 |
| JAN, 1979 | | | | | | | | | | |
| 15... | 1515 | 1.3 | 634 | 5.0 | 5.5 | 11.2 | 92 | 64 | 63 | 13 |
| FEB | | | | | | | | | | |
| 12... | 1725 | 1.4 | 560 | 5.3 | 14.5 | 9.0 | 91 | 59 | 54 | 13 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 14... | 4.0 | 22 | 1.5 | 4.8 | 8 | 0 | 7.3 | 61 | 0.0 |
| SEP | | | | | | | | | |
| 14... | 4.1 | 30 | 2.0 | 4.4 | 12 | 0 | 11 | 72 | .0 |
| OCT | | | | | | | | | |
| 02... | 3.6 | 23 | 1.6 | 4.0 | 8 | 0 | 6.1 | 61 | .0 |
| NOV | | | | | | | | | |
| 13... | 3.5 | 28 | 2.2 | 4.3 | 6 | 0 | 6.5 | 65 | .0 |
| JAN, 1979 | | | | | | | | | |
| 15... | 7.6 | 70 | 3.8 | 4.0 | 2 | 0 | 18 | 140 | .1 |
| FEB | | | | | | | | | |
| 12... | 6.4 | 63 | 3.6 | 4.2 | 6 | 0 | 15 | 130 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 14... | 0.6 | 0.02 | 18 | 132 | 60 | 480 | 7 | 80 | 100 |
| SEP | | | | | | | | | |
| 14... | .6 | .02 | 25 | 165 | 60 | 580 | 10 | 160 | 170 |
| OCT | | | | | | | | | |
| 02... | .3 | .02 | 22 | 134 | 50 | 230 | 10 | 70 | 130 |
| NOV | | | | | | | | | |
| 13... | .5 | .01 | 22 | 140 | 30 | 190 | 6 | 100 | 160 |
| JAN, 1979 | | | | | | | | | |
| 15... | 1.0 | .02 | 23 | 283 | 40 | 4500 | 10 | 340 | 520 |
| FEB | | | | | | | | | |
| 12... | 1.0 | .02 | 20 | 260 | 40 | 3100 | 20 | 260 | 440 |

Site 14

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | |
| 14... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 14... | 1625 | .07 | 566 | 3.4 | 32.0 | 2.8 | 38 |
| OCT | | | | | | | |
| 02... | -- | .00 | -- | -- | -- | -- | -- |
| NOV | | | | | | | |
| 13... | 1225 | .01 | 450 | 4.0 | 20.0 | 3.3 | 38 |
| JAN, 1979 | | | | | | | |
| 15... | 1605 | .56 | 424 | 5.1 | 5.5 | 10.2 | 84 |
| FEB | | | | | | | |
| 12... | 1020 | .71 | 496 | 5.2 | 11.0 | 9.4 | 88 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 15

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 14... | 1730 | 0.001 | 109 | 6.4 | 27.0 | 4.6 | 58 |
| SEP | | | | | | | |
| 14... | 1710 | .07 | 140 | 6.8 | 26.5 | 6.8 | 86 |
| OCT | | | | | | | |
| 02... | 1435 | .03 | 90 | 6.5 | 22.5 | 7.8 | 92 |
| NOV | | | | | | | |
| 13... | 1305 | .04 | 105 | 6.7 | 19.5 | 7.8 | 88 |
| JAN , 1979 | | | | | | | |
| 15... | 1725 | .48 | 129 | 5.5 | 6.5 | 10.4 | 87 |
| FEB | | | | | | | |
| 12... | 1150 | .36 | 116 | 5.8 | 12.5 | 9.0 | 87 |

Site 16

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 14... | 1530 | 0.10 | 624 | 7.4 | 29.5 | 6.4 | 84 | 150 | 39 | 35 |
| SEP | | | | | | | | | | |
| 15... | 0955 | 29 | 270 | 6.8 | 26.0 | 6.3 | 79 | -- | -- | -- |
| OCT | | | | | | | | | | |
| 03... | 1015 | 2.2 | 440 | 7.0 | 22.0 | 5.4 | 64 | -- | -- | -- |
| NOV | | | | | | | | | | |
| 13... | 1120 | 3.3 | 355 | 6.8 | 17.5 | 6.4 | 69 | -- | -- | -- |
| JAN , 1979 | | | | | | | | | | |
| 15... | 1400 | 52 | 390 | 6.1 | 3.5 | 11.7 | 91 | -- | -- | -- |
| FEB | | | | | | | | | | |
| 12... | 0850 | 63 | 436 | 6.6 | 8.5 | 10.1 | 89 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | 16 | 61 | 2.1 | 9.0 | 140 | 0 | 70 | 82 | 0.3 |
| SEP | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 14... | 0.7 | 0.16 | 14 | 359 | 100 | 70 | 40 | 870 | 500 |
| SEP | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 17

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN . 1979 | | | | | | | | | | |
| 16... | 1700 | 65 | 431 | 6.7 | 7.0 | 12.0 | 102 | 98 | 82 | 21 |
| FEB | | | | | | | | | | |
| 13... | 1125 | 73 | 440 | 6.4 | 12.0 | 9.7 | 93 | 110 | 92 | 24 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| JAN . 1979 | | | | | | | | | |
| 16... | 11 | 32 | 1.4 | 5.3 | 20 | 0 | 82 | 54 | 0.1 |
| FEB | | | | | | | | | |
| 13... | 12 | 36 | 1.5 | 4.8 | 22 | 0 | 94 | 56 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| JAN . 1979 | | | | | | | | | |
| 16... | 0.3 | 0.02 | 19 | 236 | 40 | 160 | 30 | 810 | 300 |
| FEB | | | | | | | | | |
| 13... | .3 | .03 | 21 | 260 | 40 | 50 | 30 | 760 | 320 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Oakwood Salt Dome

Site 18

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT. 1978 | | | | | | | | | | |
| 02... | 1805 | 0.94 | 282 | 6.0 | 22.0 | 6.2 | 73 | 74 | 57 | 17 |
| NOV | | | | | | | | | | |
| 13... | 1515 | 2.1 | 264 | 6.7 | 17.5 | 7.3 | 78 | -- | -- | -- |
| JAN. 1979 | | | | | | | | | | |
| 16... | 1730 | 66 | 360 | 6.0 | 5.0 | 11.4 | 92 | 85 | 68 | 19 |
| FEB | | | | | | | | | | |
| 13... | 0940 | 65 | 396 | 6.5 | 10.5 | 9.3 | 86 | 99 | 81 | 23 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 1978 | | | | | | | | | |
| 02... | 7.5 | 23 | 1.2 | 5.4 | 20 | 0 | 65 | 36 | 0.2 |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | 17 | 0 | -- | -- | -- |
| JAN. 1979 | | | | | | | | | |
| 16... | 9.0 | 28 | 1.3 | 4.5 | 20 | 0 | 65 | 44 | .1 |
| FEB | | | | | | | | | |
| 13... | 10 | 31 | 1.4 | 3.9 | 22 | 0 | 91 | 46 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| OCT. 1978 | | | | | | | | | |
| 02... | 0.3 | 0.03 | 18 | 183 | 60 | 150 | 20 | 190 | 200 |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN. 1979 | | | | | | | | | |
| 16... | .2 | .01 | 14 | 194 | 30 | 150 | 20 | 320 | 220 |
| FEB | | | | | | | | | |
| 13... | .3 | .02 | 21 | 238 | 30 | 80 | 30 | 380 | 320 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 1

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 13... | 1450 | 27 | 358 | 6.3 | 25.5 | 6.9 | 86 | 76 | 67 | 19 |
| OCT | | | | | | | | | | |
| 03... | 1445 | .66 | 190 | 6.2 | 23.0 | 6.0 | 71 | 44 | 28 | 10 |
| NOV | | | | | | | | | | |
| 14... | 1035 | 2.5 | 180 | 5.8 | 18.0 | 6.7 | 73 | 38 | 18 | 8.4 |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1355 | 12 | 240 | 6.1 | 6.0 | 11.4 | 94 | 51 | 43 | 11 |
| FEB | | | | | | | | | | |
| 13... | 1700 | 15 | 227 | 6.3 | 12.0 | 9.6 | 92 | 47 | 32 | 10 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | 7.0 | 21 | 1.0 | 7.4 | 12 | 0 | 93 | 30 | 0.0 |
| OCT | | | | | | | | | |
| 03... | 4.7 | 20 | 1.3 | 4.6 | 20 | 0 | 33 | 32 | .1 |
| NOV | | | | | | | | | |
| 14... | 4.0 | 18 | 1.3 | 4.2 | 24 | 0 | 21 | 33 | .1 |
| JAN , 1979 | | | | | | | | | |
| 16... | 5.8 | 19 | 1.2 | 3.5 | 10 | 0 | 49 | 29 | .1 |
| FEB | | | | | | | | | |
| 13... | 5.4 | 19 | 1.2 | 3.4 | 18 | 0 | 43 | 24 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | 0.3 | 0.01 | 37 | 226 | 70 | 260 | 20 | 4500 | 130 |
| OCT | | | | | | | | | |
| 03... | .3 | .04 | 41 | 161 | 60 | 4000 | 10 | 950 | 70 |
| NOV | | | | | | | | | |
| 14... | .3 | .03 | 32 | 134 | 30 | 710 | 10 | 120 | 60 |
| JAN , 1979 | | | | | | | | | |
| 16... | .2 | .02 | 25 | 149 | 30 | 650 | 20 | 400 | 100 |
| FEB | | | | | | | | | |
| 13... | .2 | .02 | 21 | 136 | 30 | 180 | 10 | 320 | 130 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 2

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 15... | 1700 | 0.12 | 496 | 6.2 | 30.5 | 6.6 | 88 | 150 | 150 | 38 |
| SEP | | | | | | | | | | |
| 13... | 1350 | 17 | 318 | 6.8 | 25.5 | 6.2 | 78 | 80 | 75 | 19 |
| OCT | | | | | | | | | | |
| 03... | 1240 | 1.7 | 264 | 6.4 | 22.5 | 7.4 | 87 | 73 | 52 | 17 |
| NOV | | | | | | | | | | |
| 14... | 1215 | 2.6 | 224 | 6.1 | 19.5 | 6.4 | 72 | 54 | 29 | 12 |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1250 | 12 | 268 | 6.6 | 5.5 | 11.6 | 95 | 61 | 46 | 13 |
| FEB | | | | | | | | | | |
| 13... | 1640 | 16 | 254 | 6.5 | 12.0 | 10.0 | 96 | 62 | 41 | 14 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 14 | 25 | 0.9 | 9.5 | 8 | 0 | 160 | 41 | 0.1 |
| SEP | | | | | | | | | |
| 13... | 7.9 | 22 | 1.1 | 7.3 | 6 | 0 | 81 | 36 | .1 |
| OCT | | | | | | | | | |
| 03... | 7.5 | 21 | 1.1 | 5.0 | 26 | 0 | 53 | 38 | .1 |
| NOV | | | | | | | | | |
| 14... | 5.7 | 20 | 1.2 | 4.7 | 30 | 0 | 34 | 34 | .1 |
| JAN , 1979 | | | | | | | | | |
| 16... | 6.8 | 20 | 1.1 | 3.5 | 18 | 0 | 47 | 37 | .1 |
| FEB | | | | | | | | | |
| 13... | 6.6 | 20 | 1.1 | 3.6 | 26 | 0 | 43 | 33 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 0.8 | 0.02 | 36 | 340 | 60 | 60 | 50 | 11000 | 300 |
| SEP | | | | | | | | | |
| 13... | .3 | .01 | 28 | 207 | 80 | 60 | 30 | 1800 | 140 |
| OCT | | | | | | | | | |
| 03... | .3 | .03 | 31 | 187 | 40 | 70 | 20 | 860 | 120 |
| NOV | | | | | | | | | |
| 14... | .2 | .03 | 26 | 152 | 30 | 320 | 20 | 380 | 90 |
| JAN , 1979 | | | | | | | | | |
| 16... | .2 | .01 | 21 | 158 | 20 | 260 | 10 | 440 | 120 |
| FEB | | | | | | | | | |
| 13... | .2 | .01 | 19 | 153 | 30 | 100 | 20 | 390 | 110 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 3

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 14... | -- | .00 | -- | -- | -- | -- | -- |
| OCT | | | | | | | |
| 03... | -- | .00 | -- | -- | -- | -- | -- |
| NOV | | | | | | | |
| 14... | -- | .00 | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | |
| 16... | 1530 | .86 | 409 | 5.9 | 7.5 | 10.0 | 86 |
| FEB | | | | | | | |
| 14... | 1035 | 1.5 | 390 | 6.2 | 11.5 | 8.8 | 83 |

Site 4

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | 1500 | 0.18 | 160 | 6.8 | 28.5 | 7.2 | 94 |
| SEP | | | | | | | |
| 14... | 1000 | .36 | 243 | 6.7 | 23.5 | 5.8 | 70 |
| OCT | | | | | | | |
| 03... | 1030 | .31 | 180 | 6.5 | 21.0 | 8.1 | 93 |
| NOV | | | | | | | |
| 14... | 1410 | .29 | 174 | 6.1 | 20.5 | 7.1 | 81 |
| JAN , 1979 | | | | | | | |
| 16... | 1625 | 1.7 | 226 | 6.5 | 8.0 | 10.8 | 94 |
| FEB | | | | | | | |
| 14... | 0945 | 2.1 | 218 | 6.7 | 10.5 | 9.5 | 88 |

Site 5

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 13... | 1730 | .77 | 320 | 6.9 | 24.5 | -- | -- |
| OCT | | | | | | | |
| 03... | 1105 | .06 | 460 | 6.8 | 21.0 | 7.3 | 84 |
| NOV | | | | | | | |
| 13... | 0900 | .12 | 500 | 7.4 | 19.0 | 6.4 | 71 |
| JAN , 1979 | | | | | | | |
| 17... | 1000 | 2.1 | 354 | 7.3 | 9.5 | 10.4 | 94 |
| FEB | | | | | | | |
| 13... | 1420 | 2.8 | 315 | 7.2 | 10.0 | 9.7 | 89 |

Table 8. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 6

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 13... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | | |
| 03... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | |
| 13... | -- | .00 | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1720 | .02 | 469 | 6.3 | 8.0 | 3.5 | 30 | 86 | 37 | 23 |
| FEB | | | | | | | | | | |
| 14... | 0850 | .06 | 626 | 6.8 | 13.0 | 4.1 | 40 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 16... | 6.9 | 57 | 2.7 | 7.0 | 60 | 0 | 130 | 26 | 0.1 |
| FEB | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 16... | 0.1 | 0.00 | 7.9 | 288 | 40 | 200 | 2 | 30 | 140 |
| FEB | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Site 7

| DATE | TIME | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|
| SEP , 1978 | | | | | | | | | |
| 20... | 1807 | 6150 | 8.5 | 29.0 | 7.8 | 103 | 290 | 220 | 83 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| SEP , 1978 | | | | | | | | | |
| 20... | 20 | 1200 | 31 | 12 | 88 | 0 | 57 | 1900 | 0.3 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| SEP , 1978 | | | | | | | | | |
| 20... | 1.2 | 0.07 | 6.5 | 3330 | 220 | 20 | 8 | 0 | 1100 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 8

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) | HARDNESS (MG/L AS CACO3) | HARDNESS, NONCARBONATE (MG/L CACO3) | CALCIUM DISSOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | | |
| 15... | 1815 | 0.27 | 415 | 6.1 | 28.0 | 5.2 | 67 | 81 | 44 | 19 |
| SEP | | | | | | | | | | |
| 13... | 1110 | 2.3 | 242 | 6.1 | 25.5 | 6.0 | 75 | 52 | 33 | 12 |
| OCT | | | | | | | | | | |
| 03... | 1010 | .60 | 370 | 6.8 | 21.0 | 6.6 | 76 | 68 | 37 | 15 |
| NOV | | | | | | | | | | |
| 14... | 1030 | 1.0 | 418 | 7.1 | 19.0 | 5.6 | 62 | 78 | 48 | 17 |
| JAN, 1979 | | | | | | | | | | |
| 16... | 1330 | 4.5 | 380 | 5.6 | 6.0 | 11.7 | 97 | 78 | 58 | 16 |
| FEB | | | | | | | | | | |
| 14... | 1015 | 7.0 | 406 | 6.8 | 13.0 | 9.4 | 92 | 79 | 59 | 17 |

| DATE | MAGNESIUM, DISSOLVED (MG/L AS MG) | SODIUM, DISSOLVED (MG/L AS NA) | SODIUM ADSORPTION RATIO | POTASSIUM, DISSOLVED (MG/L AS K) | BICARBONATE (MG/L AS HCO3) | CARBONATE (MG/L AS CO3) | SULFATE DISSOLVED (MG/L AS SO4) | CHLORIDE, DISSOLVED (MG/L AS CL) | FLUORIDE, DISSOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | 8.0 | 46 | 2.2 | 6.7 | 45 | 0 | 63 | 66 | 0.1 |
| SEP | | | | | | | | | |
| 13... | 5.4 | 26 | 1.6 | 5.3 | 24 | 0 | 44 | 36 | .1 |
| OCT | | | | | | | | | |
| 03... | 7.4 | 40 | 2.1 | 5.7 | 38 | 0 | 54 | 54 | .1 |
| NOV | | | | | | | | | |
| 14... | 8.5 | 38 | 1.9 | 6.7 | 36 | 0 | 63 | 58 | .1 |
| JAN, 1979 | | | | | | | | | |
| 16... | 9.1 | 38 | 1.9 | 4.8 | 24 | 0 | 73 | 52 | .1 |
| FEB | | | | | | | | | |
| 14... | 8.8 | 39 | 1.9 | 4.6 | 24 | 0 | 75 | 49 | .1 |

| DATE | BROMIDE DISSOLVED (MG/L AS BR) | IODIDE, DISSOLVED (MG/L AS I) | SILICA, DISSOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) | BORON, DISSOLVED (UG/L AS B) | IRON, DISSOLVED (UG/L AS FE) | LITHIUM DISSOLVED (UG/L AS LI) | MANGANESE, DISSOLVED (UG/L AS MN) | STRONTIUM, DISSOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | | | |
| 15... | 0.3 | 0.03 | 25 | 257 | 50 | 400 | 50 | 100 | 240 |
| SEP | | | | | | | | | |
| 13... | .3 | .02 | 21 | 163 | 60 | 240 | 20 | 100 | 120 |
| OCT | | | | | | | | | |
| 03... | .4 | .02 | 29 | 225 | 50 | 500 | 40 | 80 | 180 |
| NOV | | | | | | | | | |
| 14... | .3 | .03 | 28 | 238 | 40 | 40 | 40 | 80 | 190 |
| JAN, 1979 | | | | | | | | | |
| 16... | .3 | .03 | 24 | 230 | 40 | 540 | 40 | 500 | 180 |
| FEB | | | | | | | | | |
| 14... | .2 | .02 | 27 | 233 | 40 | 200 | 40 | 440 | 180 |

Site 9

| DATE | TIME | STREAMFLOW, INSTANTANEOUS ($FT^3/S$) | SPECIFIC CONDUCTANCE (MICROMHOS) | PH (UNITS) | TEMPERATURE (DEG C) | OXYGEN, DISSOLVED (MG/L) | OXYGEN, DISSOLVED (PERCENT SATURATION) |
|---|---|---|---|---|---|---|---|
| AUG, 1978 | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- |
| SEP | | | | | | | |
| 13... | 1425 | .03 | 880 | 6.7 | 24.5 | 5.3 | 65 |
| OCT | | | | | | | |
| 03... | -- | .00 | -- | -- | -- | -- | -- |
| NOV | | | | | | | |
| 14... | 1040 | .03 | 900 | 6.7 | 19.5 | 4.7 | 53 |
| JAN, 1979 | | | | | | | |
| 16... | 1040 | .17 | 650 | 6.8 | 6.0 | 9.9 | 82 |
| FEB | | | | | | | |
| 13... | 0850 | .52 | 545 | 6.5 | 8.5 | 8.7 | 77 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 10

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 15... | 1015 | 1.2 | 390 | 6.9 | 25.5 | 6.5 | 81 | 110 | 37 | 28 |
| SEP | | | | | | | | | | |
| 13... | 1710 | .51 | 350 | 7.1 | 25.0 | 6.8 | 84 | 85 | 14 | 23 |
| OCT | | | | | | | | | | |
| 03... | 1200 | .77 | 340 | 6.6 | 23.0 | 6.8 | 81 | 100 | 41 | 26 |
| NOV | | | | | | | | | | |
| 14... | 0820 | .60 | 372 | 6.7 | 19.0 | 6.6 | 73 | 100 | 35 | 26 |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1010 | 2.2 | 421 | 7.4 | 7.0 | 11.4 | 97 | 120 | 70 | 29 |
| FEB | | | | | | | | | | |
| 13... | 1200 | 1.9 | 415 | 7.1 | 9.0 | 9.3 | 83 | 110 | 59 | 27 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 9.5 | 25 | 1.0 | 5.1 | 88 | 0 | 52 | 33 | 0.2 |
| SEP | | | | | | | | | |
| 13... | 6.6 | 27 | 1.3 | 5.9 | 86 | 0 | 40 | 33 | .2 |
| OCT | | | | | | | | | |
| 03... | 9.3 | 25 | 1.1 | 5.0 | 76 | 0 | 48 | 34 | .2 |
| NOV | | | | | | | | | |
| 14... | 9.3 | 28 | 1.2 | 5.6 | 84 | 0 | 52 | 40 | .1 |
| JAN , 1979 | | | | | | | | | |
| 16... | 11 | 29 | 1.2 | 4.3 | 58 | 0 | 69 | 47 | .1 |
| FEB | | | | | | | | | |
| 13... | 11 | 31 | 1.3 | 4.3 | 66 | 0 | 75 | 43 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 0.4 | 0.10 | 20 | 217 | 140 | 70 | 30 | 180 | 310 |
| SEP | | | | | | | | | |
| 13... | .3 | .04 | 16 | 195 | 110 | 10 | 20 | 180 | 180 |
| OCT | | | | | | | | | |
| 03... | .3 | .03 | 20 | 206 | 110 | 40 | 20 | 170 | 250 |
| NOV | | | | | | | | | |
| 14... | .3 | .04 | 22 | 225 | 100 | 0 | 20 | 180 | 230 |
| JAN , 1979 | | | | | | | | | |
| 16... | .3 | .04 | 20 | 239 | 90 | 180 | 30 | 410 | 250 |
| FEB | | | | | | | | | |
| 13... | .3 | .04 | 24 | 249 | 110 | 50 | 30 | 350 | 290 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 11

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 15... | 0900 | 0.003 | 475 | 5.6 | 24.5 | 5.1 | 62 | 100 | 100 | 25 |
| SEP | | | | | | | | | | |
| 13... | 1605 | 1.4 | 243 | 6.4 | 24.0 | 6.9 | 84 | 41 | 0 | 9.8 |
| OCT | | | | | | | | | | |
| 03... | 1240 | .01 | 450 | 5.3 | 22.0 | 7.5 | 88 | -- | -- | -- |
| NOV | | | | | | | | | | |
| 14... | 1225 | .04 | 440 | 6.2 | 19.5 | 7.4 | 83 | -- | -- | -- |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1110 | .87 | 603 | 6.6 | 6.0 | 11.4 | 94 | -- | -- | -- |
| FEB | | | | | | | | | | |
| 13... | 1255 | 1.5 | 588 | 6.6 | 9.5 | 9.6 | 86 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 10 | 29 | 1.2 | 5.4 | 2 | 0 | 100 | 53 | 0.1 |
| SEP | | | | | | | | | |
| 13... | 3.9 | 14 | 1.0 | 3.9 | 110 | 0 | 36 | 21 | .1 |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 0.5 | 0.03 | 46 | 271 | 50 | 110 | 60 | 470 | 380 |
| SEP | | | | | | | | | |
| 13... | .2 | .01 | 3.9 | 147 | 60 | 70 | 20 | 170 | 110 |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN , 1979 | | | | | | | | | |
| 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | |
| 13... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 12

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG. 1978 | | | | | | | | | | |
| 15... | 1110 | 1.5 | 677 | 7.6 | 26.5 | 3.6 | 46 | 97 | 0 | 27 |
| SEP | | | | | | | | | | |
| 13... | 1445 | 4.9 | 420 | 6.4 | 23.0 | 5.6 | 67 | 70 | 6 | 19 |
| OCT | | | | | | | | | | |
| 03... | 1715 | 1.9 | 630 | 6.5 | 24.0 | 4.4 | 54 | 100 | 0 | 27 |
| NOV | | | | | | | | | | |
| 14... | 1200 | 2.1 | 640 | 7.4 | 20.5 | 4.6 | 52 | 100 | 0 | 27 |
| JAN. 1979 | | | | | | | | | | |
| 16... | 1110 | 9.8 | 514 | 6.8 | 7.5 | 11.0 | 95 | 120 | 51 | 29 |
| FEB | | | | | | | | | | |
| 14... | 1215 | 12 | 500 | 6.9 | 14.5 | 6.7 | 68 | 110 | 42 | 25 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1978 | | | | | | | | | |
| 15... | 7.1 | 97 | 4.3 | 11 | 200 | 0 | 55 | 86 | 0.2 |
| SEP | | | | | | | | | |
| 13... | 5.5 | 46 | 2.4 | 7.1 | 78 | 0 | 43 | 51 | .2 |
| OCT | | | | | | | | | |
| 03... | 7.9 | 92 | 4.0 | 11 | 180 | 0 | 51 | 88 | .2 |
| NOV | | | | | | | | | |
| 14... | 8.9 | 67 | 2.9 | 11 | 150 | 0 | 61 | 71 | .1 |
| JAN. 1979 | | | | | | | | | |
| 16... | 11 | 55 | 2.2 | 5.5 | 82 | 0 | 78 | 62 | .1 |
| FEB | | | | | | | | | |
| 14... | 11 | 49 | 2.1 | 5.2 | 80 | 0 | 76 | 54 | .2 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG. 1978 | | | | | | | | | |
| 15... | 0.4 | 0.05 | 16 | 401 | 350 | 1100 | 30 | 160 | 660 |
| SEP | | | | | | | | | |
| 13... | .4 | .03 | 15 | 226 | 170 | 50 | 10 | 200 | 180 |
| OCT | | | | | | | | | |
| 03... | .4 | .03 | 22 | 389 | 320 | 230 | 20 | 130 | 250 |
| NOV | | | | | | | | | |
| 14... | .4 | .04 | 23 | 344 | 290 | 80 | 20 | 180 | 250 |
| JAN. 1979 | | | | | | | | | |
| 16... | .3 | .04 | 22 | 304 | 120 | 30 | 30 | 440 | 260 |
| FEB | | | | | | | | | |
| 14... | .3 | .04 | 22 | 283 | 120 | 10 | 40 | 380 | 290 |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 13

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) |
|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | |
| 15... | 1625 | 1.7 | 601 | 6.6 | 28.5 | 4.2 | 55 |
| SEP | | | | | | | |
| 14... | 1130 | 9.2 | -- | 6.6 | 24.5 | 4.9 | 60 |
| OCT | | | | | | | |
| 03... | 0910 | 2.5 | 570 | 6.6 | 21.5 | 4.9 | 57 |
| NOV | | | | | | | |
| 14... | 1300 | 3.4 | 560 | 7.3 | 20.5 | 5.8 | 66 |
| JAN , 1979 | | | | | | | |
| 16... | 1545 | 15 | 464 | 6.1 | 7.0 | 10.6 | 90 |
| FEB | | | | | | | |
| 13... | 1535 | 18 | 473 | 7.0 | 12.0 | 8.0 | 77 |
| APR | | | | | | | |
| 11... | 1415 | 22 | 495 | 6.5 | 20.5 | -- | -- |

Site 14

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| JAN , 1979 | | | | | | | | | | |
| 16... | 0950 | 0.11 | 3250 | 5.9 | 3.5 | 12.0 | 93 | 800 | 800 | 160 |
| FEB | | | | | | | | | | |
| 13... | 0940 | .19 | 3220 | 5.3 | 8.5 | 9.8 | 87 | 740 | 730 | 140 |
| APR | | | | | | | | | | |
| 12... | 1110 | .52 | 2160 | 5.4 | 18.5 | 9.1 | 100 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| JAN , 1979 | | | | | | | | | |
| 16... | 95 | 360 | 5.6 | 9.7 | 2 | 0 | 410 | 740 | 0.5 |
| FEB | | | | | | | | | |
| 13... | 92 | 360 | 5.8 | 8.4 | 4 | 0 | 400 | 780 | .6 |
| APR | | | | | | | | | |
| 12... | -- | -- | -- | -- | 12 | 0 | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| JAN , 1979 | | | | | | | | | |
| 16... | 5.6 | 0.09 | 31 | 1820 | 50 | 2400 | 170 | 1800 | 4800 |
| FEB | | | | | | | | | |
| 13... | 6.5 | .09 | 31 | 1830 | 80 | 2300 | 180 | 1600 | 6500 |
| APR | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 15

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 15... | 1135 | 0.06 | 29200 | 3.7 | 28.5 | 5.4 | 70 | 2400 | 2400 | 660 |
| SEP | | | | | | | | | | |
| 14... | 1240 | .88 | 3580 | 3.7 | 27.5 | 7.4 | 95 | -- | -- | -- |
| OCT | | | | | | | | | | |
| 03... | 1255 | .08 | 7400 | 3.3 | 24.0 | 7.3 | 89 | -- | -- | -- |
| NOV | | | | | | | | | | |
| 14... | 0945 | .25 | 10500 | 3.7 | 19.5 | 11.5 | 129 | 1100 | 1100 | 260 |
| JAN , 1979 | | | | | | | | | | |
| 16... | 0900 | 1.6 | 4060 | 5.3 | 4.0 | 12.0 | 94 | 560 | 550 | 140 |
| FEB | | | | | | | | | | |
| 13... | 1040 | 1.8 | 3880 | 4.2 | 8.5 | 9.7 | 86 | 520 | 520 | 120 |
| APR | | | | | | | | | | |
| 12... | 0915 | 3.8 | 4280 | 4.6 | 19.0 | 8.6 | 96 | -- | -- | -- |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 160 | 5100 | 46 | 28 | 0 | 0 | 270 | 9800 | 0.5 |
| SEP | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 14... | 96 | 1900 | 26 | 20 | 0 | 0 | 200 | 3500 | .4 |
| JAN , 1979 | | | | | | | | | |
| 16... | 50 | 600 | 11 | 8.8 | 2 | 0 | 200 | 1200 | .3 |
| FEB | | | | | | | | | |
| 13... | 53 | 540 | 10 | 8.0 | 0 | 0 | 210 | 1000 | .4 |
| APR | | | | | | | | | |
| 12... | -- | -- | -- | -- | 0 | 0 | -- | -- | -- |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | 73 | 3.0 | 34 | 16200 | 3200 | 24000 | 400 | 3100 | 82000 |
| SEP | | | | | | | | | |
| 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| OCT | | | | | | | | | |
| 03... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | |
| 14... | 31 | .14 | 36 | 6070 | 830 | 4300 | 190 | 1500 | 21000 |
| JAN , 1979 | | | | | | | | | |
| 16... | 8.5 | .14 | 30 | 2250 | 180 | 13000 | 120 | 950 | 660 |
| FEB | | | | | | | | | |
| 13... | 9.4 | .16 | 31 | 1990 | 220 | 10000 | 140 | 950 | 5000 |
| APR | | | | | | | | | |
| 12... | -- | -- | -- | -- | -- | -- | -- | -- | -- |

Table 5. Results of water-quality analyses and streamflow measurements for surface-water sites, August 1978-April 1979--Continued

Palestine Salt Dome

Site 16

| DATE | TIME | STREAM-FLOW, INSTAN-TANEOUS ($FT^3/S$) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | PH (UNITS) | TEMPER-ATURE (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) | HARD-NESS (MG/L AS CACO3) | HARD-NESS, NONCAR-BONATE (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|---|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | | |
| 15... | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | | |
| 13... | 1315 | .29 | 220 | 7.0 | 25.0 | 6.6 | 81 | 64 | 0 | 14 |
| OCT | | | | | | | | | | |
| 03... | 1425 | .05 | 176 | 7.0 | 22.5 | 7.6 | 89 | 47 | 1 | 10 |
| NOV | | | | | | | | | | |
| 14... | 0845 | .19 | 342 | 6.9 | 19.0 | 7.4 | 82 | 63 | 12 | 14 |
| JAN , 1979 | | | | | | | | | | |
| 16... | 1200 | 1.8 | 214 | 6.8 | 6.5 | 10.6 | 89 | 43 | 18 | 9.1 |
| FEB | | | | | | | | | | |
| 14... | 0840 | 2.4 | 168 | 6.9 | 11.0 | 9.4 | 88 | 49 | 29 | 12 |

| DATE | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE (MG/L AS HCO3) | CAR-BONATE (MG/L AS CO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | 7.0 | 14 | 0.8 | 3.9 | 82 | 0 | 15 | 18 | 0.1 |
| OCT | | | | | | | | | |
| 03... | 5.4 | 13 | .8 | 3.5 | 56 | 0 | 10 | 22 | .1 |
| NOV | | | | | | | | | |
| 14... | 6.7 | 12 | .7 | 3.4 | 62 | 0 | 12 | 24 | .1 |
| JAN , 1979 | | | | | | | | | |
| 16... | 4.8 | 12 | .8 | 2.1 | 30 | 0 | 24 | 18 | .1 |
| FEB | | | | | | | | | |
| 14... | 4.6 | 12 | .7 | 2.1 | 24 | 0 | 25 | 27 | .1 |

| DATE | BROMIDE DIS-SOLVED (MG/L AS BR) | IODIDE, DIS-SOLVED (MG/L AS I) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | BORON, DIS-SOLVED (UG/L AS B) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) |
|---|---|---|---|---|---|---|---|---|---|
| AUG , 1978 | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP | | | | | | | | | |
| 13... | 0.3 | 0.07 | 23 | 136 | 60 | 90 | 5 | 30 | 120 |
| OCT | | | | | | | | | |
| 03... | .3 | .04 | 22 | 114 | 50 | 70 | 7 | 30 | 90 |
| NOV | | | | | | | | | |
| 14... | .2 | .06 | 22 | 125 | 40 | 170 | 10 | 70 | 100 |
| JAN , 1979 | | | | | | | | | |
| 16... | .1 | .02 | 20 | 106 | 40 | 660 | 5 | 450 | 100 |
| FEB | | | | | | | | | |
| 14... | .1 | .02 | 19 | 115 | 30 | 210 | 20 | 380 | 120 |

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