

DATA ON SUBSURFACE STORAGE OF LIQUID
WASTE NEAR PENSACOLA, FLORIDA, 1963-1980

By Robert W. Hull and J. B. Martin

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JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to:

U.S. Geological Survey
325 John Knox Road, Suite F-240
Tallahassee, Florida 32303

CONTENTS

| | Page |
|---|------|
| Abstract----- | 1 |
| Introduction----- | 1 |
| Description of injection sites----- | 3 |
| Monsanto Company, injection site 1----- | 3 |
| American Cynamid Company, injection site 2----- | 3 |
| Description of regional monitor well system----- | 6 |
| Injection and testing summary----- | 10 |
| Geologic data----- | 10 |
| Hydrologic data----- | 12 |
| Sample preparation methods and history of injection-site water-quality monitoring----- | 20 |
| Chemical and physical data----- | 22 |
| Industrial wastes----- | 22 |
| Wastewater backflush----- | 23 |
| Injection-site monitor wells----- | 23 |
| Regional monitor wells----- | 23 |
| Bacteriological and organic data----- | 23 |
| Selected references----- | 24 |

ILLUSTRATIONS

| | Page |
|---|------|
| Figure 1. Maps showing injection sites and regional monitor wells----- | 2 |
| 2. Hydrogeologic section and schematic profiles of wells, injection site 1----- | 4 |
| 3. Hydrogeologic section and schematic profiles of wells, injection site 2----- | 7 |
| 4. Graphs of injection well pressure, rate, and cumulative injection volume for injection site 1----- | 13 |
| 5. Hydrographs of water levels at monitor wells at injection site 1----- | 14 |
| 6. Graphs of injection well pressure, rate, and cumulative injection volume for injection site 2----- | 15 |

ILLUSTRATIONS--Continued

| | Page |
|---|------|
| Figures 7-8. Hydrographs of water levels at: | |
| 7. Monitor wells at injection site 2----- | 16 |
| 8. Regional monitor wells----- | 17 |
| 9-10. Schematic diagram of flow velocity and depth interval chemical data for the: | |
| 9. South monitor well at injection site 1----- | 18 |
| 10. North monitor well at injection site 1----- | 19 |

TABLES

| | Page |
|---|------|
| Tables 1-3. Descriptive data for: | |
| 1. Wells at injection site 1----- | 5 |
| 2. Wells at injection site 2----- | 8 |
| 3. Regional monitor wells----- | 9 |
| 4. Injection and testing summary at injection site 1----- | 11 |
| 5-7. Lithologic logs of: | |
| 5. Injection well A at injection site 1, station number 303537087145601----- | 28 |
| 6. South monitor well at injection site 1, station number 303417087141701----- | 32 |
| 7. North monitor well at injection site 1, station number 303657087154301----- | 35 |
| 8. Geophysical log data for injection site 1----- | 38 |
| 9. Chemical analyses of geologic samples from injection well A, at injection site 1----- | 40 |
| 10. Lithologic log of standby injection well, injection site 2, station number 303357087063801----- | 41 |

TABLES--Continued

| | Page |
|---|------|
| Table 11. Geophysical log data for injection site 2----- | 45 |
| 12. Mineralogy and cation-exchange capacity of cored samples taken from the primary injection well at injection site 2----- | 47 |
| 13-14. Lithologic logs of: | |
| 13. Regional monitor well 1, station number 303241086540401----- | 48 |
| 14. Regional monitor well 2, station number 304252087002201----- | 50 |
| 15. Geophysical log data for regional monitor wells 1 and 2----- | 53 |
| 16. Mineralogy and cation-exchange capacity of cored samples taken from regional monitor wells 1 and 2----- | 54 |
| 17-18. Monitor well sampling log for: | |
| 17. Injection site 1----- | 55 |
| 18. Injection site 2----- | 61 |
| 19-20. Water-quality analyses of industrial waste at: | |
| 19. Injection site 1----- | 65 |
| 20. Injection site 2----- | 68 |
| 21-22. Water-quality analyses of wastewater backflush from: | |
| 21. Injection wells A and B at injection site 1----- | 71 |
| 22. Injection well 1 at injection site 2----- | 77 |
| 23. Water-quality analyses of water samples from monitor wells at injection site 1----- | 79 |
| 24. Dissolved gas analyses of samples collected at monitor wells at injection site 1----- | 135 |

TABLES--Continued

| | Page |
|--|------|
| Table 25. Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2----- | 137 |
| 26. Dissolved gas analyses of samples collected at injection site 2----- | 170 |
| 27. Water-quality analyses of water samples from regional monitor wells----- | 172 |
| 28. Dissolved gas analyses of samples collected at the regional monitor wells----- | 176 |
| 29. Bacteriological data for samples collected at monitor wells at injection site 1----- | 176 |
| 30. Bacteriological data for samples collected of pre-injected waste, growth on head of injection well 1, and of samples from monitor wells at injection site 2----- | 177 |
| 31. Concentrations of organic compounds in waste, backflush of injection well 1, and monitor wells at injection site 2----- | 178 |

CONVERSION FACTORS

For use of those readers who may prefer to use metric units rather than inch-pound units, the conversion factors for the terms used in this report are listed below:

| <u>Multiply inch-pound units</u> | <u>By</u> | <u>To obtain metric units</u> |
|---|-----------|---|
| inch (in.) | 25.4 | millimeter (mm) |
| foot (ft) | .3048 | meter (m) |
| mile (mi) | 1.609 | kilometer (km) |
| square mile (mi ²) | 2.590 | square kilometer (km ²) |
| cubic foot per second (ft ³ /s) | .02832 | cubic meter per second (m ³ /s) |
| pound (lb) | .4536 | kilogram (kg) |

* * * * *

National Geodetic Vertical Datum of 1929 (NGVD of 1929): A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "mean sea level." NGVD of 1929 is referred to as sea level in the text of this report.

DATA ON SUBSURFACE STORAGE OF LIQUID WASTE NEAR PENSACOLA, FLORIDA, 1963-1980

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ABSTRACT

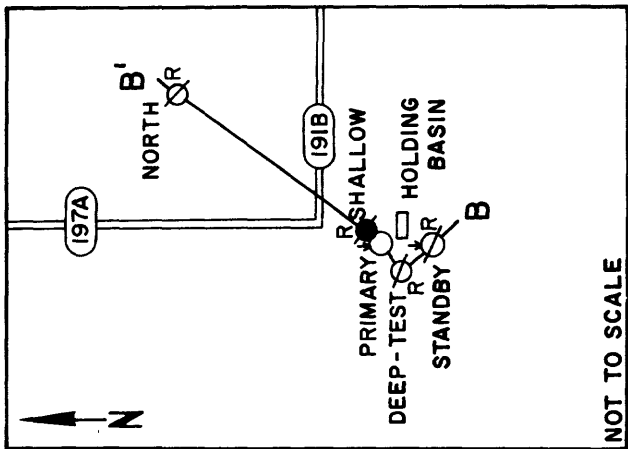
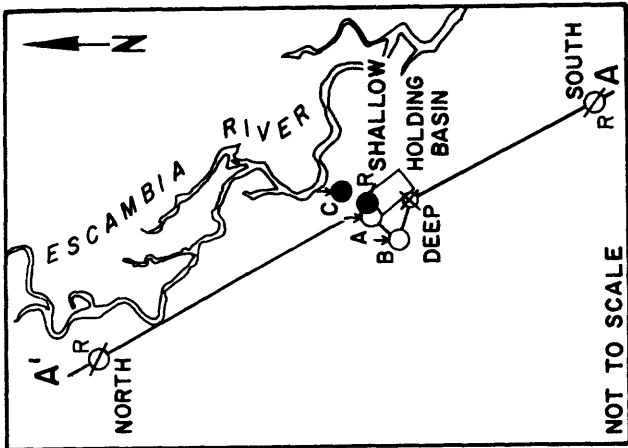
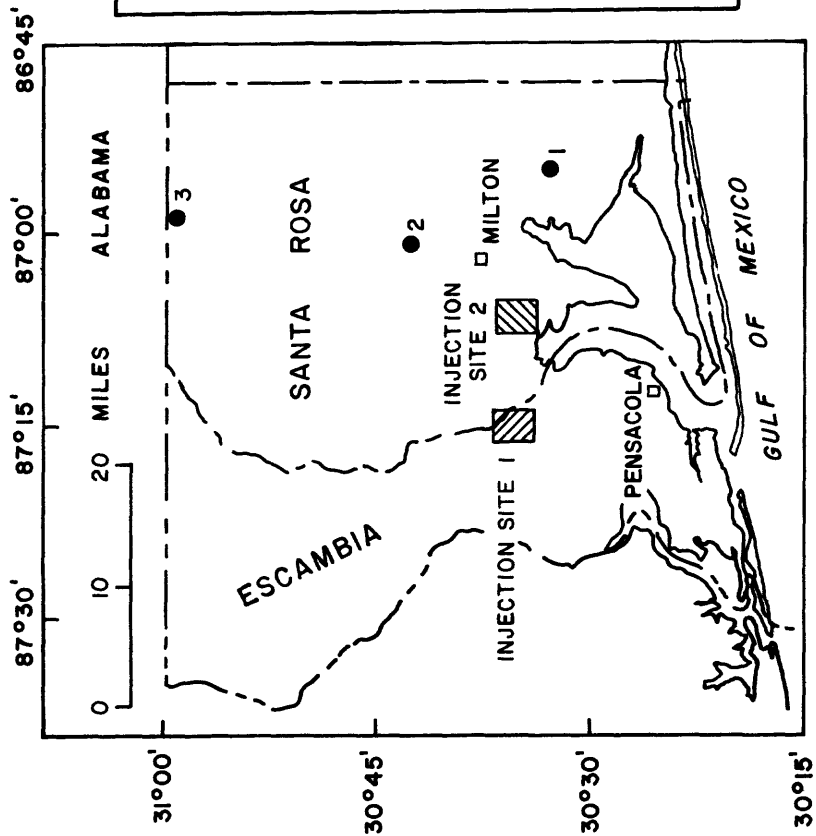
Since 1963, when industrial waste was first injected into the subsurface in northwest Florida, considerable data have been collected relating to the geochemistry of subsurface waste storage. This report presents hydrogeologic data on two subsurface storage systems near Pensacola, Florida, both of which inject liquid industrial waste through deep wells into a saline aquifer. Injection sites are described, including details of injection and testing; geologic data from cores and grab samples; graphs of injection rates, volume, pressure, and water levels; and chemical and physical data from water-quality samples collected from injection and monitor wells.

INTRODUCTION

Since 1963, when industrial liquid-waste was first injected into the subsurface near Pensacola, Fla., considerable data have been collected relating to the geochemistry of subsurface waste storage. The purpose of this report is to present the hydrogeologic data collected through June 30, 1980, at two subsurface storage systems, both of which inject acidic, liquid industrial waste into a saline aquifer through deep wells. To prevent interruption of text, tables 5-31 have been placed after "Selected References," beginning on page 28.

The report has been prepared as part of a U.S. Geological Survey nationwide program to study the feasibility and effects of deep well methods of subsurface storage. The first system, which began injection in 1963, is operated by the Monsanto Company and is herein referred to as injection site 1. The second system, which began injection in 1975, is operated by the American Cyanamid Company and is referred to as injection site 2. Data from three regional monitor wells, several miles from the industrial sites, are also presented. Figure 1 shows the locations of the industrial injection sites and the regional monitor wells.

Previous work related to subsurface waste storage includes: Batz, 1964; Dean, 1965; Barraclough, 1966; Goolsby, 1971; 1972; Foster and Goolsby, 1972; Kaufman, 1973; Puri and others, 1973; Faulkner and Pascale, 1975; Willis and others, 1975; Pascale, 1976; Elkan and Horvath, 1977; Warner and Lehr, 1977; Ehrlich and others, 1979; Miller, 1979; Vecchioli, 1979; Vecchioli and others, 1980; and Vecchioli and others, 1979. Data reports produced by the U.S. Geological Survey are as follows: Pascale, 1975; 1976; Pascale and Martin, 1977; 1978a; and 1978b. Although much of the hydrogeologic data related to industrial waste injection in northwest Florida have been published, many of these publications are out of print or otherwise inaccessible. In order to assemble all pertinent data, several previously published tables are also included.



EXPLANATION

INJECTION WELLS

ACTIVE

STANDBY

PROPOSED

MONITOR WELLS

INJECTION-ZONE MONITOR

SHALLOW-ZONE MONITOR

PLUGGED INJECTION-ZONE MONITOR

REGIONAL MONITOR WELL

R INDICATES RECORDING DEVICE ON SITE

B' — B HYDROGEOLOGIC SECTION (SEE FIGURES 2 AND 3)

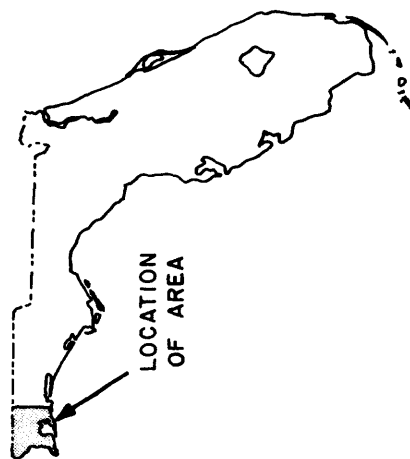


Figure 1.--Injection sites and regional monitor wells.

DESCRIPTION OF INJECTION SITES

Monsanto Company, Injection Site 1

The Monsanto Company facilities, injection site 1, located 13 miles north of Pensacola (fig. 1) comprise one of the world's largest wholly unified nylon plants. Complex organic and inorganic acid wastes from several process waste streams from the textile, chemical, and research operations are composited in a holding pond before being injected, untreated, into the subsurface. These wastes have variable characteristics but generally contain such constituents as organic monobasic and dibasic acids, nitric acid, ammonia, adiponitrile, hexamethylenediamine, sodium hydroxide, sodium carbonate, alcohols, and ketones (Batz, 1964, p. 87).

The waste-storage injection system which became operational in 1963 currently consists of two injection wells, A and B; two injection-zone monitor wells, north and south; and one upper-zone monitor well, shallow (fig. 1). A third injection-zone monitor well, deep, was plugged with cement in 1969. A third injection well, C, is scheduled for construction during 1982 (fig. 1).

Schematic profiles of wells for injection site 1 are shown in figure 2, with specific details are given in table 1. For protection against corrosion, the bottom 20 feet of casing of all injection-zone wells is stainless steel, as is the entire inner liner of each injection well. The A and B injection wells and the plugged deep monitor well are located at the apices of an equilateral triangle (fig. 1), 1,300 feet on a side. The shallow monitor well is about 100 feet northeast of the A injection well. The north and south monitor wells are located 1.9 and 1.5 miles in their respective directions from the midpoint between the A and B injection wells (fig. 1 and 2). The proposed injection well, C, is planned to be constructed 1,600 feet northeast of the A injection well on a line with the A and B wells. Of particular note are the sampling tubes installed to sample the middle of the suspected zone of waste-fluid movement at the north and south monitor wells, and the tube in the shallow monitor well installed to sample the lowermost part of the upper zone.

Waste is injected into the lower limestone of the Floridan aquifer (fig. 2), 359 feet thick at the A injection well. The limestone is confined by 219 feet of the Bucatunna Clay member of the Byram Formation. Immediately overlying the clay is the upper limestone of the Floridan aquifer, the zone monitored by the shallow monitor well. More detailed discussion of the hydrogeology of the area can be found in Puri and others (1973) and Faulkner and Pascale (1975).

American Cyanamid Company, Injection Site 2

The American Cyanamid Company, injection site 2, located 12 miles northeast of Pensacola (fig. 1), is an acrylic fiber plant. Acidic organic-waste streams from this plant feed a small holding pond where they are composited and aerated. The wastes are pumped from the pond and neutralized with sodium hydroxide to a pH of about 5.5. Alum is then added to flocculate the suspended solids and the wastes are clarified by filtration through mixed-media filters during which hydrogen peroxide is added to inhibit bacterial filter-caking.

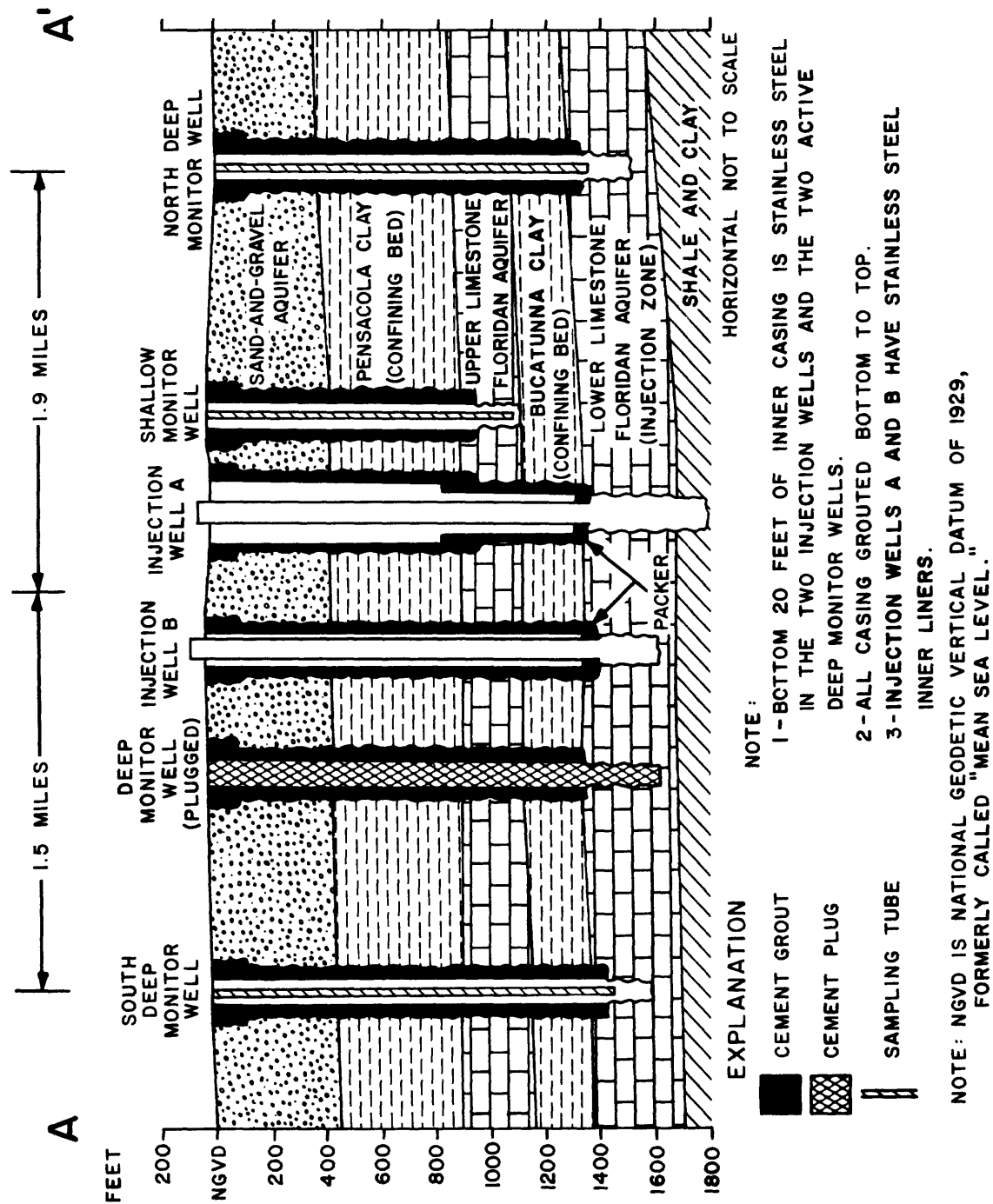


Figure 2.--Hydrogeologic section and schematic profiles of wells, injection site 1.

Table 1.--Descriptive data for wells at injection site 1

[From Pascale and Martin, 1978a, p. 9]

| Well name | Station number | Latitude and longitude | Altitude of land surface (ft) | Well completion date | Depth of well below land surface (ft) | Casing record (ft) |
|------------------------|-------------------------------|--------------------------|-------------------------------|----------------------|---------------------------------------|--|
| Injection well A | 303537087145601 | 30°35'37"N 87°14'56"W | 33 | Mar 1963 | 1,808 | 24-in steel, 0-86 18-in steel, 0-982 12-in steel, 872-1,370 12-in stainless steel, 1,370-1,390 6-in stainless steel liner, 0-1,396 |
| Injection well B | 303528087150601 | 30°35'28"N 87°15'06"W | 42 | Aug 1964 | 1,654 | 16-in steel, 0-110 10-in steel, 0-1,395 10-in stainless steel, 1,395-1,415 6-in stainless steel liner, 0-1,417 |
| Deep monitor (plugged) | 303523087145201 87°14'52"W | 30°35'23"N | 35 | Aug 1963 | 1,650 | 16-in steel, 0-100 8-in steel, 0-1,370 |
| North monitor | 303657087154301 | 30°36'57"N 87°15'43"W | 8 | Feb 1970 | 1,523 | 16-in steel, 0-100 8-in steel, 0-1,320 8-in stainless steel, 1,320-1,340 |
| (sample tube) | | | | (Aug 1977) | | 3/4-in stainless steel, 0-1,360 |
| South monitor | 303417087141701 | 30°34'17"N 87°14'17"W | 15 | Dec 1969 | 1,596 | 16-in steel, 0-100 8-in steel, 0-1,410 8-in stainless steel, 1,410-1,430 |
| (Sample tube) | | | | (Sep 1977) | | 3/4-in stainless steel, 0-1,450 |
| Shallow monitor | 303538087145501 | 30°35'38"N 87°14'55"W | 8 | Aug 1963 | 1,140 | 16-in steel, 0-100 8-in steel, 0-972 |
| (Sample tube) | | | | (Aug 1977) | | 3/4-in stainless steel, 0-1,120 |

The organic wastes are relatively consistent and the composition of the injection waste does not vary significantly. The treated waste contains various organic compounds, including acrylonitrile, as well as sodium nitrate, sodium sulfate, and sodium thiocyanate.

The injection system, which became fully operational in 1975, currently consists of two injection wells, primary and standby. The standby well has, to date (1982), been used only for monitoring. There are two injection-zone monitor wells, deep-test and north, and one upper-zone monitor well, shallow (fig. 1).

Schematic profiles of wells at injection site 2 are as shown in figure 3, and specific details are given in table 2. For protection against corrosion, the bottom 20 feet of casing of all injection-zone wells is stainless steel, as is the entire inner liner of each injection well. The wells are located with reference to the primary injection well (also referred to as injection well 1): shallow monitor, 28 feet northeast; deep-test, 1,025 feet southwest; standby injection, 1,560 feet south; and north monitor, 1.55 miles northeast. As with site 1, sampling tubes are used to monitor the injection zone. In the deep-test and north wells, polyvinyl-chloride (PVC) pipe is used for the tubes, except for the bottom 20 feet which is stainless steel. Since water level in the shallow monitor well is below land surface, a submersible pump permanently attached to a half-inch pipe at a depth of about 160 feet is used for sampling. There is no sampling tube attached below the pump.

Waste injection at site 2 is into the lower limestone of the Floridan aquifer (fig. 3); however, the injection wells only penetrate about 190 feet into the limestone. The injection zone is underlain by shale and clay and confined above by 200 feet of the Bucatunna Clay member of the Byram Formation. The shallow well serves to monitor water level and water quality in the upper limestone of the Floridan aquifer immediately overlying the Bucatunna, near the primary injection well. More detailed discussions of the hydrogeology of the area can be found in Puri and others (1973) and Faulkner and Pascale (1975).

DESCRIPTION OF REGIONAL MONITOR WELL SYSTEM

Three wells open only to the injection-zone of the lower limestone of the Floridan aquifer have been selected to provide data for a regional evaluation of the effects of subsurface waste injection. These wells, located several miles from the injection systems (fig. 1), are far enough away to detect the regional pressure effects from the two injection sites.

Regional monitor wells 1 and 2 were constructed by the U.S. Geological Survey 22 miles east and 17 miles northeast, respectively, of injection site 1 (Pascale, 1976). Regional monitor 1 is on Eglin Air Force Base property near Holley. Regional monitor 2 is on Whiting Field Naval Air Station property inside the east gate. Regional monitor 3 is 33 miles northeast of injection site 1. It is an abandoned Florida State Division of Forestry supply well for the Camp Henderson Fire Tower; the fire tower was removed several years ago. Specific data on the construction of these wells are given in table 3.

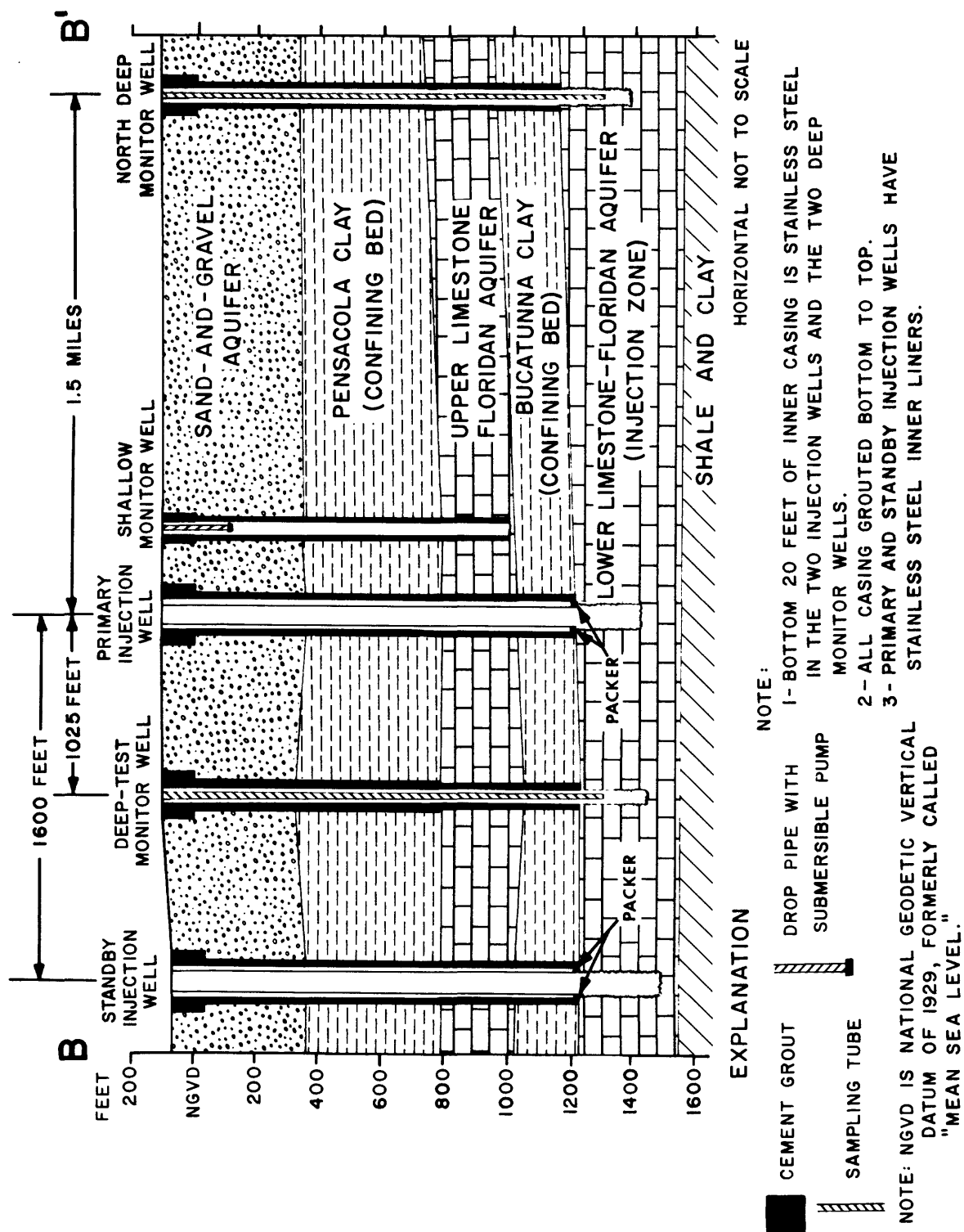


Figure 3.--Hydrogeologic section and schematic profiles of wells, injection site 2.

Table 2.--Descriptive data for wells at injection site 2

[From Pascale and Martin, 1978b, p. 7]

| Well name | Station number | Latitude and longitude | Altitude of land surface (ft) | Well completion date | Depth of well below land surface (ft) | Casing record (ft) |
|------------------------|-----------------|--------------------------|-------------------------------|----------------------|---------------------------------------|--|
| Primary injection well | 303413087063801 | 30°34'13"N 87°06'38"W | 108 | Nov 1974 | 1,526 | 24-in steel, 0-100 16-in steel, 0-870 12-in steel, 0-1,318 12-in stainless steel, 1,318-1,338 8-in stainless steel liner, 0-1,338 |
| Standby injection well | 303357087063801 | 30°33'57"N 87°06'38"W | 68 | Dec 1974 | 1,508 | 24-in steel, 0-100 16-in steel, 0-863 12-in steel, 0-1,300 12-in stainless steel, 1,300-1,320 8-in stainless steel, liner, 0-1,320 |
| Deep-test monitor | 303405087064601 | 30°34'05"N 87°06'46"W | 102 | Dec 1971 | 1,546 | 18-in steel, 0-100 12-in steel, 0-881 ¹ 6-in steel, 0-1,444 ¹ 6-in stainless steel, 1,444-1,464 |
| (sample tube) | | | | (Aug 1975) | | 3/4-in PVC, 0-1,300 1/2-in stainless steel, 1,300-1,320 |
| North monitor | 303514087054801 | 30°35'14"N 87°05'48"W | 122 | Dec 1974 | 1,492 | 6-in steel, 0-1,276 |
| (sample tube) | | | | (June 1975) | | 3/4-in PVC, 0-1,300 1/2-in stainless steel, 1,300-1,320 |
| Shallow monitor | 303413087063802 | 30°34'13"N 87°06'38"W | 109 | Nov 1974 | 1,108 | 6-in steel, 0-1,096 (1 horizontal submersible pump screwed on bottom of 1/2-in pipe, 160) |

¹ Perforated 1,340 to 1,440 ft.

Table 3.--Descriptive data for regional monitor wells

| Regional well number and name | Station number | Latitude and longitude | Altitude of land surface in feet above sea level | Date drilled | Depth (feet below land sur- face) | Casing record (feet) |
|-------------------------------------|-----------------|------------------------------|---|-----------------|--|---|
| 1--Holley-Navarre (test well 1) | 303241086540401 | 30°32'41"N 86°54'04"W | 125 | 12-73 | 1,500 | 10-inch steel, 0-316 6-inch steel, 0-1220 |
| 2--Whiting Field (test well 2) | 304252087002201 | 30°42'52"N 87°00'22"W | 125 | 1-74 | 1,290 | 10-inch steel, 0-230 6-inch steel, 0-870 5-inch steel, 836-985 |
| 3--Camp Henderson | 305940086580601 | 30°59'40"N 86°58'06"W | $\frac{1}{280}$ | 6-57 | 815 | 4-inch steel, 0-510 3-inch steel, 492-702 (lead seal at bottom of 4-inch casing) |

^{1/}Altitude approximate, from U.S. Geological Survey topographic quadrangle map.

INJECTION AND TESTING SUMMARY

Over the several years that injection sites 1 and 2 have been operational, some modifications have been made to the wastes and wells, and many tests have been made to detect changes in the system. Wells used for monitoring were constructed several years apart and were sometimes modified after construction. An example of this was the addition of sampling tubes in the injection-site monitor wells. Tables 1, 2, and 3 show the specific information on depth, size, and date of construction of these wells.

At injection site 1, the injection and testing has covered 18 years with many changes. Since mid-1963 when injection began, the waste characteristics have changed several times with potentially significant effects on the ultimate fate in the subsurface. Table 4 chronologically shows the major changes. One of the most dramatic of these took place in April 1968 when the waste was no longer neutralized prior to injection. At this time the company added additional process fluids described as "aqueous mother liquor" which added significant quantities of nitric acid, lowering the pH substantially. Backflush tests of the injection wells were performed to look at chemical changes with increasing aquifer residence time. The last of these backflush tests were performed in November 1971. In 1968, 250 pounds of lithium chloride were added to the B injection well to use in a flow rate study with the deep monitor well. The four on-site monitor wells at injection site 1 were constructed or modified as follows:

| | |
|---------------|--|
| August 1963 | Deep and shallow monitor wells constructed |
| February 1969 | Deep well plugged with cement |
| December 1969 | South monitor well constructed |
| February 1970 | North monitor well constructed |

No tabulation was prepared for injection site 2 since the wastes have maintained consistent characteristics; the same is true for the regional monitor wells.

GEOLOGIC DATA

Lithologic logs for injection well A, and the south and north monitor wells at injection site 1, are shown in tables 5, 6, and 7, respectively, and are taken from Foster and Goolsby (1972, p. 19-21, 15-16, and 17-18). Table 8 is a listing of all geophysical logs for all of the wells at injection site 1 showing the date, interval, and source of the logs if other than the U.S. Geological Survey. Table 9 is a partial chemical analysis of geologic samples from injection well A for the respective depth intervals (from Goolsby, 1972, p. 362).

The lithologic log shown in table 10 for the standby injection well at injection site 2 is taken from Pascale (1975, p. 14-16). Table 11 lists geophysical logs of wells at this site showing the date, interval, and source if other than the U.S. Geological Survey. Table 12 shows the results of mineralogic and cation-exchange capacity analyses from cored samples from the primary injection well.

Table 4.--Injection and testing summary at injection site 1

| Date | | | Injected waste | Injection wells | |
|------|-----|----|---|-----------------------------|---|
| Year | mo. | d. | | "A" | "B" |
| 1963 | 03 | -- | | Constructed | |
| | 07 | -- | Untreated at pH 4.5 or less | Begin injection | |
| 1964 | -- | -- | Partly neutralized with ammonium hydroxide (NH ₄ OH) to pH 5.0-5.5 and sand filtered | | |
| | 08 | -- | | | Constructed |
| 1965 | 07 | -- | No longer sand filtered | | Begin injection |
| 1967 | 11 | 03 | | Aquifer test--3-1/2 days | |
| | 12 | 12 | | Aquifer test--3 days | |
| | 12 | 15 | | Backflush test--1 day | Backflush test--1 day |
| 1968 | 02 | 29 | | Backflush test--3 hours | |
| | 04 | 05 | No longer neutralized, pH ₁ now 2.0-3.5, AML ¹ now added | | |
| | 04 | 24 | | Backflush test--3 hours | |
| | 05 | 07 | | Backflush test--5 hours | 250 lbs. lithium chloride (LiCl) tracer added |
| | 07 | 18 | | Backflush test--6 hours | |
| | 10 | 02 | | Backflush test--6 hours | |
| 1969 | 01 | 17 | | Aquifer test--5 days | |
| | 01 | 22 | | Backflush test--5 hours | |
| | 02 | 19 | | Backflush test--2-1/2 hours | |
| 1971 | 11 | -- | | Backflush test--100 hours | |

¹Aqueous Mother Liquor, described in text.

Lithologic logs for regional monitor wells 1 and 2 are shown in tables 13 and 14 and are from Pascale (1976, p. 16-20 and 21-25). Table 15 lists geophysical logs of the regional monitor wells showing the date, interval, and source if other than the U.S. Geological Survey. Table 16 shows the results of mineralogic and cation-exchange capacity analyses from cored samples from regional monitor wells 1 and 2 (Pascale, 1976, p. 29).

HYDROLOGIC DATA

Graphs of pertinent data for injection site 1 are shown in figures 4 and 5. Figure 4A shows the monthly average wellhead pressure in pounds per square inch for injection wells A and B. The combined monthly average injection rate in gallons per minute is shown in figure 4B, and the cumulative volume of waste injected through wells A and B in billions of gallons is shown in figure 4C. The head expressed as altitude in feet above sea level is shown in figure 5A for the north and south monitor wells and in figure 5B for the shallow monitor.

Graphs of pertinent data for injection site 2 are shown in figures 6 and 7. Figure 6A shows the monthly average wellhead pressure in pounds per square inch for injection well 1 (primary injection well). The monthly average injection rate in gallons per minute is shown in figure 6B. This rate is based on a 24 hour daily average even though injection may occur for only part of this time. The cumulative volume of waste injected in millions of gallons is shown in figure 6C. The head expressed as altitude in feet above sea level is shown in figure 7A for the deep test, standby injection, and north monitor wells and in figure 7B for the shallow monitor well.

Water-level data for the regional monitor wells are shown in figure 8. The head expressed as altitude in feet above sea level is shown for regional monitor wells 1, 2, and 3 for their periods of record.

Figures 9 and 10 are schematic diagrams of flow velocity and depth interval chemical data for the south and north monitor wells, respectively, at injection site 1 (from Foster and Goolsby, 1972, p. 27-28).

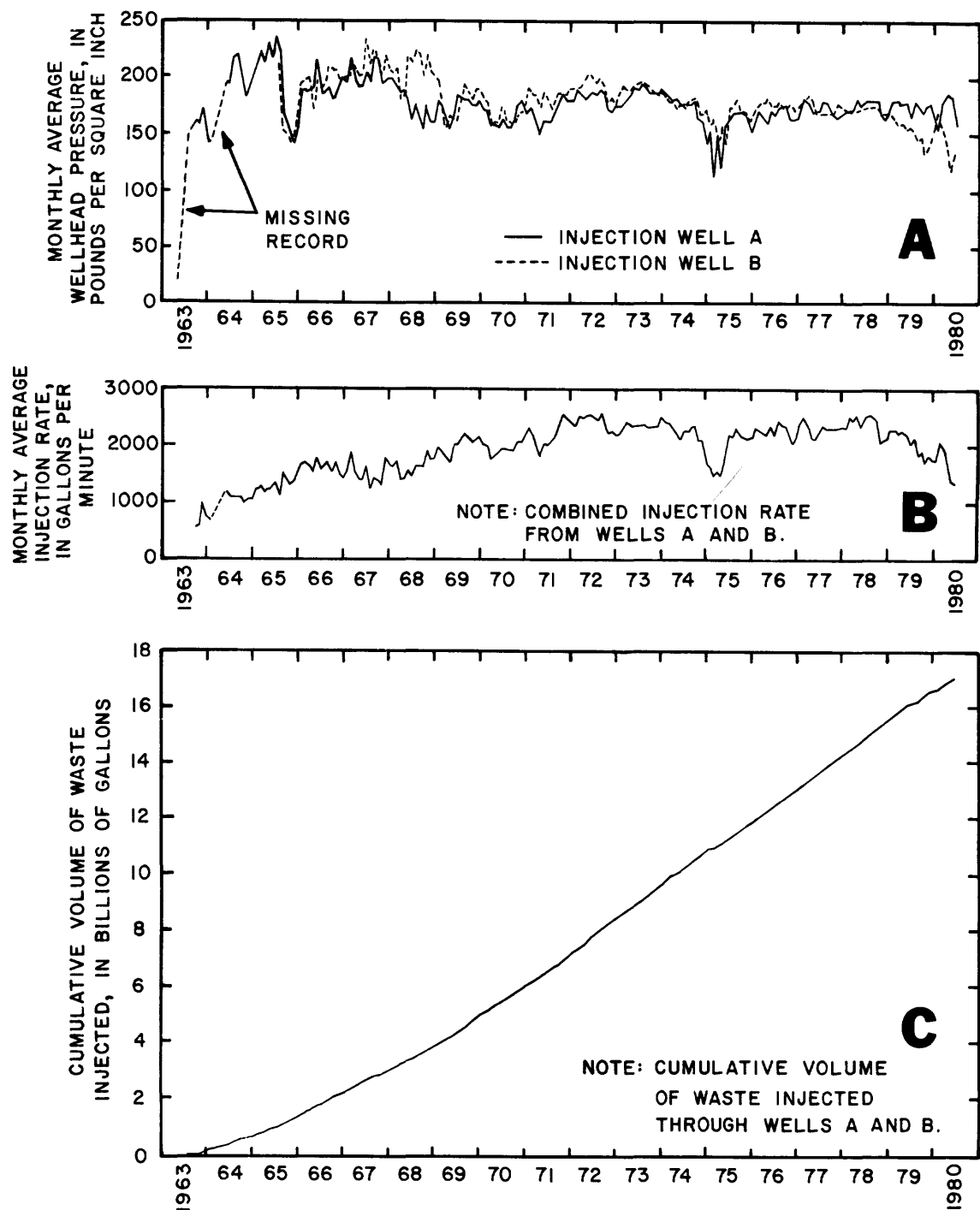


Figure 4.--Injection well pressure, rate, and cumulative injection volume for injection site 1.

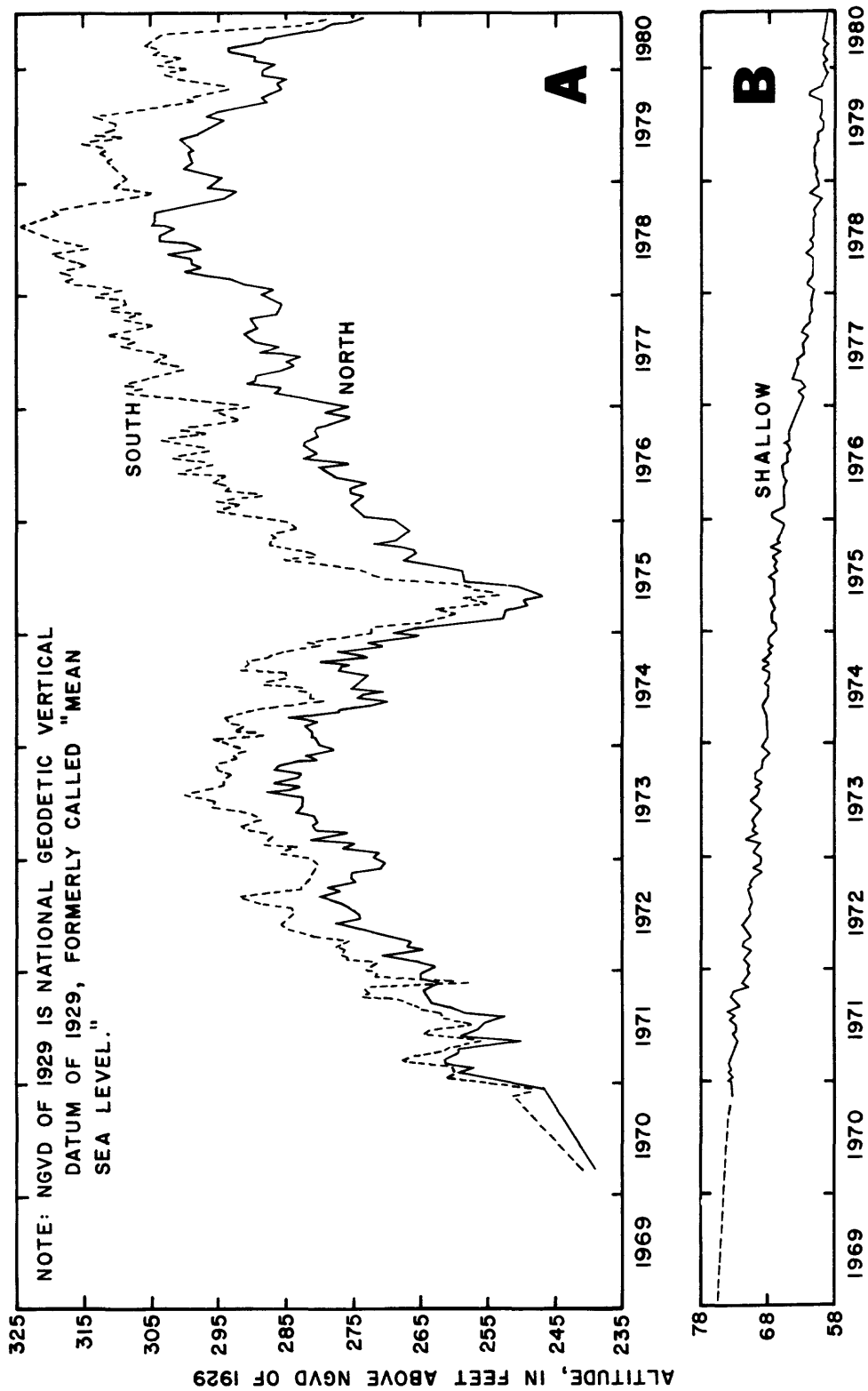


Figure 5.--Water levels at monitor wells at injection site 1.

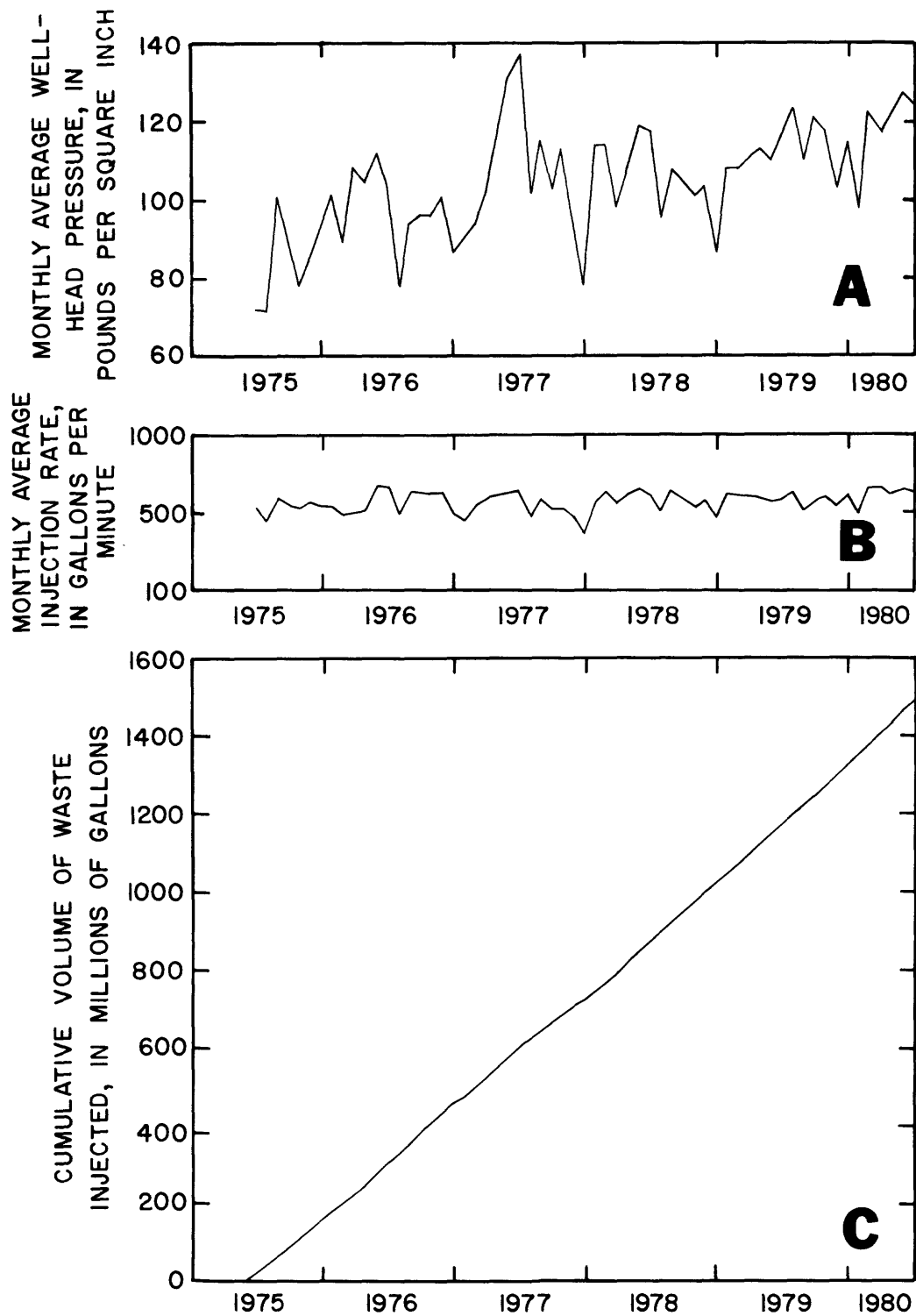


Figure 6.--Injection well pressure, rate, and cumulative injection volume for injection site 2.

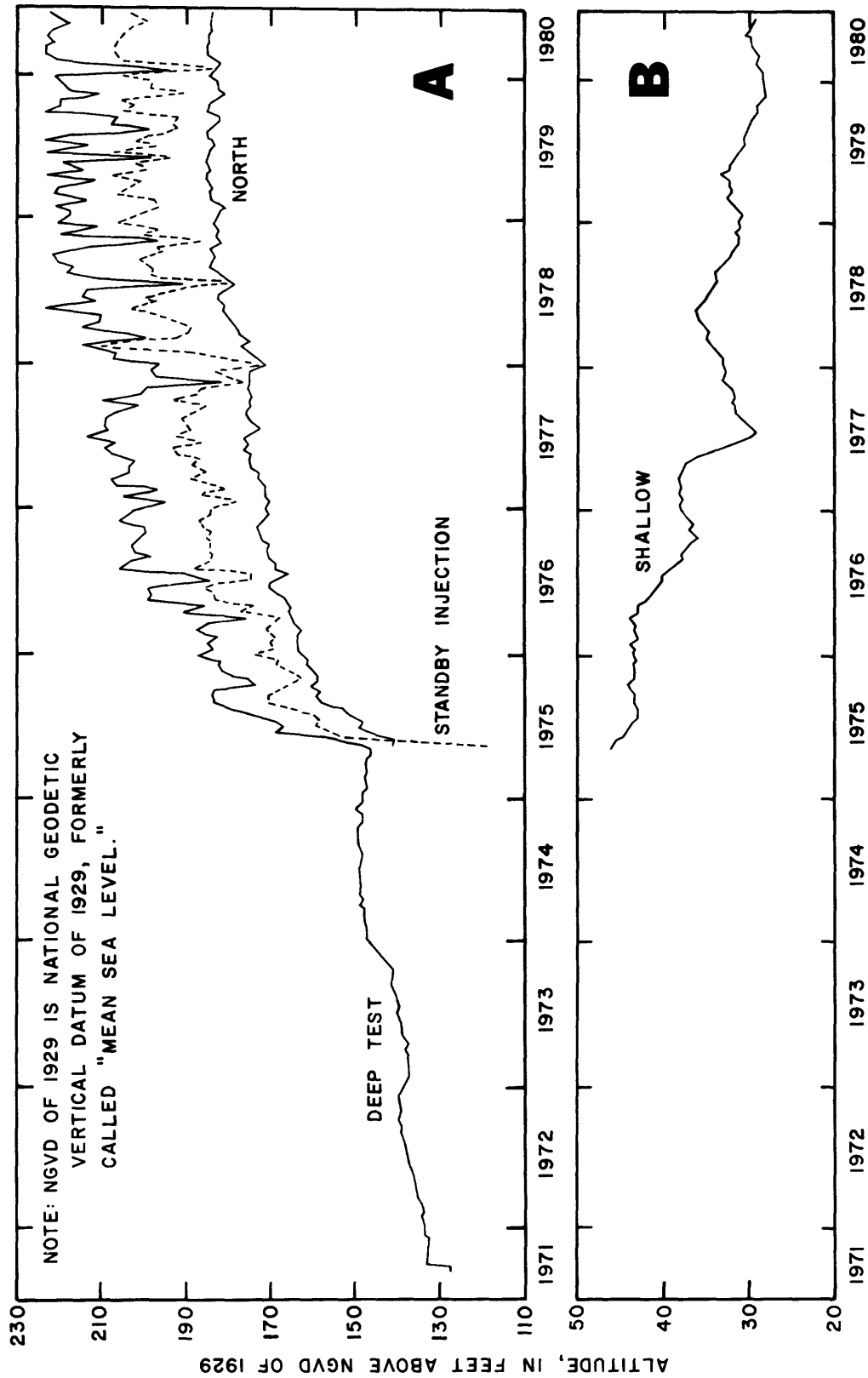


Figure 7.--Water levels at monitor wells at injection site 2.

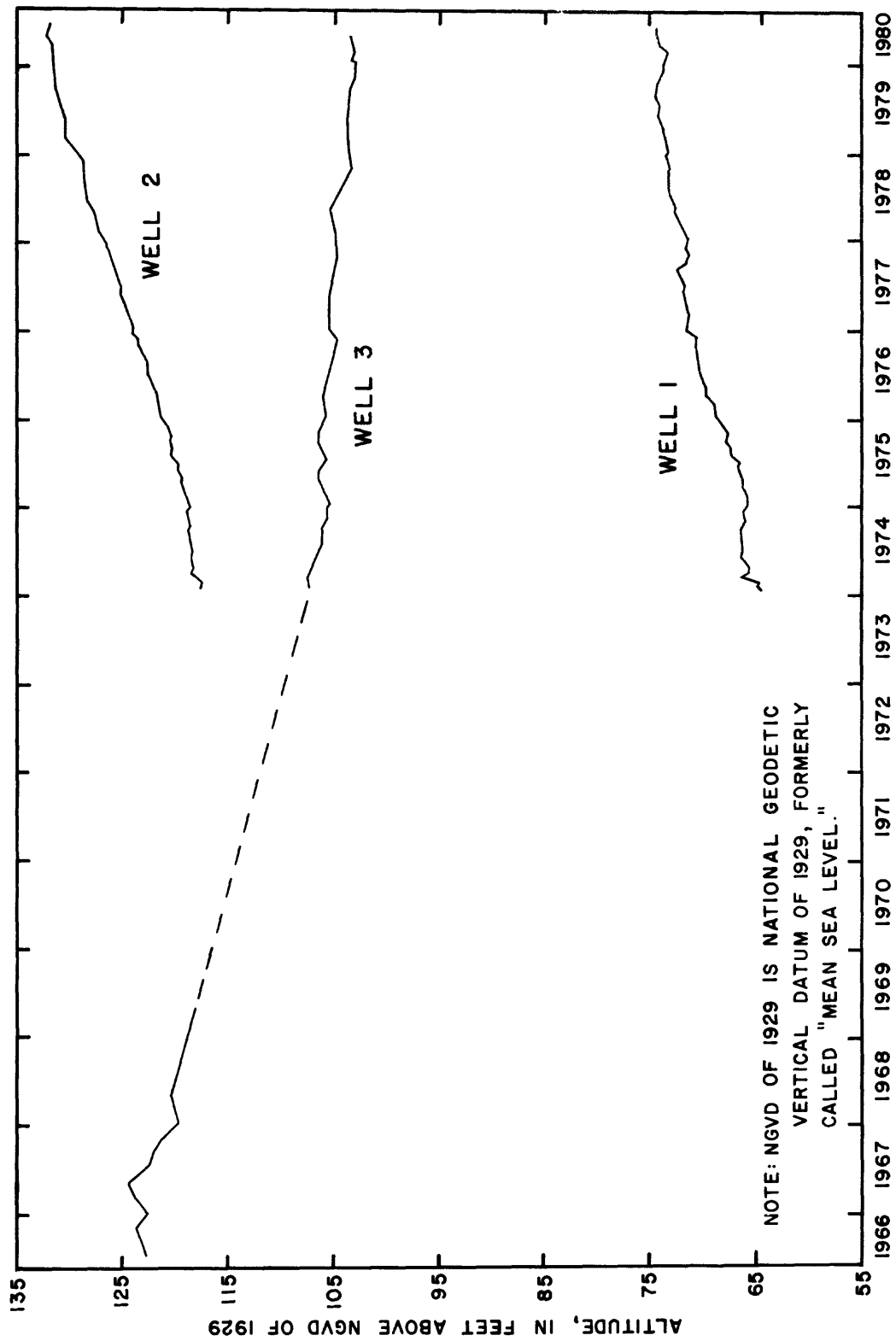
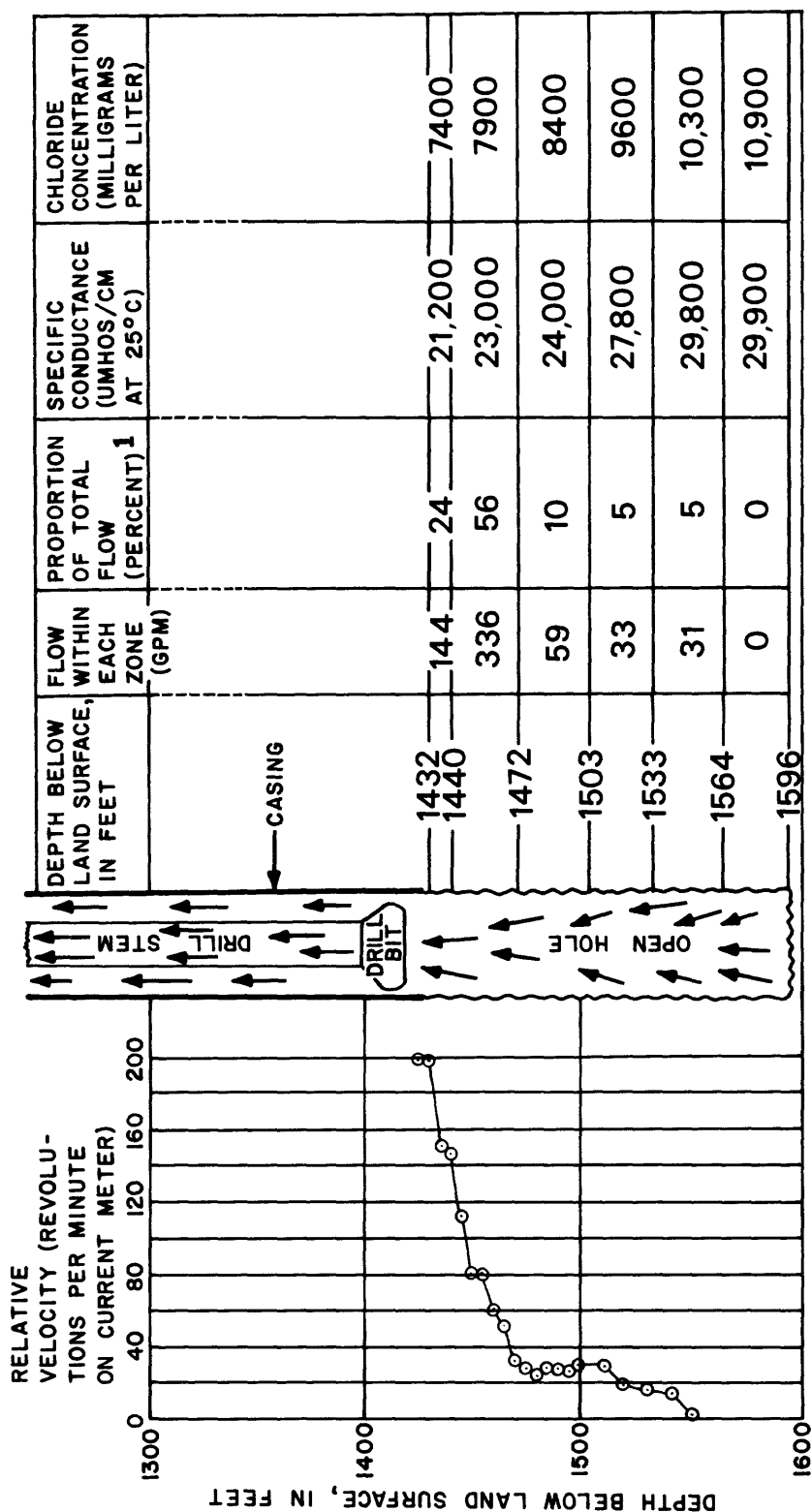


Figure 8.--Water levels at regional monitor wells.



¹ TOTAL FLOW OF COMPLETED WELL WITH DRILL STEM IN BOTTOM OF HOLE (603 GALLONS PER MINUTE).

Figure 9.--Flow velocity and depth interval chemical data for the south monitor well at injection site 1.

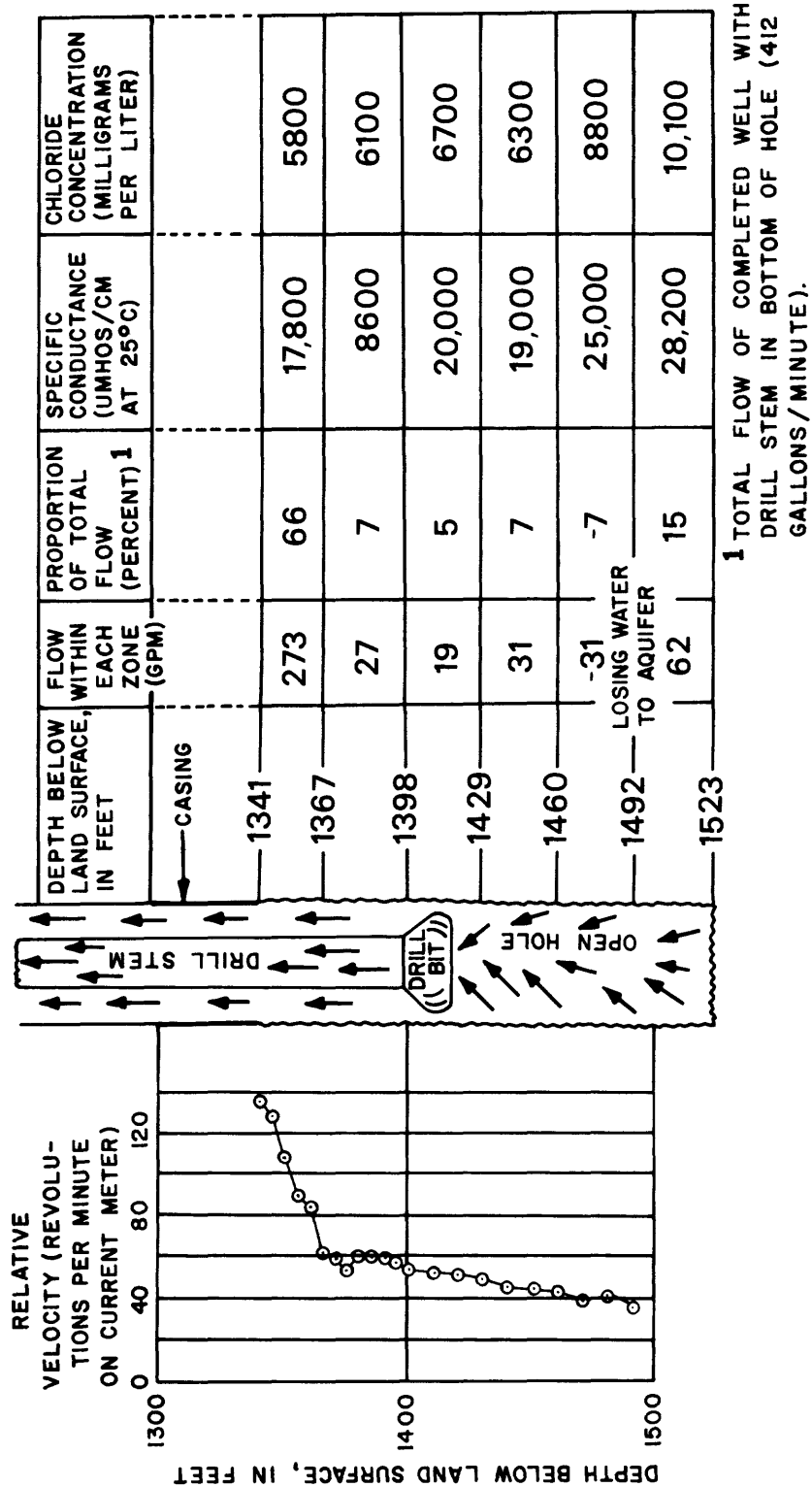


Figure 10.--Flow velocity and depth interval chemical data for the north monitor well at injection site 1.

SAMPLE PREPARATION METHODS AND HISTORY OF INJECTION-SITE WATER-QUALITY MONITORING

The methodology of collection and analysis has undergone systematic changes since the Survey began water-quality monitoring. Increased analytical workloads and advances in technology have resulted in automated procedures for most commonly analyzed constituents. A general bibliography summarizing the methods of sample collection and analysis used by the U.S. Geological Survey is as follows:

| <u>Year</u> | <u>Author(s)</u> | <u>Subject</u> |
|-------------|---|---|
| 1960 | Rainwater and Thatcher | Methods for the collection and analysis of water samples |
| 1964 | Schultz | Quantitative interpretation of mineralogical composition from x-ray and chemical data for the Pierre Shale |
| 1969 | Hinkle and Learned | Determination of mercury in natural waters by collection of silver screens |
| 1970 | Brown and others | Methods for the collection and analysis of water samples for dissolved minerals and gases |
| 1971 | Barnett and Mallory | Determination of minor elements in water by emission spectroscopy |
| 1972 | Goerlitz and Brown | Methods for the analysis of organic substances in water |
| 1976 | American Public Health Association and others | Standard methods for the examination of water and wastewater, 14th edition (most recent) |
| 1976 | Fishman and Brown | Selected methods of the U.S. Geological Survey for the analysis of wastewater |
| 1976 | Wood | Guidelines for the collection and field analysis of ground-water samples for selected unstable constituents |
| 1977 | Greeson and others | Methods for the collection and analysis of aquatic biological and microbiological samples |
| 1979 | Skougstad and others | Methods for the determination of inorganic substances in water and fluvial sediments |

A brief history of selected changes in field methods of collection and sample changes is given below for the Atlanta Central Laboratory, which began analyzing samples collected for the subsurface waste-storage program in 1973 (Berwyn Jones, written commun., July 16, 1980), and for the Quality of Water Service Unit in Ocala (R. T. Kirkland, written commun., April 17, 1980; June 2, 1980).

Atlanta Central Laboratory

| <u>Approximate time of change</u> | <u>Constituent(s) and remarks</u> |
|---------------------------------------|--|
| April 1974 | Ca and Mg by autoanalyzer (colorimetric method) |
| May 1974 | Trace metal digestion no longer with NaOH neutralization |
| Dec. 1974 | Buffered as opposed to titrated pH adjustments in chelation extraction for Cd, Co, Ca, Ni, and Pb |
| June 1975 | NH ₄ now by salicilate method and block digestion |
| ---- 1976 | Kjeldahl nitrogen now automated colorimetric and block digested--no longer distilled |
| Sept. 1976 | New spectrometer on line for Mn, Zn, Al, Be, Ba, Cr, Sr, and Mo |
| ---- 1977 | Cyanide now automated |
| May 1977 | Ca and Mg below 15 mg/L now analyzed manually |
| Jan. 1978 | Ca and Mg now all run manually |
| Feb. 1979 | Inductive coupled plasma spectrophotometer now used at laboratory option to analyze Ca, Mg, Na, Fe, Mn, Sr, and SiO ₂ |
| April 1979 | DOC now by autoanalyzer |
| June 1979 | Inductive coupled plasma spectrophotometer now used at laboratory option to analyze Ba, Be, Cd, Co, Cu, Li, Mo, Pb, V, and Zn |

Ocala Quality of Water Service Unit

| <u>Approximate time of change</u> | <u>Constituent(s) and remarks</u> |
|---------------------------------------|---|
| ---- 1970 | NH ₄ and organic nitrogen no longer distilled and autoanalyzer method now used |
| ---- 1970 | Autoanalyzer NO ₃ now by cadmium reduction |
| ---- 1970 | Mercurimetric method now used for chloride |
| ---- 1971 | Major ions still analyzed by atomic adsorption but now filtered and acidified |
| Nov. 1974 | Turbidimetric method now used on SO ₄ for these sites only because of interferences in the Mohr method |
| Jan. 1979 | COD now automated titrimetric method |
| May 1979 | COD now treated with H ₂ SO ₄ |

Additional information concerning laboratory operations and analytical techniques may be found in reports by Durham (1978) and Booth (1978).

Application of these sampling and analytical method changes can be found in tables 17 and 18, monitoring logs for injection sites 1 and 2, respectively. The logs describe the initial conditions of sampling and show to which laboratory the samples were sent; subsequent changes in sampling procedures follow. Information such as purge time (PT), amount of time the well is allowed to flow before sampling, and date when sampling was changed from a casing sample to a sampling tube are necessary for the interpretation of water-quality data. Information within parentheses describes a one-time-only situation. That is, prior conditions continue to exist in subsequent sampling. Footnotes at the end of the tables name the laboratory performing the selected analyses.

No monitoring logs are presented for the regional monitor wells since the water-quality sampling was infrequent over a period of several years.

CHEMICAL AND PHYSICAL DATA

Industrial Wastes

Samples of the industrial waste fluids have been collected prior to injection since water-quality sampling began at the injection sites. Although waste characteristics at site 1 have been quite variable over time, samples have been collected periodically to determine the general characteristics of the waste. Table 19 shows the chemical analyses of the waste at site 1 collected from a tap about 200 feet south of the injection well A on the pipeline from the holding pond to the injection well system.

Waste samples from injection site 2 have also been collected since the plant began operating; results of the chemical analyses are shown in table 20. These samples were collected from a tap on the north side of the wellhead of the primary injection well.

Wastewater Backflush

At both injection sites the injecting wells have been backflushed (reverse-flow) one or more times to examine the changes in chemical characteristics relating to fluid waste storage in the subsurface. Ehrlich and others (1979), discuss the results of one of these backflush tests at injection site 2. Backflush test data are given in tables 21 and 22 for injection wells at sites 1 and 2, respectively.

Injection-Site Monitor Wells

Fluid samples from the monitor wells have been routinely collected since about 1970 at injection site 1 and since 1975 at injection site 2. Water-quality analyses of samples from injection site 1 are in table 23, and dissolved gas analyses are in table 24. Similar analyses of samples from injection site 2 are in tables 25 and 26.

Regional Monitor Wells

Periodic water-quality sampling has been carried out at the three regional monitor wells to examine long-term changes in chemical quality from background or natural conditions. The chemical analyses are in table 27, and dissolved gas analyses are in table 28.

Bacteriological and Organic Data

Due to the organic nature of the injected waste and the presence of bacteria in the subsurface, samples were analyzed for various bacteria. Methodologies for collection were developed by Ehrlich (1972) and collection of samples began in 1976. The results of the bacterial analyses are given in tables 29 and 30. Table 29 shows the results for injection site 1; table 30 shows the results for injection site 2 for samples collected from the industrial waste, from bacterial growth around the injection wellhead, and from monitor wells at injection site 2.

An intensive study of the backflush at injection site 2 in September of 1977 required collection of samples for organic analysis to study samples for the type and extent of waste degradation. The data are given in table 31.

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Table 5.--Lithologic log of injection well A at injection site 1,
station number 303537087145601

[From Foster and Goolsby, 1972, p. 19-21]

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Sand, light brown, quartz, very fine to very coarse; tan to orange clay; black organic material | 20.0 | 20.0 |
| Sand, tan to white, quartz, medium to very coarse, frosted; orange clay coating some grains | 20.0 | 40.0 |
| Sand, tan to white, quartz, fine to granule, frosted; tan to orange clay coating grains; few black phosphorite granules | 57.0 | 97.0 |
| Sand, light gray, very fine to coarse, quartz; clay, 35 percent, light gray; mica; black phosphorite grains; limonite fragments | 22.0 | 119.0 |
| Sand, light gray, fine to coarse, quartz, frosted; clay 20 percent, white; heavy mineral | 23.0 | 142.0 |
| Sand, tan, fine to coarse, quartz, frosted; clay, orange to white; black phosphorite; mica; heavy mineral | 22.0 | 164.0 |
| Same as above. 60 percent coarse to very coarse sand | 53.0 | 217.0 |
| Sand, light gray, quartz, very fine to coarse, frosted; clay, light gray, coating sand grains; black phosphorite; heavy mineral; mica | 15.0 | 232.0 |
| Same as above. Some coarse sand; increased clay | 22.0 | 254.0 |
| Sand, white, quartz, very fine to coarse, frosted; black phosphorite grains | 23.0 | 277.0 |
| Same as above. Some white clay | 24.0 | 301.0 |
| Same as above. Sand coarse to very coarse | 20.0 | 321.0 |
| Sand, light gray to white, quartz, very fine to granule, frosted; clay, light gray to white; black phosphorite; black carbonaceous material | 23.0 | 344.0 |
| Same as above. Fine to coarse sand | 22.0 | 366.0 |

Table 5.--Lithologic log of injection well A at injection site 1,
station number 303537087145601--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Sand, light gray, quartz, medium to granule, frosted; clay, light gray, coating sand grains; granule size black phosphorite | 10.0 | 376.0 |
| Same as above. Some shell | 11.0 | 387.0 |
| Sand, gray, quartz, very fine to very coarse, frosted; shell, abundant; clay, gray; black phosphorite; mica | 25.0 | 412.0 |
| Same as above. Less shell | 23.0 | 435.0 |
| Sand, light gray, quartz, fine to medium; clay, gray; few shell; mica; fine black phosphorite | 22.0 | 457.0 |
| Same as above. Wood fragments | 22.0 | 479.0 |
| Same as above. Increased wood fragments | 46.0 | 525.0 |
| Sand, light gray, quartz, fine to coarse, frosted; few shells; mica; fine black phosphorite | 44.0 | 569.0 |
| Clay, gray; sand, fine to coarse, 20 percent of sample | 24.0 | 593.0 |
| Same as above. Few shells | 21.0 | 614.0 |
| Sand, light gray, quartz, very fine to medium, frosted; clay, light gray; fine black phosphorite | 23.0 | 637.0 |
| Same as above. Some very coarse sand; clay, gray | 46.0 | 683.0 |
| Same as above. Few shell | 69.0 | 772.0 |
| Same as above. Increase in very fine sand | 22.0 | 794.0 |
| Same as above. Mica flakes | 21.0 | 815.0 |
| Same as above. Few foraminifers; increase fine black phosphorite | 68.0 | 883.0 |
| Clay, gray; sand, fine to coarse; shell, abundant | 45.0 | 928.0 |

Table 5.--Lithologic log of injection well A at injection site 1,
station number 303537087145601--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|
| Sand, light gray, quartz, fine to coarse, frosted; limestone, white; shell; some clay | 23.0 | 951.0 |
| Limestone, gray to white, fine crystalline; sand, fine to coarse; shell; foraminifers | 21.0 | 972.0 |
| Sand, light gray, quartz, fine to medium; limestone, white to gray; shell; foraminifers | 16.0 | 988.0 |
| Limestone, light gray to tan, fine crystalline; some sand; shell; foraminifers; black phosphorite | 31.0 | 1,019.0 |
| Same as above. Some brown crystalline dolomitic limestone | 24.0 | 1,043.0 |
| Limestone, light gray to white, fine crystalline; few sand grains; foraminifers; pyrrhotite grains | 29.0 | 1,072.0 |
| Limestone, dolomitic, brown, crystalline; few shells | 32.0 | 1,104.0 |
| Limestone, white, crystalline; some foraminifera; few sand grains; some shells | 29.0 | 1,133.0 |
| Sand, white, quartz, very fine to fine; limestone, white; few foraminifers | 22.0 | 1,155.0 |
| Clay, gray; sand, fine to very coarse; mica; pyrrhotite; some shells | 77.0 | 1,232.0 |
| Clay, gray, dense; few sand grains | 138.0 | 1,370.0 |
| Limestone, white to light gray, finely crystalline; clay, gray; few sand grains | 20.0 | 1,390.0 |
| Limestone, white to light gray, fine grained to dense, gray color from glauconite or phosphorite; some shells | 26.0 | 1,416.0 |
| Same as above. Some foraminifers | 23.0 | 1,439.0 |
| Same as above. Abundant foraminifers | 23.0 | 1,462.0 |

Table 5.--Lithologic log of injection well A at injection site 1,
station number 303537087145601--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Limestone, white, dense to fine crystalline; foraminifers; shells; some black phosphorite or glauconite particles | 23.0 | 1,485.0 |
| Same as above. Pyrrhotite flakes | 55.0 | 1,540.0 |
| Limestone, white, fine crystalline, 70 percent calcite crystal structure; abundant green glauconite; shells; foraminifers | 29.0 | 1,569.0 |
| Limestone, white, finely crystalline; abundant foraminifers, 60 percent; green glauconite; shells; some sand grains | 41.0 | 1,610.0 |
| Sand, white, quartz, very fine to medium; limestone, 40 percent, white, finely crystalline; green glauconite; foraminifers; shell | 23.0 | 1,643.0 |
| Limestone, light gray, finely crystalline; sand, quartz, 15 percent; few foraminifers; green glauconite | 30.0 | 1,673.0 |
| Same as above. Increased foraminifers | 27.0 | 1,700.0 |
| Clay, greenishgray, calcareous, dense; limestone fragments; foraminifers; green glauconite | 83.0 | 1,783.0 |
| Same as above. Few quartz sand grains | 25.0 | 1,808.0 |

Table 6.--Lithologic log of south monitor well at injection site 1,
station number 303417087141701

[From Foster and Goolsby, 1972, p. 15-16]

| Lithology | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|
| Sand, white to orange, quartz, very fine to clay, white and orange; few heavy mineral grains | 12.0 | 12.0 |
| Same as above. Fragments limonite | 10.0 | 22.0 |
| Same as above. White kaolinitic clay | 10.0 | 32.0 |
| Sand, white to yellow, quartz, very fine to granule, frosted; clay, white and yellow; limonite | 6.0 | 38.0 |
| Same as above. Orange clay. Increased granule size of sand | 10.0 | 48.0 |
| Sand, tan to pink, quartz, medium to 60 percent granule; clay, 40 percent white, yellow, and lavender; black heavy mineral | 28.5 | 76.5 |
| Clay, tan to lavender, 70 percent; sand, 30 percent | 25.0 | 101.5 |
| Clay, gray, some white and red streaks; some sand, very fine to medium; mica | 6.0 | 107.5 |
| Sand, gray, medium to very coarse, quartz; clay, gray to white, 20 percent; black organic material | 6.5 | 114.0 |
| Same as above. Less clay; grains of heavy minerals | 23.1 | 137.1 |
| Same as above. Limonite grains | 23.0 | 160.1 |
| Sand, white to gray, quartz, fine to granule; some clay, black phosphorite | 22.9 | 183.0 |
| Same as above. 75 percent fine to medium sand | 16.0 | 199.0 |
| Clay, light gray, 60 percent; sand, 40 percent, fine to coarse, few granules | 30.0 | 229.0 |
| Sand, gray, quartz, fine to coarse; clay, 20 percent, gray; black phosphorite | 23.0 | 252.0 |

Table 6.--Lithologic log of south monitor well at injection site 1,
station number 303417087141701--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Sand, tan to white, quartz, fine to very coarse; 70 percent coarse, frosted; clay, white to pink; black phosphorite | 23.0 | 275.0 |
| Sand, light gray, quartz, fine to coarse; some white clay | 23.0 | 298.0 |
| Sand, light gray to white, quartz, medium to very coarse; black phosphorite | 23.0 | 321.0 |
| Same as above. Black phosphorite | 23.1 | 344.1 |
| Same as above. Less very coarse sand. Heavy mineral fragments | 23.0 | 367.1 |
| Sand, gray, quartz, very fine to coarse; clay, 20 percent, gray; black phosphorite grains; mica | 22.9 | 390.0 |
| Same as above. Increased mica | 22.9 | 412.9 |
| Sand, light gray, quartz, coarse silt to medium; some clay; mica; heavy mineral; black phosphorite; few shells | 22.9 | 435.8 |
| Same as above. 10 percent gray clay | 23.0 | 458.8 |
| Clay, gray; sand, coarse silt to fine; shells; black phosphorite; mica | 68.4 | 527.2 |
| Same as above. Clay, waxy, dense, bluish-gray | 136.4 | 663.6 |
| Sand, light gray, quartz, very fine to medium, some coarse grains; clay, gray; black phosphorite | 45.2 | 708.8 |
| Same as above. Shells | 44.3 | 753.1 |
| Clay, gray; sand, coarse silt to medium; shells; mica; black phosphorite | 44.8 | 797.9 |
| Sand as above. Increased sand | 88.7 | 886.6 |
| Sand, gray, quartz, fine to medium, frosted; clay, gray; shells; black phosphorite; slightly calcareous | 22.2 | 908.8 |

Table 6.--Lithologic log of south monitor well at injection site 1,
station number 303417087141701--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|
| Limestone, gray; foraminifers; few sand grains; limonite fragments; black phosphorite | 22.4 | 931.2 |
| Clay, gray, dense, calcareous; some sand; shells | 22.1 | 953.3 |
| Limestone, white, finely crystalline; few foraminifers | 44.2 | 997.5 |
| Limestone, light gray, finely crystalline; shells; some sand; black phosphorite; some clay; mica | 153.6 | 1,151.1 |
| Same as above. Lense of crystalline dolomitic limestone | 21.0 | 1,172.1 |
| Clay, gray, dense, waxy, calcareous; coarse silt; shells | 110.2 | 1,282.3 |
| Same as above. Limestone fragments | 99.8 | 1,382.1 |
| Limestone, white, finely crystalline; abundant foraminifers; shell; green glauconite; fragments of silty clay; magnetite fragments | 33.0 | 1,417.1 |
| Limestone, light gray, finely crystalline, bioclastic; 80 percent foraminifers; green glauconite; shells | 22.9 | 1,440.0 |
| Limestone, white, fine grained, sandy; sand, fine to medium; green glauconite; black phosphorite; calcite; foraminifers; shell fragments | 31.9 | 1,471.9 |
| Same as above. Brownish dolomitic limestone fragments; increased calcite; iron stain | 124.1 | 1,596.0 |

Table 7.--Lithologic log of north monitor well at injection site 1,
station number 303657087154301

[From Foster and Goolsby, 1972, p. 17-18]

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Sand, white to yellow, quartz, fine to granule, frosted; clay fragments, white to yellow; heavy mineral grains | 38.4 | 38.4 |
| Sand, white to tan, quartz, medium to granule, frosted; some clay | 23.0 | 61.4 |
| Clay, light gray; sand, fine to coarse; grains of heavy minerals | 23.0 | 84.4 |
| Clay, gray; sand; heavy mineral | 23.0 | 107.4 |
| Sand, light gray to tan, quartz, coarse to very coarse; clay, gray; mica; grains of heavy minerals | 27.7 | 135.1 |
| Sand, white to yellow, quartz, fine to very coarse; clay, white to orange; limonite; black phosphorite grains | 23.0 | 158.1 |
| Same as above. Some purple clay coating sand grains | 69.0 | 227.1 |
| Same as above. Increased black phosphorite | 46.0 | 273.1 |
| Sand, light gray to gray, quartz, medium to granule; clay, gray; black phosphorite granules; mica | 23.0 | 296.1 |
| Sand, tan to light gray, quartz, fine to coarse; shells; few foraminifers; black phosphorite; some gray clay | 23.0 | 319.1 |
| Same as above. Increased gray clay | 23.0 | 342.1 |
| Same as above. Increased shell | 22.9 | 365.0 |
| Clay, gray, silty; sand, fine to coarse; shells; black phosphorite | 22.9 | 387.9 |
| Same as above. Increased clay | 45.9 | 433.8 |
| Clay, bluish-gray, dense, waxy; sand, fine to coarse; black phosphorite | 22.8 | 456.6 |
| Same as above. Increased sand | 22.8 | 479.4 |

Table 7.--Lithologic log of north monitor well at injection site 1,
station number 303657087154301--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Sand, light gray, quartz, very fine to medium; clay, light gray; fine-grained black phosphorite; mica | 91.1 | 570.5 |
| Same as above. Increased clay | 22.7 | 593.2 |
| Clay, gray, waxy, silty; sand, fine to coarse; shells; fine black phosphorite | 22.6 | 615.8 |
| Clay, gray, waxy, silty; few sand grains; black phosphorite; shell | 22.5 | 638.3 |
| Same as above. Some sand | 67.8 | 706.1 |
| Same as above. 30 percent sand | 22.2 | 728.3 |
| Sand, light gray, quartz, silt to coarse; clay, gray, 30 percent, waxy; some shell; fine black phosphorite | 44.7 | 773.0 |
| Clay, gray, calcareous; sand; shell; black phosphorite; limestone lenses; mica | 90.7 | 863.7 |
| Limestone, gray, finely crystalline; some clay; silt; sand; shells; black phosphorite | 44.6 | 906.7 |
| Same as above. 25 percent sand | 44.2 | 950.9 |
| Same as above. Increased clay | 22.1 | 973.0 |
| Limestone, gray, dense, hard; black phosphorite; shells | 66.2 | 1,039.2 |
| Same as above. Increased shells; foraminifers | 22.1 | 1,061.3 |
| Same as above. Lenses of brownish-gray dolomitic limestone | 22.2 | 1,083.5 |
| Clay, gray, waxy, calcareous; sand; limestone | 22.0 | 1,105.5 |
| Sand, light gray, quartz, silt to medium, few granules; clay, gray; black phosphorite; limestone; foraminifers | 21.1 | 1,126.6 |
| Same as above. Shells | 21.0 | 1,147.6 |

Table 7.--Lithologic log of north monitor well at injection site 1,
station number 303657087154301--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|
| Clay, gray, dense, waxy; sand; limonite; limestone fragments | 132.9 | 1,280.5 |
| Limestone, gray to white, finely crystalline; black phosphorite | 22.7 | 1,303.2 |
| Limestone, light gray to cream; foraminifers; shells; black phosphorite; green glauconite | 38.0 | 1,341.2 |
| Limestone, white, granular; green glauconite; foraminifers; shells; black phosphorite; limonite stains | 119.7 | 1,460.9 |
| Sand, white, quartz, fine; limestone fragments; foraminifers; shell; green glauconite filling fossil tests | 60.8 | 1,521.7 |
| Limestone, white; foraminifers; shells; green glauconite | 2.0 | 1,523.7 |

Table 8.--Geophysical log data for injection site 1

[Depths are in feet below land surface. Geophysical logs were done by the U.S. Geological Survey, unless otherwise noted.]

[The use of trade names in this table is for identification only and does not imply endorsement by the U.S. Geological Survey.]

Injection well "A"--303537087145601

Caliper: Mechanical--01-12-77; 1,200-1,390 ft; (Micro-Gage, Inc.)

Injection well "B"--303528087150601

Caliper: Mechanical--06-22-72; 1,350-1,440 ft; (French Well Surveys, Inc.)

Mechanical (X-Y)--02-07-79; 1,300-1,550 ft; (French Well Surveys, Inc.)

Sonar--02-07-79; 1,415-1,555 ft; (Dowell, Inc., and French Well Surveys, Inc.)

Radiation: Natural Gamma--06-22-72; 0-1,440 ft; (French Well Surveys, Inc.)

Neutron--06-22-72; 0-1,440 ft; (French Well Surveys, Inc.)

Shallow well--303538087145501

Caliper: Mechanical--05-09-77; 951-984 ft; (Micro-Gage, Inc.)

Fluid conductivity: 05-09-77; 900-1,134 ft; (Micro-Gage, Inc.)

Fluid velocity: 05-09-77; 990-1,120 ft; (Micro-Gage, Inc.)

Radiation: Natural Gamma--05-09-77; 0-1,128 ft; (Micro-Gage, Inc.)

Neutron--05-09-77; 3-1,135 ft; (Micro-Gage, Inc.)

Temperature: 05-09-77; 20-987 ft and 990-1,138 ft; (Micro-Gage, Inc.)

Table 8.--Geophysical log data for injection site 1--Continued

North well--303657087154301

Caliper: Mechanical--03-11-70; 1,320-1,515 ft
--05-12-77; 1,325-1,507 ft; (Micro-Gage, Inc.)

Electric: Spontaneous potential/resistivity--03-11-70; 1,324-1,514 ft

Fluid conductivity: 03-11-70; 1,300-1,513 ft
05-12-77; 1,297-1,507 ft; (Micro-Gage, Inc.)

Fluid velocity: 05-12-77; 1,276-1,504 ft; (Micro-Gage, Inc.)

Radiation: Natural Gamma--03-11-70; 2-1,516 ft

Neutron--05-12-70; 10-1,507 ft; (Micro-Gage, Inc.)

South well--303417087141701

Caliper: Mechanical--03-10-70; 1,400-1,592 ft
--05-11-77; 1,414-1,597 ft; (Micro-Gage, Inc.)

Electric: Spontaneous potential/resistivity--03-10-70; 1,413-1,596 ft

Fluid conductivity: 03-10-70; 1,300-1,595 ft
05-11-77; 1,399-1,602 ft; (Micro Gage, Inc.)

Fluid velocity: 05-11-77; 1,428-1,600 ft; (Micro-Gage, Inc.)

Radiation: Natural Gamma--03-10-70; 7-1,591 ft

Neutron--05-10-77; 0-1,599 ft; (Micro-Gage, Inc.)

Temperature: 05-10-77; 0-1,596 ft

Table 9.--Chemical analyses of geologic samples from injection well A,
at injection site 1

[From Goolsby, 1972, p. 362]

[Results in milligrams per gram of rock, except as indicated]

| Depth intervals of sample (in feet below land surface) | Cal- cium (Ca) | Magne- sium (Mg) | Potas- sium (K) | Sodi- um (Na) | Manga- nese (Mn) | Iron (Fe) | CaCO ₃ (weight per- cent) |
|---|----------------------|------------------------|-----------------------|---------------------|------------------------|--------------|---|
| <u>Upper limestone of Floridan aquifer</u> | | | | | | | |
| 1,042-1,073 | 228.9 | 94.7 | 0.8 | 0.71 | 0.21 | 5.72 | 57 |
| <u>Bucatumna clay</u> | | | | | | | |
| 1,315-1,336 | 27.4 | 4.8 | 2.3 | 7.5 | 0.19 | 7.16 | 7 |
| 1,336-1,370 | 41.4 | 4.6 | 2.4 | 6.8 | 0.23 | 7.04 | 10 |
| <u>Lower limestone of Floridan aquifer</u> | | | | | | | |
| 1,370-1,390 | 318.6 | 9.6 | 1.2 | 0.5 | 0.54 | 6.71 | 80 |
| 1,390-1,416 | 374.3 | 7.8 | 0.7 | 0.2 | 0.35 | 6.62 | 94 |
| 1,416-1,439 | 386.4 | 5.2 | 0.15 | 0.2 | 0.46 | 6.50 | 97 |
| 1,439-1,462 | 365.2 | 5.7 | 0.20 | 0.2 | 0.34 | 7.30 | 91 |
| 1,462-1,485 | 398.1 | 5.4 | 0.27 | 0.2 | 0.12 | 2.90 | 100 |
| 1,485-1,508 | 383.2 | 4.8 | 0.17 | ^{1/} 0.2 | 0.13 | 2.23 | 96 |
| 1,508-1,540 | 390.6 | 5.3 | 0.20 | 0.2 | 0.14 | 1.42 | 98 |
| 1,540-1,569 | 296.4 | 44.7 | 0.45 | 0.2 | 0.14 | 5.28 | 74 |
| 1,569-1,610 | 301.3 | 4.4 | 0.28 | 0.3 | 0.04 | 1.81 | 75 |
| 1,610-1,643 | 227.0 | 6.6 | 0.33 | 0.2 | 0.04 | 2.68 | 57 |
| 1,643-1,673 | 222.0 | 8.4 | 0.34 | 0.2 | 0.04 | 2.93 | 56 |
| 1,673-1,700 | 308.4 | 5.8 | 0.43 | 0.6 | 0.06 | 2.73 | 77 |
| 1,700-1,725 | 131.2 | 12.3 | 4.2 | 4.6 | 0.06 | 6.56 | 33 |
| <u>Shale and clay</u> | | | | | | | |
| 1,725-1,752 | 177.4 | 7.5 | 4.7 | 3.8 | 0.06 | 6.90 | 44 |
| 1,752-1,783 | 91.2 | 3.7 | 3.0 | 6.2 | 0.03 | 6.22 | 23 |
| 1,783-1,808 | 92.1 | 3.8 | 2.8 | 5.8 | 0.03 | 4.28 | 23 |

^{1/}Estimated.

Table 10.--Lithologic log of standby injection well at injection site 2,
station number 303357087063801

[From Pascale, 1975, p. 14-16]

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Sand, clear to orange, medium to very coarse, subangular; sand grains encrusted with orange clay | 50 | 50 |
| Sand, clear to tan, fine to coarse, subangular to subrounded, encrusted with tan clay; gravel, white to tan, subrounded silty clay, pale red purple | 10 | 60 |
| Sand, frosted to tan, medium to coarse, subangular | 20 | 80 |
| Sand, frosted to tan, medium to coarse, subangular; gravel, white to pink, subrounded; clay, light grayish green, stained pale red purple | 20 | 100 |
| Sand, tan, fine to medium, subangular; black phosphorite grains | 30 | 130 |
| Sand, clear to tan, medium to very coarse, subangular to subrounded | 20 | 150 |
| Sand, clear to tan, fine to medium, subangular; black phosphorite grains | 100 | 250 |
| Sand, clear to tan or yellow, well-sorted medium sand, angular to subangular; black phosphorite grains | 10 | 260 |
| Sand, clear to tan, fine to coarse, subangular; black phosphorite grains | 30 | 290 |
| Sand, clear to gray or tan, fine to coarse, subrounded; mica flakes; black phosphorite grains | 10 | 300 |
| Sand, clear to tan or yellow, fine to coarse, subrounded; phosphorite; limonite; mica flakes | 150 | 450 |
| Sand, clear to gray, fine to coarse, subrounded, fossiliferous | 10 | 460 |
| Sand, clear to yellow or gray, mostly fine to medium, some coarse, subrounded; fossils abundant; mica flakes; (coarse sand increases with depth) | 40 | 500 |
| Sand, clear to gray or tan, fine to coarse, subrounded; clay, light gray, as cement in conglomerates; fossils | 10 | 510 |

Table 10.--Lithologic log of standby injection well at injection site 2,
station number 303357087063801--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Clay, medium to dark gray; gravel, clear to gray or white, subrounded; iron minerals; fossils; carbonized wood | 10 | 520 |
| Sand, clear to gray, fine to very coarse, subrounded; clay, light gray; gravel, clear to gray, subrounded; fossils; (sand gets finer with depth); mica flakes | 50 | 570 |
| Clay, light to medium gray, sandy, silty; sand, clear to orange, fine to coarse, subrounded, less than 10 percent; fossils | 10 | 580 |
| Sand, clear to gray, fine to very coarse, subrounded; clay, as cement in conglomerates, light gray; fossils | 20 | 600 |
| Clay, light to medium gray, sandy; sand, clear to gray, subrounded; gravel, clear to gray or yellow, granular subrounded; fossils; mica flakes | 30 | 630 |
| Sand, clear to tan, fine to coarse, subangular to subrounded; fossils; phosphorite grains; mica flakes | 20 | 650 |
| Gravel, clear to gray or yellow, granular, subangular; clay, light gray, as cement in gravel conglomerates; fossils | 10 | 660 |
| Clay, light gray, sandy; sand, clear to gray, very fine to medium, subangular; gravel, clear to gray or yellow, subrounded; fossils; mica flakes | 10 | 670 |
| Gravel, clear to gray or yellow, granular, subangular to subrounded; clay, light gray, sandy; fossils | 20 | 690 |
| Clay, light to medium gray, silty; gravel, clear to gray or white, granular, subrounded; fossils | 60 | 750 |
| Clay, light to medium gray, sandy; gravel, clear to gray, granular, subrounded; fossils | 40 | 790 |
| Clay, medium to dark gray, sandy, micaceous; gravel, clear to white or gray, granular, subrounded | 80 | 870 |
| Limestone, argillaceous, light to medium gray | 10 | 880 |
| Limestone, argillaceous, light to medium gray | 50 | 930 |

Table 10.--Lithologic log of standby injection well at injection site 2,
station number 303357087063801--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Limestone, light to dark gray, argillaceous; fossils | 10 | 940 |
| Limestone, light gray, sandy, porous, micaceous; clay, dark gray; carbonized matter | 40 | 980 |
| Same as above, no clay | 20 | 1,000 |
| Dolomite, medium to dark brown, finely crystalline, massive; dolomite, light to medium brown, porous (lattice); clay, dark gray, as cement in conglomerates | 20 | 1,020 |
| Limestone, medium to dark gray-brown, finely crystalline; dolomite, medium to dark brown, finely crystalline; dolomite, light brown, porous; marl, white, porous, sandy, micaceous | 30 | 1,050 |
| Dolomite, light to medium brown, coarsely crystalline; limestone, dark gray, finely crystalline; marl, white, soft, sandy | 40 | 1,090 |
| Dolomite, light to dark brown, finely crystalline; clay, dark gray, as cement in conglomerates; limestone, dark gray, finely crystalline; marl, soft, white, sandy | 10 | 1,100 |
| Clay, light to dark gray, sandy, calcareous; dolomite, light to medium brown, crystalline; limestone, light gray, sandy, soft, porous | 10 | 1,110 |
| Clay, light to medium gray, micaceous, calcareous, contains clastics ranging from fine sands to pebbles; iron minerals; fossils | 60 | 1,170 |
| Clay, medium to dark brown, calcareous; limestone, white to tan, porous, sandy | 20 | 1,190 |
| Clay, medium to dark brown, silty, sandy; limestone, white to bluish white, porous; pebbles, white to tan, subrounded | 40 | 1,230 |
| Clay, light to dark gray or brown, sandy, micaceous; limestone, light gray to light bluish white, porous; pebbles, white to tan, subrounded | 30 | 1,260 |

Table 10.--Lithologic log of standby injection well at injection site 2,
station number 303357087063801--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Clay, light to dark brown or gray, sandy; limestone, light to medium gray, porous; shale, medium gray; pebbles, white to tan, subrounded; dolomite, light brown | 40 | 1,300 |
| Sand, clear to gray or yellow, medium to very coarse, angular to subangular; limestone, light to medium gray, sandy, porous | 10 | 1,310 |
| Clay, medium to dark gray, calcareous, sandy; sand, clear to tan, medium to coarse, angular to subangular; limestone, light gray, porous; phosphorite grains; fossil fragments | 10 | 1,320 |
| Limestone, light to medium gray, porous, argillaceous, sandy; clay, medium to dark gray, sandy | 20 | 1,340 |
| Limestone, light gray to tan, porous, sandy, abundant inclusion of a black glass-like mineral | 10 | 1,350 |
| Limestone, light tan, crystalline; limestone, medium to dark bluish gray, crystalline; sand, clear to tan, subrounded | 10 | 1,360 |
| Limestone, cream to light brown, dense, hard, nonfossiliferous; limestone, light gray, crystalline, matrix white to dark gray, dense, brittle, nonfossiliferous; sand, clear to yellow, medium to coarse, subrounded; phosphorite, black, shiny; oxide, reddish brown, glassy | 10 | 1,370 |
| Limestone, cream to light brown, porous, hard, nonfossiliferous; limestone, light gray, matrix white to dark gray, crystalline, dense, brittle, nonfossiliferous; sand and oxide same as above | 80 | 1,450 |
| Limestone, cream to light brown, dense to porous, hard, fossiliferous; limestone, gray, dense, brittle, crystalline, nonfossiliferous (less abundant than above); sand, clear to yellow, medium to coarse, subrounded; oxide, reddish brown, fine to medium | 40 | 1,490 |
| Sand, clear to brown, medium, subangular to subrounded; limestone, cream to light brown, fossiliferous, porous, brittle; oxide, reddish brown, glassy | 10 | 1,500 |

Table 11.--Geophysical log data for injection site 2

[Depths are in feet below land surface. Geophysical logs were done by the U.S. Geological Survey, unless otherwise noted.]

Primary injection well--303413087063801

Caliper: Mechanical--05-03-75; 0-1,526 ft

Electric: Spontaneous potential/resistivity--05-04-75; 1,326-1,530 ft;
includes short and long normal

Fluid conductivity: 05-03-75; 1,176-1,530 ft

Radiation: Natural Gamma--05-03-75; 0-1,532 ft

Gamma-Gamma--05-04-75; 0-1,522 ft

Neutron--05-04-75; 0-1,526 ft

Temperature: 05-03-75; 0-1,526 ft
05-04-75, 1,188-1,529 ft

Standby injection well--303357087063801

Caliper: Mechanical--05-19-75; 0-1,508 ft

Electric: Spontaneous potential/resistivity--01-07-75; 1,327-1,508 ft;
includes short and long normal

Fluid conductivity: 05-19-75; 1,320-1,508 ft

Radiation: Natural Gamma--01-07-75; 0-1,508 ft

Gamma-Gamma--01-07-75; 2-1,505 ft

Neutron--01-07-75; 64-1,506 ft

Temperature: 05-19-75; 0-1,508 ft

Shallow well--303413087063802

Caliper: Mechanical--01-06-75; 1,046-1,108 ft

Radiation: Natural Gamma--01-06-75; 5-1,108 ft

Gamma-Gamma--01-06-75; 4-1,108 ft

Neutron--01-06-75; 4-1,108 ft

Table 11.--Geophysical log data for injection site 2--Continued

Deep-test well--303405087064601

Caliper: Mechanical--09-09-71; 1,464-1,548 ft
--05-18-76; 0-1,389 ft

Electric: Spontaneous potential/resistivity--09-09-71; 1,464-1,550 ft

Fluid velocity: 09-09-71; 1,460-1,549 ft

Radiation: Natural Gamma--09-09-71; 6-1,550 ft
--05-18-76, 0-1,390 ft

Gamma-Gamma--09-09-71; 6-1,546 ft

Neutron--09-09-71; 6-1,546 ft

Temperature: 05-18-76; 0-1,388 ft

North well--303514087054801

Caliper: Mechanical--01-08-75; 0-1,492 ft

Electric: Spontaneous potential/resistivity--05-20-75; 1,280-1,490 ft;
includes one short and one long normal

Fluid conductivity: 05-20-75; 1,200-1,492 ft

Radiation: Natural Gamma--01-08-75; 0-1,492 ft

Gamma-Gamma--01-08-75; 0-1,486 ft

Neutron--05-20-75; 0-1,490 ft

Temperature: 05-20-75; 1,180-1,492 ft

Table 12.--Mineralogy and cation-exchange capacity of cored samples taken from the primary injection well at injection site 2

[From Pascale, 1975, p. 14, and USGS files]

[Lithologic unit: B, Bucatunna Clay; P, Pensacola Clay;
L, lower limestone]

| | Primary injection well | | | | | | Deep-test monitor well | |
|--|------------------------|-------|-------|-------|-------|-------|------------------------|-----------------|
| Date of collection | 10-74 | 10-74 | 10-74 | 11-74 | 11-74 | 11-74 | 12-71 | 12-71 |
| Depth (feet below land surface) | 1,130 | 1,300 | 650 | 1,330 | 1,450 | 1,500 | 1,348- 1,362 | 1,488- 1,498 |
| Lithologic unit | B | B | P | L | L | L | L | L |
| <u>Mineral</u> ¹ (weight percent) | | | | | | | | |
| Quartz | 41 | 1 | 24 | -- | -- | -- | 3 | 4 |
| Calcite | 0 | 0 | 2 | 93 | 96 | 84 | 75-80 | 90-95 |
| Dolomite | -- | -- | -- | -- | -- | -- | 3 | 5 |
| Kaolinite | 2 | 3 | 7 | -- | -- | -- | -- | -- |
| Illite | 2 | 4 | 7 | -- | -- | -- | -- | -- |
| Montmorillonite | 40 | 11 | 20 | -- | -- | -- | -- | -- |
| Mixed-layer clay minerals | 14 | 14 | 31 | -- | -- | -- | -- | -- |
| Total weight percent | 99 | 33 | 101 | -- | -- | -- | -- | -- |
| Cation-exchange capacity (milliequivalents per 100 grams) ² | 18 | 14 | 21 | -- | -- | -- | -- | -- |

¹Analysis by x-ray diffraction using methods of Shultz, 1964.

²Analysis by methods in Beetem, and others, 1962, p. B1-B8.

Table 13.--Lithologic log of regional monitor well 1,
station number 303241086540401

[From Pascale, 1976, p. 16-20]

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Sand, tan to brown, quartz, fine to medium, subrounded | 20 | 20 |
| Sand, tan to orange, quartz, fine to medium | 30 | 50 |
| Sand, light brown, quartz, fine to medium, subangular; clay, orange to white; black phosphorite grains | 60 | 110 |
| Sand, orange to clear quartz, fine to medium, subangular; clay, white to orange; black phosphorite grains | 90 | 200 |
| Clay, medium gray; sand, clear to white quartz, fine to medium; black phosphorite grains | 60 | 260 |
| Clay, gray to green; sand, clear to gray, medium; shell fragments; black phosphorite grains | 70 | 330 |
| Clay, light to medium gray; sand, clear to white, fine to medium; black phosphorite grains; shell fragments less abundant | 40 | 370 |
| Clay, light to medium gray; sand, clear to white, fine to medium; black phosphorite; shell fragments abundant | 40 | 410 |
| Sand, medium to fine quartz, subangular, clear to orange; clay, medium gray; shell fragments | 80 | 490 |
| Clay, gray with traces of orange; sand, fine to medium, frosted to clear; shell fragments; black phosphorite grains | 90 | 580 |
| Clay, medium to dark gray; sand, coarse; shell fragments; black phosphorite grains | 145 | 725 |
| Limestone, tan to light gray, hard dolomitic; clay, gray; sand, fine to medium; black phosphorite grains | 5 | 730 |
| Limestone, cream to white; black phosphorite grains; pyrite; shells | 20 | 750 |
| Limestone, brown to light gray, dolomitic; black phosphorite grains; pyrite; shells | 40 | 790 |
| Limestone, cream to tan, dolomitic, rough texture; shell fragments; pyrite; black phosphorite grains | 40 | 830 |
| Limestone, white to gray, fine texture; pyrite; black phosphorite grains | 70 | 900 |

Table 13.--Lithologic log of regional monitor well 1,
station number 303241086540401--Continued

| Lithology | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|
| Limestone, white to tan; shells; clay, gray to light gray | 10 | 910 |
| Clay, gray; shells; limestone, tan | 10 | 920 |
| Limestone, white to tan to gray, dolomitic; shells; clay, gray; black phosphorite grains | 50 | 970 |
| Limestone, brown to tan, dolomitic; shell fragments; clay, medium gray; pyrite | 40 | 1,010 |
| Limestone, white to gray; shells and shell fragments; pyrite; clay, medium gray; sand, fine to medium, clear to orange | 30 | 1,040 |
| Clay, gray, waxy; shells; limestone fragments, white; sand, fine to medium; black phosphorite grains | 20 | 1,060 |
| Clay, gray, waxy, sticky; shells; wood fragments, dark brown | 30 | 1,090 |
| Clay, dark to medium gray, dense, waxy, sticky; shells, cream; wood fragments, light to dark brown | 90 | 1,180 |
| Clay, gray, dense, waxy; pyrite; limestone fragments | 10 | 1,190 |
| Limestone, white, finely crystalline; clay, gray; sand, clear quartz; shells; black phosphorite grains | 40 | 1,230 |
| Limestone, white to tan, finely crystalline; forami- nifers; shells; pyrite; black phosphorite grains | 30 | 1,260 |
| Limestone, white, finely crystalline; green glauconite; pyrite; black phosphorite grains | 110 | 1,370 |
| Limestone, white, finely crystalline; foraminifers; black phosphorite grains; sand, clear, quartz, fine | 30 | 1,400 |
| Sand, clear, quartz, medium; limestone, white, finely crystalline; black phosphorite grains; green glauconite | 10 | 1,410 |
| Limestone, white, finely crystalline; sand, clear, quartz; black phosphorite grains | 40 | 1,450 |
| Limestone, white, finely crystalline; sand, clear, quartz, medium (50 percent sand); black phosphorite grains, very fine | 50 | 1,500 |

Table 14.--Lithologic log of regional monitor well 2,
station number 304252087002201

[From Pascale, 1976, p. 21-25]

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Clay, white to brown, sticky; sand, white to clear quartz, medium | 20 | 20 |
| Sand, clear to white quartz, medium; clay, brown to red | 20 | 40 |
| Sand, clear to white, medium to coarse; gravel, white to yellow, very coarse to pea size; clay, brown | 20 | 60 |
| Sand, clear to white, medium to coarse, subrounded to rounded; gravel, clear to white, very coarse; clay, light brown | 90 | 150 |
| Clay, yellow to brown, sticky; gravel, very coarse to small pebbles; sand, medium, clear to white | 10 | 160 |
| Sand, clear to white, medium to coarse, subrounded to angular; gravel, very coarse to pebble; clay, light brown | 50 | 210 |
| Clay, green-gray to red, sticky; gravel, very coarse to pea size; sand, clear to white, medium | 10 | 220 |
| Sand, white to clear, medium to coarse; gravel, white to clear, very coarse to pebbles; clay, yellow brown to green, sticky | 30 | 250 |
| Sand, clear to purple, medium to coarse, subrounded to subangular; clay, brown; gravel, clear to rose, very coarse to pea size | 40 | 290 |
| Clay, gray brown to yellow brown; sand, clear to white, medium to coarse; gravel, clear to red, very coarse; black phosphorite grains | 40 | 330 |
| Clay, dark green, sticky; sand, clear to white, subangular to subrounded; shell fragments; black phosphorite grains | 120 | 450 |
| Sand, clear to white, medium; clay, dark green, soft; shell fragments; black phosphorite grains | 80 | 530 |

Table 14.--Lithologic log of regional monitor well 2,
station number 304252087002201---Continued

| Lithology | Thickness (feet) | Depth (feet) |
|---|---------------------|-----------------|
| Clay, dark gray, soft, sticky; sand, white to clear, angular to subangular; shell fragments | 110 | 640 |
| Limestone, gray, finely crystalline, porous; sand, clear to white, medium; clay, dark gray, soft, sticky; black phosphorite grains; pyrite; shell fragments | 30 | 670 |
| Limestone, light gray, fine; sand, clear to white, medium; clay, gray to green, brittle, soft; black phosphorite grains; pyrite; shell fragments | 120 | 790 |
| Sand, clear to white, medium; limestone, gray, fine; shell fragments; black phosphorite grains | 40 | 830 |
| Clay, dark green, soft, sticky; sand, white to yellow, angular to subangular; limestone, gray, fine; shell fragments | 50 | 880 |
| Clay, dark green, soft, very dense, waxy; sand, clear to white, medium | 100 | 980 |
| Limestone, white, finely crystalline; sand, clear to white, medium; black phosphorite grains | 30 | 1,010 |
| Limestone, white, finely crystalline; pyrite; green glauconite; black phosphorite grains; shell fragments | 50 | 1,060 |
| Limestone, white to tan, limonite stains on limestone, finely crystalline; green glauconite; sand, clear quartz | 30 | 1,090 |
| Clay, light gray, soft, waxy; limestone, white to tan, finely crystalline | 20 | 1,110 |
| Limestone, white, finely crystalline; black phosphorite grains; pyrite; trace of clay | 20 | 1,130 |
| Limestone, white, finely crystalline; shell fragments; phosphorite; green glauconite; sand, clear quartz, medium | 20 | 1,150 |

Table 14.--Lithologic log of regional monitor well 2,
station number 304252087002201---Continued

| Lithology | Thickness (feet) | Depth (feet) |
|--|---------------------|-----------------|
| Limestone, white to tan to gray; shell fragments; foraminifers; limonite clay, white; clay, gray, silty | 40 | 1,190 |
| Sand, clear quartz, medium, subangular; limestone, white to tan, crystalline | 40 | 1,230 |
| Limestone, white to tan, finely crystalline; shell fragments; sand, clear quartz, medium; limonite clay | 30 | 1,260 |
| Limestone, white to tan; sand, clear quartz, medium; shell fragments; clay, light gray, soft; black phosphorite, black | 20 | 1,280 |
| Clay, gray, soft; black phosphorite grains, abundant; sand, clear quartz, medium; limestone fragments | 10 | 1,290 |

Table 15.--Geophysical log data for regional monitor wells 1 and 2

[Depths are in feet below land surface. Geophysical logs were done by the U.S. Geological Survey, unless otherwise noted]

Regional monitor well 1--303241086540401
(Holley-Navarre or test well 1)

Caliper: Mechanical--03-18-74; 1,205-1,406 ft
--05-13-77; 1,200-1,409 ft

Electric: Spontaneous potential/resistivity--03-18-74; 1,220-1,400 ft;
includes one short and one long normal

Fluid conductivity: 03-18-74; 70-1,364 ft
05-13-77; 1,200-1,408 ft

Radiation: Natural Gamma--01-28-74; 10-1,420 ft

Gamma-Gamma--03-18-74; 4-1,400 ft and 10-1,407 ft

Neutron--03-18-74; 0-1,404 ft

Temperature: 03-18-74; 12-1,406 ft

Regional monitor well 2--304252087002201
(Whiting Field or test well 2)

Caliper: Mechanical--01-28-74; 840-1,200 ft

Electric: Spontaneous potential/resistivity--03-18-74; 980-1,182 ft;
includes one short and one long normal

Fluid conductivity: 03-18-74; 100-1,182 ft

Radiation: Natural Gamma--01-28-74; 60-1,200 ft

Gamma-Gamma--03-18-74; 6-1,172 ft

Neutron--03-18-74; 4-1,178 ft

Temperature: 03-18-74; 0-1,186 ft

Table 16.--Mineralogy and cation-exchange capacity of cored samples taken from regional monitor wells 1 and 2

[From Pascale, 1976, p. 28-29]

[Lithologic unit: B, Bucatunna Clay; L, lower limestone]

| | Regional monitor well 1 | | | Regional monitor well 2 | | |
|---|----------------------------|----------|----------|----------------------------|----------|----------|
| Date of collection | 08-16-73 | 08-20-73 | 08-21-73 | 09-27-73 | 09-28-73 | 09-29-73 |
| Depth (feet below land surface) | 1,084 | 1,120 | 1,225 | 880 | 920 | 985 |
| Lithologic unit | B | B | L | B | B | L |
| <u>Mineral</u> ¹ (weight percent) | | | | | | |
| Quartz | 12 | 14 | -- | 13 | 8 | -- |
| Calcite | 0 | 0 | 90 | 2 | 7 | 92 |
| Kaolinite | 11 | 11 | -- | 12 | 7 | -- |
| Illite | 4 | 5 | -- | 4 | 3 | -- |
| Montmoril- lonite | 25 | 31 | -- | 20 | 16 | -- |
| Mixed-layer clay minerals | 24 | 28 | -- | 27 | 20 | -- |
| Total weight percent | 76 | 89 | -- | 78 | 61 | -- |
| Cation-exchange capacity (milliequiv- alents per ₂ 100 grams) ² | 46 | 47 | -- | 43 | 46 | -- |

¹Analysis by x-ray diffraction using methods of Schultz, 1964.

²Analysis by methods described in Beetem, and others, 1962, p. B1-B8.

Table 17.--Monitor well sampling log for injection site 1

[Log represents initiation or change in field procedures only;
comments in parentheses () indicate a one-time condition.]

| Date | Shallow | North | South |
|---|--|--|----------------|
| 11-04-70 | 1 hr 20 min PT ¹ | 45 min PT | 1 hr 15 min PT |
| pH, temperature, and alkalinity field determinations made on unfiltered sample. All laboratory analyses made at QWSU ² except TOC at Washington ³ . Mercuric chloride (HgCl ₂) added to all nutrient and TOC samples to retard bacterial growth. Cations filtered with 0.45 um filter and acidified with nitric acid (HNO ₃). Anions filtered with 0.45 um filter, nutrients unfiltered, trace elements filtered with 0.45 um filter then acidified with nitric acid. | | | |
| 01-18-71 | 1 hr PT | 50 min PT | 1 hr PT |
| 04-15-71 | 40 min PT | | |
| 04-16-71 | | 1 hr PT | |
| 09-15-71 | | (2 hr PT) | |
| 12-08-71 | (1 hr PT) | | |
| 12-09-71 | | (after 30 min PT, water turbid; after 1 hr PT, limestone flakes and sand grains visible) | |
| 01-04-72 | | (after 15 min PT, water turbid with flakes and sand) field alkalinity now done on filtered sample | |
| 04-10-72 | All nutrients, including organic carbon, now iced and no longer treated with HgCl ₂ . | | |
| 08-09-72 | - - - - - All TOC samples sent to QWSU.- - - - - | | |
| 10-18-72 | (55 min PT) | | |
| 11-15-72 | (50 min PT) | | |
| 12-13-72 | | | 40 min PT |
| 12-14-72 | | 40 min PT | |
| 04-17-73 | (DOC samples split and sent to QWSU and R. L. Malcom, Arvada Research Laboratory ⁴ .) | | |

See footnotes at end of table

Table 17.--Monitor well sampling log for injection site 1--Continued

| Date | Shallow | | North | South |
|----------|---|-----------|------------------------------------|---|
| 05-16-73 | <u>Time</u> | <u>pH</u> | <u>HCO₃ in mg/L</u> | <u>PT</u> |
| | 1415 | 8.73 | 550 | 40 min |
| | 1445 | 8.61 | 530 | 1 hr 10 min |
| | 1500 | 8.72 | 520 | 1 hr 25 min |
| | 1615 | 8.68 | 511 | 2 hr 40 min |
| 06-12-73 | 1340 | 8.67 | 530 | 40 min |
| | 1355 | 8.72 | 517 | 55 min |
| | 1415 | 8.72 | 508 | 1 hr 15 min |
| 06-13-73 | | | | (1 hr 45 min PT) no more observ- able turbidity |
| 07-18-73 | 1300 | 8.76 | 513 | 30 min |
| | 1330 | 8.74 | 505 | 1 hr |
| 08-22-73 | - - - - - No more TOC samples taken--only DOC. - - - - - | | | |
| | 1345 | 8.71 | 493 | 30 min |
| | 1415 | 8.73 | 496 | 1 hr |
| 09-12-73 | | | | 30 min |
| 11-14-73 | - All major constituent analyses now done at Doraville Laboratory ⁵ .- | | | |
| 03-18-74 | | | | (G. Elkan collects micro- biological ₆ samples) |
| 06-20-74 | | | | (water turbid during 40 min PT --cut back flow rate then cleared and sampled) |
| 08-15-74 | (sample collected during a PT period from 30 min to 1 hr 35 min) | | | |
| 01-16-75 | | | | (15 min PT) |
| 02-18-75 | | | | (sample collected at 1542 with 26 min PT and 500 gpm, and a second sample at 1552 with 36 min PT and maximum gpm) |

See footnotes at end of table

Table 17.--Monitor well sampling log for injection site 1--Continued

| Date | Shallow | North | South |
|-------------------------------|--|-----------|---|
| 02-19-75 | 40 min PT | 30 min PT | 30 min PT |
| 03-12-75 | - - All trace element analyses now done at Doraville Laboratory. - - | | |
| 07-16-75 | Specific conductance now determined in the field on unfiltered samples. | | |
| 08-19-75 | <div> <div>Time</div> <div>pH</div> <div>HCO₃ in mg/L</div> <div>PT</div> </div> <div> <div>(1345</div> <div>8.59</div> <div>559</div> <div>40 min)</div> </div> <div> <div>(1740</div> <div>8.65</div> <div>511</div> <div>4 hr 35 min)</div> </div> | | |
| 09-15-75 | (4 hr 25 min PT) | | |
| 10-14-75 | - - - Specific conductance now determined on filtered sample. - - - | | |
| | (3 hr 40 min PT) | | |
| 11-17-75 | (3 hr PT) | | |
| 12-16-75 | (4 hr PT) | | |
| 01-22-76 | (4 hr PT; company purged well on 01-08-76 for undetermined period of time) | | (company purged well 01-08-76 for undetermined period of time) |
| 02-25-76 | 3 hr PT | | (collected 2 gas samples, sent to D. W. Fisher, Reston, Laboratory) |
| 03-20-76 | | | (company collected gas samples 3 times and purged well 03-03-76 to 03-17-76 for 1-1/2 to 3-3/4 hours each time) |
| 04-26-76 | (4 hr PT) | | |
| 05-20-76 | (2 hr 45 min PT) | | |
| 06-23-76 | (4 hr 30 min PT) | | |
| See footnotes at end of table | | | |

Table 17.--Monitor well sampling log for injection site 1--Continued

| Date | Shallow | North | South |
|----------|---|---|--|
| 07-19-76 | (3 hr 20 min PT) | | |
| 08-17-76 | 5 hr PT | | |
| 11-17-76 | (3 hr 15 min PT) | | |
| 11-18-76 | | | discharge pipe and sampling valves replaced because of leakage |
| 12-16-76 | (4 hr PT) | | |
| 01-19-77 | | | (purged several days to prevent freezing of pipes) |
| 01-20-77 | (purged several days to prevent freezing of pipes) | (purged several days to prevent freezing of pipes) | |
| 02-24-77 | (same--still flowing) | | |
| 04-21-77 | (3 hr 40 min PT) | | |
| 05-12-77 | - - - - - No samples because of geophysical well-logging. - - - - - | | |
| 06-15-77 | (5 hr PT to clean out well) | (1 hr 30 min PT to clean out well) | |
| 06-16-77 | | | (1 hr PT to clean out well) |
| 06-18-77 | | | (30 min PT) |
| 07-18-77 | | (no sample--valve flushed 1 hr 30 min) | |
| 07-19-77 | - - - - - Sampling tubes installed by this date. - - - - - | | |

| <u>Time</u> | <u>HCO₃</u> | | <u>PT</u> | (sampled twice at 1335 with 5 min PT, sampled regu- lar point at 1400 and 30 min PT) | (well purging for days) |
|-------------|------------------------|----------------|-----------|--|----------------------------|
| | <u>pH</u> | <u>in mg/L</u> | | | |
| (1025 | <u>8.41</u> | <u>520</u> | 18) | | |
| | <u>Regular point</u> | | | | |
| (1100 | 8.32 | 542 | 30) | | |

Table 17.--Monitor well sampling log for injection site 1--Continued

| Date | Shallow | North | South |
|----------|---|--|---|
| 08-18-77 | - - Wells sampled through tube from here on. - - | | 5 min PT (sample foaming) |
| | 18-20 min PT | 5 min PT | |
| 08-19-77 | | | (30 min PT, sampled regular point at 0930; 50 min PT, sampled tube at 1020) |
| 09-21-77 | | (valve found leaking slowly) | well sampled through tube from here on, 5 min PT |
| 10-27-77 | | (collected gas sample--sent to D. W. Fisher) | (collected gas sample--sent to D. W. Fisher) |
| 12-14-77 | (tube and valve purging several days to prevent freezing of pipes) | (valve still leaking) | |
| 02-09-78 | - - - - All tubes purging to prevent the freezing of pipes. - - - - | | |
| 05-04-78 | | (collected gas sample--sent to D. W. Fisher) | (collected gas sample--sent to D. W. Fisher) |
| 09-21-78 | | (collected gas sample--sent to D. W. Fisher) | (collected gas sample--sent to D. W. Fisher) |
| 12-13-78 | | (large valve and discharge pipe leaking) | |
| 01-24-79 | (purged since 01-02-79 to prevent freezing of pipes) | (purged since 01-02-79 to prevent freezing of pipes) | (valve burst 01-02-79 and not repaired as of this date) |
| 03-08-79 | (collected gas sample--sent to D. W. Fisher) | (collected gas sample--sent to D. W. Fisher, well still flowing) | (collected gas sample--sent to D. W. Fisher, well repaired but still flowing) |

Table 17.--Monitor well sampling log for injection site 1--Continued

| Date | Shallow | North | South |
|----------|---|---|--|
| 04-23-79 | | (still purging-- cut off flow after sampling) | (still purging --cut off flow after sampling) |
| 12-13-79 | (purging to prevent freezing of pipes) | | |
| 01-21-80 | | | (collected gas sample, sent to D. W. Fisher, well purging since 12-17-80, well left still purging) |
| 01-22-80 | | (purge since 12-17-79, left purging, collected gas sample--sent to D. W. Fisher, collected carbon 12, 13, and 14 --sent to ⁸ Craig Sprinkle) | |
| 01-23-80 | (purged week of 01-11-80--not now purging) | | |
| 03-20-80 | | (still purging-- cut off flow after sampling) | (still purging) |
| 05-01-80 | | (sampling tube shot up by vandals--well purging) | |

¹Purge time, length of time well flowing prior to sampling. Originally (as of 07-17-70) was based on reaching a specified temperature, 30°C for the shallow well and 35°C for the deeper wells. This was later changed (02-19-75) to allow for the purging of two casing volumes, and later (07-19-77) for two sampling tube volumes. Other purges occurred from accidental breakage and leakage or intentional discharge to prevent freezing and subsequent breakage of valves of pipes.

²U.S. Geological Survey, Quality of Water Service Unit, Ocala, Fla.

³U.S. Geological Survey, Water-Quality Laboratory, Washington, D.C.--no longer operating.

⁴U.S. Geological Survey, Central Region Research Laboratory, Arvada, Colo.

⁵U.S. Geological Survey, National Water-Quality Laboratory, Doraville, Ga.

⁶University of North Carolina, Department of Microbiology, Raleigh, N. C.

⁷U.S. Geological Survey, Northeastern Region Research Laboratory, Reston, Va.

⁸U.S. Geological Survey, Southeastern Regional Aquifer Study, Atlanta, Ga.

Table 18.--Monitor well sampling log for injection site 2

[Log represents initiation or change in field procedures only; comments in parentheses () indicate a one-time condition.]

| Date | Shallow | North | Standby injection | Deep-test |
|----------|--|---|--|--|
| | pH, temperature, specific conductance, and alkalinity field determinations made ₁ on unfiltered sample. All laboratory analyses of nutrients made on unfiltered samples at QWSU ¹ . All other analyses made at Doraville Laboratory ² . Cations filtered with 0.45 um filter and acidified with nitric acid (HNO ₃). Anions filtered with 0.45 um filter. Trace elements filtered with 0.45 um filter and acidified with nitric acid. | | | |
| 07-14-75 | | (35 min PT ³), collected through sampling tube | | |
| 07-16-75 | (1 hr PT) | | 2 hr PT, flow through large discharge pipe, sampled from valve on smaller, side discharge pipe | |
| 08-21-75 | (40 min PT) | (25 min PT) | | (2 hr 5 min PT), collected through sampling tube |
| 08-22-75 | | | small amounts of sand and limestone particles present in sample water | |
| 09-16-75 | - - - - - | Specific conductance now determined on filtered samples - - - - - | | |
| 09-17-75 | 10 min PT | 20 min PT | (55 min PT), begin bicarbonate analysis in filtered sample | 10 min PT |

See footnotes at end of table

Table 18.--Monitor well sampling log for injection site 2---Continued

| Date | Shallow | North | Standby injection | Deep-test |
|----------|---|-------|---|---|
| 10-16-75 | | | 50 min PT | |
| 01-21-76 | | | (5 hr PT) | |
| 02-26-76 | | | | (10 min PT at 1400; 2 hr at 1550) |
| 05-13-76 | | | | |
| | | | | <div> <div>Time</div> <div>pH</div> <div>HCO₃ in mg/L</div> <div>PT</div> </div> <div> 1125 7.95 534 2 min 1133 7.73 723 10 min 1138 7.73 772 15 min 1141 7.73 777 18 min 1144 7.73 813 21 min 1210 7.80 856 47 min 1326 7.70 802 2 hr 3 min 1340 7.78 826 2 hr 17 min 1410 7.71 774 2 hr 17 min 1440 7.70 684 3 hr 17 min 1540 7.68 668 4 hr 17 min 1615 7.73 648 4 hr 42 min </div> |
| 08-19-76 | | | (45 min PT) | (collected organic ₄ sample, sent to G. Ehrlich) |
| 01-18-77 | | | 20 min PT, purge through large discharge pipe, turn off and collect sample through smaller side discharge pipe. | |
| 04-19-77 | (collect organic sample; sent to M. Yates) ₅ | | (collect organic sample; sent to M. Yates) | |

See footnotes at end of table

Table 18.--Monitor well sampling log for injection site 2--Continued

| Date | Shallow | North | Standby injection | Deep-test |
|----------|--|--|--|---|
| 04-20-77 | | (collect organic sample; sent to M. Yates) | | (collect organic sample; sent to M. Yates) |
| 02-06-78 | | | | (collect organic sample; sent to M. Yates) |
| 02-07-78 | | (collect organic sample; sent to M. Yates) | | |
| 05-01-78 | | | | (same, collect ₆ gas sample, sent to D. W. Fisher) |
| 05-02-78 | | (same as for 04-19-77; collect gas sample; sent to D. W. Fisher) | | |
| 12-12-78 | | (collected gas sample, sent to D. W. Fisher) | | |
| 03-07-79 | (6 hr 30 min PT) | | | |
| 04-30-79 | (7 hr 30 min PT) | | | |
| 06-11-79 | | (collected organic sample, sent to M. Yates; collected gas sample, sent to D. W. Fisher) | | |
| 06-12-79 | (collected organic sample, sent to M. Yates; collected gas sample, sent to D. W. Fisher) | | (collected organic sample, sent to M. Yates; collected gas sample, sent to D. W. Fisher) | |

See footnotes at end of table

Table 18.--Monitor well sampling log for injection site 2--Continued

| Date | Shallow | North | Standby injection | Deep-test |
|----------|-------------------|------------------|-------------------|--|
| 06-13-79 | | | | (collected organic sample, sent to M. Yates; collected gas sample, sent to D. W. Fisher) |
| 07-24-79 | (16 hr 30 min PT) | | | |
| 09-19-79 | (22 hr 30 min PT) | | | |
| 11-06-79 | (20 hr PT) | | | |
| 01-07-80 | | (2 hr 10 min PT) | | |
| 01-08-80 | (23 hr 30 min PT) | | | |
| 01-09-80 | | | (3 hr 30 min PT) | |
| 01-10-80 | | | | (45 min PT) |
| 03-18-80 | (18 hr 15 min PT) | | (4 hr PT) | (15 min PT) |
| 04-29-80 | (21 hr PT) | | | |
| 04-30-80 | | | (35 min PT) | |
| 06-18-80 | (17 hr PT) | | | |
| 06-25-80 | | | | (collected gas sample; sent to D. W. Fisher) |

- 1 U.S. Geological Survey, Quality of Water Service Unit, Ocala, Fla.
- 2 U.S. Geological Survey, National Water-Quality Laboratory, Doraville, Ga.
- 3 Purge time, length of time well flowing prior to sampling. Based on purging at least two casing or sampling tube volumes before initiation of sample collection.
- 4 U.S. Geological Survey, Western Region Research Laboratory, Menlo Park, Calif.
- 5 U.S. Geological Survey, National Water-Quality Laboratory, Arvada, Colo.
- 6 U.S. Geological Survey, Northeastern Region Research Laboratory, Reston, Va.

Table 19.--Water-quality analyses of industrial waste at injection site 1

| 303535087154500 - Waste, Monsanto. | | | | | | | | | | | | | | | | | | | 303535087154500 - Waste, Monsanto. | | | | | | | | | | | | | | | | | | |
|------------------------------------|-------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|-----------|-------|----------------------------------|--------------------------|--|---|--|--|---|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPEC- IFIC CON- DUCT- ANCE (MICRO- MHMS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, BIOCHEM 5 DAY (MG/L) | HARD- NESS, NONCAR- BONATE (MG/L CaCO3) | HARD- NESS, CARBONATE (MG/L CaCO3) | ACIDITY TOTAL HEATED (MG/L H2O) | | | | | | | | | | | | | | | | | | | |
| DEC, 1966 | 12... | — | 8600 | 3.5 | — | — | — | — | — | DEC, 1966 | 12... | — | — | — | — | 26 | — | — | | | | | | | | | | | | | | | | | | | |
| JUN, 1970 | — | — | — | 2.4 | — | — | — | — | — | APR, 1968 | — | — | — | — | — | 12 | — | — | | | | | | | | | | | | | | | | | | | |
| 05... | — | — | — | — | — | — | 5 | — | — | JUN, 1970 | — | — | — | — | — | 20 | — | — | | | | | | | | | | | | | | | | | | | |
| NOV, 1971 | 0800 | — | — | 3.2 | — | — | — | — | — | 05... | — | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |
| 01... | 1600 | — | — | 3.0 | — | — | — | — | — | NOV, 1971 | 0800 | — | — | — | — | 38 | — | — | | | | | | | | | | | | | | | | | | | |
| 01... | 2400 | — | — | 3.0 | — | — | — | — | — | 01... | 2400 | — | — | — | — | 34 | — | — | | | | | | | | | | | | | | | | | | | |
| 02... | 0800 | — | — | 2.8 | — | — | — | — | — | 02... | 0800 | — | — | — | — | 38 | — | — | | | | | | | | | | | | | | | | | | | |
| 02... | 1600 | — | — | 2.8 | — | — | — | — | — | 02... | 2400 | — | — | — | — | 35 | — | — | | | | | | | | | | | | | | | | | | | |
| 02... | 2400 | — | — | 2.1 | — | — | — | — | — | 03... | 1600 | — | — | — | — | 42 | — | — | | | | | | | | | | | | | | | | | | | |
| 03... | 0800 | — | — | 2.6 | — | — | — | — | — | 03... | 0800 | — | — | — | — | 43 | — | — | | | | | | | | | | | | | | | | | | | |
| 03... | 1600 | — | — | 2.9 | — | — | — | — | — | 04... | 0800 | — | — | — | — | 40 | — | — | | | | | | | | | | | | | | | | | | | |
| 03... | 2400 | — | — | 2.6 | — | — | — | — | — | 04... | 1600 | — | — | — | — | 38 | — | — | | | | | | | | | | | | | | | | | | | |
| 04... | 0800 | — | — | 2.8 | — | — | — | — | — | 04... | 2400 | — | — | — | — | 38 | — | — | | | | | | | | | | | | | | | | | | | |
| 04... | 1600 | — | — | 2.6 | — | — | — | — | — | 05... | 0800 | — | — | — | — | 40 | — | — | | | | | | | | | | | | | | | | | | | |
| 04... | 2400 | — | — | 2.5 | — | — | — | — | — | 05... | 1600 | — | — | — | — | 38 | — | — | | | | | | | | | | | | | | | | | | | |
| 05... | 0800 | — | — | 2.7 | — | — | — | — | — | 05... | 2400 | — | — | — | — | 36 | — | — | | | | | | | | | | | | | | | | | | | |
| 05... | 1600 | — | — | 2.8 | — | — | — | — | — | 06... | 0800 | — | — | — | — | 39 | — | — | | | | | | | | | | | | | | | | | | | |
| 05... | 2400 | — | — | 2.7 | — | — | — | — | — | 06... | 1600 | — | — | — | — | 32 | — | — | | | | | | | | | | | | | | | | | | | |
| 06... | 0800 | — | — | 2.7 | — | — | — | — | — | 07... | 0800 | — | — | — | — | 28 | — | — | | | | | | | | | | | | | | | | | | | |
| 06... | 1600 | — | — | 2.3 | — | — | — | — | — | 07... | 1600 | — | — | — | — | 36 | — | — | | | | | | | | | | | | | | | | | | | |
| 06... | 2400 | — | — | 1.8 | — | — | — | — | — | 07... | 2400 | — | — | — | — | 31 | — | — | | | | | | | | | | | | | | | | | | | |
| 07... | 0800 | — | — | 1.9 | — | — | — | — | — | 08... | 0800 | — | — | — | — | 50 | — | — | | | | | | | | | | | | | | | | | | | |
| 07... | 1600 | — | — | 2.2 | — | — | — | — | — | 08... | 1230 | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |
| 07... | 2400 | — | — | 2.0 | — | — | — | — | — | APR, 1973 | 0730 | — | — | 24000 | — | 17 | — | 220 | | | | | | | | | | | | | | | | | | | |
| 08... | 0800 | — | — | 2.0 | — | — | — | — | — | 25... | — | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |
| 08... | 1230 | — | — | 2.4 | — | — | — | — | — | DEC | — | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |
| APR, 1973 | 0730 | — | 8000 | 2.5 | — | — | — | 15 | — | 11... | 1200 | — | — | — | — | 13 | — | 149 | | | | | | | | | | | | | | | | | | | |
| 25... | — | — | — | — | — | — | — | — | — | APR, 1977 | — | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |
| DEC | — | — | 8560 | 3.0 | — | — | — | 13 | — | 22... | 1300 | — | 1.005 | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |
| 11... | 1200 | — | — | — | — | — | — | — | — | JAN, 1980 | — | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |
| JAN, 1980 | — | — | — | — | — | 20.5 | 600 | — | 60 | 11... | 1000 | — | — | 20500 | — | 19 | 19 | 120 | | | | | | | | | | | | | | | | | | | |
| 11... | 1000 | — | 4800 | 3.3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | |

Table 19.--Water-quality analyses of industrial waste at injection site 1--Continued

[illegible]

Table 19.--Water-quality analyses of industrial waste at injection site 1--Continued

[illegible]

Table 20.--Water-quality analyses of industrial waste at injection site 2--Continued

| 303413067063800 - Waste, American Cyanamid. | | | | | | | | | | 303413067063800 - Waste, American Cyanamid. | | | | | | | | | | | | | |
|---|--|----------|--|------------------------------------|--|-----------------------------------|--|-----------------------------------|--|---|--|----------|--|----------|--|------------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|
| TIME | | DATE | | SOLIDS, VOLATA- TILE ON TILE | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | | TIME | | DATE | | SOLIDS, VOLATA- TILE ON TILE | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | |
| TIME | | DATE | | SOLIDS, VOLATA- TILE ON TILE | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | | TIME | | DATE | | SOLIDS, VOLATA- TILE ON TILE | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | | MITRO- GEN, MITRATE DIS- | |
| JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | |
| 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | |
| 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | |
| JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | |
| 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | |
| 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | |
| JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | |
| 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | |
| 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | |
| JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | |
| 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | |
| 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | |
| JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | |
| 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | |
| 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | |
| JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | |
| 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | |
| 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | |
| JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | |
| 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | |
| 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | |
| JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | |
| 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | |
| 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | | 1100 | |
| JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | |
| 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | |
| 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | |
| JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | |
| 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | |
| 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | |
| JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | | JUL 1975 | |
| 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | |
| 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | | 1150 | |
| JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | | JUN 1976 | |
| 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | | 18... | |
| 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | | 2200 | |
| JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | | JUN 1977 | |
| 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | | 14... | |
| 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | | 1145 | |
| JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | | JUN 1978 | |
| 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | | 07... | |
| 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | |
| JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | | JUN 1979 | |
| 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | | 03... | |
| 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | | 1030 | |
| JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | | JUN 1980 | |
| 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | | 01... | |
| 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | | 1445 | |
| JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | | JUN 1981 | |
| 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | |
| 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | | 1015 | |
| JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | | JUN 1982 | |
| 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | | 12... | |
| 1180 | | 1180 | | 1180 | | 1180 | | 1180 | | 1180 | | 1180 | | 1180 | | 1180 | | 1180 | | 1180 | | 1180 | |
| JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | | JUN 1983 | |
| 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | | 09... | |
| 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | | 1130 | |
| JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | | JUN 1984 | |
| 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | | 24... | |
| 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | | 1530 | |

Table 20. --Water-quality analyses of industrial waste at injection site 2--Continued

303413087063800 - Waste, American Cyanamid.

| DATE | TIME | CARBON, TOTAL (MG/L AS C) | | CARBON, ORGANIC TOTAL (MG/L AS C) | | CARBON, INUR- GANIC, DIS- SOLVED (MG/L AS C) | | CARBON, INUR- GANIC, DIS- SOLVED (MG/L AS C) | | CYANIDE TOTAL (MG/L AS CN) | | THIO- CYANATE TOTAL (MG/L AS SCN) | | PHENOLS (MG/L) | |
|-----------|------|---------------------------|-------------|-----------------------------------|-------------|--|-------------|--|-------------|----------------------------|--------------|--------------------------------------|---------------|----------------|--------|
| | | (MG/L AS C) | (MG/L AS C) | (MG/L AS C) | (MG/L AS C) | (MG/L AS C) | (MG/L AS C) | (MG/L AS C) | (MG/L AS C) | (MG/L AS CN) | (MG/L AS CN) | (MG/L AS SCN) | (MG/L AS SCN) | (MG/L) | (MG/L) |
| JUL, 1975 | | | | | | | | | | | | | | | |
| 16... | 1150 | - | - | - | - | 400 | - | - | - | 2.3 | - | - | - | - | - |
| AUG, 1976 | 2300 | - | - | - | - | 590 | - | - | - | 3.2 | - | - | - | - | - |
| NOV, 1977 | | | | | | | | | | | | | | | |
| 14... | 1145 | - | - | - | - | 330 | - | - | - | - | - | - | - | - | - |
| FEB, 1978 | | | | | | | | | | | | | | | |
| 07... | 1445 | - | - | - | - | 330 | - | - | - | 12 | - | - | - | - | - |
| MAY | | | | | | | | | | | | | | | |
| 03... | 1030 | - | - | - | - | 470 | - | - | - | 2.9 | - | - | - | - | - |
| AUG | | | | | | | | | | | | | | | |
| 01... | 1445 | - | - | - | - | 310 | - | - | - | 4.3 | - | - | - | - | - |
| DEC | | | | | | | | | | | | | | | |
| 12... | 1015 | - | - | - | - | - | - | - | - | - | - | 120 | - | - | - |
| MAY, 1979 | | | | | | | | | | | | | | | |
| 01... | 0900 | - | - | - | - | - | - | - | - | 8.6 | 120 | - | - | - | - |
| JUN | | | | | | | | | | | | | | | |
| 12... | 1100 | - | - | - | - | 520 | - | - | - | 5.5 | 180 | - | - | 11 | - |
| JUL, 1980 | | | | | | | | | | | | | | | |
| 07... | 1130 | - | - | - | - | 500 | - | - | - | 5.1 | 180 | - | - | - | - |
| JUN | | | | | | | | | | | | | | | |
| 24... | 1580 | - | - | - | - | 540 | - | - | - | 2.6 | 79 | - | - | - | - |

Table 21.--Water-quality analyses of wastewater backflush from injection wells A and B at injection site 1

| 303537087145699 - Monsanto backflush water injection well "A". | | | | | | | | | | | | | |
|--|------|-------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|------------|------|-------------------------------|--|
| 303537087145699 - Monsanto backflush water injection well "A". | | | | | | | | | | | | | |
| DATE | TIME | SMP- LINO DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DATE | TIME | SMP- LINO DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) |
| DEC , 1967 | 1200 | — | — | 7.1 | — | — | — | — | — | JUL , 1968 | 1430 | — | — |
| 15... | 1200 | — | — | 7.0 | — | — | — | — | — | 18... | 1430 | — | — |
| 18... | 1230 | — | — | 7.1 | — | — | — | — | — | 18... | 1500 | — | — |
| 18... | 1330 | — | — | 7.0 | — | — | — | — | — | 18... | 1520 | — | — |
| 18... | 1420 | — | — | — | — | — | — | — | — | OCT | — | — | — |
| FEB , 1968 | 1000 | — | — | 3.4 | — | — | — | — | — | 02... | 1000 | — | — |
| 29... | 1030 | — | — | 6.6 | — | — | — | — | — | 02... | 1005 | — | — |
| 29... | 1100 | — | — | 7.0 | — | — | — | — | — | 02... | 1015 | — | — |
| 29... | 1100 | — | — | 7.2 | — | — | — | — | — | 02... | 1035 | — | — |
| 29... | 1230 | — | — | — | — | — | — | — | — | 02... | 1045 | — | — |
| APR | 1000 | — | — | 3.8 | — | — | — | — | — | 02... | 1100 | — | — |
| 24... | 1015 | — | — | 3.9 | — | — | — | — | — | 02... | 1120 | — | — |
| 24... | 1030 | — | — | 4.4 | — | — | — | — | — | 02... | 1215 | — | — |
| 24... | 1100 | — | — | 4.8 | — | — | — | — | — | 02... | 1300 | — | — |
| 24... | 1130 | — | — | 5.1 | — | — | — | — | — | 02... | 1415 | — | — |
| 24... | 1200 | — | — | 5.3 | — | — | — | — | — | 02... | 1525 | — | — |
| 24... | 1220 | — | — | 5.4 | — | — | — | — | — | FEB , 1969 | — | — | — |
| APR | 1010 | — | — | 3.4 | — | — | — | — | — | 19... | 0948 | — | — |
| 07... | 1025 | — | — | 4.4 | — | — | — | — | — | 19... | 0955 | — | — |
| 07... | 1040 | — | — | 4.5 | — | — | — | — | — | 19... | 1015 | — | — |
| 07... | 1055 | — | — | 4.7 | — | — | — | — | — | 19... | 1048 | — | — |
| 07... | 1110 | — | — | 4.9 | — | — | — | — | — | 19... | 1125 | — | — |
| 07... | 1140 | — | — | 5.0 | — | — | — | — | — | 19... | 1225 | — | — |
| 07... | 1215 | — | — | 5.2 | — | — | — | — | — | NOV , 1971 | — | — | — |
| 07... | 1240 | — | — | 5.2 | — | — | — | — | — | 08... | 1330 | — | — |
| 07... | 1310 | — | — | 5.3 | — | — | — | — | — | 08... | 1400 | — | — |
| 07... | 1340 | — | — | 5.4 | — | — | — | — | — | 08... | 1430 | — | — |
| 07... | 1410 | — | — | 5.4 | — | — | — | — | — | 08... | 1500 | — | — |
| 07... | 1440 | — | — | 5.4 | — | — | — | — | — | 08... | 1530 | — | — |
| JUL | 0930 | — | — | 3.5 | — | — | — | — | — | 08... | 1640 | — | — |
| 18... | 1005 | — | — | 3.5 | — | — | — | — | — | 08... | 1740 | — | — |
| 18... | 1033 | — | — | 3.9 | — | — | — | — | — | 08... | 1850 | — | — |
| 18... | 1040 | — | — | 4.0 | — | — | — | — | — | 08... | 2220 | — | — |
| 18... | 1055 | — | — | 4.1 | — | — | — | — | — | 09... | 0640 | — | — |
| 18... | 1115 | — | — | 4.2 | — | — | — | — | — | 09... | 1200 | — | — |
| 18... | 1130 | — | — | 4.3 | — | — | — | — | — | 09... | 1400 | — | — |
| 18... | 1200 | — | — | 4.3 | — | — | — | — | — | 09... | 1600 | — | — |
| 18... | 1230 | — | — | 4.3 | — | — | — | — | — | 09... | 2400 | — | — |
| 18... | 1300 | — | — | 4.3 | — | — | — | — | — | 10... | 0530 | — | — |
| 18... | 1330 | — | — | 4.3 | — | — | — | — | — | 10... | 0530 | — | — |
| 18... | 1410 | — | — | 4.2 | — | — | — | — | — | 10... | 1120 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 10... | 1120 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 10... | 1600 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 10... | 0300 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 11... | 0900 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 11... | 0900 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 11... | 1800 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 11... | 1800 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 12... | 0200 | — | — |
| | | — | — | 4.2 | — | — | — | — | — | 12... | 1300 | — | — |

Table 21.--Water-quality analyses of wastewater backflush from injection wells A and B at injection site 1--Continued

| 30537087165699 - Nonsanto backflush water injection well "A". | | | | | | | | | | | | |
|---|------|---------------------------------|--------------------------|---|--|---|--------------------------------------|--------------------------------------|--|-----|-----|-----|
| DATE | TIME | DENSITY (GM/L AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) | OXYGEN DEMAND, BIOCHEM 5 DAY UNIT/L | HARD- NESS MG/L AS CaCO3 | HARD- NESS MG/L AS CaCO3 | ACIDITY TOTAL HEATED (MG/L AS H) | | | |
| NOV , 1971 | | | | | | | | | | | | |
| 08... | 1400 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 08... | 1430 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 08... | 1530 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 08... | 1740 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 09... | 0440 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 09... | 1200 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 09... | 1600 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 09... | 2400 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | 0215 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | 0530 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | 1120 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | 1600 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | 1830 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10... | 2145 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11... | 0300 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11... | 0900 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11... | 1800 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11... | 1900 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | 0600 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | 0945 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12... | 1300 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30537087165699 - Nonsanto backflush water injection well "B". | | | | | | | | | | | | |
| DATE | TIME | DENSITY (GM/L AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) | OXYGEN DEMAND, BIOCHEM 5 DAY UNIT/L | HARD- NESS MG/L AS CaCO3 | HARD- NESS MG/L AS CaCO3 | ACIDITY TOTAL HEATED (MG/L AS H) | | | |
| FEB , 1968 | | | | | | | | | | | | |
| 29... | 1000 | --- | --- | --- | --- | --- | 120 | --- | --- | --- | --- | --- |
| 29... | 1030 | --- | --- | --- | --- | --- | 170 | --- | --- | --- | --- | --- |
| 29... | 1100 | --- | --- | --- | --- | --- | 290 | --- | --- | --- | --- | --- |
| 29... | 1230 | --- | --- | --- | --- | --- | 480 | --- | --- | --- | --- | --- |
| APR | | | | | | | | | | | | |
| 24... | 1000 | --- | --- | --- | --- | --- | 16 | --- | --- | --- | --- | --- |
| 24... | 1015 | --- | --- | --- | --- | --- | 69 | --- | --- | --- | --- | --- |
| 24... | 1030 | --- | --- | --- | --- | --- | 1100 | --- | --- | --- | --- | --- |
| 24... | 1100 | --- | --- | --- | --- | --- | 2400 | --- | --- | --- | --- | --- |
| 24... | 1130 | --- | --- | --- | --- | --- | 3200 | --- | --- | --- | --- | --- |
| 24... | 1200 | --- | --- | --- | --- | --- | 3300 | --- | --- | --- | --- | --- |
| 24... | 1230 | --- | --- | --- | --- | --- | 3700 | --- | --- | --- | --- | --- |
| MAY | | | | | | | | | | | | |
| 07... | 1010 | --- | --- | --- | --- | --- | 23 | --- | --- | --- | --- | --- |
| 07... | 1025 | --- | --- | --- | --- | --- | 1200 | --- | --- | --- | --- | --- |
| 07... | 1040 | --- | --- | --- | --- | --- | 1800 | --- | --- | --- | --- | --- |
| 07... | 1055 | --- | --- | --- | --- | --- | 2400 | --- | --- | --- | --- | --- |
| 07... | 1110 | --- | --- | --- | --- | --- | 3200 | --- | --- | --- | --- | --- |
| 07... | 1140 | --- | --- | --- | --- | --- | 3900 | --- | --- | --- | --- | --- |
| 07... | 1215 | --- | --- | --- | --- | --- | 4300 | --- | --- | --- | --- | --- |
| 07... | 1240 | --- | --- | --- | --- | --- | 4800 | --- | --- | --- | --- | --- |
| 07... | 1310 | --- | --- | --- | --- | --- | 5100 | --- | --- | --- | --- | --- |
| 07... | 1340 | --- | --- | --- | --- | --- | 5200 | --- | --- | --- | --- | --- |
| 07... | 1410 | --- | --- | --- | --- | --- | 5400 | --- | --- | --- | --- | --- |
| 07... | 1440 | --- | --- | --- | --- | --- | 5500 | --- | --- | --- | --- | --- |
| JUN | | | | | | | | | | | | |
| 02... | 1000 | --- | --- | --- | --- | --- | 63 | --- | --- | --- | --- | --- |
| 02... | 1005 | --- | --- | --- | --- | --- | 430 | --- | --- | --- | --- | --- |
| 02... | 1015 | --- | --- | --- | --- | --- | 750 | --- | --- | --- | --- | --- |
| 02... | 1035 | --- | --- | --- | --- | --- | 1100 | --- | --- | --- | --- | --- |
| 02... | 1100 | --- | --- | --- | --- | --- | 1300 | --- | --- | --- | --- | --- |
| 02... | 1130 | --- | --- | --- | --- | --- | 1400 | --- | --- | --- | --- | --- |
| 02... | 1215 | --- | --- | --- | --- | --- | 1400 | --- | --- | --- | --- | --- |
| 02... | 1300 | --- | --- | --- | --- | --- | 1400 | --- | --- | --- | --- | --- |
| 02... | 1415 | --- | --- | --- | --- | --- | 1900 | --- | --- | --- | --- | --- |
| 02... | 1525 | --- | --- | --- | --- | --- | 1900 | --- | --- | --- | --- | --- |
| FEB , 1969 | | | | | | | | | | | | |
| 19... | 0948 | --- | --- | --- | --- | --- | 540 | --- | --- | --- | --- | --- |
| 19... | 0955 | --- | --- | --- | --- | --- | 540 | --- | --- | --- | --- | --- |
| 19... | 1015 | --- | --- | --- | --- | --- | 640 | --- | --- | --- | --- | --- |
| 19... | 1048 | --- | --- | --- | --- | --- | 830 | --- | --- | --- | --- | --- |
| 19... | 1125 | --- | --- | --- | --- | --- | 900 | --- | --- | --- | --- | --- |
| 19... | 1225 | --- | --- | --- | --- | --- | 990 | --- | --- | --- | --- | --- |

Table 21.--Water-quality analyses of wastewater backflush from injection wells A and B at injection site 1--Continued

| 303537087145699 - Mesquite backflush water injection well "A". | | | | | | | | | |
|--|------|---------------------------------|---|---|---|--|---|-----------------------------------|---------------------------------------|
| DATE | TIME | ACIDITY (M/L) AS CAO33 | CALCIUM DIS- SOLVED (M/L) AS CA | MAGNE- SIUM, DIS- SOLVED (M/L) AS MG | SODIUM, DIS- SOLVED (M/L) AS NA | POTAS- SIUM, DIS- SOLVED (M/L) AS K | BICAR- BONATE (M/L) AS MCO3 | CAR- BONATE (M/L) AS CO3 | ALKA- LITY (M/L) AS CAO33 |
| DEC, 1967 | | | | | | | | | |
| 13... | 1200 | — | 98 | — | — | 2.9 | — | — | — |
| 15... | 1206 | — | 88 | — | — | — | — | — | — |
| 15... | 1230 | — | 115 | — | — | — | — | — | — |
| 15... | 1330 | — | 88 | — | — | — | — | — | — |
| 15... | 1420 | — | 153 | — | — | — | — | — | — |
| 15... | 1423 | — | 124 | — | — | — | — | — | — |
| 15... | 1423 | — | 83 | — | — | — | — | — | — |
| 15... | 1430 | — | 120 | — | — | 2.1 | — | — | — |
| 15... | 2100 | — | 120 | — | — | 2.0 | — | — | — |
| 15... | 0300 | — | 148 | — | — | — | — | — | — |
| 16... | 0600 | — | 88 | — | — | — | — | — | — |
| FEB, 1968 | | | | | | | | | |
| 29... | 1000 | — | 47 | — | — | 2.4 | — | — | — |
| 29... | 1030 | — | 62 | — | — | 2.8 | — | — | — |
| 29... | 1100 | — | 110 | — | — | 2.1 | — | — | — |
| 29... | 1230 | — | 184 | — | — | 2.0 | — | — | — |
| APR | | | | | | | | | |
| 24... | 1000 | — | 3.9 | — | — | 2.7 | — | — | — |
| 24... | 1015 | — | 25 | — | — | 2.7 | — | — | — |
| 24... | 1030 | — | 450 | — | — | 2.0 | — | — | — |
| 24... | 1100 | — | 946 | — | — | 2.1 | — | — | — |
| 24... | 1130 | — | 1287 | — | — | 2.2 | — | — | — |
| 24... | 1200 | — | 1305 | — | — | 2.0 | — | — | — |
| 24... | 1230 | — | 1459 | — | — | 2.1 | — | — | — |
| MAY | | | | | | | | | |
| 07... | 1010 | — | 5.5 | — | — | 3.2 | — | — | — |
| 07... | 1025 | — | 471 | — | — | 3.8 | — | — | — |
| 07... | 1040 | — | 715 | — | 735 | 3.3 | — | — | — |
| 07... | 1055 | — | 1032 | — | 715 | 3.3 | — | — | — |
| 07... | 1110 | — | 1244 | — | 755 | 9.3 | — | — | — |
| 07... | 1140 | — | 1542 | — | 735 | 4.7 | — | — | — |
| 07... | 1215 | — | 1747 | — | 735 | 2.9 | — | — | — |
| 07... | 1240 | — | 1898 | — | 735 | 3.7 | — | — | — |
| 07... | 1310 | — | 1989 | — | 735 | 2.9 | — | — | — |
| 07... | 1340 | — | 2051 | — | — | 3.0 | — | — | — |
| 07... | 1410 | — | 2119 | — | — | 2.9 | — | — | — |
| 07... | 1440 | — | 2171 | — | 735 | 3.0 | — | — | — |
| JUL | | | | | | | | | |
| 18... | 0950 | — | 6.1 | — | — | 3.0 | — | — | — |
| 18... | 1005 | — | 376 | — | — | 2.9 | — | — | — |
| 18... | 1033 | — | 488 | — | — | 2.9 | — | — | — |
| 18... | 1040 | — | 628 | — | — | 2.9 | — | — | — |
| 18... | 1055 | — | 704 | — | — | 2.8 | — | — | — |
| 18... | 1115 | — | — | — | — | — | — | — | — |
| 303537087145699 - Mesquite backflush water injection well "B". | | | | | | | | | |
| DATE | TIME | ACIDITY (M/L) AS CAO33 | CALCIUM DIS- SOLVED (M/L) AS CA | MAGNE- SIUM, DIS- SOLVED (M/L) AS MG | SODIUM, DIS- SOLVED (M/L) AS NA | POTAS- SIUM, DIS- SOLVED (M/L) AS K | BICAR- BONATE (M/L) AS MCO3 | CAR- BONATE (M/L) AS CO3 | ALKA- LITY (M/L) AS CAO33 |
| JUL, 1968 | | | | | | | | | |
| 18... | 1130 | — | 688 | — | — | — | — | — | — |
| 18... | 1200 | — | 804 | — | — | — | — | — | — |
| 18... | 1230 | — | 876 | — | — | — | — | — | — |
| 18... | 1300 | — | 870 | — | — | — | — | — | — |
| 18... | 1330 | — | 976 | — | — | — | — | — | — |
| 18... | 1410 | — | 1024 | — | — | — | — | — | — |
| 18... | 1430 | — | 968 | — | — | — | — | — | — |
| 18... | 1500 | — | 1012 | — | — | — | — | — | — |
| 18... | 1520 | — | 1014 | — | — | — | — | — | — |
| OCT | | | | | | | | | |
| 02... | 1000 | — | 8.9 | — | — | — | — | — | — |
| 02... | 1005 | — | 182 | — | — | — | — | — | — |
| 02... | 1015 | — | 276 | — | — | — | — | — | — |
| 02... | 1035 | — | 406 | — | — | — | — | — | — |
| 02... | 1100 | — | 487 | — | — | — | — | — | — |
| 02... | 1130 | — | 548 | — | — | — | — | — | — |
| 02... | 1215 | — | 607 | — | — | — | — | — | — |
| 02... | 1300 | — | 605 | — | — | — | — | — | — |
| 02... | 1415 | — | 712 | — | — | — | — | — | — |
| 02... | 1525 | — | 733 | — | — | — | — | — | — |
| FEB, 1969 | | | | | | | | | |
| 19... | 0948 | — | 206 | — | — | — | — | — | — |
| 19... | 0955 | — | 207 | — | — | — | — | — | — |
| 19... | 1015 | — | 253 | — | — | — | — | — | — |
| 19... | 1048 | — | 320 | — | — | — | — | — | — |
| 19... | 1125 | — | 345 | — | — | — | — | — | — |
| 19... | 1225 | — | 382 | — | — | — | — | — | — |
| MAY, 1971 | | | | | | | | | |
| 08... | 1400 | — | 60 | — | — | — | — | — | — |
| 08... | 1430 | — | 96 | — | — | — | — | — | — |
| 08... | 1530 | — | 130 | — | — | — | — | — | — |
| 08... | 1740 | 135 | 166 | — | — | — | — | — | — |
| 08... | 0640 | — | 204 | — | — | — | — | — | — |
| 09... | 1200 | — | 176 | — | — | — | — | — | — |
| 09... | 1400 | — | 170 | — | — | — | — | — | — |
| 09... | 2000 | — | 162 | — | — | — | — | — | — |
| 09... | 0330 | 141 | 170 | — | — | — | — | — | — |
| 10... | 1120 | 142 | 168 | — | — | — | — | — | — |
| 10... | 1600 | — | 166 | — | — | — | — | — | — |
| 11... | 0300 | — | 162 | — | — | — | — | — | — |
| 11... | 0900 | 134 | 178 | — | — | — | — | — | — |
| 11... | 1800 | — | 150 | — | — | — | — | — | — |
| 12... | 1300 | — | 167 | — | — | — | — | — | — |

Table 21.--Water-quality analyses of wastewater backflush from injection wells A and B at injection site 1--Continued

| 303537087145699 - Monsanto backflush water injection well "A". | | | | | | | | | |
|--|------|---|--|---|--|--|--|--|--|
| DATE | TIME | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM DIS- SOLVED (UG/L AS BA) | BORON, TOTAL REDUC- IBLE (UG/L AS B) | BORON, DIS- SOLVED (UG/L AS B) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | CHRO- MIUM, REDUC- IBLE (UG/L AS CR) | COPPER, DIS- SOLVED (UG/L AS CU) |
| OCT , 1968 | 1000 | --- | --- | --- | --- | --- | 720 | --- | 7200 |
| 02... | 1005 | --- | --- | --- | --- | --- | 720 | --- | 7300 |
| 02... | 1015 | --- | --- | --- | --- | --- | 660 | --- | 7300 |
| 02... | 1035 | --- | --- | --- | --- | --- | 640 | --- | 7100 |
| 02... | 1100 | --- | --- | --- | --- | --- | 640 | --- | 6900 |
| 02... | 1130 | --- | --- | --- | --- | --- | 600 | --- | 6800 |
| 02... | 1215 | --- | --- | --- | --- | --- | 600 | --- | 6500 |
| 02... | 1300 | --- | --- | --- | --- | --- | 600 | --- | 6400 |
| 02... | 1415 | --- | --- | --- | --- | --- | 600 | --- | 6200 |
| 02... | 1525 | --- | --- | --- | --- | --- | 560 | --- | 6300 |
| FEB , 1969 | 0948 | --- | --- | --- | --- | --- | 850 | --- | 23000 |
| 19... | 0955 | --- | --- | --- | --- | --- | 830 | --- | 23000 |
| 19... | 1015 | --- | --- | --- | --- | --- | 820 | --- | 23000 |
| 19... | 1048 | --- | --- | --- | --- | --- | 800 | --- | 23000 |
| 19... | 1125 | --- | --- | --- | --- | --- | 780 | --- | 22000 |
| 19... | 1225 | --- | --- | --- | --- | --- | 720 | --- | 22000 |
| APR , 1971 | 1400 | --- | --- | --- | --- | --- | 1000 | --- | 2900 |
| 08... | 1430 | --- | --- | --- | --- | --- | 1030 | --- | 2800 |
| 08... | 1530 | --- | --- | --- | --- | --- | 960 | --- | 2300 |
| 08... | 1740 | --- | --- | --- | --- | --- | 930 | --- | 2300 |
| 09... | 0640 | --- | --- | --- | --- | --- | 920 | --- | 2100 |
| 09... | 1200 | --- | --- | --- | --- | --- | 880 | --- | 2300 |
| 09... | 1400 | --- | --- | --- | --- | --- | 920 | --- | 2200 |
| 09... | 1600 | --- | --- | --- | --- | --- | 920 | --- | 2000 |
| 09... | 2400 | --- | --- | --- | --- | --- | 860 | --- | 2000 |
| 10... | 0530 | --- | --- | --- | --- | --- | 860 | --- | 2000 |
| 10... | 1120 | --- | --- | --- | --- | --- | 860 | --- | 1900 |
| 10... | 1600 | --- | --- | --- | --- | --- | 860 | --- | 1900 |
| 11... | 0300 | --- | --- | --- | --- | --- | 930 | --- | 2100 |
| 11... | 0900 | --- | --- | --- | --- | --- | 860 | --- | 2000 |
| 11... | 1800 | --- | --- | --- | --- | --- | 980 | --- | 2200 |
| 12... | 1300 | --- | --- | --- | --- | --- | 1000 | --- | 2200 |
| 303537087145699 - Monsanto backflush water injection well "A". | | | | | | | | | |
| DATE | TIME | IRON, TOTAL REDUC- IBLE (UG/L AS FE) | IRON, SUS- PENDED REDUC- IBLE (UG/L AS FE) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | ZINC, DIS- SOLVED (UG/L AS ZN) |
| OCT , 1968 | 1000 | --- | --- | 3250 | --- | --- | 3200 | --- | --- |
| 02... | 1005 | --- | --- | 3650 | --- | --- | 3300 | --- | --- |
| 02... | 1015 | --- | --- | 2900 | --- | --- | 3300 | --- | --- |
| 02... | 1035 | --- | --- | 2900 | --- | --- | 3200 | --- | --- |
| 02... | 1100 | --- | --- | 2750 | --- | --- | 3200 | --- | --- |
| 02... | 1130 | --- | --- | 2700 | --- | --- | 3200 | --- | --- |
| 02... | 1215 | --- | --- | 2400 | --- | --- | 3100 | --- | --- |
| 02... | 1300 | --- | --- | 2400 | --- | --- | 3100 | --- | --- |
| 02... | 1415 | --- | --- | 2500 | --- | --- | 3100 | --- | --- |
| 02... | 1525 | --- | --- | 2600 | --- | --- | 3100 | --- | --- |
| FEB , 1969 | 0948 | --- | --- | 7800 | --- | 0 | 1200 | --- | 750 |
| 19... | 0955 | --- | --- | 6700 | --- | 0 | 1200 | --- | 450 |
| 19... | 1015 | --- | --- | 6500 | --- | --- | 1200 | --- | 420 |
| 19... | 1048 | --- | --- | 5400 | --- | --- | 1300 | --- | 500 |
| 19... | 1125 | --- | --- | 4800 | --- | --- | 1300 | --- | 480 |
| 19... | 1225 | --- | --- | 3800 | --- | --- | 1300 | --- | 450 |
| APR , 1971 | 1400 | --- | --- | 7600 | --- | --- | 420 | --- | --- |
| 08... | 1430 | --- | --- | 7300 | --- | --- | 420 | --- | --- |
| 08... | 1530 | --- | --- | 5900 | --- | --- | 460 | --- | --- |
| 08... | 1740 | --- | --- | 4900 | --- | --- | 460 | --- | --- |
| 09... | 0640 | --- | --- | 3800 | --- | --- | 460 | --- | --- |
| 09... | 1200 | --- | --- | 4700 | --- | --- | 440 | --- | --- |
| 09... | 1400 | --- | --- | 4400 | --- | --- | 420 | --- | --- |
| 09... | 1600 | --- | --- | 4700 | --- | --- | 380 | --- | --- |
| 09... | 2400 | --- | --- | 4200 | --- | --- | 300 | --- | --- |
| 10... | 0530 | --- | --- | 3900 | --- | --- | 500 | --- | --- |
| 10... | 1120 | --- | --- | 3900 | --- | --- | 380 | --- | --- |
| 10... | 1600 | --- | --- | 3900 | --- | --- | 380 | --- | --- |
| 11... | 0300 | --- | --- | 3700 | --- | --- | 380 | --- | --- |
| 11... | 0900 | --- | --- | 3900 | --- | --- | 350 | --- | --- |
| 11... | 1800 | --- | --- | 3200 | --- | --- | 350 | --- | --- |
| 12... | 1300 | --- | --- | 3200 | --- | --- | 350 | --- | --- |

Table 21.--Water-quality analyses of wastewater backflush from injection wells A and B at injection site 1--Continued

| 303537087150499 - Mesquite backflush water injection well "A". | | | | | | | | | |
|--|------|---------------------------|-----------------------------|--|--|----------------------------|---------------------------------|----------------|--|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC (MG/L AS C) | CARBON, INORGANIC, DISSOLVED (MG/L AS C) | CARBON, INORGANIC, DISSOLVED (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIOCYANATE TOTAL (MG/L AS SCN) | PHENOLS (UB/L) | |
| NOV. 1971 | 1400 | 6500 | 6450 | 50 | 50 | --- | --- | --- | |
| 08... | 1450 | 6500 | 6450 | 50 | 50 | --- | --- | --- | |
| 08... | 1530 | 6500 | 6450 | 50 | 50 | --- | --- | --- | |
| 08... | 1740 | 6500 | 6400 | 100 | 100 | --- | --- | --- | |
| 09... | 0640 | 6500 | 6450 | 50 | 50 | --- | --- | --- | |
| 10... | 0530 | 6600 | 6500 | 100 | 100 | --- | --- | --- | |
| 11... | 0940 | 6500 | 6400 | 100 | 100 | --- | --- | --- | |
| 12... | 0200 | 6500 | 6400 | 100 | 100 | --- | --- | --- | |
| 12... | 1330 | 6700 | 6600 | 100 | 100 | --- | --- | --- | |

| 303532087150499 - Mesquite backflush water injection well "B". | | | | | | | | | |
|--|------|-----------------------|--|-------------------|-----------------|----------------------------|----------------------------------|---------------------|---------------------|
| DATE | TIME | SAMP- LING DEPTH (FT) | SP- CIFIC CON- DUCT- IANCE (MICRO- MOHS) | PH FIELD (UNITTS) | PH LAB (UNITTS) | TEMP- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COEMLT UNITTS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) |
| DEC. 1967 | 1612 | --- | --- | 7.2 | --- | --- | --- | --- | --- |
| 15... | 1623 | --- | --- | 7.1 | --- | --- | --- | --- | --- |
| 15... | 1640 | --- | --- | 7.0 | --- | --- | --- | --- | --- |
| 15... | 1705 | --- | --- | 7.0 | --- | --- | --- | --- | --- |
| 15... | 1720 | --- | --- | 6.9 | --- | --- | --- | --- | --- |
| 15... | 1740 | --- | --- | 6.9 | --- | --- | --- | --- | --- |
| 16... | 0900 | --- | --- | 6.9 | --- | --- | --- | --- | --- |

| 303532087150499 - Mesquite backflush water injection well "B". | | | | | | | | | |
|--|------|--------------------------|----------------------|-------------------------------------|--------------------------------|------------------------------------|-------------------------------|-------------------------|--------------------------|
| DATE | TIME | ACIDITY (MG/L AS CHCO3H) | CALCIUM (MG/L AS CA) | MAGNE- SIUM, DISSOLVED (MG/L AS MG) | SODIUM, DISSOLVED (MG/L AS NA) | POTAS- SIUM, DISSOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3H) | CHL- ORIDE (MG/L AS CL) | ALUM- INIUM (MG/L AS AL) |
| DEC. 1967 | 1612 | --- | 94 | --- | --- | --- | --- | --- | --- |
| 15... | 1623 | --- | 118 | --- | --- | --- | --- | --- | --- |
| 15... | 1640 | --- | 140 | --- | --- | --- | --- | --- | --- |
| 15... | 1705 | --- | 144 | --- | --- | --- | --- | --- | --- |
| 15... | 1720 | --- | 173 | --- | --- | --- | --- | --- | --- |
| 15... | 2100 | --- | 269 | --- | --- | --- | --- | --- | --- |
| 15... | 2400 | --- | 254 | --- | --- | --- | --- | --- | --- |
| 16... | 0300 | --- | 198 | --- | --- | --- | --- | --- | --- |
| 16... | 0600 | --- | 262 | --- | --- | --- | --- | --- | --- |

Table 22.--Water-quality analyses of wastewater backflush from injection well 1 at injection site 2

| 303413067063899 - American Creamsilk backflush water injection well 1. | | | | | | | | | | | | | | |
|--|------|--------------------------------|---|-------------|-----------|---------------------------------------|--------------------------|------------------------------|------------------------------|---------------------------------|--|---|----------------------------|---|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPEC- IFIC CON- CENT- RATIONS (MG/L) | FIELD PH | LAB PH | TEMPER- ATURE, WATER (DEG C) | COLOR (PCU) UNTITS | TUR- BID- ITY (NTU) | TUR- BID- ITY (FTU) | DENSITY (G/ML AT 20 C) | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, BIOCHEM- ICAL (MG/L) | BIOCHEM- ICAL (MG/L) | ACTIVITY TOTAL HEATED (MG/L AS H) |
| | | | | | | | | | | | | | | |
| JAN , 1976 | 0130 | — | 4900 | 7.9 | — | 18.0 | — | — | — | — | — | — | — | — |
| 20... | 1115 | — | 5000 | 7.8 | — | 19.0 | 5 | 9 | — | — | — | — | — | — |
| NOV , 1977 | 1700 | — | 5200 | 8.1 | — | 24.0 | 30 | — | — | — | — | — | — | — |
| 14... | 0900 | — | 5300 | 8.2 | — | 24.0 | 20 | — | — | — | — | — | — | — |
| 15... | 0900 | — | 5730 | 8.0 | — | 24.0 | 20 | — | — | — | — | — | — | — |
| 16... | 0900 | — | 5900 | 7.9 | — | 25.0 | 17 | — | — | — | — | — | — | — |
| 17... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN , 1976 | 0130 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1115 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV , 1977 | 1700 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 14... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 15... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 16... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 17... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN , 1976 | 0130 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1115 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV , 1977 | 1700 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 14... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 15... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 16... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 17... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN , 1976 | 0130 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1115 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV , 1977 | 1700 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 14... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 15... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 16... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 17... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — | — |

Table 22.--Water-quality analyses of wastewater backflush from injection well 1 at injection site 2--Continued

303413087043899 - American Cyanamid backflush water injection well 1.

| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | | SULFATE DIS- SOLVED (MG/L AS S04) | | CHLORIDE DIS- SOLVED (MG/L AS CL) | | FLUORIDE DIS- SOLVED (MG/L AS F) | | SILICA DIS- SOLVED (MG/L AS SiO2) | | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | | SOLIDS, SUM OF CONSTITUENTS, AT 110 DEG. C DIS- SOLVED (MG/L) | | SOLIDS, TOTAL RESIDUE | |
|-----------|------|---|--------|------------------------------------|-------------------------|--|-------------------------|--|-------------------------|--|-------------------------|--|-------------------------|--|-------------------------|--|-------------------------|
| | | DIS- SOLVED (MG/L AS CO2) | AS S04 | DIS- SOLVED (MG/L AS CL) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) |
| JAN, 1976 | | 11 | 1000 | 200 | 6.2 | 4580 | 2930 | 10 | 8 | | | | | | | | |
| 20... | 0130 | 11 | 1000 | 200 | 6.2 | 4580 | 2930 | 10 | 8 | | | | | | | | |
| 21... | 1115 | 22 | 1000 | 200 | 6.2 | 4580 | 2930 | 10 | 8 | | | | | | | | |
| NOV, 1977 | | 4.0 | 1200 | 120 | 0 | 4740 | 2830 | 10 | 8 | | | | | | | | |
| 14... | 1700 | 4.0 | 1200 | 120 | 0 | 4740 | 2830 | 10 | 8 | | | | | | | | |
| 15... | 0900 | 5.0 | 1300 | 130 | 0 | 4630 | 3030 | 10 | 8 | | | | | | | | |
| 16... | 0900 | 12 | 1400 | 140 | 1 | 4540 | 3340 | 10 | 8 | | | | | | | | |
| 17... | 0930 | 16 | 1500 | 160 | 1 | 4420 | 3390 | 10 | 8 | | | | | | | | |
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) | | SOLIDS, TILE ON TION, TOTAL (MG/L) | | NITRO-GEN, NITRATE DIS- SOLVED (MG/L AS N) | | NITRO-GEN, NITRITE DIS- SOLVED (MG/L AS N) | | NITRO-GEN, AMMONIA DIS- SOLVED (MG/L AS N) | | NITRO-GEN, AMMONIA DIS- SOLVED (MG/L AS N) | | NITRO-GEN, ALUMINUM, PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) | | NITRO-GEN, ALUMINUM, PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) | |
| | | DIS- SOLVED (MG/L AS CO2) | AS S04 | DIS- SOLVED (MG/L AS CL) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) | DIS- SOLVED (MG/L AS F) |
| JAN, 1976 | | 130 | 448 | 448 | .020 | .000 | 110 | 70 | 70 | | | | | | | | |
| 20... | 0130 | 130 | 448 | 448 | .020 | .000 | 110 | 70 | 70 | | | | | | | | |
| 21... | 1115 | 60 | 378 | 378 | .040 | .020 | 160 | 100 | 100 | | | | | | | | |
| NOV, 1977 | | 140 | 400 | 400 | .020 | .020 | 70,000 | 84,000 | 95,000 | | | | | | | | |
| 14... | 1700 | 140 | 400 | 400 | .020 | .020 | 70,000 | 84,000 | 95,000 | | | | | | | | |
| 15... | 0900 | 120 | 350 | 350 | .020 | .020 | 70,000 | 84,000 | 95,000 | | | | | | | | |
| 16... | 0900 | 120 | 330 | 330 | .020 | .020 | 70,000 | 84,000 | 95,000 | | | | | | | | |
| 17... | 0930 | 100 | 300 | 300 | .020 | .020 | 70,000 | 84,000 | 95,000 | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1

303538087145501 - Shallow monitor, Monsanto.

303538087145501 - Shallow monitor, Monsanto.

| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM, COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) |
|-----------|-------|--------------------------------|---|------------------------|----------------------|---------------------------------------|--|------------------------------|------------------------------|
| NOV, 1967 | 01... | — | 2020 | 8.6 | — | 30.0 | 50 | — | — |
| DEC | 17... | — | 2000 | 8.6 | — | 30.5 | 50 | — | — |
| APR, 1968 | 07... | — | 2000 | 8.6 | — | — | 50 | — | — |
| MAY | 08... | — | 2010 | 8.6 | — | — | 40 | — | — |
| JUL | 16... | — | 1920 | 8.6 | — | 30.0 | 45 | — | — |
| OCT | 02... | — | 1950 | 8.6 | — | — | 50 | — | — |
| JAN, 1969 | 20... | — | 2000 | 8.7 | — | — | 50 | — | — |
| MAR, 1970 | 12... | — | 2000 | 8.6 | — | — | 60 | — | — |
| JUN | 05... | — | 1980 | 8.8 | — | — | 40 | — | — |
| NOV | 04... | — | 2050 | 8.4 | — | 29.5 | 50 | — | — |
| JAN, 1971 | 19... | — | 2050 | 8.3 | — | 29.7 | 30 | — | — |
| MAR | 13... | — | 2050 | 8.7 | — | 30.0 | 50 | — | — |
| APR | 15... | — | 2020 | 8.6 | — | 30.0 | — | — | — |
| MAY | 13... | — | 2020 | 8.9 | — | 30.0 | 50 | — | — |
| JUN | 10... | — | 2020 | 9.0 | — | 30.0 | — | — | — |
| JUL | 08... | — | 2040 | 8.9 | — | 30.0 | — | — | — |
| AUG | 12... | — | 2120 | 8.9 | — | 30.0 | — | — | — |
| SEP | 16... | — | 2040 | 8.5 | — | 30.0 | — | — | — |
| OCT | 14... | — | 2040 | 8.7 | — | 30.0 | — | — | — |
| NOV | 11... | — | 2040 | 8.8 | — | 29.0 | — | — | — |
| DEC | 08... | — | 1640 | 8.6 | — | 29.7 | — | — | — |
| JAN, 1972 | 03... | — | 2000 | 8.7 | — | 29.5 | — | — | — |
| FEB | 11... | — | 2100 | 8.7 | — | 30.0 | — | — | — |
| MAR | 07... | — | 2040 | 8.7 | — | 30.0 | 40 | 2 | — |
| APR, 1972 | 0855 | — | 2000 | 8.7 | — | 30.0 | 45 | 2 | — |
| MAY | 15... | — | 2040 | 8.7 | — | 30.0 | — | 3 | — |
| JUN | 13... | — | 2000 | 8.7 | — | 30.0 | — | 1 | — |
| JUL | 12... | — | 2000 | 8.7 | — | 30.0 | — | 1 | — |
| AUG | 09... | — | 2000 | 8.7 | — | 30.0 | — | 3 | — |
| SEP | 13... | — | 2000 | 8.7 | — | 30.0 | 40 | 3 | — |
| OCT | 18... | — | 2000 | 8.7 | — | 30.0 | — | 1 | — |
| NOV | 15... | — | 2000 | 8.7 | — | 29.5 | — | 2 | — |
| DEC | 14... | — | 2000 | 8.7 | — | 29.7 | — | 1 | — |
| JAN, 1973 | 1350 | — | 2100 | 8.7 | — | 30.0 | — | 1 | — |
| FEB | 14... | — | 2100 | 8.7 | — | 29.5 | — | 1 | — |
| MAR | 1300 | — | 2100 | 8.7 | — | 29.5 | 45 | 1 | — |
| APR | 1315 | — | 2000 | 8.7 | — | 29.5 | — | 1 | — |
| MAY | 1615 | — | 2030 | 8.7 | — | 30.0 | — | 10 | — |
| JUN | 1340 | — | 1950 | 8.7 | — | 29.5 | — | — | — |
| JUL | 1355 | — | 1950 | 8.7 | — | 29.5 | — | — | — |
| AUG | 1410 | — | 1950 | 8.7 | — | 30.0 | — | — | — |
| SEP | 1415 | — | 2040 | 8.7 | — | 30.0 | — | 3 | — |
| OCT | 1300 | — | 2000 | 8.8 | — | 29.5 | — | 2 | — |
| NOV | 1345 | — | 2000 | 8.7 | — | 29.5 | — | — | — |
| DEC | 1445 | — | 2000 | 8.7 | — | 29.5 | 45 | 10 | — |
| JAN, 1974 | 1310 | — | 2040 | 8.7 | — | 29.5 | — | 2 | — |
| FEB | 1430 | — | 2010 | 8.7 | — | 29.5 | — | 2 | — |
| MAR | 1000 | — | 1970 | 8.8 | — | 30.0 | — | 2 | — |
| APR | 1340 | — | 2000 | 8.7 | — | 29.5 | — | 5 | — |
| MAY | 1325 | — | 2020 | 8.7 | — | 29.5 | — | 7 | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303539067145501 - Shallow monitor, Mesquite. | | | | | | | | | | | |
|--|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|-----|-----|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COMPLT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | | |
| MAR , 1974 | | | | | | | | | | | |
| MAR 18... | 1355 | — | 2000 | 8.7 | — | 29.5 | 40 | 2 | — | — | — |
| APR 16... | 1330 | — | 1990 | 8.6 | — | 29.5 | — | 7 | — | — | — |
| MAY 21... | 1530 | — | 2010 | 8.7 | — | 29.5 | — | 6 | — | — | — |
| JUN 19... | 1440 | — | 2020 | 8.7 | — | 29.5 | — | 4 | — | — | — |
| JUL 29... | 1315 | — | 1980 | 8.7 | — | 30.0 | — | 1 | — | — | — |
| AUG 15... | 1310 | — | 1930 | 8.7 | — | 29.5 | — | 8 | — | — | — |
| SEP 18... | 1335 | — | 1970 | 8.6 | — | 29.5 | 70 | 2 | — | — | — |
| OCT 14... | 1330 | — | 1920 | 8.7 | — | 29.5 | — | 3 | — | — | — |
| NOV 19... | 1410 | — | 1940 | 8.6 | — | 29.5 | — | 3 | — | — | — |
| DEC 18... | 0920 | — | 2060 | 8.6 | — | 29.5 | — | 1 | — | — | — |
| JAN , 1975 | | | | | | | | | | | |
| JAN 13... | 1055 | — | 2100 | 8.7 | — | 29.5 | — | 3 | — | — | — |
| FEB 19... | 1440 | — | 2050 | 8.6 | — | 29.5 | — | 2 | — | — | — |
| MAR 12... | 1600 | — | 2100 | 8.7 | — | 29.5 | 50 | 2 | — | — | — |
| APR 16... | 1410 | — | 2100 | 8.6 | — | 29.5 | — | 5 | — | — | — |
| MAY 13... | 1055 | — | 2100 | 8.6 | — | 29.5 | — | 4 | — | — | — |
| JUN 18... | 1320 | — | 2200 | 8.6 | — | 29.5 | — | 3 | — | — | — |
| JUL 17... | 1205 | — | 2050 | 8.6 | — | 29.5 | 50 | 4 | — | — | — |
| AUG 19... | 1345 | — | 2100 | 8.6 | — | 29.5 | — | 3 | — | — | — |
| SEP 15... | 1625 | — | 2200 | 8.7 | — | 30.0 | 40 | 4 | — | — | — |
| OCT 14... | 1555 | — | 2150 | 8.7 | — | 30.0 | — | 6 | — | — | — |
| NOV 17... | 1600 | — | 1900 | 8.6 | — | 30.0 | — | 2 | — | — | — |
| DEC 16... | 1240 | — | 1920 | 8.6 | — | 30.0 | — | 4 | — | — | — |
| JAN , 1976 | | | | | | | | | | | |
| JAN 22... | 1245 | — | 2050 | 8.6 | — | 30.0 | — | 2 | — | — | 3.0 |
| FEB 23... | 1450 | — | 2100 | 8.6 | — | 30.0 | — | 2 | — | — | 1.0 |
| MAR , 1976 | | | | | | | | | | | |
| MAR 19... | 1640 | — | 2030 | 8.6 | — | 30.0 | 60 | 2 | — | — | — |
| APR 26... | 1600 | — | 2030 | 8.7 | — | 30.0 | — | 3 | — | — | — |
| MAY 21... | 1100 | — | 2030 | 8.6 | — | 30.0 | — | 3 | — | — | — |
| JUN 23... | 1230 | — | 2030 | 8.7 | — | 30.0 | — | 2 | — | — | — |
| JUL 19... | 1630 | — | 2100 | 8.6 | — | 30.0 | — | 3 | — | — | — |
| AUG 17... | 1440 | — | 2010 | 8.7 | — | 30.0 | — | 3 | — | — | — |
| SEP 14... | 1320 | — | 2030 | 8.6 | — | 30.0 | 40 | 3 | — | — | — |
| OCT 20... | 1345 | — | 2000 | 8.6 | — | 30.0 | — | 2 | — | — | — |
| NOV 17... | 1400 | — | 2000 | 8.7 | — | 30.0 | — | 2 | — | — | — |
| DEC 16... | 1230 | — | 2000 | 8.7 | — | 30.0 | — | 2 | — | — | — |
| JAN , 1977 | | | | | | | | | | | |
| JAN 20... | 1100 | — | 2030 | 8.4 | — | 30.0 | — | 2 | — | — | — |
| FEB 24... | 1330 | — | 2000 | 8.8 | — | 30.5 | — | 2 | — | — | — |
| MAR 22... | 1640 | — | 2000 | 8.5 | — | 30.0 | 45 | 2 | — | — | — |
| APR 21... | 1540 | — | 1980 | 8.6 | — | 30.5 | — | 1 | — | — | — |
| MAY 15... | 1500 | — | 2060 | 8.3 | — | 30.5 | 45 | 3 | — | — | — |
| JUL 19... | 1025 | — | 2100 | 8.4 | — | 25.0 | — | 2 | — | — | — |
| AUG 19... | 1100 | — | 1990 | 8.3 | — | 29.0 | — | 2 | — | — | — |
| SEP 18... | 1335 | — | 2030 | 8.6 | — | 25.0 | — | 3 | — | — | — |
| OCT 21... | 0930 | — | 2000 | 8.3 | — | 24.5 | 30 | 2 | — | — | — |
| NOV 27... | 1330 | — | 1970 | 8.3 | — | 23.5 | — | 3 | — | — | — |
| DEC 14... | 0930 | — | 2000 | 8.7 | — | 24.5 | — | 3 | — | — | — |
| FEB , 1978 | | | | | | | | | | | |
| FEB 09... | 0945 | — | 1970 | 8.6 | — | 22.5 | — | 1 | — | — | — |
| MAR 22... | 0930 | — | 1940 | 8.6 | — | 21.0 | 40 | — | — | 3.0 | — |
| MAY 04... | 1130 | — | 1970 | 8.5 | — | 22.5 | — | — | — | 1.0 | — |
| JUN 14... | 0945 | — | 2000 | 8.6 | — | 23.5 | — | — | — | 1.0 | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 30333007145301 - Shallow monitor, Messaute. | | | | | | | | | | 30333007145301 - Shallow monitor, Messaute. | | | | | | | | | |
|---|------|-------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|---|-------|---------------------------------|-------------------------|--|---|-------------------------------------|---------------------------------------|---|---|
| DATE | TIME | SWP- LING DEPTH (FT) | SPE- CIFIC GRV- ITY (G/ML) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COALTY UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (MTU) | DATE | TIME | DENSITY (G/ML AT 20 C) | SPE- CIFIC GRVITY | DEMAND, OCT- ICL (LUM LEVEL) | DEMAND, OCT- ICL (HIGH LEVEL) | DEMAND, BIOCH- UNITS 5 DAY | HARD- NESS (M/L AS CAC03) | HARD- NESS, MUNICH- MUNATE (M/L CAC03) | ACIDITY TOTAL HEATED (M/L AS H) |
| AUG , 1978 | 1345 | — | 2000 | 8.5 | — | 24.5 | — | — | 1.0 | NOV , 1967 | 01... | — | — | — | — | — | 10 | 0 | — |
| SEP 21... | 1400 | — | 2000 | 8.4 | — | 25.0 | 50 | — | 2.0 | DEC 17... | — | — | — | — | — | — | 9 | 0 | — |
| NOV 03... | 1200 | — | 1950 | 8.4 | — | 22.0 | — | — | 1.0 | APR , 1968 | 09... | — | — | — | — | — | 8 | 0 | — |
| DEC 13... | 1145 | — | 1850 | 8.4 | — | 22.5 | — | — | 2.0 | MAY 06... | — | — | — | — | — | — | 8 | 0 | — |
| JAN , 1979 | 1400 | — | 1950 | 8.4 | — | 21.5 | — | — | 4.0 | JUL 14... | — | — | — | — | — | — | 8 | 0 | — |
| MAR 08... | 1400 | — | 2000 | 8.7 | — | 21.5 | 45 | — | 4.0 | OCT 07... | — | — | — | — | — | — | 8 | 0 | — |
| APR 23... | 1315 | — | 1750 | 8.6 | — | 21.5 | — | — | 1.0 | JAN , 1969 | 02... | — | — | — | — | — | 8 | 0 | — |
| MAY 05... | 1145 | — | 1980 | 8.6 | — | 24.5 | — | — | 1.0 | MAR , 1970 | 12... | — | — | — | — | — | 11 | 0 | — |
| JUN 01... | 0940 | — | 1970 | 8.5 | — | 23.0 | — | — | 1.0 | MAY 05... | — | — | — | — | — | — | 9 | 0 | — |
| SEP 20... | 1500 | — | 2000 | 8.4 | — | 24.5 | — | — | 1.0 | NOV 04... | — | — | — | — | — | — | — | 0 | — |
| NOV 07... | 1430 | — | 1950 | 8.6 | — | 23.0 | — | — | .00 | JAN , 1971 | 19... | — | — | — | — | — | — | 0 | — |
| JAN , 1980 | 1030 | — | 1980 | 8.4 | — | 20.0 | 5 | — | 1.0 | MAR 15... | — | — | — | — | — | — | 3 | 0 | — |
| MAR 19... | 1620 | — | 1980 | 8.6 | — | 21.5 | — | — | 2.0 | MAY 13... | — | — | — | — | — | — | 9 | 0 | — |
| MAY 01... | 1400 | — | 1990 | 8.4 | — | 22.5 | — | — | 1.0 | FEB , 1972 | 11... | — | — | — | — | — | 10 | 0 | — |
| JUN 18... | 1630 | — | 1950 | 8.3 | — | 23.0 | 40 | — | 1.0 | MAR 07... | 0930 | — | — | — | — | — | 9 | 0 | — |
| | | | | | | | | | | APR 11... | 0835 | — | — | — | — | — | 22 | 0 | — |
| | | | | | | | | | | MAY 15... | 1745 | — | — | — | — | — | 11 | 0 | — |
| | | | | | | | | | | JUN 13... | 1540 | — | — | — | — | — | 33 | 0 | — |
| | | | | | | | | | | JUL 12... | 1620 | — | — | — | — | — | 33 | 0 | — |
| | | | | | | | | | | AUG 09... | 1245 | — | — | — | — | — | 15 | 0 | — |
| | | | | | | | | | | SEP 13... | 1325 | — | — | — | — | — | 8 | 0 | — |
| | | | | | | | | | | OCT 18... | 1330 | — | — | — | — | — | 26 | 0 | — |
| | | | | | | | | | | NOV 15... | 1230 | — | — | — | — | — | 26 | 0 | — |
| | | | | | | | | | | DEC 14... | 1330 | — | — | — | — | — | 13 | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 30C538087145501 - Shallow monitor, Mesquite. | | | | | | | | | |
|--|------|----------------------------------|--------------------------|--|---|--------------------------------------|---|---|--|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | OXYGEN BIOCHEM 5 DAY (MG/L) | HAZ- ARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | HAZ- ARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) |
| FEB , 1975 | | | | | | | | | |
| FEB | 1440 | - | - | - | - | - | 12 | 0 | - |
| MAR | 1600 | - | - | - | - | - | 11 | 0 | - |
| APR | 1410 | - | - | - | - | - | 10 | 0 | - |
| MAY | 1055 | - | - | - | - | - | 11 | 0 | - |
| JUN | 1320 | - | - | - | - | - | 9 | 0 | - |
| JUL | 1205 | - | - | - | - | - | 10 | 0 | - |
| AUG | 1345 | - | - | - | - | - | 8 | 0 | - |
| SEP | 1625 | - | - | - | - | - | 13 | 0 | - |
| OCT | 1555 | - | - | - | - | - | 9 | 0 | - |
| NOV | 1600 | - | - | - | - | - | 9 | 0 | - |
| DEC , 1976 | | | | | | | | | |
| DEC | 1240 | - | - | - | - | - | 10 | 0 | - |
| JAN , 1976 | 1245 | - | - | - | - | - | 9 | 0 | - |
| FEB | 1450 | - | - | - | - | - | 9 | 0 | - |
| MAR | 1640 | - | - | - | - | - | 9 | 0 | - |
| APR | 1600 | - | - | - | - | - | 9 | 0 | - |
| MAY | 1100 | - | - | - | - | - | 10 | 0 | - |
| JUN | 1250 | - | - | - | - | - | 10 | 0 | - |
| JUL | 1650 | - | - | - | - | - | 10 | 0 | - |
| AUG | 1440 | - | - | - | - | - | 10 | 0 | - |
| SEP | 1320 | - | - | - | - | - | 10 | 0 | - |
| OCT | 1345 | - | - | - | - | - | 9 | 0 | - |
| NOV | 1400 | - | - | - | - | - | 9 | 0 | - |
| DEC | 1230 | - | - | - | - | - | 9 | 0 | - |
| JAN , 1977 | | | | | | | | | |
| JAN | 1100 | - | - | - | - | - | 9 | 0 | - |

| 30C538087145501 - Shallow monitor, Mesquite. | | | | | | | | | |
|--|------|----------------------------------|--------------------------|--|---|--------------------------------------|---|---|--|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | OXYGEN BIOCHEM 5 DAY (MG/L) | HAZ- ARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | HAZ- ARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) |
| JUN , 1973 | | | | | | | | | |
| JUN | 1350 | - | - | - | - | - | 10 | 0 | - |
| FEB | 1300 | - | - | - | - | - | 11 | 0 | - |
| MAR | 1300 | - | - | - | - | - | 11 | 0 | - |
| APR | 1315 | - | - | - | - | - | 8 | 0 | - |
| MAY | 1615 | - | - | - | - | - | 13 | 0 | - |
| JUN | 1340 | - | - | - | - | - | 12 | 0 | - |
| JUN | 1355 | - | - | - | - | - | 9 | 0 | - |
| JUN | 1410 | - | - | - | - | - | 10 | 0 | - |
| JUN | 1415 | - | - | - | - | - | 14 | 0 | - |
| JUL | 1300 | - | - | - | - | - | 14 | 0 | - |
| SEP | 1645 | - | - | - | - | - | 10 | 0 | - |
| OCT | 1310 | - | - | - | - | - | 12 | 0 | - |
| NOV | 1430 | - | - | - | - | - | 14 | 0 | - |
| DEC | 1000 | - | - | - | - | - | 17 | 0 | - |
| JAN , 1974 | | | | | | | | | |
| JAN | 1340 | - | - | - | - | - | 10 | 0 | - |
| FEB | 1325 | - | - | - | - | - | 10 | 0 | - |
| MAR | 1355 | - | - | - | - | - | 9 | 0 | - |
| APR | 1330 | - | - | - | - | - | 8 | 0 | - |
| MAY | 1530 | - | - | - | - | - | 14 | 0 | - |
| JUN | 1440 | - | - | - | - | - | 15 | 0 | - |
| JUL | 1315 | - | - | - | - | - | 10 | 0 | - |
| AUG | 1310 | - | - | - | - | - | 9 | 0 | - |
| SEP | 1335 | - | - | - | - | - | 17 | 0 | - |
| OCT | 1330 | - | - | - | - | - | 11 | 0 | - |
| NOV | 1410 | - | - | - | - | - | 11 | 0 | - |
| DEC | 0920 | - | - | - | - | - | 9 | 0 | - |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303538087145501 - Shallow monitor, Monsanto. | | | | | | | | | | 303538087145501 - Shallow monitor, Monsanto. | | | | | | | | | |
|--|------|-------------------------------|--------------------------|--|---|---|--|--|--|--|------|----------------------------------|--|--|--|---|--|---|--|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN DEMAND, BIOCHEM- ICAL (5 DAY LEVEL) | HARD- NESS (MG/L AS CaCO3) | HARD- NESS (MG/L AS CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) | DATE | TIME | ACIDITY (MG/L AS CaCO3) | CALCIUM DIS- SOLVED (MG/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) | SODIUM, DIS- SOLVED (MG/L AS Na) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CaCO3) | ALKA- LINITY (MG/L AS CaCO3) |
| FEB , 1977 | 1330 | — | — | — | — | — | 10 | 0 | — | NOV , 1967 | — | — | 1.9 | 1.0 | 447 | 5.2 | 526 | 23 | 470 |
| MAR 24... | 1330 | — | — | — | — | — | 9 | 0 | — | DEC 01... | — | — | 1.8 | 1.0 | 440 | 6.3 | 494 | 20 | 439 |
| MAR 27... | 1640 | .999 | — | — | — | — | 9 | 0 | — | APR , 1968 | — | — | 1.7 | 1.0 | 450 | 5.1 | 525 | 24 | 471 |
| APR 21... | 1540 | — | — | — | — | — | 12 | 0 | — | MAY 09... | — | — | 1.8 | 1.0 | 446 | 6.2 | 496 | 24 | 447 |
| JUN 15... | 1500 | — | — | — | — | — | 8 | 0 | — | MAY 08... | — | — | 1.8 | .9 | 442 | 6.7 | 524 | 18 | 460 |
| JUL 19... | 1025 | — | — | — | — | — | 9 | 0 | — | JUL 16... | — | — | 1.8 | 1.0 | 444 | 5.7 | 534 | 18 | 448 |
| JUL 19... | 1100 | — | — | — | — | — | 11 | 0 | — | OCT 02... | — | — | 1.8 | 1.0 | 435 | 6.3 | 524 | 8 | 443 |
| AUG 18... | 1335 | — | — | — | — | — | 11 | 0 | — | JAN , 1969 | — | — | 2.4 | 1.0 | 450 | 5.6 | 496 | 24 | 447 |
| SEP 21... | 0950 | .999 | — | — | — | — | 9 | 0 | — | MAR , 1970 | — | — | 1.9 | 1.0 | 444 | 5.8 | 522 | 38 | 491 |
| OCT 27... | 1330 | — | — | — | — | — | 9 | 0 | — | JUN 12... | — | — | — | 1.3 | 450 | 6.0 | 538 | 16 | 448 |
| DEC 14... | 0930 | — | — | — | — | — | 10 | 0 | — | MAY 05... | — | — | 1.8 | .9 | 426 | 5.6 | 468 | 44 | 457 |
| FEB , 1978 | 0945 | — | — | — | — | — | 10 | 0 | — | NOV 04... | — | — | 2.1 | 1.1 | — | — | 520 | 24 | 466 |
| MAR 09... | 0930 | 1.000 | — | — | — | — | 10 | 0 | — | JAN , 1971 | — | — | 1.9 | 1.0 | 437 | 5.2 | 514 | 25 | 463 |
| MAR 22... | 0930 | — | — | — | — | — | 10 | 0 | — | MAR 19... | — | — | 1.8 | 1.0 | — | — | 492 | 32 | 457 |
| MAY 04... | 1130 | — | — | — | — | — | 9 | 0 | — | MAR 13... | — | — | 1.8 | 1.0 | — | — | 510 | 28 | 465 |
| JUN 14... | 0945 | — | — | — | — | — | 10 | 0 | — | APR 15... | — | — | 2.0 | 1.0 | — | — | 503 | 32 | 466 |
| AUG 08... | 1345 | — | — | — | — | — | 10 | 0 | — | MAY 13... | — | — | 1.8 | 1.0 | — | — | 542 | 14 | 468 |
| SEP 21... | 1400 | 1.000 | — | — | — | — | 10 | 0 | — | JUN 10... | — | — | 1.8 | 1.0 | — | — | 518 | 18 | 455 |
| NOV 08... | 1200 | — | — | — | — | — | 10 | 0 | — | JUL 08... | — | — | 1.8 | 1.0 | — | — | 498 | 24 | 448 |
| DEC 13... | 1145 | — | — | — | — | — | 9 | 0 | — | AUG 08... | — | — | 2.0 | 1.2 | — | — | 518 | 12 | 445 |
| JAN , 1979 | 1400 | — | — | — | — | — | 10 | 0 | — | JAN , 1972 | — | — | 1.8 | 1.0 | — | — | 516 | 11 | 442 |
| MAR 08... | 1400 | 1.001 | — | — | — | — | 10 | 0 | — | FEB 03... | — | — | 2.1 | 1.1 | — | — | 506 | 27 | 460 |
| APR 23... | 1315 | — | — | — | — | — | 8 | 0 | — | MAR 11... | 0950 | — | 1.8 | 1.0 | — | — | 504 | 22 | 450 |
| JUN 05... | 1145 | — | — | — | — | — | 10 | 0 | — | MAR 07... | 0930 | — | 1.8 | 1.0 | 430 | 5.0 | 504 | | |
| AUG 01... | 0940 | — | — | — | — | — | 9 | 0 | — | | | | | | | | | | |
| SEP 20... | 1500 | 1.002 | — | — | — | — | 10 | 0 | — | | | | | | | | | | |
| NOV 07... | 1430 | — | — | — | — | — | 17 | 0 | .1 | | | | | | | | | | |
| JAN , 1980 | 1030 | .999 | — | — | 31 | — | 8 | 0 | — | | | | | | | | | | |
| MAR 23... | 1620 | — | — | — | — | — | 7 | 0 | — | | | | | | | | | | |
| MAY 19... | 1400 | — | — | — | — | — | 9 | 0 | — | | | | | | | | | | |
| JUN 01... | 1630 | .999 | — | — | 20 | — | 9 | 0 | 0 | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 305330007145501 - Shallow monitor, Mesquite. | | | | | | | | | | 305330007145501 - Shallow monitor, Mesquite. | | | | | | | | | |
|--|------|----------------------------------|--|---|---|--|--|------------------------------------|--|--|------|----------------------------------|--|---|---|--|--|------------------------------------|--|
| DATE | TIME | ACIDITY (mg/L AS CaCO3) | CALCIUM DIS- SOLVED (mg/L AS Ca) | MAGNE- SIUM DIS- SOLVED (mg/L AS Mg) | SODIUM DIS- SOLVED (mg/L AS Na) | POTAS- SIUM DIS- SOLVED (mg/L AS K) | BICAR- BONATE (mg/L AS HCO3) | CAR- BONATE (mg/L AS CO3) | ALKA- LITY (mg/L AS CaCO3) | DATE | TIME | ACIDITY (mg/L AS CaCO3) | CALCIUM DIS- SOLVED (mg/L AS Ca) | MAGNE- SIUM DIS- SOLVED (mg/L AS Mg) | SODIUM DIS- SOLVED (mg/L AS Na) | POTAS- SIUM DIS- SOLVED (mg/L AS K) | BICAR- BONATE (mg/L AS HCO3) | CAR- BONATE (mg/L AS CO3) | ALKA- LITY (mg/L AS CaCO3) |
| MAR., 1974 | | | | | | | | | | | | | | | | | | | |
| APR 11... | 0855 | — | 6.5 | 1.5 | 440 | — | 302 | 23 | 430 | APR 12... | 1355 | — | 2.0 | .9 | 450 | 7.2 | 511 | 21 | 454 |
| MAY 15... | 1745 | — | 2.8 | 1.0 | — | — | 496 | 20 | 440 | APR 16... | 1330 | — | 1.7 | 1.0 | — | — | 516 | 18 | 453 |
| JUN 13... | 1340 | — | 10 | 2.0 | — | — | 512 | 20 | 453 | MAY 21... | 1330 | — | 3.3 | 1.3 | — | — | 506 | 19 | 447 |
| JUL 12... | 1620 | — | 10 | 2.0 | — | — | 510 | 19 | 450 | JUN 19... | 1440 | — | 4.2 | 1.1 | — | — | 513 | 20 | 454 |
| AUG 09... | 1245 | — | 3.2 | 1.8 | — | — | 508 | 20 | 443 | JUL 29... | 1315 | — | 2.8 | .8 | — | — | 521 | 20 | 441 |
| SEP 13... | 1525 | — | 3.0 | 1.8 | 450 | 7.1 | 502 | 20 | 445 | AUG 15... | 1310 | — | 1.6 | 1.1 | — | — | 504 | 20 | 447 |
| OCT 18... | 1350 | — | 7.0 | 2.1 | — | — | 492 | 20 | 437 | SEP 18... | 1335 | — | 5.1 | .9 | 450 | 6.1 | 522 | 19 | 440 |
| NOV 15... | 1250 | — | 7.0 | 2.1 | — | — | 494 | 23 | 443 | OCT 14... | 1330 | — | 2.8 | 1.0 | — | — | 506 | 19 | 447 |
| DEC 14... | 1330 | — | 2.5 | 1.6 | — | — | 803 | 20 | 692 | NOV 19... | 1410 | — | 2.3 | 1.2 | — | — | 514 | 19 | 453 |
| JAN 17... | 1350 | — | 2.4 | 1.0 | — | — | 500 | 28 | 457 | DEC 18... | 0920 | — | 1.8 | 1.0 | — | — | 494 | 24 | 445 |
| FEB 14... | 1300 | — | 2.3 | 1.1 | — | — | 504 | 23 | 452 | JAN 15... | 1035 | — | — | .9 | — | — | 480 | 15 | 438 |
| MAR 14... | 1300 | — | 2.5 | 1.1 | 440 | 5.3 | 496 | 20 | 440 | FEB 19... | 1440 | — | 3.0 | 1.2 | — | — | 509 | 20 | 451 |
| APR 17... | 1315 | — | 1.6 | 1.0 | — | — | 508 | 13 | 438 | MAR 12... | 1600 | — | 2.1 | 1.3 | 440 | 5.6 | 526 | 19 | 443 |
| MAY 16... | 1615 | — | 2.7 | 1.5 | — | — | 511 | 13 | 441 | APR 16... | 1410 | — | 2.3 | 1.0 | — | — | 546 | 19 | 479 |
| JUN 12... | 1340 | — | 2.5 | 1.5 | — | — | 530 | 18 | 445 | MAY 16... | 1035 | — | 2.7 | 1.0 | — | — | 535 | 16 | 482 |
| JUL 12... | 1355 | — | 1.7 | 1.1 | — | — | 517 | 22 | 441 | JUN 13... | 1320 | — | 1.9 | 1.0 | — | — | 535 | 16 | 482 |
| AUG 12... | 1410 | — | 2.1 | 1.1 | — | — | 508 | 22 | 453 | JUL 18... | 1205 | — | 2.5 | 1.0 | — | — | 592 | 17 | 514 |
| SEP 12... | 1415 | — | 2.9 | 1.7 | — | — | 508 | 22 | 453 | JUL 17... | 1205 | — | 2.5 | 1.0 | — | — | 592 | 17 | 514 |
| OCT 18... | 1300 | — | 3.0 | 1.6 | — | — | 513 | 21 | 456 | AUG 18... | 1345 | — | 1.7 | .9 | — | — | 559 | 14 | 482 |
| NOV 22... | 1345 | — | 3.0 | 1.2 | — | — | 493 | 17 | 433 | SEP 19... | 1625 | — | 2.9 | 1.3 | 420 | 6.2 | 502 | 18 | 442 |
| DEC 12... | 1645 | — | 2.4 | 1.0 | 440 | 5.7 | 509 | 20 | 451 | OCT 15... | 1555 | — | 1.9 | 1.0 | — | — | 502 | 18 | 442 |
| JAN 10... | 1310 | — | 3.6 | .8 | — | — | 500 | 23 | 448 | NOV 17... | 1600 | — | 2.1 | 1.0 | — | — | 502 | 18 | 442 |
| FEB 14... | 1430 | — | 3.5 | 1.2 | — | — | 502 | 23 | 450 | DEC 17... | 1240 | — | 2.3 | 1.1 | — | — | 508 | 15 | 442 |
| MAR 11... | 1000 | — | 4.7 | 1.3 | — | — | 506 | 23 | 453 | JAN 11... | 1245 | — | 2.0 | 1.0 | — | — | 510 | 16 | 445 |
| APR 16... | 1340 | — | 2.4 | 1.0 | — | — | 508 | 22 | 453 | FEB 22... | 1450 | — | 2.1 | 1.0 | — | — | 511 | 18 | 449 |
| MAY 19... | 1325 | — | 2.6 | .9 | — | — | 508 | 22 | 453 | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 302530067145501 - Shallow monitor, Mesquite. | | | | | | | | | | 302530067145501 - Shallow monitor, Mesquite. | | | | | | | | | |
|--|-------|---|---|---|---|--|---|---|---|--|------|---|---|---|---|--|---|---|---|
| DATE | TIME | ACIDITY (mg/L AS CaCO ₃) | CALCIUM DISE- SOLVED (mg/L AS Ca) | MAGNE- SIUM, DISE- SOLVED (mg/L AS Mg) | SODIUM, DISE- SOLVED (mg/L AS Na) | POTAS- SIUM, DISE- SOLVED (mg/L AS K) | BICAR- BONATE (mg/L AS HCO ₃) | CAR- BONATE (mg/L AS CO ₃) | ALKA- LITY (mg/L AS CaCO ₃) | DATE | TIME | ACIDITY (mg/L AS CaCO ₃) | CALCIUM DISE- SOLVED (mg/L AS Ca) | MAGNE- SIUM, DISE- SOLVED (mg/L AS Mg) | SODIUM, DISE- SOLVED (mg/L AS Na) | POTAS- SIUM, DISE- SOLVED (mg/L AS K) | BICAR- BONATE (mg/L AS HCO ₃) | CAR- BONATE (mg/L AS CO ₃) | ALKA- LITY (mg/L AS CaCO ₃) |
| MAR., 1976 | 15... | — | 2.2 | .9 | 442 | 5.7 | 513 | 17 | 449 | AUG., 1978 | 1345 | — | 2.2 | 1.0 | — | — | 629 | 11 | 534 |
| APR. | 1600 | — | 2.0 | 1.0 | — | — | 495 | 19 | 438 | SEP. | 1400 | — | 2.0 | 1.2 | 440 | 5.4 | 451 | 10 | 551 |
| MAY | 1100 | — | 2.3 | 1.0 | — | — | 514 | 20 | 455 | NOV. | 1200 | — | 2.0 | 1.1 | — | — | 641 | 11 | 544 |
| JUN | 1200 | — | 2.3 | 1.0 | — | — | 516 | 19 | 455 | DEC. | 1145 | — | 2.2 | 1.1 | — | — | 622 | 4 | 517 |
| JUL | 1650 | — | 2.0 | 1.1 | — | — | 517 | 17 | 452 | JAN., 1979 | 1400 | — | 1.6 | 1.1 | — | — | 564 | 10 | 479 |
| AUG. | 1440 | — | 2.2 | 1.0 | — | — | 514 | 19 | 453 | MAR. | 1400 | — | 2.0 | 1.1 | 540 | 5.4 | 609 | 28 | 546 |
| SEP. | 1320 | — | 2.1 | 1.2 | 440 | 6.5 | 514 | 19 | 453 | APR. | 1315 | — | 1.5 | 1.0 | — | — | 626 | 19 | 545 |
| OCT. | 1345 | — | 1.7 | 1.1 | — | — | 519 | 17 | 454 | MAY | 1145 | — | 2.2 | 1.1 | — | — | 632 | 16 | 545 |
| NOV. | 1400 | — | 2.0 | 1.0 | — | — | 513 | 19 | 452 | AUG. | 0940 | — | 1.9 | 1.1 | — | — | 628 | 16 | 542 |
| DEC. | 1230 | — | 1.6 | 1.1 | — | — | 507 | 19 | 447 | SEP. | 1300 | — | 1.7 | 1.1 | 440 | 5.7 | 642 | 7 | 538 |
| JAN., 1977 | 1100 | — | 1.9 | 1.1 | — | — | 523 | 13 | 434 | NOV. | 1430 | — | 1.9 | 1.2 | — | — | 616 | 20 | 540 |
| FEB. | 1330 | — | 2.0 | 1.1 | — | — | 498 | 23 | 447 | DEC., 1980 | 1030 | 5.0 | 2.6 | 2.5 | 440 | 6.1 | 645 | 7 | 541 |
| MAR. | 1640 | — | 1.9 | 1.0 | 440 | 5.8 | 508 | 12 | 437 | MAR. | 1628 | — | 1.4 | 1.0 | — | — | 603 | 23 | 538 |
| APR. | 1540 | — | 1.8 | 1.2 | — | — | 508 | 15 | 442 | NOV. | 1400 | — | 1.4 | .9 | — | — | 633 | 10 | 536 |
| MAY | 1500 | — | 2.1 | 1.5 | 440 | 6.0 | 520 | 5 | 435 | JUN. | 1630 | .0 | 1.9 | 1.0 | 440 | 5.4 | 635 | 0 | 537 |
| JUN | 1025 | — | 1.6 | .9 | — | — | 520 | 7 | 438 | | | | | | | | | | |
| JUL | 1100 | — | 1.9 | 1.1 | — | — | 542 | 1 | 446 | | | | | | | | | | |
| AUG. | 1335 | — | 1.7 | 1.2 | — | — | 629 | 11 | 534 | | | | | | | | | | |
| SEP. | 0950 | — | 2.1 | 1.2 | 440 | 6.2 | 639 | 1 | 526 | | | | | | | | | | |
| OCT. | 1330 | — | 2.4 | 1.1 | — | — | 648 | 1 | 533 | | | | | | | | | | |
| NOV. | 0930 | — | 1.9 | 1.0 | — | — | 528 | 20 | 466 | | | | | | | | | | |
| DEC., 1978 | 0945 | — | 1.9 | 1.0 | — | — | 511 | 23 | 457 | | | | | | | | | | |
| JAN. | 0930 | — | 1.9 | 1.1 | 440 | 5.0 | 621 | 19 | 541 | | | | | | | | | | |
| FEB. | 1130 | — | 2.1 | 1.0 | — | — | 634 | 10 | 537 | | | | | | | | | | |
| MAR. | 0945 | — | 2.0 | 1.1 | — | — | 629 | 13 | 538 | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303030087145501 - Shallow monitor, Mesquite. | | | | | | | | | | | | | |
|--|------|---|---|---|--|---|--|---|--|--|--|--|--|
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L) AS CO ₂ | SULFATE DIS- SOLVED (MG/L) AS SO ₄ | CHL- ORIDE, DIS- SOLVED (MG/L) AS CL | FLUO- RIDE, DIS- SOLVED (MG/L) AS F | SILICA, DIS- SOLVED (MG/L) AS SiO ₂ | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUN OF CONSTITU- ENTS, DIS- SOLVED (MG/L) | SOLIDS, SUNP. TOTAL RESIDUE AT 110 DEG. C (MG/L) | | | | |
| NOV. 1967 | | 2.3 | .8 | 380 | 3.5 | 15 | — | 1130 | — | | | | |
| DEC. 17... | | .0 | 4.4 | 402 | 3.4 | 15 | — | 1150 | — | | | | |
| APR. 1968 | | | | | | | | | | | | | |
| APR. 1968 | | 2.3 | .4 | 376 | 3.4 | 15 | 1090 | 1140 | — | | | | |
| MAY 18... | | 2.2 | .0 | 376 | 3.2 | 15 | — | 1120 | — | | | | |
| JUL 14... | | 2.3 | .0 | 380 | 3.1 | 15 | 1120 | 1130 | — | | | | |
| SEP 07... | | 2.3 | 3.2 | 400 | 3.4 | 15 | — | 1170 | — | | | | |
| JAN. 1969 | | | | | | | | | | | | | |
| JAN. 1969 | | 1.7 | .0 | 400 | 3.2 | 14 | 1150 | 1150 | — | | | | |
| MAY 1970 | | 2.2 | .8 | 370 | 3.1 | 15 | 1120 | 1120 | — | | | | |
| JUN 03... | | — | .0 | 352 | 4.0 | 16 | 1130 | 1120 | — | | | | |
| MAY 04... | | 3.6 | 4.0 | 400 | 2.9 | 16 | 1160 | 1160 | — | | | | |
| JAN. 1971 | | 4.3 | 4.0 | 375 | 3.2 | 15 | 1110 | 1110 | — | | | | |
| MAY 1971 | | — | .0 | 340 | 4.5 | 16 | 1070 | 1070 | — | | | | |
| APR 15... | | 2.3 | — | — | — | 14 | — | — | — | | | | |
| MAY 13... | | — | — | 380 | 3.7 | 14 | 1110 | 1110 | — | | | | |
| JUN 10... | | .9 | — | — | — | — | — | — | — | | | | |
| JUL 08... | | 1.1 | — | — | — | — | — | — | — | | | | |
| AUG 12... | | 1.1 | — | — | — | 14 | — | — | — | | | | |
| SEP 14... | | 2.9 | — | — | — | — | — | — | — | | | | |
| OCT 14... | | 1.8 | — | — | — | — | — | — | — | | | | |
| NOV 11... | | 1.4 | — | — | — | — | — | — | — | | | | |
| DEC 08... | | 2.2 | — | — | — | — | — | — | — | | | | |
| JAN. 1972 | | 1.7 | — | — | — | 14 | — | — | — | | | | |
| FEB 08... | | 1.8 | — | — | — | — | — | — | — | | | | |
| MAR 11... | | 1.6 | 2.2 | 370 | 1.7 | 14 | 1090 | 1090 | — | | | | |
| APR 07... | | 1.6 | | | | | | | | | | | |

| 303030087145501 - Shallow monitor, Mesquite. | | | | | | | | | | | | | |
|--|------|---|---|---|--|---|--|---|--|--|--|--|--|
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L) AS CO ₂ | SULFATE DIS- SOLVED (MG/L) AS SO ₄ | CHL- ORIDE, DIS- SOLVED (MG/L) AS CL | FLUO- RIDE, DIS- SOLVED (MG/L) AS F | SILICA, DIS- SOLVED (MG/L) AS SiO ₂ | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUN OF CONSTITU- ENTS, DIS- SOLVED (MG/L) | SOLIDS, SUNP. TOTAL RESIDUE AT 110 DEG. C (MG/L) | | | | |
| APR. 1972 | | 1.8 | — | — | — | — | — | — | — | | | | |
| MAY 11... | 0655 | 1.7 | — | — | — | 14 | — | — | — | | | | |
| JUN 15... | 1745 | 1.8 | — | — | — | 14 | — | — | — | | | | |
| JUL 13... | 1540 | 1.8 | — | — | — | 14 | — | — | — | | | | |
| AUG 16... | 1620 | 1.8 | — | — | — | 14 | — | — | — | | | | |
| SEP 12... | 1245 | 1.7 | — | — | — | 14 | — | — | — | | | | |
| OCT 13... | 1525 | 1.7 | 2.0 | 380 | 4.5 | 14 | 1100 | 1100 | 1100 | | | | |
| NOV 18... | 1330 | 1.7 | — | — | — | 13 | — | — | — | | | | |
| DEC 12... | 1250 | 1.7 | — | — | — | 13 | — | — | — | | | | |
| JAN. 1973 | | 2.4 | — | — | — | 13 | — | — | — | | | | |
| FEB 17... | 1330 | 1.8 | — | — | — | 13 | — | — | — | | | | |
| MAR 14... | 1300 | 1.8 | — | — | — | 14 | — | — | — | | | | |
| APR 13... | 1300 | 1.7 | 1.6 | 380 | 3.6 | 14 | 1100 | 991 | — | | | | |
| MAY 17... | 1315 | 1.7 | — | — | — | 14 | — | — | — | | | | |
| JUN 16... | 1615 | 1.7 | — | 360 | — | 15 | — | — | — | | | | |
| JUL 12... | 1340 | 1.8 | — | 370 | — | — | — | — | — | | | | |
| AUG 12... | 1370 | 1.8 | — | 370 | — | — | — | — | — | | | | |
| SEP 12... | 1415 | 1.8 | — | 320 | — | 15 | — | — | — | | | | |
| OCT 18... | 1300 | 1.4 | — | 380 | — | 22 | — | — | — | | | | |
| NOV 22... | 1345 | 1.7 | — | 410 | — | 15 | — | — | — | | | | |
| DEC 12... | 1645 | 1.7 | .8 | 380 | 3.5 | 14 | 1100 | 1130 | — | | | | |
| JAN. 1974 | | 1.7 | — | 370 | — | 15 | — | — | — | | | | |
| FEB 14... | 1430 | 1.8 | — | 380 | — | — | — | — | — | | | | |
| MAR 11... | 1000 | 1.4 | — | 380 | — | — | — | — | — | | | | |
| APR 16... | 1340 | 1.8 | — | 360 | — | — | — | — | — | | | | |
| MAY 13... | 1325 | 1.8 | — | 370 | — | — | — | — | — | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 30533007145501 - Shallow monitor, Mesquite. | | | | | | | | | | | | | |
|---|------|--|-----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|--|--|--|------------|------|--|-----------------------------------|
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL- RID- DIS- SOLVED (MG/L AS CL) | FLU- RID- DIS- SOLVED (MG/L AS F) | SILICA DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 100 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CON- STI- DENTS, DIS- SOLVED (MG/L) | SOLIDS, SUSP. TOTAL AT 110 DEG. C (MG/L) | DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) |
| MAR , 1974 | 1305 | 1.9 | 1.9 | 360 | — | 15 | 1130 | 1140 | — | MAR , 1976 | 1640 | 2.2 | — |
| APR 14... | 1330 | 2.2 | — | 370 | — | — | — | — | — | APR 16... | 1600 | 1.7 | — |
| MAY 21... | 1330 | 1.7 | — | 300 | — | — | — | — | — | MAY 20... | 1100 | 2.2 | — |
| JUN 19... | 1440 | 1.6 | — | 300 | — | — | — | — | — | JUN 22... | 1250 | 1.8 | — |
| JUL 27... | 1315 | 1.6 | — | 390 | — | — | — | — | — | JUL 19... | 1650 | 2.2 | — |
| AUG 15... | 1310 | 1.7 | — | 300 | — | — | — | — | — | AUG 17... | 1440 | 1.8 | — |
| SEP 18... | 1335 | 2.3 | 2.6 | 300 | 5.0 | 15 | 1130 | 1140 | — | SEP 14... | 1320 | 2.2 | — |
| OCT 14... | 1330 | 1.7 | — | 390 | — | — | — | — | — | OCT 21... | 1345 | 2.2 | — |
| NOV 19... | 1410 | 2.2 | — | 350 | — | — | — | — | — | NOV 17... | 1400 | 1.8 | — |
| DEC 18... | 0920 | 2.0 | — | 300 | — | — | — | — | — | DEC 16... | 1220 | 1.7 | — |
| JAN , 1975 | 1035 | 1.6 | — | 360 | — | — | — | — | — | JAN , 1977 | 1100 | 3.4 | — |
| FEB 19... | 1440 | 2.2 | — | 370 | — | — | — | — | — | FEB 20... | 1330 | 1.4 | — |
| MAR 12... | 1600 | 1.8 | — | 360 | 3.1 | 15 | 1090 | — | — | MAR 22... | 1640 | 2.7 | — |
| APR 16... | 1410 | 2.3 | — | 330 | — | — | — | — | — | APR 21... | 1540 | 2.2 | — |
| MAY 13... | 1035 | 2.4 | — | 300 | — | — | — | — | — | MAY 15... | 1500 | 4.3 | — |
| JUN 18... | 1320 | 2.4 | — | 360 | — | — | — | — | — | JUN 19... | 1025 | 3.4 | — |
| JUL 17... | 1205 | 2.5 | — | 360 | — | — | — | — | — | JUL 19... | 1100 | 4.4 | — |
| AUG 17... | 1345 | 2.4 | — | 390 | 3.9 | 15 | — | — | — | AUG 18... | 1335 | 2.6 | — |
| SEP 15... | 1625 | 1.7 | — | 350 | 4.0 | — | — | — | — | SEP 21... | 0950 | 5.1 | — |
| OCT 14... | 1555 | 1.7 | — | 360 | 3.0 | 14 | 1110 | — | — | OCT 27... | 1330 | 5.2 | — |
| NOV 17... | 1600 | 2.2 | — | 370 | — | — | — | — | — | NOV 14... | 0930 | 1.8 | — |
| DEC 16... | 1240 | 2.2 | — | 300 | — | — | — | — | — | DEC 09... | 0945 | 2.2 | — |
| JAN , 1976 | 1245 | 2.2 | — | 370 | — | — | — | — | — | JAN 22... | 0930 | 2.7 | — |
| FEB 21... | 1450 | 2.2 | — | 370 | — | — | — | — | — | FEB 04... | 1130 | 3.3 | — |
| | | | | | | | | | | JUN 14... | 0945 | 2.6 | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303530007145501 - Shallow monitor, Measurements. | | | | | | | | | | 303530007145501 - Shallow monitor, Measurements. | | | | | | | | | |
|--|------|-------------------------------------|---|------------------------------------|---|--|--|---|------------|--|---|---|--|--|--|--|--|--|--|
| DATE | TIME | CHLORIDE DIS- SOLVED AS CL | SULFATE DIS- SOLVED AS SO ₄ | FLUORIDE DIS- SOLVED AS F | SILICA DIS- SOLVED AS SiO ₂ | SOLIDS, RESIDUE AT 100 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUN OF CONSTI- TENTS, DIS- SOLVED (MG/L) | SOLIDS, SUNP, TOTAL AT 110 DEG. C (MG/L) | DATE | TIME | SOLIDS, RESIDUE AT 100 DEG. C TOTAL (MG/L) | SOLIDS, VOLTA- TILE ON TIGHT, TOTAL (MG/L) | MITRO- GEN, NITRATE TOTAL (MG/L) | MITRO- GEN, NITRATE TOTAL (MG/L) | MITRO- GEN, NITRATE TOTAL (MG/L) | MITRO- GEN, NITRATE TOTAL (MG/L) | MITRO- GEN, NITRATE TOTAL (MG/L) | MITRO- GEN, NITRATE TOTAL (MG/L) | MITRO- GEN, NITRATE TOTAL (MG/L) |
| AUG. 1970 | | | | | | | | | NOV. 1967 | | | | | | | | | | |
| 1345 | 3.3 | 310 | — | — | — | — | — | — | 01... | — | — | — | — | — | — | — | — | — | — |
| SEP. 21... | 4.3 | 320 | — | 4.9 | 15 | 1130 | — | — | 17... | — | — | — | — | — | — | — | — | — | — |
| NOV. 08... | 4.2 | 330 | — | — | — | — | — | — | 09... | — | — | — | — | — | — | — | — | — | — |
| DEC. 13... | 4.0 | 320 | — | — | — | — | — | — | 04... | — | — | — | — | — | — | — | — | — | — |
| JAN. 1971 | | | | | | | | | JUL. 14... | — | — | — | — | — | — | — | — | — | — |
| 24... | 3.7 | 360 | — | — | — | — | — | — | 01... | — | — | — | — | — | — | — | — | — | — |
| MAR. 08... | 2.1 | 310 | — | 4.9 | 13 | 1120 | — | — | 02... | — | — | — | — | — | — | — | — | — | — |
| APR. 23... | 2.7 | 320 | — | — | — | — | — | — | JAN. 1969 | — | — | — | — | — | — | — | — | — | — |
| JUN. 05... | 2.7 | 310 | — | — | — | — | — | — | 20... | — | — | — | — | — | — | — | — | — | — |
| AUG. 01... | 3.3 | 310 | — | — | — | — | — | — | MAR. 1970 | — | — | — | — | — | — | — | — | — | — |
| SEP. 20... | 4.2 | 300 | — | 5.0 | 15 | 1090 | — | — | JUN. 03... | — | — | — | — | — | — | — | — | — | — |
| NOV. 07... | 2.6 | 320 | — | — | — | — | — | — | NOV. 04... | — | — | — | — | — | — | — | — | — | — |
| JAN. 1980 | | | | | | | | | JAN. 1971 | — | — | — | — | — | — | — | — | — | — |
| 23... | 4.2 | 310 | 4.2 | 4.4 | 17 | 1110 | — | — | 19... | — | — | — | — | — | — | — | — | — | — |
| MAR. 19... | 2.6 | 320 | — | — | — | — | — | — | MAR. 15... | — | — | — | — | — | — | — | — | — | — |
| MAY 01... | 4.2 | 310 | — | — | — | — | — | — | APR. 15... | — | — | — | — | — | — | — | — | — | — |
| JUN. 18... | 5.3 | 320 | — | 5.7 | 17 | 1110 | — | — | MAY 13... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | JUN. 10... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | JUL. 08... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | AUG. 12... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | SEP. 14... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | OCT. 14... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | NOV. 11... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | DEC. 08... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | JAN. 1972 | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | 03... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | FEB. 11... | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | 0730 | — | — | — | — | — | — | — | — | — | — |
| | | | | | | | | | MAR. 07... | — | — | — | — | — | — | — | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 305330087145501 - Shallow monitor, Neenahste. | | | | | | | | | | | | | |
|---|------|--|---|---|---|---|---|---|---|---|---|---|---|
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) | SOLIDS, VOLA- TILE ON TUBA, TOTAL (MG/L) | NI- TRO- GEN, NITRATE TOTAL (MG/L AS N) | NI- TRO- GEN, NITRITE TOTAL (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) | NI- TRO- GEN, NITRATE DISE- SOLVED (MG/L AS N) |
| APR , 1972 | | | | | | | | | | | | | |
| 11... | 0855 | — | — | .00 | .004 | — | — | 1.300 | — | — | — | — | — |
| MAY | | | | | | | | | | | | | |
| 13... | 1745 | — | — | .00 | .004 | — | — | .900 | — | — | — | — | — |
| JUN | | | | | | | | | | | | | |
| 13... | 1540 | — | — | .00 | .000 | .000 | .000 | 1.200 | — | — | — | — | — |
| JUL | | | | | | | | | | | | | |
| 12... | 1620 | — | — | .00 | .003 | — | — | 1.300 | — | — | — | — | — |
| AUG | | | | | | | | | | | | | |
| 09... | 1245 | — | — | .00 | .006 | — | — | 1.300 | — | — | — | — | — |
| SEP | | | | | | | | | | | | | |
| 13... | 1525 | — | — | .00 | .003 | — | — | 1.300 | — | — | — | — | — |
| OCT | | | | | | | | | | | | | |
| 18... | 1330 | — | — | .00 | .002 | — | — | 1.200 | — | — | — | — | — |
| NOV | | | | | | | | | | | | | |
| 15... | 1230 | — | — | .00 | .002 | — | — | 1.300 | — | — | — | — | — |
| DEC | | | | | | | | | | | | | |
| 14... | 1330 | — | — | .00 | .002 | — | — | 1.300 | — | — | — | — | — |
| JAN , 1973 | | | | | | | | | | | | | |
| 17... | 1330 | — | — | .00 | .002 | — | — | 1.200 | — | — | — | — | — |
| FEB | | | | | | | | | | | | | |
| 14... | 1300 | — | — | .00 | .002 | — | — | 1.100 | — | — | — | — | — |
| MAR | | | | | | | | | | | | | |
| 14... | 1300 | — | — | .00 | .004 | — | — | 1.300 | — | — | — | — | — |
| APR | | | | | | | | | | | | | |
| 17... | 1315 | — | — | .00 | .001 | — | — | 1.200 | — | — | — | — | — |
| MAY | | | | | | | | | | | | | |
| 16... | 1615 | — | — | .00 | .004 | — | — | 1.400 | — | — | — | — | — |
| JUN | | | | | | | | | | | | | |
| 12... | 1340 | — | — | — | — | — | — | 1.200 | — | — | — | — | — |
| 13... | 1335 | — | — | — | — | — | — | 1.200 | — | — | — | — | — |
| 14... | 1410 | — | — | — | — | — | — | 1.200 | — | — | — | — | — |
| 12... | 1415 | — | — | .00 | .005 | — | — | 1.300 | — | — | — | — | — |
| JUL | | | | | | | | | | | | | |
| 11... | 1300 | — | — | .00 | .006 | — | — | 1.300 | — | — | — | — | — |
| AUG | | | | | | | | | | | | | |
| 22... | 1345 | — | — | .00 | .010 | — | — | 1.200 | — | — | — | — | — |
| SEP | | | | | | | | | | | | | |
| 12... | 1645 | — | — | .00 | .004 | — | — | 1.300 | — | — | — | — | — |
| OCT | | | | | | | | | | | | | |
| 10... | 1310 | — | — | .00 | .000 | — | — | 1.300 | — | — | — | — | — |
| NOV | | | | | | | | | | | | | |
| 14... | 1430 | — | — | .00 | .010 | — | — | 1.200 | — | — | — | — | — |
| DEC | | | | | | | | | | | | | |
| 11... | 1000 | — | — | .00 | .010 | — | — | 1.200 | — | — | — | — | — |
| JAN , 1974 | | | | | | | | | | | | | |
| 14... | 1340 | — | — | .00 | .010 | — | — | 1.300 | — | — | — | — | — |
| FEB | | | | | | | | | | | | | |
| 19... | 1325 | — | — | .00 | .000 | — | — | 1.300 | — | — | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 305330067145301 - Shallow monitor, Neenahste. | | | | | | | | | | | | | | 305330067145301 - Shallow monitor, Neenahste. | | | | | | | | | | | |
|---|------|------|--|--|---|----------------------------|---|--|---|--|---|--|---|---|--|------|--|--|---|----------------------------|---|--|---|--|---|
| DATE | | TIME | | SOLIDS, RESIDUE AT 100 DEG. C. TOTAL (MG/L) | | SOLIDS, TOTAL (MG/L) | | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | | DATE | | TIME | | SOLIDS, RESIDUE AT 100 DEG. C. TOTAL (MG/L) | | SOLIDS, TOTAL (MG/L) | | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | |
| MAR 19 1976 | 1640 | | | — | — | — | — | .00 | — | .00 | — | .010 | — | AUG 1978 | | | | — | — | — | — | .010 | — | — | — |
| APR 28 1600 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | SEP 21 1400 | | | | — | — | — | — | .000 | — | — | — |
| MAY 20 1100 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | NOV 08 1200 | | | | — | — | — | — | .000 | — | — | — |
| JUN 23 1230 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | DEC 13 1145 | | | | — | — | — | — | .010 | — | — | — |
| JUL 19 1630 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | JAN 1979 | | | | — | — | — | — | .010 | — | — | — |
| AUG 17 1440 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | MAR 28 1400 | | | | — | — | — | — | .000 | — | — | — |
| SEP 14 1320 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | APR 23 1315 | | | | — | — | — | — | .000 | — | — | — |
| OCT 20 1345 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | JUN 05 1145 | | | | — | — | — | — | .010 | — | — | — |
| NOV 17 1400 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | AUG 01 0940 | | | | — | — | — | — | .010 | — | — | — |
| DEC 21 1220 | | | | — | — | — | — | .01 | — | .00 | — | .000 | — | SEP 20 1300 | | | | — | — | — | — | .000 | — | — | — |
| JAN 1977 | | | | — | — | — | — | .01 | — | .00 | — | .000 | — | NOV 07 1430 | | | | — | — | — | — | .000 | — | — | — |
| FEB 28 1100 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | JAN 1980 | | | | — | — | — | — | .010 | — | — | — |
| MAR 28 1330 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | FEB 23 1030 | | | | — | — | — | — | .010 | — | — | — |
| APR 22 1640 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | MAR 19 1620 | | | | — | — | — | — | .010 | — | — | — |
| MAY 21 1540 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | MAY 21 1400 | | | | — | — | — | — | .010 | — | — | — |
| JUN 15 1500 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | JUN 18 1630 | | | | — | — | — | — | .000 | — | — | — |
| JUL 19 1025 | | | | — | — | — | — | .01 | — | .00 | — | .000 | — | | | | | — | — | — | — | .000 | — | — | — |
| AUG 18 1335 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | | | | | — | — | — | — | .000 | — | — | — |
| SEP 21 0950 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | | | | | — | — | — | — | .010 | — | — | — |
| OCT 27 1330 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | | | | | — | — | — | — | .000 | — | — | — |
| DEC 14 0930 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | | | | | — | — | — | — | .010 | — | — | — |
| FEB 69 0945 | | | | — | — | — | — | .00 | — | .00 | — | .010 | — | | | | | — | — | — | — | .010 | — | — | — |
| MAR 22 0930 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | | | | | — | — | — | — | .000 | — | — | — |
| MAY 04 1130 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | | | | | — | — | — | — | .000 | — | — | — |
| JUN 14 0945 | | | | — | — | — | — | .00 | — | .00 | — | .000 | — | | | | | — | — | — | — | .000 | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303530087/45501 - Shallow monitor, Massachusetts. | | | | | | | | | |
|---|-------|--|--|---|---|---|-----------|------|--|
| DATE | TIME | NITRO- GEN. ORGANIC TOTAL (MG/L AS N) | NITRO- GEN. ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P) | PHOS- PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P) | ALUM- INUM, DISSOL- VED (UG/L AS AL) | DATE | TIME | NITRO- GEN. ORGANIC TOTAL (MG/L AS N) |
| MAY, 1967 | 01... | — | — | — | — | 260 | MAY, 1972 | 1745 | .63 |
| DEC | 17... | — | — | — | — | — | JUN | 1540 | .34 |
| APR, 1968 | 09... | — | — | — | — | 260 | JUL | 1620 | .46 |
| MAY | 06... | — | — | — | — | — | AUG | 1245 | .15 |
| JUL | 14... | — | — | — | — | 190 | SEP | 1525 | .36 |
| OCT | 07... | — | — | — | — | 260 | OCT | 1350 | .27 |
| DEC | 02... | — | — | — | — | — | NOV | 1250 | .15 |
| JAN, 1969 | 20... | — | — | — | — | — | DEC | 1300 | .15 |
| MAR, 1970 | 12... | — | — | — | — | 30 | JAN, 1973 | 1350 | .35 |
| JUN | 03... | — | — | — | — | — | FEB | 1300 | .25 |
| MAY | 04... | — | — | — | — | 100 | MAR | 1300 | .36 |
| JAN, 1971 | 19... | — | — | — | — | — | APR | 1315 | .48 |
| MAR | 15... | — | — | — | — | 30 | MAY | 1615 | .16 |
| APR | 13... | — | — | — | — | — | JUN | 1415 | .28 |
| MAY | 13... | — | — | — | — | — | JUL | 1300 | .46 |
| JUN | 10... | — | — | — | — | — | AUG | 1345 | .28 |
| JUL | 08... | — | — | — | — | — | SEP | 1645 | .46 |
| SEP | 16... | — | — | — | — | — | OCT | 1310 | .07 |
| OCT | 14... | — | — | — | — | — | NOV | 1430 | .35 |
| NOV | 11... | — | — | — | — | — | DEC | 1000 | .15 |
| DEC | 03... | — | — | — | — | — | JAN, 1974 | 1340 | .46 |
| JAN, 1972 | 03... | — | — | — | — | — | FEB | 1325 | .32 |
| FEB | 11... | — | — | — | — | — | MAR | 1335 | .25 |
| MAR | 07... | — | — | — | — | — | APR | 1300 | .47 |
| APR | 11... | — | — | — | — | — | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303530007145501 - Shallow monitor, Massachusetts. | | | | | | | | | |
|---|------|---|---|---|---|---|---|---|---|
| DATE | TIME | MITRO- GEN. ORGANIC TOTAL (MVA) (AS M) | MITRO- GEN. ORGANIC TOTAL (MVA) (AS M) | PHOS- PHOSPH. DIS- SOLVED (MVA) (AS P) | PHOS- PHOSPH. DIS- SOLVED (MVA) (AS P) | PHOS- PHOSPH. DIS- SOLVED (MVA) (AS P) | PHOS- PHOSPH. DIS- SOLVED (MVA) (AS P) | PHOS- PHOSPH. DIS- SOLVED (MVA) (AS P) | PHOS- PHOSPH. DIS- SOLVED (MVA) (AS P) |
| MAY, 1974 | 1530 | .30 | 1.5 | .070 | 1.5 | .070 | 1.5 | .070 | 1.5 |
| JUN 15... | 1440 | .20 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| JUL 25... | 1315 | .20 | 1.4 | .080 | 1.4 | .080 | 1.4 | .080 | 1.4 |
| AUG 15... | 1310 | .20 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| SEP 15... | 1335 | .30 | 1.5 | .100 | 1.5 | .100 | 1.5 | .100 | 1.5 |
| OCT 15... | 1330 | .28 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| NOV 15... | 1410 | .27 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| DEC 15... | 0720 | .21 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| JAN, 1975 | 1055 | .23 | 1.5 | .060 | 1.5 | .060 | 1.5 | .060 | 1.5 |
| FEB 15... | 1440 | .29 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| MAR 12... | 1400 | .30 | 1.5 | .070 | 1.5 | .070 | 1.5 | .070 | 1.5 |
| APR 14... | 1410 | .40 | 1.6 | .070 | 1.6 | .070 | 1.6 | .070 | 1.6 |
| MAY 13... | 1055 | .34 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| JUN 18... | 1320 | .37 | 1.6 | .070 | 1.6 | .070 | 1.6 | .070 | 1.6 |
| JUL 17... | 1205 | .30 | 1.5 | .060 | 1.5 | .060 | 1.5 | .060 | 1.5 |
| AUG 15... | 1345 | .21 | 1.5 | .060 | 1.5 | .060 | 1.5 | .060 | 1.5 |
| SEP 15... | 1625 | .31 | 1.5 | .060 | 1.5 | .060 | 1.5 | .060 | 1.5 |
| OCT 14... | 1555 | .20 | 1.2 | .070 | 1.2 | .070 | 1.2 | .070 | 1.2 |
| NOV 17... | 1400 | .24 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| DEC 17... | 1240 | .20 | 1.5 | .070 | 1.5 | .070 | 1.5 | .070 | 1.5 |
| JAN, 1976 | 1245 | .19 | 1.5 | .060 | 1.5 | .060 | 1.5 | .060 | 1.5 |
| FEB 22... | 1450 | .14 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| MAR 15... | 1440 | .20 | 1.5 | .070 | 1.5 | .070 | 1.5 | .070 | 1.5 |
| APR 26... | 1400 | .27 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| MAY, 1976 | 1100 | .18 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| JUN 22... | 1250 | .17 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| JUL 19... | 1650 | .37 | 1.5 | .070 | 1.5 | .070 | 1.5 | .070 | 1.5 |
| AUG 19... | 1440 | .07 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| SEP 14... | 1320 | .07 | 1.3 | .080 | 1.3 | .080 | 1.3 | .080 | 1.3 |
| OCT 20... | 1345 | .17 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| NOV 17... | 1400 | .17 | 1.4 | .090 | 1.4 | .090 | 1.4 | .090 | 1.4 |
| DEC 12... | 1220 | .17 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| JAN, 1977 | 1100 | .17 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| FEB 24... | 1330 | .17 | 1.4 | .050 | 1.4 | .050 | 1.4 | .050 | 1.4 |
| MAR 22... | 1440 | .07 | 1.3 | .050 | 1.3 | .050 | 1.3 | .050 | 1.3 |
| APR 21... | 1540 | .02 | 1.3 | .050 | 1.3 | .050 | 1.3 | .050 | 1.3 |
| MAY 15... | 1500 | .00 | 1.4 | .090 | 1.4 | .090 | 1.4 | .090 | 1.4 |
| JUN 15... | 1025 | .00 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| JUL 19... | 1100 | .00 | 1.4 | .060 | 1.4 | .060 | 1.4 | .060 | 1.4 |
| AUG 18... | 1335 | .15 | 1.4 | .050 | 1.4 | .050 | 1.4 | .050 | 1.4 |
| SEP 21... | 0950 | .00 | 1.3 | .050 | 1.3 | .050 | 1.3 | .050 | 1.3 |
| OCT 27... | 1330 | .15 | 1.4 | .090 | 1.4 | .090 | 1.4 | .090 | 1.4 |
| NOV 14... | 0920 | .00 | 1.3 | .060 | 1.3 | .060 | 1.3 | .060 | 1.3 |
| DEC 14... | 0945 | .05 | 1.3 | .060 | 1.3 | .060 | 1.3 | .060 | 1.3 |
| JAN, 1978 | 0930 | .16 | 1.4 | .050 | 1.4 | .050 | 1.4 | .050 | 1.4 |
| FEB 04... | 1130 | .21 | 1.5 | .050 | 1.5 | .050 | 1.5 | .050 | 1.5 |
| MAR 14... | 0945 | .37 | 1.5 | .040 | 1.5 | .040 | 1.5 | .040 | 1.5 |
| APR 13... | 1345 | .28 | 1.4 | .070 | 1.4 | .070 | 1.4 | .070 | 1.4 |
| MAY 21... | 1400 | .26 | 1.6 | .050 | 1.6 | .050 | 1.6 | .050 | 1.6 |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303536067145501 - Shallow monitor, Mesquite. | | | | | | | | | | | | | | | | 303536067145501 - Shallow monitor, Mesquite. | | | | | | | | | | | | | | | | | | | | | |
|--|--|------|--|----------------------------------|--|--|--|--------------------------------|--|---|--|---|--|---------------------------------|--|--|--|------|--|--|--|---------------------------------------|--|--------------------------------|--|--------------------------------|--|----------------------------------|--|-------------------------------------|--|-------------------------------------|--|--------------------------------|--|----|--|
| DATE | | TIME | | ARSENIC DIS- SOLVED (UG/L AS AS) | | BARIUM TOTAL REDOX- ENABLE (UG/L AS B) | | BARIUM DIS- SOLVED (UG/L AS B) | | CHROMIUM HEXA- VALENT, DIS- SOLVED (UG/L AS CR) | | CHROMIUM HEXA- VALENT, DIS- SOLVED (UG/L AS CR) | | COPPER DIS- SOLVED (UG/L AS CU) | | DATE | | TIME | | IRON, TOTAL REDOX- ENABLE (UG/L AS FE) | | IRON, SIS- REDOX- ENABLE (UG/L AS FE) | | IRON, DIS- SOLVED (UG/L AS FE) | | LEAD, DIS- SOLVED (UG/L AS PB) | | LITHIUM DIS- SOLVED (UG/L AS LI) | | MANGANESE, DIS- SOLVED (UG/L AS MN) | | STRONTIUM, DIS- SOLVED (UG/L AS SR) | | ZINC, DIS- SOLVED (UG/L AS ZN) | | | |
| JUN , 1972 | | | | - | | 2300 | | 2300 | | - | | - | | - | | NOV , 1967 | | | | - | | - | | 170 | | 0 | | 30 | | - | | 270 | | 20 | | | |
| SEP , 1965 | | 1245 | | - | | 2400 | | 2400 | | - | | - | | 0 | | DEC , 17... | | | | - | | - | | - | | - | | - | | - | | 230 | | 0 | | | |
| JUN , 1972 | | 1325 | | - | | 2400 | | 2400 | | - | | - | | - | | APR , 1968 | | | | - | | - | | 90 | | - | | 30 | | - | | 200 | | 0 | | | |
| JUN , 1972 | | 1330 | | - | | 2400 | | 2400 | | - | | - | | - | | MAY , 09... | | | | - | | - | | 120 | | - | | 30 | | - | | 200 | | 10 | | | |
| JUN , 1972 | | 1220 | | - | | 2300 | | 2300 | | - | | - | | - | | JUL , 06... | | | | - | | - | | 50 | | - | | 20 | | - | | 180 | | 0 | | | |
| JUN , 1972 | | 1330 | | - | | 2200 | | 2200 | | - | | - | | - | | OCT , 16... | | | | - | | - | | 170 | | - | | 20 | | - | | - | | 0 | | | |
| JUN , 1972 | | 1330 | | - | | 2300 | | 2300 | | - | | - | | - | | DEC , 02... | | | | - | | - | | 0 | | - | | - | | - | | 0 | | 200 | | - | |
| JUN , 1972 | | 1300 | | - | | 2200 | | 2200 | | - | | - | | 0 | | JAN , 1969 | | | | - | | - | | 20 | | 10 | | 30 | | 0 | | 250 | | 0 | | | |
| JUN , 1972 | | 1300 | | - | | 1750 | | 1700 | | - | | - | | - | | MAR , 1970 | | | | - | | - | | - | | - | | - | | - | | 180 | | - | | | |
| JUN , 1972 | | 1315 | | - | | 1700 | | 1700 | | - | | - | | - | | JUN , 03... | | | | - | | - | | 40 | | - | | - | | - | | 10 | | - | | 30 | |
| JUN , 1972 | | 1615 | | - | | - | | - | | - | | - | | 10 | | NOV , 04... | | | | - | | - | | 30 | | - | | - | | - | | 10 | | - | | - | |
| JUN , 1972 | | 1645 | | - | | - | | - | | - | | - | | 1 | | JAN , 1971 | | | | - | | - | | 40 | | 0 | | - | | 0 | | 210 | | 10 | | | |
| JUN , 1972 | | 1335 | | - | | 4000 | | 2600 | | - | | - | | 3 | | MAR , 13... | | | | - | | - | | 30 | | - | | - | | 0 | | 240 | | 10 | | | |
| JUN , 1972 | | 1400 | | - | | 2800 | | 2800 | | - | | - | | 0 | | MAY , 13... | | | | - | | - | | - | | - | | - | | - | | 200 | | - | | - | |
| JUN , 1972 | | 1625 | | - | | 2000 | | 2000 | | - | | - | | 0 | | JUL , 10... | | | | - | | - | | 30 | | - | | - | | - | | - | | 0 | | 0 | |
| JUN , 1972 | | 1640 | | - | | 2100 | | 2100 | | - | | - | | 0 | | AUG , 08... | | | | - | | - | | 30 | | - | | - | | - | | - | | - | | 0 | |
| JUN , 1972 | | 1320 | | - | | 2000 | | 2000 | | - | | - | | 1 | | SEP , 12... | | | | - | | - | | 20 | | - | | - | | - | | - | | - | | 0 | |
| JUN , 1972 | | 1640 | | - | | 2600 | | 2600 | | - | | - | | 0 | | NOV , 16... | | | | - | | - | | 30 | | - | | - | | - | | - | | 20 | | 20 | |
| JUN , 1972 | | 0950 | | - | | 2900 | | 2900 | | - | | - | | 0 | | JAN , 1972 | | | | - | | - | | 20 | | - | | - | | - | | - | | 10 | | 10 | |
| JUN , 1972 | | 0930 | | - | | 2500 | | 2500 | | - | | - | | 0 | | MAR , 03... | | | | - | | - | | 50 | | - | | - | | - | | 220 | | 0 | | | |
| JUN , 1972 | | 1400 | | - | | 3500 | | 3500 | | - | | - | | 0 | | APR , 07... | | | | - | | - | | - | | - | | - | | - | | - | | - | | 0 | |
| JUN , 1972 | | 1400 | | - | | 2800 | | 2800 | | - | | - | | 0 | | SEP , 11... | | | | - | | - | | 40 | | - | | - | | - | | 400 | | 60 | | | |
| JUN , 1972 | | 1300 | | - | | 1600 | | 1600 | | - | | - | | 0 | | FEB , 1973 | | | | - | | - | | - | | - | | - | | - | | 240 | | - | | - | |
| JUN , 1972 | | 1030 | | - | | 1800 | | 1800 | | - | | - | | 0 | | MAR , 14... | | | | - | | - | | 30 | | - | | - | | - | | 260 | | 10 | | | |
| JUN , 1972 | | 1630 | | - | | 2200 | | 2200 | | - | | - | | 1 | | MAR , 14... | | | | - | | - | | - | | - | | - | | - | | - | | - | | - | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303539087/45501 - Shallow monitor, Messaite. | | | | | | | | | | 303539087/45501 - Shallow monitor, Messaite. | | | | | | | | | |
|--|-------|-----------|-------|-----------|--|-----------|-------|-----------|-------|--|-------|-----------|-------|-----------|----------------------------------|-----------|-------|-----------|-------|
| IRON, TOTAL, RECYCLED, ENRICHED (UG/L AS FE) | | | | | IRON, SUSPENDED, RECYCLED, ENRICHED (UG/L AS FE) | | | | | LEAD, DIS-SOLVED (UG/L AS PB) | | | | | LITHIUM, DIS-SOLVED (UG/L AS LI) | | | | |
| DATE | TIME | DATE | TIME | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE | DATE |
| SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 | SEP, 1973 | 12:00 |
| 16:45 | | 16:45 | | 16:45 | | 16:45 | | 16:45 | | 16:45 | | 16:45 | | 16:45 | | 16:45 | | 16:45 | |
| MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 | MAR, 1974 | 1355 |
| SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | |
| 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | |
| 1335 | | 1335 | | 1335 | | 1335 | | 1335 | | 1335 | | 1335 | | 1335 | | 1335 | | 1335 | |
| 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | |
| 0920 | | 0920 | | 0920 | | 0920 | | 0920 | | 0920 | | 0920 | | 0920 | | 0920 | | 0920 | |
| MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 | MAR, 1975 | 1600 |
| 12:00 | | 12:00 | | 12:00 | | 12:00 | | 12:00 | | 12:00 | | 12:00 | | 12:00 | | 12:00 | | 12:00 | |
| 1625 | | 1625 | | 1625 | | 1625 | | 1625 | | 1625 | | 1625 | | 1625 | | 1625 | | 1625 | |
| MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 | MAR, 1976 | 1640 |
| 19:00 | | 19:00 | | 19:00 | | 19:00 | | 19:00 | | 19:00 | | 19:00 | | 19:00 | | 19:00 | | 19:00 | |
| SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | |
| 14:00 | | 14:00 | | 14:00 | | 14:00 | | 14:00 | | 14:00 | | 14:00 | | 14:00 | | 14:00 | | 14:00 | |
| MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 | MAR, 1977 | 1320 |
| 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | |
| MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 | MAR, 1978 | 1640 |
| 15:00 | | 15:00 | | 15:00 | | 15:00 | | 15:00 | | 15:00 | | 15:00 | | 15:00 | | 15:00 | | 15:00 | |
| SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | |
| 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | |
| MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 | MAR, 1979 | 0950 |
| 22:00 | | 22:00 | | 22:00 | | 22:00 | | 22:00 | | 22:00 | | 22:00 | | 22:00 | | 22:00 | | 22:00 | |
| SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | |
| 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | | 21:00 | |
| MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 | MAR, 1979 | 1400 |
| 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | |
| SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | | SEP | |
| 20:00 | | 20:00 | | 20:00 | | 20:00 | | 20:00 | | 20:00 | | 20:00 | | 20:00 | | 20:00 | | 20:00 | |
| MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 | MAR, 1980 | 1030 |
| 23:00 | | 23:00 | | 23:00 | | 23:00 | | 23:00 | | 23:00 | | 23:00 | | 23:00 | | 23:00 | | 23:00 | |
| JUN | | JUN | | JUN | | JUN | | JUN | | JUN | | JUN | | JUN | | JUN | | JUN | |
| 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | | 18:00 | |
| 1630 | | 1630 | | 1630 | | 1630 | | 1630 | | 1630 | | 1630 | | 1630 | | 1630 | | 1630 | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 30533007145501 - Shallow monitor, Massachusetts. | | | | | | | | | | | | | | 30533007145501 - Shallow monitor, Massachusetts. | | | | | | | | | | | | | |
|--|------|-----------------------------|------|-----------------------------|--|--|------------------------------|--|----------------|---|------------------------------|---|---|--|---|---|----------------|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | CARBON, TOTAL (mg/L) (AS C) | | | CARBON, ORGANIC DIS-SOLVED (mg/L) (AS C) | | | CARBON, INOR-GANIC, SOLVED (mg/L) (AS C) | | | CYANIDE TOTAL (mg/L) (AS CN) | | | THIO-CYANATE TOTAL (mg/L) (AS SCN) | | | PHENOLS (ug/L) | | | | | | | | | | |
| | | DATE | TIME | CARBON, TOTAL (mg/L) (AS C) | CARBON, ORGANIC DIS-SOLVED (mg/L) (AS C) | CARBON, INOR-GANIC, SOLVED (mg/L) (AS C) | CYANIDE TOTAL (mg/L) (AS CN) | THIO-CYANATE TOTAL (mg/L) (AS SCN) | PHENOLS (ug/L) | | | | | | | | | | | | | | | | | | |
| FEB , 1973 | 1300 | 130 | 26 | — | 104 | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| MAR 14... | 1300 | 134 | 32 | — | 102 | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| APR 17... | 1315 | — | 7.5 | 7.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| MAY 16... | 1415 | — | 5.5 | 3.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| JUN 12... | 1415 | — | 5.0 | 9.5 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| JUL 18... | 1300 | — | 6.0 | 5.5 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| SEP 12... | 1445 | — | — | 6.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| OCT 10... | 1310 | — | — | 5.5 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| NOV 14... | 1430 | — | — | 6.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| DEC 11... | 1000 | — | — | 4.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| JAN , 1974 | 1340 | — | — | 5.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| MAR 18... | 1335 | — | — | 2.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| APR 14... | 1330 | — | — | 8.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| MAY 21... | 1330 | — | — | 5.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| JUN 19... | 1440 | — | — | 3.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| JUL 19... | 1315 | — | — | 2.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| AUG 15... | 1310 | — | — | 2.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| SEP 18... | 1335 | — | — | 1.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| OCT 14... | 1330 | — | — | .0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| NOV 19... | 1410 | — | — | 4.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| DEC 18... | 0920 | — | — | 4.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| JAN , 1975 | 1035 | — | — | 3.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| FEB 19... | 1440 | — | — | 2.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |
| MAR 12... | 1440 | — | — | 3.0 | — | — | — | — | — | — | — | — | — | — | — | — | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 305323087145501 - Shallow monitor, Neenah. | | | | | | | | | | 305323087145501 - Deep monitor, Neenah. | | | | | | | | | |
|--|------|------------------------------------|---|---|--|-------------------------------------|---|-------------------|-----------|---|--------------------------------|---|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|--|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, INOR- GANIC, TOTAL (MG/L AS C) | CARBON, INOR- GANIC, DIS- SOLVED (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO- CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | |
| APR. 1977 | | | | | | | | | | OCT. 1967 | | | | | | | | | |
| JUL 21... | 1540 | - | - | - | 3.0 | - | - | - | 31... | - | - | 19000 | 6.8 | - | 33.5 | 30 | - | - | |
| JUL 15... | 1500 | - | - | - | 6.6 | - | - | - | DEC 17... | - | - | 19000 | 6.9 | - | 34.0 | 50 | - | - | |
| JUL 19... | 1100 | - | - | - | 6.6 | - | - | - | APR. 1968 | | | | | | | | | | |
| AUG 18... | 1335 | - | - | - | 5.6 | - | - | - | 09... | - | - | 20000 | 7.1 | - | - | 50 | - | - | |
| SEP 21... | 0930 | - | - | - | 3.0 | - | - | - | 11... | - | - | - | 6.8 | - | - | - | - | - | |
| OCT 27... | 1330 | - | - | - | 2.0 | - | - | - | MAY 04... | - | - | 19800 | 7.0 | - | 34.0 | 55 | - | - | |
| DEC 14... | 0930 | - | - | - | 2.0 | - | - | - | JUL 16... | - | - | 19800 | 7.0 | - | 34.5 | 45 | - | - | |
| FEB 09... | 0945 | - | - | - | 4.0 | - | - | - | OCT 30... | - | - | 18000 | 6.9 | - | 34.5 | 70 | - | - | |
| MAR 22... | 0930 | - | - | - | 5.0 | - | - | - | 30... | - | - | - | 6.0 | - | - | - | - | - | |
| MAY 04... | 1130 | - | - | - | 3.0 | - | - | - | JUN. 1969 | | | | | | | | | | |
| JUN 14... | 0945 | - | - | - | 3.0 | - | - | - | 07... | - | - | 13000 | 5.5 | - | - | - | - | - | |
| AUG 03... | 1345 | - | - | - | 5.0 | - | - | - | 22... | - | - | - | 4.8 | - | 28.0 | - | - | - | |
| SEP 21... | 1400 | - | - | - | 4.0 | - | - | - | | | | | | | | | | | |
| MAY 08... | 1200 | - | - | - | 6.2 | - | - | - | | | | | | | | | | | |
| DEC 13... | 1145 | - | - | - | 5.0 | - | - | - | | | | | | | | | | | |
| JAN. 1979 | | | | | | | | | | | | | | | | | | | |
| FEB 24... | 1400 | - | - | - | 5.2 | - | - | - | | | | | | | | | | | |
| MAR 23... | 1315 | - | - | - | 6.0 | - | - | - | | | | | | | | | | | |
| JUL 05... | 1145 | - | - | - | 4.6 | - | - | - | | | | | | | | | | | |
| AUG 01... | 0940 | - | - | - | 6.0 | - | - | - | | | | | | | | | | | |
| SEP 20... | 1500 | - | - | - | 6.3 | - | - | - | | | | | | | | | | | |
| JAN. 1980 | | | | | | | | | | | | | | | | | | | |
| MAR 23... | 1030 | - | - | - | 9.3 | - | - | - | | | | | | | | | | | |
| MAY 17... | 1620 | - | - | - | 6.9 | - | - | - | | | | | | | | | | | |
| MAY 01... | 1400 | - | - | - | 6.1 | - | - | - | | | | | | | | | | | |
| JUN 18... | 1630 | - | - | - | 7.2 | - | - | - | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303523067145201 - Deep monitor, Mesquite. | | | | | | | | | | | | | |
|---|-------|----------------------------------|--|--|--|---|--------------------------------------|------------------------------------|--|-----------|-------|----------------------------------|--|
| 303523067145201 - Deep monitor, Mesquite. | | | | | | | | | | | | | |
| DATE | TIME | ACIDITY (ME/L AS CAC03) | CALCIUM DIS- SOLVED (ME/L AS CA) | MAGNE- SIUM, DIS- SOLVED (ME/L AS MG) | SODIUM, DIS- SOLVED (ME/L AS NA) | POTAS- SIUM, DIS- SOLVED (ME/L AS K) | BICAR- BONATE (ME/L AS CO3) | CAR- BONATE (ME/L AS CO3) | ALKA- LITY (ME/L AS CAC03) | DATE | TIME | ACIDITY (ME/L AS CAC03) | CALCIUM DIS- SOLVED (ME/L AS CA) |
| SEP, 1968 | | | | | | | | | | | | | |
| SEP, 1968 | 07... | — | 296 | 180 | — | — | — | — | — | SEP, 1968 | 07... | — | 296 |
| 07... | 0800 | — | 306 | 176 | 4300 | — | — | — | — | 07... | 0800 | — | 306 |
| 01... | 1000 | — | 262 | 170 | 3940 | — | — | — | — | 01... | 1000 | — | 262 |
| 02... | — | — | 284 | 175 | 3920 | 71 | 3000 | 0 | 2460 | 02... | — | — | 284 |
| 04... | — | — | 382 | 176 | 3970 | — | — | — | — | 04... | — | — | 382 |
| 08... | — | — | 388 | 185 | — | — | — | — | — | 08... | — | — | 388 |
| 10... | — | — | 401 | 185 | 4260 | — | — | — | — | 10... | — | — | 401 |
| 15... | — | — | 383 | 178 | 4320 | — | — | — | — | 15... | — | — | 383 |
| 18... | — | — | 384 | 179 | — | — | — | — | — | 18... | — | — | 384 |
| 22... | — | — | 382 | 184 | 4220 | — | — | — | — | 22... | — | — | 382 |
| 25... | — | — | 812 | 164 | 3890 | — | — | — | — | 25... | — | — | 812 |
| 30... | — | — | — | — | — | — | — | — | — | 30... | — | — | — |
| OCT, 1968 | | | | | | | | | | | | | |
| OCT, 1968 | 01... | — | 529 | 180 | 4360 | — | — | — | — | OCT, 1968 | 01... | — | 529 |
| 05... | — | — | 512 | 178 | 4570 | — | — | — | — | 05... | — | — | 512 |
| 06... | — | — | 512 | 186 | — | — | — | — | — | 06... | — | — | 512 |
| 12... | 0800 | — | 500 | 183 | 4320 | — | — | — | — | 12... | 0800 | — | 500 |
| 15... | 1000 | — | 294 | 176 | 3890 | — | — | — | — | 15... | 1000 | — | 294 |
| 15... | — | — | 440 | 178 | 4100 | — | — | — | — | 15... | — | — | 440 |
| 22... | — | — | 449 | 181 | 4200 | — | — | — | — | 22... | — | — | 449 |
| 26... | — | — | 466 | 180 | 4220 | — | — | — | — | 26... | — | — | 466 |
| 29... | — | — | 470 | 175 | — | — | — | — | — | 29... | — | — | 470 |
| DEC, 1968 | | | | | | | | | | | | | |
| DEC, 1968 | 04... | — | 474 | 176 | — | — | — | — | — | DEC, 1968 | 04... | — | 474 |
| 06... | — | — | 470 | 179 | — | — | — | — | — | 06... | — | — | 470 |
| 10... | — | — | 474 | 175 | — | — | — | — | — | 10... | — | — | 474 |
| 13... | — | — | 461 | 175 | — | — | — | — | — | 13... | — | — | 461 |
| 17... | — | — | 474 | 176 | — | — | — | — | — | 17... | — | — | 474 |
| 20... | — | — | 416 | 172 | 4260 | — | — | — | — | 20... | — | — | 416 |
| JAN, 1969 | | | | | | | | | | | | | |
| JAN, 1969 | 03... | — | 487 | 169 | 4220 | — | — | — | — | JAN, 1969 | 03... | — | 487 |
| 07... | — | — | 2700 | 41 | 730 | — | — | — | — | 07... | — | — | 2700 |
| 22... | — | — | 2350 | 26 | 635 | 2.5 | 4000 | — | 3280 | 22... | — | — | 2350 |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303523087145201 - Deep monitor, Mossanto. | | | | | | | | | |
|---|------|---|---|--------------------------------|--------------------------------|------------------------------------|--------------------------------------|---|--|
| 303523087145201 - Deep monitor, Mossanto. | | | | | | | | | |
| DATE | TIME | CARBON DIOXIDE (MG/L AS CO ₂) | SULFATE (MG/L AS SO ₄) | CHLORIDE (MG/L AS CL) | FLUORIDE (MG/L AS F) | SILICA (MG/L AS SiO ₂) | SOLIDS, RESIDUE AT 180 DEG. C (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED AT 110 DEG. C (MG/L) | SOLIDS, TOTAL RESIDUE AT 110 DEG. C (MG/L) |
| OCT. 1967 | | | | | | | | | |
| 31... | | 710 | 18 | 5700 | 2.7 | 24 | - | 11700 | - |
| DEC. 17... | | 524 | 18 | 6000 | 3.7 | - | - | 11900 | - |
| APR. 1968 | | 343 | 21 | 6300 | 2.6 | 24 | - | 12600 | - |
| MAY 09... | | 432 | 20 | 5900 | 2.6 | 24 | - | 11300 | - |
| JUL 16... | | 301 | 17 | 5950 | 2.7 | 24 | - | 11700 | - |
| OCT. 02... | | 604 | 28 | 6100 | 2.5 | 24 | 11600 | 12700 | - |
| JAN. 1969 | | 101000 | 82 | 161 | 3.3 | 12 | - | 11000 | - |
| 22... | | | | | | | | | |
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) | SOLIDS, VOLUME ON TITRATION, TOTAL (MG/L) | NITRO-GEN, NITRATE (MG/L AS N) | NITRO-GEN, NITRATE (MG/L AS N) | NITRO-GEN, NITRATE (MG/L AS N) | NITRO-GEN, NITRATE (MG/L AS N) | NITRO-GEN, NITRATE (MG/L AS N) | NITRO-GEN, NITRATE (MG/L AS N) |
| OCT. 1967 | | | | | | | | | |
| 31... | | - | - | - | .56 | - | .015 | - | 350 |
| DEC. 17... | | - | - | - | .81 | - | .000 | - | 330 |
| APR. 1968 | | - | - | - | 1.2 | - | .000 | - | 350 |
| MAY 09... | | - | - | - | .00 | - | .003 | - | 390 |
| JUL 16... | | - | - | - | 1.1 | - | .076 | - | 380 |
| SEP. 17... | | - | - | - | .68 | - | - | - | - |
| 22... | | - | - | - | .63 | - | - | - | - |
| OCT. 02... | | - | - | - | 9.3 | - | 2.500 | - | 390 |
| 04... | | - | - | - | 16 | - | - | - | - |
| 10... | | - | - | - | 20 | - | - | - | - |
| NOV. 01... | | - | - | - | 11 | - | - | - | - |
| 03... | | - | - | - | 13 | - | - | - | - |
| 12... | 0800 | - | - | - | 14 | - | - | - | - |
| 12... | 1000 | - | - | - | 5.4 | - | - | - | - |
| 13... | | - | - | - | 4.5 | - | - | - | - |
| 22... | | - | - | - | 11 | - | - | - | - |
| 26... | | - | - | - | 14 | - | - | - | - |
| DEC. 06... | | - | - | - | 11 | - | - | - | - |
| 20... | | - | - | - | 11 | - | - | - | - |
| JAN. 1969 | | - | - | - | 13 | - | - | - | - |
| 03... | | - | - | - | 410 | - | - | - | - |
| 07... | | - | - | - | 1300 | - | - | - | 490 |
| 22... | | - | - | - | - | - | - | - | - |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Monsanto. | | | | | | | | | | | | | | | | | | | |
|--|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|------------|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) |
| DEC , 1969 | | | | | | | | | | AUG , 1972 | | | | | | | | | |
| 23... | | | 29900 | 8.0 | | 35.0 | 5 | | | 09... | 1624 | | 23400 | 7.4 | | 35.0 | | 30 | |
| 24... | | | 23200 | | | | 5 | | | SEP | | | | | | | | | |
| MAR , 1970 | | | | | | | | | | 14... | 0900 | | 23000 | 7.3 | | 35.0 | 5 | 20 | |
| 11... | | | 23500 | 7.3 | | 35.0 | 0 | | | OCT | | | | | | | | | |
| JUN | | | | | | | | | | 18... | 1625 | | 23000 | 7.2 | | 35.0 | | 15 | |
| 23... | | | 23100 | | | 35.0 | 5 | | | NOV | | | | | | | | | |
| 23... | | | | | | | | | | 15... | 1535 | | 22900 | 7.3 | | 35.0 | | 15 | |
| 02... | | | 23100 | | | 34.5 | 5 | | | DEC | | | | | | | | | |
| NOV | | | | | | | | | | 13... | 1310 | | 23000 | 7.3 | | 35.0 | | 20 | |
| 04... | | | 23800 | 7.3 | | 35.0 | 0 | | | JAN , 1973 | | | | | | | | | |
| JAN , 1971 | | | | | | | | | | 17... | 1650 | | 24000 | 7.3 | | 35.0 | | 15 | |
| 19... | | | 23800 | 7.4 | | 35.0 | 0 | | | FEB | | | | | | | | | |
| MAR | | | | | | | | | | 14... | 1640 | | 24000 | 7.3 | | 35.0 | | 20 | |
| 16... | 1201 | | 23200 | 7.3 | | 34.0 | 0 | | | MAR | | | | | | | | | |
| 1202 | | | | | | | 0 | | | 14... | 1640 | | 24000 | 7.3 | | 35.0 | 5 | 10 | |
| 1203 | | | 23200 | 8.0 | | 34.0 | 0 | | | APR | | | | | | | | | |
| APR | | | | | | | | | | 18... | 0950 | | 23000 | 7.3 | | 35.0 | | 10 | |
| 16... | | | 23300 | 7.4 | | 35.0 | | | | MAY | | | | | | | | | |
| MAY | | | | | | | | | | 16... | 0945 | | 23300 | 7.4 | | 35.0 | | 20 | |
| 13... | | | 23300 | 7.5 | | 35.0 | 5 | | | JUN | | | | | | | | | |
| JUN | | | | | | | | | | 13... | 0915 | | 23800 | 7.3 | | 35.0 | | 20 | |
| 09... | | | 23400 | 7.4 | | 35.0 | | | | JUL | | | | | | | | | |
| 07... | | | 23500 | 7.4 | | 35.5 | | | | 18... | 1740 | | 22100 | 7.3 | | 35.0 | | 20 | |
| AUG | | | | | | | | | | AUG | | | | | | | | | |
| 11... | | | 17500 | 7.5 | | 35.0 | | | | 22... | 1720 | | 23000 | 7.3 | | 35.0 | | | |
| SEP | | | | | | | | | | 12... | 1055 | | 23000 | 7.3 | | 35.0 | 10 | 20 | |
| 16... | | | 22700 | 7.1 | | 35.5 | | | | OCT | | | | | | | | | 20 |
| 14... | | | 23500 | 7.1 | | 35.5 | | | | 10... | 1650 | | 23300 | 7.4 | | 35.0 | | | |
| NOV | | | | | | | | | | 14... | 1010 | | 22900 | 7.4 | | 35.0 | | 20 | |
| 11... | | | 24000 | 7.6 | | 35.0 | | | | DEC | | | | | | | | | |
| DEC | | | | | | | | | | 11... | 1330 | | 22600 | | | 34.6 | 2 | 15 | |
| 09... | | | 19900 | 7.4 | | 35.0 | | | | 11... | 1530 | | 22700 | 7.2 | | 34.6 | 2 | | |
| JAN , 1972 | | | | | | | | | | JAN , 1974 | | | | | | | | | |
| 04... | 0930 | | 23100 | 7.3 | | 35.5 | | | | 16... | 1640 | | 23100 | 7.4 | | 35.0 | | 19 | |
| FEB | | | | | | | | | | 19... | 1640 | | 23000 | 7.4 | | 35.0 | | 21 | |
| 10... | 1600 | | 23500 | 7.3 | | 35.5 | | | | MAR | | | | | | | | | |
| MAR | | | | | | | | | | 18... | 1710 | | 22700 | 7.4 | | 35.0 | 6 | | |
| 06... | 1320 | | 28000 | 7.3 | | 35.0 | 20 | | | APR | | | | | | | | | |
| APR | | | | | | | | | | 17... | 1620 | | 21800 | 7.3 | | 35.0 | | 15 | |
| 10... | 1600 | | 23000 | 7.3 | | 35.0 | 5 | | | MAY | | | | | | | | | |
| 15... | 1445 | | 23500 | 7.4 | | 35.5 | | | | 22... | 1340 | | 22700 | 7.3 | | 35.0 | | 16 | |
| JUN | | | | | | | | | | 20... | 1410 | | 21800 | 7.3 | | 35.0 | | 17 | |
| 13... | 1325 | | 23800 | 7.3 | | 35.0 | | | | JUL | | | | | | | | | |
| JUL | | | | | | | | | | 30... | 1310 | | 22400 | 7.3 | | 35.0 | | 18 | |
| 12... | 1345 | | 23000 | 7.3 | | 35.0 | | | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Massachusetts. | | | | | | | | | | | | |
|---|-------|-------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|--|--|--|
| DATE | TIME | SMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHMS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COMMIT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | | | |
| 303417087141701 - South monitor, Massachusetts. | | | | | | | | | | | | |
| AUG , 1974 | 0930 | — | 21800 | 7.3 | — | 35.0 | — | 18 | — | | | |
| SEP | 15... | — | — | — | — | — | — | — | — | | | |
| SEP | 1000 | — | 22300 | 7.3 | — | 35.0 | 3 | 18 | — | | | |
| OCT | 15... | — | — | — | — | — | — | — | — | | | |
| OCT | 1310 | — | 21800 | 7.3 | — | 35.0 | — | 17 | — | | | |
| NOV | 0940 | — | 21600 | 7.3 | — | 35.0 | — | 18 | — | | | |
| DEC | 19... | — | — | — | — | — | — | — | — | | | |
| DEC | 1540 | — | 22700 | 7.3 | — | 35.0 | — | 14 | — | | | |
| JAN , 1975 | 1525 | — | 23000 | 7.3 | — | 35.0 | — | 15 | — | | | |
| FEB | 19... | — | — | — | — | — | — | — | — | | | |
| FEB | 0925 | — | 22800 | 7.3 | — | 34.5 | — | 20 | — | | | |
| FEB | 0935 | — | 22600 | 7.4 | — | 35.0 | — | 21 | — | | | |
| MAR | 19... | — | — | — | — | — | — | — | — | | | |
| MAR | 12... | — | 23200 | 7.3 | — | 34.5 | 10 | 12 | — | | | |
| APR | 0915 | — | — | — | — | — | — | — | — | | | |
| APR | 0910 | — | 23100 | 7.3 | — | 35.0 | — | 20 | — | | | |
| MAY | 17... | — | 22900 | 7.3 | — | 34.5 | — | 20 | — | | | |
| MAY | 0830 | — | — | — | — | — | — | — | — | | | |
| JUN | 0945 | — | 22400 | 7.2 | — | 35.0 | — | 20 | — | | | |
| JUL | 1520 | — | 19500 | 7.3 | — | 35.0 | 10 | 20 | — | | | |
| AUG | 19... | — | — | — | — | — | — | — | — | | | |
| SEP | 1610 | — | 21700 | 7.2 | — | 35.0 | — | 20 | — | | | |
| SEP | 1610 | — | 23000 | 7.3 | — | 35.0 | 20 | 20 | — | | | |
| OCT | 1600 | — | 21000 | 7.3 | — | 35.0 | — | 20 | — | | | |
| NOV | 1500 | — | 17700 | 7.3 | — | 22.0 | — | 50 | — | | | |
| NOV | 1530 | — | 18700 | 7.2 | — | 27.0 | — | 15 | — | | | |
| DEC | 1350 | — | 18500 | 7.3 | — | 24.0 | 30 | — | 15 | | | |
| JAN , 1976 | 0930 | — | 18300 | 7.3 | — | 22.0 | — | — | 25 | | | |
| FEB | 1530 | — | 19700 | 7.3 | — | 23.0 | — | — | 30 | | | |
| MAR | 1600 | — | 20000 | 7.3 | — | 23.5 | — | — | 50 | | | |
| APR | 1630 | — | 20000 | 7.2 | — | 23.5 | 30 | — | 35 | | | |
| MAY | 1300 | — | 16800 | 7.2 | — | 22.5 | — | — | 25 | | | |
| DEC | 1500 | — | 16800 | 7.2 | — | 22.0 | — | — | 70 | | | |
| JUN , 1979 | 1545 | — | 19100 | 7.0 | — | 24.0 | — | — | 16 | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Mesquite. | | | | | | | | | | | | | | | | | | | 303417087141701 - South monitor, Mesquite. | | | | | | | | | | | | | | | | | | |
|--|------|----------------------------------|--------------------------|--|---|---|--|--|---|------------|------------|----------------------------------|--------------------------|--|---|---|--|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPEC- IFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN DEMAND, BIOCHEM- ICAL (5 DAY UNINHIB) | HARD- NESS (MG/L AS CaCO3) | HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | ACTIVITY TOTAL HEATED (MG/L AS H) | DATE | TIME | DENSITY (GM/ML AT 20 C) | SPEC- IFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN DEMAND, BIOCHEM- ICAL (5 DAY UNINHIB) | HARD- NESS (MG/L AS CaCO3) | HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | ACTIVITY TOTAL HEATED (MG/L AS H) | | | | | | | | | | | | | | | | | | |
| APR , 1973 | 0950 | - | - | - | - | - | 1100 | - | - | MAR , 1975 | 0915 | - | - | - | - | - | - | 1000 | 630 | - | | | | | | | | | | | | | | | | | |
| MAY | 0945 | - | - | - | - | - | 1200 | - | - | APR | 12... 0915 | - | - | - | - | - | - | 950 | 570 | - | | | | | | | | | | | | | | | | | |
| JUN | 0915 | - | - | - | - | - | 1200 | - | - | MAY | 17... 0910 | - | - | - | - | - | - | 910 | 520 | - | | | | | | | | | | | | | | | | | |
| JUL | 1740 | - | - | - | - | - | 1000 | - | - | JUN | 13... 0830 | - | - | - | - | - | - | 900 | 900 | - | | | | | | | | | | | | | | | | | |
| AUG | 1720 | - | - | - | - | - | 1200 | 900 | - | JUL | 18... 0945 | - | - | - | - | - | - | 900 | 900 | - | | | | | | | | | | | | | | | | | |
| SEP | 1055 | - | - | - | - | - | 900 | 750 | - | AUG | 16... 1520 | - | - | - | - | - | - | 910 | 510 | - | | | | | | | | | | | | | | | | | |
| OCT | 1630 | - | - | - | - | - | 1100 | 800 | - | SEP | 19... 1610 | - | - | - | - | - | - | 900 | 560 | - | | | | | | | | | | | | | | | | | |
| NOV | 1010 | - | - | - | - | - | 1300 | 1100 | - | OCT | 16... 0950 | - | - | - | - | - | - | 900 | 560 | - | | | | | | | | | | | | | | | | | |
| DEC | 1330 | - | - | - | - | - | 1200 | - | - | NOV | 15... 1000 | - | - | - | - | - | - | 930 | 900 | - | | | | | | | | | | | | | | | | | |
| JAN , 1974 | 1530 | - | - | - | - | - | 1200 | - | - | DEC | 18... 0855 | - | - | - | - | - | - | 890 | 450 | - | | | | | | | | | | | | | | | | | |
| FEB | 1640 | - | - | - | - | - | 1100 | 840 | - | JAN , 1976 | 1515 | - | - | - | - | - | - | 910 | 470 | - | | | | | | | | | | | | | | | | | |
| MAR | 1640 | - | - | - | - | - | 1000 | - | - | FEB | 22... 1520 | - | - | - | - | - | - | 910 | 450 | - | | | | | | | | | | | | | | | | | |
| APR | 1710 | - | - | - | - | - | 990 | 730 | - | MAR | 23... 1640 | - | - | - | - | - | - | 950 | 480 | - | | | | | | | | | | | | | | | | | |
| MAY | 1420 | - | - | - | - | - | 960 | 700 | - | APR | 20... 0840 | - | - | - | - | - | - | 1000 | 520 | - | | | | | | | | | | | | | | | | | |
| JUN | 1340 | - | - | - | - | - | 880 | - | - | MAY | 27... 0905 | - | - | - | - | - | - | 950 | 440 | - | | | | | | | | | | | | | | | | | |
| JUL | 1410 | - | - | - | - | - | 930 | 650 | - | JUN | 14... 0935 | - | - | - | - | - | - | 950 | 440 | - | | | | | | | | | | | | | | | | | |
| AUG | 1310 | - | - | - | - | - | 950 | 660 | - | JUL | 22... 1325 | - | - | - | - | - | - | 890 | 390 | - | | | | | | | | | | | | | | | | | |
| SEP | 0950 | - | - | - | - | - | 870 | 570 | - | AUG | 20... 0925 | - | - | - | - | - | - | 950 | 450 | - | | | | | | | | | | | | | | | | | |
| OCT | 1000 | - | - | - | - | - | 930 | 620 | - | SEP | 18... 0945 | - | - | - | - | - | - | 860 | 350 | - | | | | | | | | | | | | | | | | | |
| NOV | 1310 | - | - | - | - | - | 950 | 630 | - | OCT | 14... 1630 | - | - | - | - | - | - | 990 | 480 | - | | | | | | | | | | | | | | | | | |
| DEC | 0940 | - | - | - | - | - | 950 | 610 | - | NOV | 20... 1630 | - | - | - | - | - | - | 950 | 430 | - | | | | | | | | | | | | | | | | | |
| JAN , 1975 | 1540 | - | - | - | - | - | 940 | 610 | - | DEC | 18... 0950 | - | - | - | - | - | - | 950 | 430 | - | | | | | | | | | | | | | | | | | |
| FEB | 1525 | - | - | - | - | - | 950 | 590 | - | JAN , 1977 | 1425 | - | - | - | - | - | - | 950 | 440 | - | | | | | | | | | | | | | | | | | |
| MAR | 0925 | - | - | - | - | - | 980 | 610 | - | FEB | 19... 1115 | - | - | - | - | - | - | 890 | 390 | - | | | | | | | | | | | | | | | | | |
| APR | 0935 | - | - | - | - | - | 950 | 590 | - | MAR | 23... 1400 | - | - | - | - | - | - | 930 | 480 | - | | | | | | | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Mesquite. | | | | | | | | | | 303417087141701 - South monitor, Mesquite. | | | | | | | | | |
|--|------|----------------------------------|--------------------------|---|--|--|---|---|---|--|------|----------------------------------|--|--|---|--|------------------------------------|---------------------------------------|-----|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, ICOL (LOW LEVEL) | OXYGEN DEMAND, ICOL (HIGH LEVEL) | OXYGEN DEMAND, BIOCHEM UNLIMITED 5 DAY | HAZ- MESS, BICARB- ONATE (MG/L AS CAO3) | HAZ- MESS, BICARB- ONATE (MG/L AS CAO3) | ACTIVITY TOTAL HEATED (MG/L AS H) | DATE | TIME | ACTIVITY (MG/L AS CAO3) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICARB- ONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CAO3) | |
| MAR , 1977 | 1415 | 1.008 | — | 160 | — | — | 950 | 430 | — | DEC , 1969 | — | — | 302 | 224 | 6540 | 90 | 216 | — | 177 |
| APR | 1420 | — | — | — | 308 | — | 930 | 390 | — | 24... | — | — | 172 | 146 | 5030 | 75 | 264 | 0 | 217 |
| JUN | 0945 | — | — | — | 341 | — | 730 | 190 | — | MAR , 1970 | — | — | 181 | 142 | 4920 | 65 | 270 | 0 | 221 |
| JUL | 1430 | — | — | — | 307 | — | 930 | 390 | — | 11... | — | — | 170 | 143 | 4870 | 73 | 190 | 0 | 156 |
| AUG | 0930 | — | — | — | 320 | — | 930 | 390 | — | 23... | — | — | 176 | 146 | 4850 | 72 | 264 | 0 | 217 |
| SEP | 1020 | — | — | — | 390 | — | 770 | 48 | — | 02... | — | — | 210 | 146 | 5000 | 80 | 275 | 0 | 226 |
| SEP | 1610 | 1.807 | — | — | 290 | — | 760 | 0 | — | 04... | — | — | 190 | 145 | 4700 | 80 | 266 | 0 | 218 |
| OCT | 1600 | — | — | — | 500 | — | 740 | 0 | — | JAN , 1971 | — | — | 178 | 137 | 4720 | 72 | 266 | 0 | 218 |
| DEC | 1500 | — | — | — | 600 | — | 610 | 0 | — | MAR | 1201 | — | 178 | 137 | 4720 | 72 | 266 | — | 218 |
| FEB , 1970 | 1530 | — | — | — | — | — | 930 | 240 | — | 16... | 1202 | — | 170 | 146 | — | — | 277 | 0 | 227 |
| MAR | 1550 | 1.007 | — | — | 400 | — | 830 | 90 | — | APR | 1203 | — | 173 | 147 | 4660 | 65 | 271 | 0 | 222 |
| MAY | 0930 | — | — | — | 530 | — | 690 | 0 | — | MAY | — | — | 173 | 147 | — | — | 272 | 0 | 223 |
| JUN | 1530 | — | — | — | 530 | — | 650 | 0 | — | 09... | — | — | 169 | 144 | — | — | 274 | 0 | 225 |
| AUG | 1600 | — | — | — | 335 | — | 660 | 0 | — | 07... | — | — | 158 | 130 | — | — | 268 | 0 | 220 |
| SEP | 1630 | 1.008 | — | — | 600 | — | 750 | 0 | — | AUG | — | — | 168 | 144 | — | — | 282 | 0 | 231 |
| OCT | 1500 | — | — | — | 540 | — | 680 | 0 | — | 11... | — | — | 162 | 146 | — | — | 271 | 0 | 222 |
| DEC | 1500 | — | — | — | 670 | — | 600 | 0 | — | 14... | — | — | 168 | 144 | — | — | 266 | 0 | 218 |
| JAN , 1979 | 1545 | — | — | — | 430 | — | 930 | 420 | — | 11... | — | — | 168 | 148 | — | — | 269 | 0 | 220 |
| MAR | 1630 | 1.010 | — | — | 400 | — | 1000 | 510 | — | 09... | — | — | 169 | 144 | — | — | 266 | 0 | 218 |
| APR | 1600 | — | — | — | 430 | — | 800 | 390 | — | JAN , 1972 | 0930 | — | 166 | 147 | — | — | 261 | 0 | 214 |
| JUN | 1445 | — | — | — | 400 | — | 690 | 0 | — | 04... | 1600 | — | 170 | 153 | 4700 | 68 | 267 | 0 | 219 |
| AUG | 1300 | — | — | — | 500 | — | 790 | 110 | — | MAR | 1520 | — | 160 | 150 | 4800 | — | 262 | 0 | 215 |
| SEP | 1430 | 1.010 | — | — | — | — | 830 | 150 | — | APR | 1600 | — | 168 | 150 | — | — | 269 | 0 | 221 |
| OCT | 1030 | — | — | — | 500 | — | 810 | 130 | — | MAY | 1445 | — | 190 | 140 | — | — | 266 | 0 | 218 |
| JAN , 1980 | 1400 | 1.008 | — | — | 190 | — | 940 | 470 | 2.2 | JUN | 1325 | — | 190 | 140 | — | — | 266 | 0 | 218 |
| MAR | 1500 | — | — | — | 300 | — | 970 | 490 | — | 13... | 1345 | — | 190 | 150 | — | — | 266 | 0 | 218 |
| APR | 1530 | — | — | — | 460 | — | 810 | 180 | — | 12... | 1345 | — | 190 | 150 | — | — | 266 | 0 | 218 |
| JUN | 1200 | 1.007 | — | — | 240 | — | 830 | 300 | 2.0 | — | — | — | — | — | — | — | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

303417087141701 - South monitor, Mesquite.

303417087141701 - South monitor, Mesquite.

| DATE | TIME | ACIDITY (MG/L AS CaCO3) | CALCIUM DIS- SOLVED (MG/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) | SODIUM, DIS- SOLVED (MG/L AS Na) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CaCO3) |
|------------|------|----------------------------------|--|--|--|---|---------------------------------------|------------------------------------|--|
| AUG., 1972 | | | | | | | | | |
| SEP... | 1624 | — | 210 | 180 | — | — | 267 | 0 | 219 |
| SEP... | 0900 | — | 170 | 150 | 5200 | 110 | 268 | 0 | 220 |
| OCT... | | — | 280 | 170 | — | — | 269 | 0 | 221 |
| NOV... | 1623 | — | 190 | 170 | — | — | 274 | 0 | 225 |
| DEC... | 1335 | — | 189 | 150 | — | — | 268 | 0 | 220 |
| JAN., 1973 | 1310 | — | 190 | 150 | — | — | 278 | 0 | 228 |
| FEB... | 1650 | — | 220 | 160 | — | — | 280 | 0 | 230 |
| MAR... | 1640 | — | 270 | 220 | 5000 | 110 | 280 | 0 | 230 |
| APR... | 0950 | — | 190 | 160 | — | — | 282 | 0 | 231 |
| MAY... | 0945 | — | 200 | 160 | — | — | 276 | 0 | 226 |
| JUN... | 0915 | — | 280 | 160 | — | — | 281 | 0 | 230 |
| JUL... | 1740 | — | 180 | 140 | — | — | 282 | 0 | 231 |
| AUG... | 1720 | — | 205 | 170 | — | — | 285 | 0 | 234 |
| SEP... | 1055 | — | 170 | 130 | 4600 | 74 | 282 | 0 | 231 |
| OCT... | 1650 | — | 180 | 160 | — | — | 284 | 0 | 233 |
| NOV... | 1010 | — | 200 | 190 | — | — | 284 | 0 | 233 |
| DEC... | 1320 | — | 180 | 180 | 5700 | 140 | — | — | — |
| JAN., 1974 | 1530 | — | 180 | 180 | 5700 | 200 | 290 | 0 | 238 |
| FEB... | 1640 | — | 180 | 160 | — | — | 294 | 0 | 241 |
| MAR... | 1640 | — | 170 | 150 | — | — | 300 | 0 | 246 |
| APR... | 1710 | — | 160 | 140 | 4800 | 100 | 306 | 0 | 251 |
| MAY... | 1420 | — | 170 | 130 | — | — | 315 | 0 | 258 |
| JUN... | 1340 | — | 140 | 130 | — | — | 329 | 0 | 270 |
| JUL... | 1410 | — | 160 | 130 | — | — | 342 | 0 | 281 |
| AUG... | 1310 | — | 150 | 140 | — | — | 357 | 0 | 293 |
| SEP... | | — | 150 | 120 | — | — | 360 | 0 | 295 |
| OCT... | 1000 | — | 130 | 140 | 4600 | 90 | 372 | 0 | 305 |
| NOV... | 1310 | — | 150 | 140 | — | — | 397 | 0 | 326 |
| DEC... | 0940 | — | 150 | 140 | — | — | 412 | 0 | 338 |
| JAN., 1975 | 1540 | — | 160 | 130 | — | — | 421 | 0 | 345 |
| FEB... | 1525 | — | 150 | 140 | — | — | 442 | 0 | 363 |
| MAR... | 0925 | — | 160 | 140 | — | — | 445 | 0 | 365 |
| APR... | 0935 | — | 150 | 140 | — | — | 442 | 0 | 363 |
| MAY... | 0915 | — | 160 | 140 | 4700 | 100 | 448 | 0 | 367 |
| JUN... | 0910 | — | 160 | 134 | — | — | 462 | 0 | 379 |
| JUL... | 0830 | — | 152 | 128 | — | — | 466 | 0 | 382 |
| AUG... | 0945 | — | 160 | 140 | — | — | 479 | 0 | 393 |
| SEP... | 1320 | — | 150 | 130 | — | — | 491 | 0 | 403 |
| OCT... | 1610 | — | 160 | 140 | — | — | 502 | 0 | 412 |
| NOV... | 0950 | — | 170 | 130 | 4700 | 81 | 512 | 0 | 420 |
| DEC... | 1000 | — | 140 | 140 | — | — | 524 | 0 | 430 |
| JAN., 1976 | 0855 | — | 140 | 130 | — | — | 529 | 0 | 434 |
| FEB... | 1515 | — | 150 | 130 | — | — | 542 | 0 | 445 |
| MAR... | 1520 | — | 150 | 130 | — | — | 559 | 0 | 458 |
| APR... | 1640 | — | 150 | 140 | — | — | 574 | 0 | 471 |
| MAY... | 0940 | — | 160 | 140 | 4800 | 78 | 584 | 0 | 479 |
| JUN... | 0905 | — | 150 | 140 | — | — | 594 | 0 | 487 |
| JUL... | 0955 | — | 150 | 140 | — | — | 599 | 0 | 491 |
| AUG... | 1325 | — | 140 | 130 | — | — | 605 | 0 | 496 |
| SEP... | 0925 | — | 150 | 140 | — | — | 614 | 0 | 504 |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Monsanto. | | | | | | | | | | 303417087141701 - South monitor, Monsanto. | | | | | | | | | |
|--|------|----------------------------------|--|--|--|---|--|------------------------------------|--|--|------|----------------------------------|--|--|--|---|--|------------------------------------|--|
| DATE | TIME | ACIDITY (MG/L AS CaCO3) | CALCIUM DIS- SOLVED (MG/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) | SODIUM, DIS- SOLVED (MG/L AS Na) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CaCO3) | DATE | TIME | ACIDITY (MG/L AS CaCO3) | CALCIUM DIS- SOLVED (MG/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) | SODIUM, DIS- SOLVED (MG/L AS Na) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CaCO3) |
| AUG , 1976 | | | | | | | | | | MAR , 1979 | | | | | | | | | |
| 18... | 0945 | — | 130 | 130 | — | — | 622 | 0 | 510 | 08... | 1630 | — | 160 | 140 | 4800 | 76 | 596 | 0 | 489 |
| SEP | | | | | | | | | | APR | | | | | | | | | |
| 14... | 1630 | — | 160 | 140 | 4800 | 120 | 630 | 0 | 517 | 23... | 1600 | — | 140 | 130 | — | — | 595 | 0 | 488 |
| OCT | | | | | | | | | | JUN | | | | | | | | | |
| 20... | 1630 | — | 150 | 140 | — | — | 639 | 0 | 524 | 05... | 1445 | — | 110 | 100 | — | — | 854 | 0 | 700 |
| NOV | | | | | | | | | | AUG | | | | | | | | | |
| 18... | 0950 | — | 150 | 140 | — | — | 638 | 0 | 523 | 01... | 1300 | — | 100 | 130 | — | — | 835 | 0 | 685 |
| DEC | | | | | | | | | | SEP | | | | | | | | | |
| 16... | 1425 | — | 150 | 140 | — | — | 628 | 0 | 515 | 19... | 1430 | — | 110 | 130 | 4300 | 69 | 822 | 0 | 674 |
| JAN , 1977 | | | | | | | | | | NOV | | | | | | | | | |
| 19... | 1115 | — | 140 | 130 | — | — | 610 | 0 | 500 | 08... | 1030 | — | 110 | 130 | — | — | 824 | 0 | 680 |
| FEB | | | | | | | | | | JAN , 1980 | | | | | | | | | |
| 23... | 1400 | — | 140 | 140 | — | — | 639 | 0 | 524 | 21... | 1400 | 109 | 140 | 140 | 4600 | 93 | 580 | 0 | 476 |
| MAR | | | | | | | | | | MAR | | | | | | | | | |
| 22... | 1415 | — | 140 | 140 | 4700 | 74 | 636 | 0 | 522 | 20... | 1500 | — | 140 | 150 | — | — | 588 | 0 | 480 |
| APR | | | | | | | | | | APR | | | | | | | | | |
| 21... | 1420 | — | 140 | 140 | — | — | 656 | 0 | 538 | 30... | 1530 | — | 110 | 130 | — | — | 770 | 0 | 632 |
| JUN | | | | | | | | | | JUN | | | | | | | | | |
| 16... | 0945 | — | 100 | 110 | 4800 | 75 | 649 | 0 | 532 | 26... | 1200 | 99 | 110 | 130 | 4100 | 70 | 748 | 0 | 610 |
| JUL | | | | | | | | | | | | | | | | | | | |
| 18... | 1430 | — | 140 | 140 | — | — | 656 | 0 | 538 | | | | | | | | | | |
| AUG | | | | | | | | | | | | | | | | | | | |
| 0930 | | — | 140 | 140 | — | — | 649 | 0 | 532 | | | | | | | | | | |
| 19... | 1020 | — | 110 | 120 | — | — | 879 | 0 | 721 | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | | | |
| 21... | 1610 | — | 100 | 120 | 4300 | 82 | 977 | 0 | 801 | | | | | | | | | | |
| OCT | | | | | | | | | | | | | | | | | | | |
| 27... | 1600 | — | 100 | 120 | — | — | 983 | 0 | 806 | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | | | |
| 14... | 1500 | — | 80 | 100 | — | — | 969 | 0 | 795 | | | | | | | | | | |
| FEB , 1978 | | | | | | | | | | | | | | | | | | | |
| 08... | 1530 | — | 140 | 140 | — | — | 842 | 0 | 691 | | | | | | | | | | |
| MAR | | | | | | | | | | | | | | | | | | | |
| 22... | 1550 | — | 110 | 130 | 4400 | 71 | 892 | 0 | 732 | | | | | | | | | | |
| MAY | | | | | | | | | | | | | | | | | | | |
| 04... | 0930 | — | 80 | 120 | — | — | 945 | 0 | 775 | | | | | | | | | | |
| JUN | | | | | | | | | | | | | | | | | | | |
| 14... | 1530 | — | 94 | 100 | — | — | 933 | 0 | 765 | | | | | | | | | | |
| AUG | | | | | | | | | | | | | | | | | | | |
| 02... | 1600 | — | 82 | 110 | — | — | 930 | 0 | 763 | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | | | |
| 21... | 1630 | — | 96 | 120 | 4600 | 70 | 972 | 0 | 797 | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | | | | | | |
| 08... | 1500 | — | 90 | 110 | — | — | 921 | 0 | 755 | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | | | |
| 13... | 1500 | — | 76 | 100 | — | — | 905 | 0 | 742 | | | | | | | | | | |
| JAN , 1979 | | | | | | | | | | | | | | | | | | | |
| 24... | 1545 | — | 140 | 140 | — | — | 617 | 0 | 506 | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Massachusetts. | | | | | | | | | | | | | |
|---|------|--|---|---|--|--|--|--|--|--|--|--|--|
| DATE | TIME | CHLORIDE DIS- SOLVED (MG/L) AS CL2 | SULFATE DIS- SOLVED (MG/L) AS SO4 | CHLORIDE, RIDE, DIS- SOLVED (MG/L) AS CL | FLUORIDE, RIDE, DIS- SOLVED (MG/L) AS F | SILICA, DIS- SOLVED (MG/L) AS SiO2 | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUN OF CONSTITUENTS, DIS- SOLVED (MG/L) | SOLIDS, SUN OF CONSTITUENTS, DIS- SOLVED (MG/L) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SILICA, DIS- SOLVED (MG/L) AS SiO2 | FLUORIDE, RIDE, DIS- SOLVED (MG/L) AS F | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) |
| DEC., 1969 | | | | | | | | | | | | | |
| 23... | | — | — | — | — | — | — | — | — | — | — | — | — |
| 24... | | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR., 1970 | | | | | | | | | | | | | |
| 11... | | 22 | — | — | — | — | — | — | — | — | — | — | — |
| JUN. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 23... | | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 10... | | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV. | | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN., 1971 | | | | | | | | | | | | | |
| 04... | | 22 | — | — | — | — | — | — | — | — | — | — | — |
| 19... | | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 1201 | | 21 | — | — | — | — | — | — | — | — | — | — | — |
| 1202 | | — | — | — | — | — | — | — | — | — | — | — | — |
| 1203 | | — | — | — | — | — | — | — | — | — | — | — | — |
| APR. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 16... | | 18 | — | — | — | — | — | — | — | — | — | — | — |
| MAY | | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | | 14 | — | — | — | — | — | — | — | — | — | — | — |
| JUN. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 07... | | 17 | — | — | — | — | — | — | — | — | — | — | — |
| JUL. | | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 11... | | 14 | — | — | — | — | — | — | — | — | — | — | — |
| SEP. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 16... | | 36 | — | — | — | — | — | — | — | — | — | — | — |
| OCT. | | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV. | | 34 | — | — | — | — | — | — | — | — | — | — | — |
| DEC. | | 11 | — | — | — | — | — | — | — | — | — | — | — |
| JAN., 1972 | | — | — | — | — | — | — | — | — | — | — | — | — |
| 07... | | 17 | — | — | — | — | — | — | — | — | — | — | — |
| 04... | | 21 | — | — | — | — | — | — | — | — | — | — | — |
| FEB. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 10... | | 21 | — | — | — | — | — | — | — | — | — | — | — |
| MAR. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 06... | | 21 | — | — | — | — | — | — | — | — | — | — | — |
| APR. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 10... | | 21 | — | — | — | — | — | — | — | — | — | — | — |
| MAY | | 17 | — | — | — | — | — | — | — | — | — | — | — |
| 15... | | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | | 21 | — | — | — | — | — | — | — | — | — | — | — |
| JUL. | | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | | 21 | — | — | — | — | — | — | — | — | — | — | — |
| 1395 | | 21 | — | — | — | — | — | — | — | — | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Mesquite. | | | | | | | | | | | |
|--|------|---------------------------------------|---|---|--|---|--|---|---|-----------|------|
| DATE | TIME | CARBON DIOXIDE (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL- ORIDE, DIS- SOLVED (MG/L AS CL) | FLU- ORIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L) | DATE | TIME |
| 416... 1974 | 0950 | 29 | — | 8000 | — | — | — | — | — | FEB | 1400 |
| 15... SEP | 1000 | 30 | — | 8000 | 2.9 | 19 | 15600 | — | — | MAR | 1415 |
| 18... OCT | 1310 | 32 | — | 8200 | — | — | — | — | — | APR | 1420 |
| 15... NOV | 0940 | 33 | — | 7000 | — | — | — | — | — | JUN | 0945 |
| 19... DEC | 1540 | 34 | — | 8000 | — | — | — | — | — | JUL | 1430 |
| 17... JAN, 1975 | 1525 | 35 | — | 7800 | — | — | — | — | — | AUG | 0930 |
| 15... FEB | 0925 | 36 | — | 7800 | — | — | — | — | — | SEP | 1020 |
| 19... MAR | 0925 | 38 | — | 7800 | — | — | — | — | — | OCT | 1610 |
| 12... APR | 0915 | 36 | — | 7700 | 2.8 | 20 | 13500 | — | — | NOV | 1600 |
| 17... MAY | 0910 | 37 | — | 7600 | — | — | — | — | — | DEC | 1500 |
| 13... JUN | 0830 | 37 | — | 7800 | — | — | — | — | — | FEB, 1976 | 1530 |
| 18... JUL | 0945 | 48 | — | 7700 | — | — | — | — | — | MAR | 1550 |
| 16... AUG | 1520 | 39 | — | 7700 | 2.8 | 20 | — | — | — | MAY | 0930 |
| 19... SEP | 1610 | 51 | — | 7600 | 2.8 | — | — | — | — | JUN | 1530 |
| 16... OCT | 0950 | 41 | — | 7600 | 3.0 | 20 | 15000 | — | — | AUG | 1600 |
| 15... NOV | 1000 | 42 | — | 7600 | — | — | — | — | — | SEP | 1650 |
| 18... DEC | 0855 | 53 | — | 7700 | — | — | — | — | — | NOV | 1500 |
| 16... JAN, 1976 | 1515 | 43 | — | 7500 | — | — | — | — | — | DEC | 1500 |
| 22... FEB | 1520 | 45 | — | 7600 | — | — | — | — | — | JAN, 1977 | 1545 |
| 23... MAR | 1640 | 46 | — | 7600 | — | — | — | — | — | MAR | 1630 |
| 20... APR | 0940 | 59 | — | 7600 | 3.0 | 20 | 13200 | — | — | APR | 1600 |
| 27... MAY | 0945 | 60 | — | 8200 | — | — | — | — | — | JUN | 1445 |
| 14... JUN | 0955 | 48 | — | 7800 | — | — | — | — | — | AUG | 1300 |
| 22... JUL | 1325 | 49 | — | 7700 | — | — | — | — | — | SEP | 1430 |
| 20... AUG | 0925 | 62 | — | 7600 | — | — | — | — | — | NOV | 1030 |
| 18... SEP | 0945 | 63 | — | 7700 | — | — | — | — | — | JAN, 1980 | 1400 |
| 20... OCT | 1420 | 64 | — | 7900 | 3.3 | 14 | 13500 | — | — | MAR | 1500 |
| 20... NOV | 1430 | 51 | — | 7600 | — | — | — | — | — | APR | 1530 |
| 18... DEC | 0950 | 51 | — | 7600 | — | — | — | — | — | JUN | 1200 |
| 16... JAN, 1977 | 1425 | 50 | — | 7500 | — | — | — | — | — | | |
| 19... FEB | 1115 | 62 | — | 7700 | — | — | — | — | — | | |

| 303417087141701 - South monitor, Mesquite. | | | | | | | | | | | |
|--|------|---------------------------------------|---|---|--|---|--|---|---|------|------|
| DATE | TIME | CARBON DIOXIDE (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL- ORIDE, DIS- SOLVED (MG/L AS CL) | FLU- ORIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C (MG/L) | DATE | TIME |
| 15... FEB | 1400 | 51 | — | 7600 | — | — | — | — | — | FEB | 1400 |
| 22... MAR | 1415 | 51 | — | 7600 | 2.9 | 21 | 13400 | — | — | MAR | 1415 |
| 21... APR | 1420 | 53 | — | 7500 | — | — | — | — | — | APR | 1420 |
| 16... JUN | 0945 | 52 | — | 7600 | 2.8 | 21 | 13700 | — | — | JUN | 0945 |
| 18... JUL | 1430 | 53 | — | 7600 | — | — | — | — | — | JUL | 1430 |
| 19... AUG | 0930 | 66 | — | 7700 | — | — | — | — | — | SEP | 1020 |
| 21... SEP | 1610 | 62 | — | 6800 | 2.8 | 20 | 10200 | — | — | OCT | 1600 |
| 21... NOV | 1600 | 79 | — | 7300 | — | — | — | — | — | DEC | 1500 |
| 14... FEB, 1978 | 1530 | 85 | — | 7300 | — | — | — | — | — | MAR | 1550 |
| 22... MAY | 0930 | 76 | — | 6400 | — | — | — | — | — | JUN | 1530 |
| 14... AUG | 1600 | 75 | — | 6400 | — | — | — | — | — | SEP | 1650 |
| 21... NOV | 1650 | 98 | — | 7300 | 2.9 | 21 | 12500 | — | — | DEC | 1500 |
| 08... JAN, 1979 | 1545 | 99 | — | 7700 | — | — | — | — | — | FEB | 1545 |
| 08... MAR | 1630 | 60 | — | 7400 | 3.2 | 21 | 13400 | — | — | APR | 1600 |
| 23... JUN | 1445 | 86 | — | 5900 | — | — | — | — | — | JUN | 1445 |
| 01... SEP | 1300 | 67 | — | 7200 | — | — | — | — | — | SEP | 1300 |
| 19... NOV | 1430 | 83 | — | 6100 | 2.9 | 22 | 12300 | 11200 | — | DEC | 1500 |
| 03... JAN, 1980 | 1400 | 74 | 28 | 7700 | 2.7 | 26 | 13400 | 13000 | — | MAR | 1500 |
| 20... APR | 1530 | 47 | — | 7000 | — | — | — | — | — | MAY | 1430 |
| 30... JUN | 1200 | 65 | 21 | 7200 | 3.0 | 22 | 12200 | 12100 | — | JUN | 1200 |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Messaate. | | | | | | | | | | | | | | | | 303417087141701 - South monitor, Messaate. | | | | | | | | | | | | | | | |
|--|------|--|---|---|--|---|---|-----------|------|--|---|---|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | SOLIDS, RESIDUE AT 100 DEG. C, TOTAL (MG/L) | SOLIDS, VOL-A- TILE ON ION- TOM, TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L) | NITRO- GEN, AMMONIA TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) | DATE | TIME | SOLIDS, RESIDUE AT 100 DEG. C, TOTAL (MG/L) | SOLIDS, VOL-A- TILE ON ION- TOM, TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L) | NITRO- GEN, AMMONIA TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) | | | | | | | | | | | | | | | | |
| DEC 1969 | | | | | | | | SEP 1972 | | | | | | | | | | | | | | | | | | | | | | | |
| 23... | | | | | | | | 14... | 0900 | | | | | | | | | | | | | | | | | | | | | | |
| MAR 1970 | | | | | | | | OCT 19... | 1625 | | | | | | | | | | | | | | | | | | | | | | |
| JUN 11... | | | | | | | | MAY 15... | 1535 | | | | | | | | | | | | | | | | | | | | | | |
| 23... | | | | | | | | DEC 12... | 1310 | | | | | | | | | | | | | | | | | | | | | | |
| SEP 02... | | | | | | | | JAN 1973 | 1650 | | | | | | | | | | | | | | | | | | | | | | |
| MAY 04... | | | | | | | | FEB 17... | 1640 | | | | | | | | | | | | | | | | | | | | | | |
| JUN 19... | | | | | | | | MAR 14... | 1640 | | | | | | | | | | | | | | | | | | | | | | |
| MAR 14... | 1201 | | | | | | | APR 14... | 0950 | | | | | | | | | | | | | | | | | | | | | | |
| APR 14... | | | | | | | | MAY 16... | 0945 | | | | | | | | | | | | | | | | | | | | | | |
| MAY 13... | | | | | | | | JUN 13... | 0915 | | | | | | | | | | | | | | | | | | | | | | |
| JUN 09... | | | | | | | | JUL 18... | 1740 | | | | | | | | | | | | | | | | | | | | | | |
| JUL 07... | | | | | | | | AUG 22... | 1720 | | | | | | | | | | | | | | | | | | | | | | |
| AUG 11... | | | | | | | | SEP 12... | 1055 | | | | | | | | | | | | | | | | | | | | | | |
| SEP 14... | | | | | | | | OCT 10... | 1630 | | | | | | | | | | | | | | | | | | | | | | |
| OCT 14... | | | | | | | | NOV 14... | 1010 | | | | | | | | | | | | | | | | | | | | | | |
| NOV 11... | | | | | | | | DEC 11... | 1330 | | | | | | | | | | | | | | | | | | | | | | |
| DEC 09... | | | | | | | | JAN 1974 | 1530 | | | | | | | | | | | | | | | | | | | | | | |
| JAN 04... | | | | | | | | FEB 14... | 1640 | | | | | | | | | | | | | | | | | | | | | | |
| FEB 10... | 0930 | | | | | | | MAR 19... | 1640 | | | | | | | | | | | | | | | | | | | | | | |
| MAR 06... | 1600 | | | | | | | APR 18... | 1710 | | | | | | | | | | | | | | | | | | | | | | |
| APR 10... | 1320 | | | | | | | MAY 17... | 1420 | | | | | | | | | | | | | | | | | | | | | | |
| MAY 15... | 1445 | | | | | | | JUN 22... | 1340 | | | | | | | | | | | | | | | | | | | | | | |
| JUN 13... | 1325 | | | | | | | JUL 20... | 1410 | | | | | | | | | | | | | | | | | | | | | | |
| JUL 12... | 1345 | | | | | | | AUG 30... | 1310 | | | | | | | | | | | | | | | | | | | | | | |
| AUG 09... | 1624 | | | | | | | SEP 15... | 0950 | | | | | | | | | | | | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Mesquite. | | | | | | | | | | | | | |
|--|------|--|---|--|---|--|---|-----------|------|--|---|--|---|
| DATE | TIME | SOLIDS, RESIDUE AT 100 DEG. C, TOTAL (MG/L) | SOLIDS, VOL-A- TILE ON ION- TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L) | DATE | TIME | SOLIDS, RESIDUE AT 100 DEG. C, TOTAL (MG/L) | SOLIDS, VOL-A- TILE ON ION- TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L) |
| SEP, 1974 | 1000 | — | — | .00 | — | 10.000 | — | JAN, 1977 | 1115 | — | — | .00 | — |
| OCT | 1310 | — | — | .00 | — | 9.400 | — | FEB | 1400 | — | — | .00 | — |
| NOV | 0940 | — | — | .00 | — | 10.000 | — | MAR | 1415 | — | — | .01 | — |
| DEC | 1540 | — | — | .00 | — | 10.000 | — | APR | 1420 | — | — | .00 | — |
| JAN, 1975 | 1525 | — | — | .00 | — | 9.200 | — | JUN | 0945 | — | — | .00 | — |
| FEB | 0925 | — | — | .00 | — | 8.900 | — | JUL | 1430 | — | — | .01 | — |
| MAR | 0935 | — | — | .00 | — | 9.500 | — | AUG | 0930 | — | — | .00 | — |
| APR | 0915 | — | — | .00 | — | 8.000 | — | SEP | 1020 | — | — | .01 | — |
| MAY | 0910 | — | — | .01 | — | 8.900 | — | OCT | 1610 | — | — | .00 | — |
| JUN | 0830 | — | — | .00 | — | 8.700 | — | NOV | 1600 | — | — | .00 | — |
| JUL | 0945 | — | — | .00 | — | 10.000 | — | DEC | 1300 | — | — | .00 | — |
| AUG | 1520 | — | — | .00 | — | 9.300 | — | FEB, 1978 | 1530 | — | — | .01 | — |
| SEP | 1610 | — | — | .01 | — | 8.700 | — | MAR | 1550 | — | — | .00 | — |
| OCT | 0930 | — | — | .00 | — | 9.600 | — | APR | 0930 | — | — | .01 | — |
| NOV | 1000 | — | — | .00 | — | 9.300 | — | JUN | 1530 | — | — | .00 | — |
| DEC | 0835 | — | — | .01 | — | 10.000 | — | AUG | 1600 | — | — | .00 | — |
| JAN, 1976 | 1515 | — | — | .02 | — | 9.300 | — | SEP | 1630 | — | — | .00 | — |
| FEB | 1520 | — | — | .00 | — | 9.000 | — | NOV | 1500 | — | — | .00 | — |
| MAR | 1640 | — | — | .00 | — | 10.000 | — | DEC | 1500 | — | — | .00 | — |
| APR | 0840 | — | — | .00 | — | 9.300 | — | JAN, 1979 | 1545 | — | — | .00 | — |
| MAY | 0905 | — | — | .00 | — | 10.000 | — | MAR | 1630 | — | — | .00 | — |
| JUN | 0935 | — | — | .00 | — | 8.900 | — | APR | 1600 | — | — | .00 | — |
| JUL | 1325 | — | — | .00 | — | 9.500 | — | JUN | 1445 | — | — | .00 | — |
| AUG | 0925 | — | — | .00 | — | 9.400 | — | AUG | 1300 | — | — | .00 | — |
| SEP | 0945 | — | — | .00 | — | 10.000 | — | SEP | 1430 | — | — | .00 | — |
| OCT | 1630 | — | — | .00 | — | 10.000 | — | NOV | 1030 | — | — | .00 | — |
| NOV | 1630 | — | — | .00 | — | 9.300 | — | JAN, 1980 | 1400 | — | — | .00 | — |
| DEC | 0930 | — | — | .00 | — | 9.000 | — | MAR | 1500 | — | — | .00 | — |
| JAN | 1425 | — | — | .01 | — | 9.300 | — | APR | 1530 | — | — | .00 | — |
| | | | | | | | | JUN | 1200 | — | — | .00 | — |
| | | | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Massachusetts. | | | | | | | | | | | | | | |
|---|-------|--|--|---|--|---|--|-----------|------|--|--|---|---|--|
| DATE | TIME | NITRO- GEN. ORGANIC TOTAL (MG/L AS N) | NITRO- GEN. DIS- SOLVED (MG/L AS N) | PHOS- PHOS. TOTAL (MG/L AS P) | PHOS- PHOS. DIS- SOLVED (MG/L AS P) | PHOS- PHOS. ORTHOPH. DISSOL. (MG/L AS P) | ALUM- INUM, DISS- SOLVED (MG/L AS AL) | DATE | TIME | NITRO- GEN. ORGANIC TOTAL (MG/L AS N) | NITRO- GEN. DIS- SOLVED (MG/L AS N) | PHOS- PHOS. TOTAL (MG/L AS P) | PHOS- PHOS. ORTHOPH. DISSOL. (MG/L AS P) | ALUM- INUM, DISS- SOLVED (MG/L AS AL) |
| DEC, 1969 | 24... | 2.7 | — | — | — | .000 | — | NOV, 1972 | 1535 | .00 | — | — | — | — |
| MAR, 1970 | 11... | 2.1 | — | .000 | — | .000 | 460 | DEC | 1310 | .56 | — | — | — | — |
| JUN | 23... | — | — | .010 | — | .000 | — | JAN, 1973 | 1650 | .00 | — | — | — | — |
| NOV | 04... | 6.6 | — | .010 | — | .000 | 40 | FEB | 1640 | .15 | — | — | — | — |
| JAN, 1971 | 19... | 4.5 | — | .020 | — | .000 | — | MAR | 1640 | .06 | — | — | — | — |
| MAR | 1201 | 2.0 | — | .010 | — | — | — | APR | 0950 | .28 | — | — | — | — |
| APR | 1202 | — | — | — | — | — | 40 | MAY | 0945 | .00 | — | — | — | — |
| MAY | 1203 | — | — | — | — | — | 40 | JUN | 0915 | .08 | — | .015 | — | — |
| JUN | 16... | 5.1 | — | .010 | — | .010 | — | JUL | 1740 | .00 | — | — | — | — |
| JUL | 13... | — | — | .010 | — | .000 | — | AUG | 1720 | .58 | — | .020 | — | — |
| AUG | 09... | 5.0 | — | — | — | — | — | SEP | 1055 | .45 | — | .014 | — | — |
| SEP | 16... | .00 | — | — | — | — | — | OCT | 1650 | .07 | — | .036 | — | — |
| OCT | 14... | .00 | — | — | — | — | — | NOV | 1010 | .48 | — | .020 | — | — |
| NOV | 11... | .00 | — | — | — | — | — | DEC | 1330 | .12 | — | .022 | — | 10 |
| DEC | 09... | .78 | — | — | — | — | — | JAN, 1974 | 1530 | .12 | — | .020 | — | 20 |
| JAN, 1972 | 0930 | 5.4 | — | .010 | — | .000 | — | FEB | 1640 | .36 | — | .027 | — | — |
| FEB | 10... | .00 | — | — | — | — | — | MAR | 1640 | .20 | — | .020 | — | — |
| MAR | 1320 | .00 | — | — | — | — | — | APR | 1710 | .30 | — | .020 | — | — |
| APR | 1600 | .14 | — | — | — | — | — | MAY | 1420 | .59 | — | .000 | — | — |
| MAY | 1445 | .43 | — | — | — | .000 | — | JUN | 1340 | .01 | — | .020 | — | — |
| JUN | 1325 | .54 | — | — | — | .013 | — | JUL | 1410 | .10 | — | .020 | — | — |
| JUL | 1345 | 1.5 | — | — | — | — | — | AUG | 1310 | 1.7 | — | .040 | — | — |
| AUG | 1624 | .63 | — | — | — | .003 | — | SEP | 0950 | .10 | — | .040 | — | — |
| SEP | 0900 | .00 | — | .010 | — | .007 | — | OCT | 1000 | .00 | — | .010 | — | — |
| OCT | 1625 | .00 | — | — | — | — | — | OCT | 1310 | .59 | — | .020 | — | — |

Table 23. --Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Mensanto. | | | | | | | | | | | | | |
|--|------|--|--|--|--|---|-----------|------|--|--|--|--|---|
| DATE | TIME | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, DIS- SOLVED (MG/L AS N) | PHOS- PHORUS, DIS- SOLVED (MG/L AS P) | PHOS- PHORUS, ORTHOPH- OSPHATE TOTAL (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | DATE | TIME | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, DIS- SOLVED (MG/L AS N) | PHOS- PHORUS, DIS- SOLVED (MG/L AS P) | PHOS- PHORUS, ORTHOPH- OSPHATE TOTAL (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) |
| NOV, 1974 | | | | | | | FEB | 1400 | .40 | — | .020 | — | — |
| DEC 19... | 0940 | .87 | — | .010 | — | — | MAR 22... | | .20 | — | .020 | — | — |
| DEC 17... | 1540 | .00 | — | .010 | — | — | APR 22... | | 1.2 | — | .010 | — | — |
| JAN, 1975 | | | | | | | JUN 21... | | .80 | — | .020 | — | — |
| FEB 15... | 1525 | .70 | — | .010 | — | — | JUL 16... | 0945 | .37 | — | .020 | — | — |
| FEB 19... | 0925 | .60 | — | .020 | — | — | AUG 18... | 1430 | .60 | — | .020 | — | — |
| FEB 19... | 0935 | .90 | — | .020 | — | — | SEP 19... | 0930 | .50 | — | .030 | — | — |
| MAR 12... | 0915 | 1.4 | — | .020 | — | — | SEP 21... | 1610 | .10 | — | .060 | — | — |
| APR 17... | 0910 | 1.0 | — | .020 | — | — | OCT 07... | 1600 | .50 | — | .030 | — | — |
| MAY 13... | 0830 | .60 | — | .010 | — | — | DEC 27... | 1500 | .90 | — | .040 | — | — |
| JUN 18... | 0945 | .90 | — | .010 | — | — | FEB, 1978 | | .30 | — | .020 | — | — |
| JUL 14... | 1520 | 1.1 | — | .010 | — | — | MAR 08... | 1530 | 2.0 | — | .020 | — | — |
| AUG 15... | 1610 | 1.1 | — | .000 | — | — | MAR 22... | 1550 | .80 | — | .040 | — | — |
| SEP 15... | | .80 | — | .010 | — | — | MAY 04... | 0930 | 1.5 | — | .030 | — | — |
| OCT 14... | 0950 | .90 | — | .020 | — | — | JUN 14... | 1530 | 1.5 | — | .020 | — | — |
| NOV 15... | 1000 | .37 | — | .020 | — | — | AUG 02... | 1600 | 1.5 | — | .030 | — | — |
| NOV 18... | 0855 | .80 | — | .030 | — | — | SEP 02... | 1600 | 1.4 | — | .020 | — | — |
| DEC 16... | 1515 | 1.1 | — | .030 | — | — | NOV 21... | 1630 | .60 | — | .010 | — | — |
| JAN, 1976 | | | | | | | DEC 08... | 1500 | 1.6 | — | .020 | — | — |
| JAN 22... | 1320 | 1.5 | — | .010 | — | — | DEC 13... | 1500 | 2.3 | — | .030 | — | — |
| FEB 23... | 1640 | .60 | — | .020 | — | — | JAN, 1979 | | — | — | .020 | — | — |
| MAR 20... | 0840 | .70 | — | .020 | — | — | MAR 24... | 1545 | 2.1 | — | .040 | — | — |
| MAR 27... | 0905 | .40 | — | .020 | — | — | MAR 08... | 1630 | 1.6 | — | .020 | — | — |
| MAY 14... | 0955 | .50 | — | .020 | — | — | APR 23... | 1600 | 2.3 | — | .030 | — | — |
| JUN 22... | 1325 | .30 | — | .010 | — | — | JUN 03... | 1445 | .36 | — | — | — | — |
| JUL 20... | 0925 | .30 | — | .030 | — | — | AUG, 1979 | | 1.8 | — | .010 | — | — |
| AUG 18... | 0945 | .87 | — | .020 | — | — | SEP 01... | 1300 | 1.5 | — | .010 | — | — |
| SEP 14... | 1630 | .17 | — | .020 | — | — | NOV 19... | 1430 | 1.2 | — | .010 | — | — |
| OCT 14... | 1630 | .20 | — | .020 | — | — | DEC 08... | 1030 | 1.2 | — | .010 | — | — |
| NOV 18... | 0950 | .50 | — | .010 | — | — | JAN, 1980 | 1400 | 1.2 | — | .010 | — | — |
| DEC 14... | 1425 | .70 | — | .020 | — | — | MAR 21... | 1500 | 1.2 | — | .010 | — | — |
| JAN, 1977 | | | | | | | APR 30... | 1530 | 1.7 | — | .020 | — | — |
| JAN 19... | 1115 | | — | .020 | — | — | JUN 26... | 1200 | 1.5 | — | .020 | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Massachusetts. | | | | | | | | | | 303417087141701 - South monitor, Massachusetts. | | | | | | | | | |
|---|------|--|---|--|---|--|--|--|--|---|------|--|---|--|---|--|--|--|--|
| DATE | TIME | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM DIS- SOLVED (UG/L AS BA) | BORON TOTAL REDUC- IBLE (UG/L AS B) | BORON DIS- SOLVED (UG/L AS B) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM DIS- SOLVED (UG/L AS CR) | CHRO- MIUM HEXA- VALENT, DIS- SOLVED (UG/L AS CR) | COPPER, DIS- SOLVED (UG/L AS CU) | DATE | TIME | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM DIS- SOLVED (UG/L AS BA) | BORON TOTAL REDUC- IBLE (UG/L AS B) | BORON DIS- SOLVED (UG/L AS B) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM DIS- SOLVED (UG/L AS CR) | CHRO- MIUM HEXA- VALENT, DIS- SOLVED (UG/L AS CR) | COPPER, DIS- SOLVED (UG/L AS CU) |
| DEC., 1969 | | | | | | | | | | JAN., 1973 | | | | | | | | | |
| 22... | | | | | 7100 | | | | | 17... | 1630 | | | 5000 | 5000 | | | | |
| MAR., 1970 | | | | | 5100 | | | | | FEB. | 1640 | | | 5100 | 5100 | | | | |
| JUN. | | 0 | 140 | | 5500 | | | 20 | 30 | MAR. | 1640 | | | 4900 | 4900 | | | | 50 |
| 23... | | | | | 5900 | | | | | APR. | 0950 | | | 5100 | | | | | |
| 02... | | | | | 5400 | | | 0 | 0 | MAY | 0945 | | | 5200 | 5200 | | | | |
| 04... | | | | | 5500 | | | | | SEP. | 1035 | | | 0 | | | | | |
| JAN., 1971 | | | | | 4300 | | | 10 | 0 | DEC. | 1230 | | | | | 0 | 0 | 0 | 0 |
| MAR. | 1201 | 0 | | | 4300 | | | | 0 | 11... | 1530 | | | | | 0 | 0 | 0 | 0 |
| 16... | 1202 | | | | 4300 | | | | 0 | 11... | 1530 | | | | | | | | |
| 16... | 1203 | | | | 6100 | | | | 0 | MAR., 1974 | 1710 | | | | 6000 | | | | 1 |
| MAY | | | | | 5100 | | | | | SEP. | 1000 | | | | 6000 | | | | 2 |
| 13... | | | | | 5200 | | | | 0 | MAR., 1975 | 0915 | | | | | | | | 0 |
| JUL. | | | | | 5100 | | | | | APR. | 0910 | | | | 10000 | | | | |
| 07... | | | | | 5100 | | | | | SEP. | 0950 | | | | 2900 | | | | 0 |
| 16... | | | | | 4600 | | | | 0 | MAR., 1976 | 0640 | | | | 3800 | | | | 0 |
| NOV | | | | | 5100 | | | | 0 | SEP. | 0640 | | | | 9600 | | | | 1 |
| JAN., 1972 | 0930 | | | | 4800 | | | | 20 | 14... | 1630 | | | | 12000 | | | | 0 |
| MAR. | 1520 | | | | 5400 | | | | | 22... | 1415 | | | | 12000 | | | | 0 |
| APR. | 1600 | | | 5400 | 5100 | | | | | SEP. | 1610 | | | | 4400 | | | | 0 |
| 10... | | | | 5100 | 5100 | | | | | MAR., 1978 | 1550 | | | | 5000 | | | | 0 |
| 15... | 1445 | | | 5200 | 5300 | | | | | SEP. | 1650 | | | | 11000 | | | | 0 |
| JUN | 1325 | | | 5200 | 5300 | | | | | MAR., 1979 | 1630 | | | | 3900 | | | | 0 |
| JUL | 1345 | | | 5200 | 5200 | | | | | SEP. | 1430 | | | | 3200 | | | | 0 |
| AUG | 1624 | | | 5200 | 5200 | | | | 20 | JAN., 1980 | 1400 | | | | 9100 | | | | 2 |
| 09... | 0900 | | | 5200 | 5200 | | | | | JUN. | 1200 | | | | | | | | |
| 14... | | | | 5200 | 5200 | | | | | 26... | | | | | | | | | |
| 18... | 1625 | | | 5200 | 5200 | | | | | | | | | | | | | | |
| NOV | 1535 | | | 5200 | 5200 | | | | | | | | | | | | | | |
| DEC | 1310 | | | 5200 | 5200 | | | | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Monsanto. | | | | | | | | | | | | | | | | | |
|--|------|--------------------------------------|-------|---|-------|------------------------------|-------|------------------------------|-------|---------------------------------|-------|------------------------------------|-------|------------------------------------|-------|------------------------------|-------|
| DATE | TIME | IRON, TOTAL RECOV-ERABLE (U/L AS FE) | | IRON, SUS-PENDED RECOV-ERABLE (U/L AS FE) | | IRON, DIS-SOLVED (U/L AS FE) | | LEAD, DIS-SOLVED (U/L AS PB) | | LITHIUM, DIS-SOLVED (U/L AS LI) | | MANGA-NESE, DIS-SOLVED (U/L AS MN) | | STRON-TIUM, DIS-SOLVED (U/L AS SR) | | ZINC, DIS-SOLVED (U/L AS ZN) | |
| | | AS FE | AS FE | AS FE | AS FE | AS FE | AS FE | AS PB | AS PB | AS LI | AS LI | AS MN | AS MN | AS SR | AS SR | AS ZN | AS ZN |
| DEC, 1969 | | | | | | | | | | | | | | | | | |
| 23... | | | | | | | | | | | | | | | | | |
| 24... | | | | | | | | | | | | | | | | | |
| MAR, 1970 | | | | | | | | | | | | | | | | | |
| 11... | | | | | | 1700 | | 10 | | 0 | | 10 | | 22000 | | 30 | |
| JUN | | | | | | | | | | | | | | | | | |
| 23... | | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 02... | | | | | | | | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | | | | |
| 04... | | | | | | | | | | | | | | | | | |
| JAN, 1971 | | | | | | | | | | | | | | | | | |
| 19... | | | | | | | | | | | | | | | | | |
| MAR | | | | | | | | | | | | | | | | | |
| 16... | 1201 | | | | | 1500 | | | | | | 10 | | 20000 | | 30 | |
| 18... | 1202 | | | | | | | | | | | | | | | | |
| 18... | 1203 | | | | | | | | | | | | | | | | |
| MAY | | | | | | | | | | | | | | | | | |
| 13... | | | | | | | | | | | | | | | | | |
| JUN | | | | | | | | | | | | | | | | | |
| 09... | | | | | | | | | | | | | | | | | |
| JUL | | | | | | | | | | | | | | | | | |
| 07... | | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 16... | | | | | | | | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | | | | |
| 11... | | | | | | | | | | | | | | | | | |
| JAN, 1972 | | | | | | | | | | | | | | | | | |
| 04... | 0930 | | | | | | | | | | | | | | | | |
| MAR | | | | | | | | | | | | | | | | | |
| 06... | 1520 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 14... | 0900 | | | | | | | | | | | | | | | | |
| MAR, 1973 | | | | | | | | | | | | | | | | | |
| 14... | 1640 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 12... | 1055 | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | |
| 11... | 1330 | | | | | | | | | | | | | | | | |
| 11... | 1530 | | | | | | | | | | | | | | | | |
| MAR, 1974 | | | | | | | | | | | | | | | | | |
| 18... | 1710 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 18... | 1000 | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | |
| 17... | 1540 | | | | | | | | | | | | | | | | |
| MAR, 1975 | | | | | | | | | | | | | | | | | |
| 12... | 0915 | | | | | | | | | | | | | | | | |
| 12... | | | | | | | | | | | | | | | | | |

| 303417087141701 - South monitor, Monsanto. | | | | | | | | | | | | | | | | | |
|--|------|--------------------------------------|-------|---|-------|------------------------------|-------|------------------------------|-------|---------------------------------|-------|------------------------------------|-------|------------------------------------|-------|------------------------------|-------|
| DATE | TIME | IRON, TOTAL RECOV-ERABLE (U/L AS FE) | | IRON, SUS-PENDED RECOV-ERABLE (U/L AS FE) | | IRON, DIS-SOLVED (U/L AS FE) | | LEAD, DIS-SOLVED (U/L AS PB) | | LITHIUM, DIS-SOLVED (U/L AS LI) | | MANGA-NESE, DIS-SOLVED (U/L AS MN) | | STRON-TIUM, DIS-SOLVED (U/L AS SR) | | ZINC, DIS-SOLVED (U/L AS ZN) | |
| | | AS FE | AS FE | AS FE | AS FE | AS FE | AS FE | AS PB | AS PB | AS LI | AS LI | AS MN | AS MN | AS SR | AS SR | AS ZN | AS ZN |
| SEP, 1975 | | | | | | | | | | | | | | | | | |
| 16... | 0950 | | | | | | | | | | | | | | | | |
| MAR, 1976 | | | | | | | | | | | | | | | | | |
| 20... | 0840 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 16... | 1630 | | | | | | | | | | | | | | | | |
| MAR, 1977 | | | | | | | | | | | | | | | | | |
| 22... | 1415 | | | | | | | | | | | | | | | | |
| JUN | | | | | | | | | | | | | | | | | |
| 16... | 0945 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 21... | 1610 | | | | | | | | | | | | | | | | |
| MAR, 1978 | | | | | | | | | | | | | | | | | |
| 22... | 1550 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 21... | 1650 | | | | | | | | | | | | | | | | |
| MAR, 1979 | | | | | | | | | | | | | | | | | |
| 08... | 1630 | | | | | | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | |
| 19... | 1430 | | | | | | | | | | | | | | | | |
| JAN, 1900 | | | | | | | | | | | | | | | | | |
| 21... | 1400 | | | | | | | | | | | | | | | | |
| JUN | | | | | | | | | | | | | | | | | |
| 26... | 1200 | | | | | | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Monsanto. | | | | | | | | | | | | | | 303417087141701 - South monitor, Monsanto. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------|---------------------------|------|------|------------------------------------|------|------|--|------|------|----------------|----------------------------------|----------------------------|--|----------------|------|------|---------------------------|------|------|------------------------------------|------|------|--|------|------|----------------------------|----------------------------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--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| DATE | TIME | CARBON, TOTAL (MG/L) AS C | | | CARBON, ORGANIC SOLVED (MG/L) AS C | | | CARBON, INOR-GANIC, DIS-SOLVED (MG/L) AS C | | | PHENOLS (UG/L) | THIO-CYANIDE TOTAL (MG/L) AS SCN | CYANIDE TOTAL (MG/L) AS CN | THIO-CYANIDE TOTAL (MG/L) AS SCN | PHENOLS (UG/L) | DATE | TIME | CARBON, TOTAL (MG/L) AS C | | | CARBON, ORGANIC SOLVED (MG/L) AS C | | | CARBON, INOR-GANIC, DIS-SOLVED (MG/L) AS C | | | CYANIDE TOTAL (MG/L) AS CN | THIO-CYANIDE TOTAL (MG/L) AS SCN | PHENOLS (UG/L) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | | | | | | | | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | | | | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C | AS C |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303417087141701 - South monitor, Mesquite. | | | | | | | | | | 303417087141701 - South monitor, Mesquite. | | | | | | | | | |
|--|------|---------------------------|-----------------------------------|--|--------------------------------------|---|---------------------------------|----------------|---|--|------|---------------------------|-----------------------------------|--|--------------------------------------|---|---------------------------------|----------------|---|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INOR-GANIC TOTAL (MG/L AS C) | CARBON, INOR-GANIC DIS-SOLVED (MG/L AS C) | THIO-CYANIDE TOTAL (MG/L AS CN) | PHENOLS (UG/L) | | DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INOR-GANIC TOTAL (MG/L AS C) | CARBON, INOR-GANIC DIS-SOLVED (MG/L AS C) | THIO-CYANIDE TOTAL (MG/L AS CN) | PHENOLS (UG/L) | |
| FEB , 1975 | | | | | | | | | | MAR , 1977 | | | | | | | | | |
| MAR 19... | 0935 | - | - | - | - | - | - | - | - | MAR 22... | 1415 | - | - | - | - | - | - | - | - |
| APR 12... | 0915 | - | - | - | - | - | - | - | - | APR 21... | 1420 | - | - | - | - | - | - | - | - |
| MAY 17... | 0910 | - | - | - | - | - | - | - | - | JUN 16... | 0945 | - | - | - | - | - | - | - | - |
| JUN 13... | 0830 | - | - | - | - | - | - | - | - | AUG 19... | 0930 | - | - | - | - | - | - | - | - |
| JUN 18... | 0945 | - | - | - | - | - | - | - | - | SEP 21... | 1610 | - | - | - | - | - | - | - | - |
| JUL 14... | 1520 | - | - | - | - | - | - | - | - | OCT 27... | 1600 | - | - | - | - | - | - | - | - |
| AUG 19... | 1610 | - | - | - | - | - | - | - | - | DEC 14... | 1500 | - | - | - | - | - | - | - | - |
| SEP 16... | 0950 | - | - | - | - | - | - | - | - | FEB , 1978 | | | | | | | | | |
| OCT 15... | 1000 | - | - | - | - | - | - | - | - | MAR 08... | 1530 | - | - | - | - | - | - | - | - |
| NOV 18... | 0855 | - | - | - | - | - | - | - | - | MAR 22... | 1550 | - | - | - | - | - | - | - | - |
| DEC 16... | 1515 | - | - | - | - | - | - | - | - | MAY 04... | 0930 | - | - | - | - | - | - | - | - |
| JAN , 1976 | | | | | | | | | | JUN 14... | 1530 | - | - | - | - | - | - | - | - |
| FEB 22... | 1520 | - | - | - | - | - | - | - | - | AUG 02... | 1600 | - | - | - | - | - | - | - | - |
| MAR 25... | 1640 | - | - | - | - | - | - | - | - | SEP 21... | 1650 | - | - | - | - | - | - | - | - |
| APR 20... | 0840 | - | - | - | - | - | - | - | - | NOV 08... | 1500 | - | - | - | - | - | - | - | - |
| MAY 27... | 0905 | - | - | - | - | - | - | - | - | DEC 13... | 1500 | - | - | - | - | - | - | - | - |
| JUN 14... | 0955 | - | - | - | - | - | - | - | - | JAN , 1979 | | | | | | | | | |
| JUL 22... | 1325 | - | - | - | - | - | - | - | - | MAR 24... | 1545 | - | - | - | - | - | - | - | - |
| AUG 20... | 0925 | - | - | - | - | - | - | - | - | MAR 28... | 1630 | - | - | - | - | - | - | - | - |
| SEP 18... | 0945 | - | - | - | - | - | - | - | - | APR 08... | 1600 | - | - | - | - | - | - | - | - |
| OCT 14... | 1630 | - | - | - | - | - | - | - | - | JUN 23... | 1445 | - | - | - | - | - | - | - | - |
| NOV 20... | 1630 | - | - | - | - | - | - | - | - | AUG 05... | 1445 | - | - | - | - | - | - | - | - |
| DEC 16... | 1425 | - | - | - | - | - | - | - | - | SEP 01... | 1300 | - | - | - | - | - | - | - | - |
| JAN , 1977 | | | | | | | | | | SEP 19... | 1430 | - | - | - | - | - | - | - | - |
| FEB 19... | 1115 | - | - | - | - | - | - | - | - | NOV 08... | 1030 | - | - | - | - | - | - | - | - |
| MAR 23... | 1400 | - | - | - | - | - | - | - | - | JAN , 1980 | | | | | | | | | |
| | | | | | | | | | | MAR 21... | 1400 | - | - | - | - | - | - | - | - |
| | | | | | | | | | | MAR 20... | 1500 | - | - | - | - | - | - | - | - |
| | | | | | | | | | | APR 30... | 1530 | - | - | - | - | - | - | - | - |
| | | | | | | | | | | JUN 26... | 1200 | - | - | - | - | - | - | - | - |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Massachusetts. | | | | | | | | | | | | | | | | | | | |
|---|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|------------|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM CONALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM CONALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) |
| JUL , 1972 | | | | | | | | | | | | | | | | | | | |
| FEB , 1970 | | | 17000 | 6.9 | | 34.4 | | | | JUL , 1972 | | | | | | | | | |
| 02... | | | 19900 | | | 35.3 | 10 | | | 13... | 1040 | | 22000 | 7.5 | | 35.0 | | 130 | |
| MAR | | | | | | | | | | AUG | | | | | | | | | |
| 12... | | | 20800 | 7.4 | | 34.8 | 0 | | | 10... | 1020 | | 23000 | 7.5 | | 35.0 | | 100 | |
| 02... | | | 16800 | | | 34.6 | 5 | | | SEP | | | | | | | | | |
| 04... | | | 17300 | 7.2 | | 34.3 | 0 | | | 14... | 1330 | | 22000 | 7.5 | | 35.0 | 5 | 85 | |
| JUN , 1971 | | | 17500 | 7.4 | | 34.4 | 5 | | | OCT | | | 23000 | 7.5 | | 35.0 | | 55 | |
| MAR | | | 17300 | 7.3 | | 34.0 | 0 | | | NOV | | | 23000 | 7.6 | | 35.0 | | 35 | |
| 14... | | | 17200 | 7.5 | | 34.5 | | | | DEC | | | 23000 | 7.6 | | 35.0 | | 100 | |
| 16... | | | 17200 | 7.5 | | 34.5 | | | | 14... | 1000 | | 23000 | 7.6 | | 35.0 | | | |
| 16... | | | 17200 | 7.5 | | 34.5 | 0 | | | JAN , 1973 | 0935 | | 24000 | 7.6 | | 35.0 | | 1 | |
| 13... | | | 17300 | 7.6 | | 34.5 | | | | FEB | 1000 | | 24000 | 7.6 | | 34.8 | | 35 | |
| JUN | | | 17300 | 7.5 | | 34.5 | | | | MAR | 0950 | | 23000 | 7.6 | | 35.0 | 5 | 40 | |
| 09... | | | 17400 | 7.5 | | 34.5 | | | | APR | 1430 | | 24000 | 7.6 | | 34.5 | | 6 | |
| 07... | | | 17400 | 7.5 | | 34.5 | | | | MAY | 1010 | | 23400 | 7.6 | | 34.5 | | 20 | |
| AUG | | | 23500 | 7.5 | | 34.5 | | | | 17... | 1630 | | 23700 | 7.5 | | 35.0 | | 15 | |
| 12... | | | 17500 | 7.2 | | 34.5 | | | | JUL | 1000 | | 22500 | 7.5 | | 35.0 | | 20 | |
| 15... | | | 17400 | 7.5 | | 34.5 | | | | 19... | 1030 | | 18400 | 7.4 | | 35.0 | | | |
| 07... | | | 17500 | 7.5 | | 33.5 | | | | AUG | 1030 | | 23900 | 7.6 | | 35.0 | 20 | 20 | |
| 12... | | | 16600 | 7.5 | | 34.6 | | | | SEP | 1050 | | 23400 | 7.4 | | 35.0 | | 20 | |
| 09... | | | 20200 | 7.4 | | 34.5 | | | | OCT | 0935 | | 23800 | 7.4 | | 35.0 | | 20 | |
| JAN , 1972 | | | 21400 | 7.5 | | 35.0 | | | | 11... | 0950 | | 23800 | 7.4 | | 35.0 | | 85 | |
| 04... | | | | | | | | 300 | | 15... | 0950 | | 23800 | 7.4 | | 35.2 | 2 | 50 | |
| FEB | 1310 | | | | | | | 230 | | DEC | 1200 | | 18200 | 7.4 | | 35.0 | | 16 | |
| MAR | 1420 | | | | | | | 300 | | JAN , 1974 | 1110 | | 24300 | 7.6 | | 35.0 | | 19 | |
| 07... | | | | | | | | 250 | | FEB | 1020 | | 24100 | 7.5 | | 34.5 | 50 | 20 | |
| 07... | | | | | | | | 170 | | 20... | 0930 | | 22200 | 7.5 | | 35.0 | | 10 | |
| 07... | | | 22000 | 7.5 | | 35.0 | 5 | 130 | | MAR | | | | | | | | | |
| 1510 | | | 22000 | 7.6 | | 35.0 | 0 | 100 | | 19... | | | | | | | | | |
| APR | 1425 | | 22000 | 7.6 | | 35.0 | | 200 | | APR | 0950 | | | | | | | | |
| 11... | | | 22500 | 7.6 | | 35.0 | | | | 17... | 1010 | | 17700 | 7.5 | | 35.0 | | 13 | |
| 16... | | | 22000 | 7.5 | | 35.0 | | 170 | | MAY | 1050 | | 23900 | 7.5 | | 34.5 | | 14 | |
| JUN | 1012 | | | | | | | | | 22... | | | | | | | | | |
| 14... | | | | | | | | | | JUN | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303457087154301 - North monitor, Massachusetts. | | | | | | | | | | 303457087154301 - North monitor, Massachusetts. | | | | | | | | | |
|---|------|-------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|---|------|-------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|
| DATE | TIME | SMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DATE | TIME | SMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) |
| JUL 1974 | 0920 | — | 17300 | 7.4 | — | 35.0 | — | 16 | — | JAN 1976 | 1005 | — | 27500 | 7.5 | — | 34.5 | — | 15 | — |
| AUG 16... | 0935 | — | 23700 | — | — | 34.5 | — | — | — | JUL 19... | 1505 | — | 29000 | 7.5 | — | 34.5 | — | 15 | — |
| 16... | 1010 | — | 17200 | 7.5 | — | 35.0 | — | 15 | — | AUG 15... | 1200 | — | 28000 | 7.4 | — | 35.0 | — | 15 | — |
| 16... | 1100 | — | 21200 | — | — | 34.0 | — | — | — | SEP 17... | 1045 | — | 26300 | 7.4 | — | 35.0 | 10 | 15 | — |
| SEP 19... | 0940 | — | 23100 | 7.4 | — | 35.0 | 2 | 14 | — | OCT 14... | 1100 | — | 25000 | 7.5 | — | 35.0 | — | 15 | — |
| OCT 15... | 1005 | — | 22400 | 7.4 | — | 35.5 | — | 14 | — | NOV 17... | 1355 | — | 23200 | 7.5 | — | 35.0 | — | 15 | — |
| NOV 20... | 1050 | — | 16600 | 7.4 | — | 34.5 | — | 14 | — | DEC 16... | 1015 | — | 24000 | 7.6 | — | 35.0 | — | 15 | — |
| DEC 18... | 1340 | — | 24100 | 7.4 | — | 35.0 | — | 18 | — | JAN 1977 | 1455 | — | 24000 | 7.3 | — | 35.5 | — | 15 | — |
| JAN 1975 | 0940 | — | 26000 | 7.6 | — | 35.0 | — | 110 | — | FEB 24... | 1035 | — | 25000 | 7.4 | — | 35.0 | — | 15 | — |
| FEB 18... | 1542 | — | 25600 | 7.4 | — | 34.0 | — | 25 | — | MAR 23... | 0950 | — | 25000 | 7.4 | — | 35.5 | 5 | 20 | — |
| 18... | 1552 | — | 25800 | 7.6 | — | 35.5 | — | 35 | — | APR 22... | 1025 | — | 26000 | 7.7 | — | 35.5 | — | 35 | — |
| MAY 12... | 1315 | — | 25300 | 7.4 | — | 34.0 | 60 | 12 | — | JUN 15... | 1330 | — | 28000 | 7.7 | — | 34.5 | 35 | 15 | — |
| APR 17... | 1450 | — | 25800 | 7.5 | — | 34.5 | — | 15 | — | JUL 19... | 1335 | — | 17000 | 7.6 | — | 24.0 | — | 12 | — |
| MAY 14... | 1645 | — | 24800 | 7.5 | — | 34.5 | — | 20 | — | 19... | 1400 | — | 26000 | 7.5 | — | 35.0 | — | 20 | — |
| JUN 18... | 1600 | — | 25000 | 7.4 | — | 34.5 | — | 20 | — | AUG 18... | 1020 | — | 17300 | 7.5 | — | 23.0 | — | 17 | — |
| JUL 17... | 0935 | — | 25000 | 7.5 | — | 34.5 | 2 | 30 | — | SEP 21... | 1320 | — | 17500 | 7.6 | — | 23.0 | 5 | 15 | — |
| AUG 20... | 1030 | — | 24500 | 7.6 | — | 35.0 | — | 15 | — | OCT 27... | 1000 | — | 15300 | 7.5 | — | 22.5 | — | 17 | — |
| SEP 15... | 1435 | — | 24000 | 7.5 | — | 35.0 | 10 | 20 | — | DEC 15... | 1015 | — | 14400 | 7.5 | — | 22.0 | — | 17 | — |
| OCT 14... | 1355 | — | 25000 | 7.6 | — | 35.0 | — | 15 | — | FEB 1978 | 1300 | — | 14200 | 7.4 | — | 23.0 | — | 16 | — |
| NOV 17... | 1410 | — | 25900 | 7.5 | — | 35.0 | — | 20 | — | MAR 09... | 1300 | — | 18500 | 7.5 | — | 24.0 | 40 | — | 18 |
| DEC 16... | 1000 | — | 25600 | 7.5 | — | 35.0 | — | 20 | — | APR 22... | 1300 | — | 17500 | 7.4 | — | 23.0 | — | 15 | — |
| JAN 1976 | 1030 | — | 25000 | 7.4 | — | 35.0 | — | 20 | — | MAY 04... | 1530 | — | 17100 | 7.4 | — | 23.0 | — | 16 | — |
| FEB 22... | 1335 | — | 28000 | 7.6 | — | 35.0 | — | 15 | — | JUN 14... | 1240 | — | 17500 | 7.4 | — | 23.0 | — | 17 | — |
| MAR 25... | 1335 | — | 26000 | 7.5 | — | 35.0 | 70 | 15 | — | AUG 03... | 1100 | — | 17500 | 7.4 | — | 22.5 | 40 | — | 16 |
| APR 19... | 1455 | — | 24800 | 7.6 | — | 35.0 | — | 15 | — | SEP 21... | 0945 | — | 13800 | 7.4 | — | 22.5 | — | — | 17 |
| MAY 26... | 1415 | — | 24500 | 7.4 | — | 34.5 | — | 15 | — | NOV 08... | 1015 | — | — | — | — | — | — | — | 16 |
| 20... | 0910 | — | — | — | — | — | — | — | — | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303AS7087154301 - North monitor, Massachusetts. | | | | | | | | | | | | | | | | |
|---|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|----------------------------------|--------------------------|---|---|---|---|--|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHO/CM) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | OXYGEN DEMAND, BIOCHEM- ICAL (5 DAY UNITS) (MG/L) | HARD- NESS, MURKAR- BONATE (MG/L CAO3) | HARD- NESS, MURKAR- BONATE (MG/L CAO3) | ACIDITY TOTAL HEATED (MG/L AS H) |
| DEC , 1978 | | | | | | | | | | | | | | | | |
| 13... | 1030 | — | 14200 | 7.3 | — | 22.0 | — | — | 19 | — | — | — | — | — | 390 | — |
| JAN , 1979 | | | | | | | | | | | | | | | 676 | — |
| 24... | 1015 | — | 16600 | 7.3 | — | 26.0 | — | — | 17 | — | — | — | — | — | 726 | — |
| MAR | | | | | | | | | | | | | | | | — |
| 08... | 1015 | — | 20500 | 7.4 | — | 29.5 | 5 | — | 17 | — | — | — | — | — | 359 | — |
| APR | | | | | | | | | | | | | | | | — |
| 24... | 1100 | — | 20000 | 7.4 | — | 29.5 | — | — | — | — | — | — | — | — | 618 | — |
| JUN | | | | | | | | | | | | | | | | — |
| 05... | 0945 | — | 17200 | 7.3 | — | 23.5 | — | — | 15 | — | — | — | — | — | 674 | — |
| JUL | | | | | | | | | | | | | | | | — |
| 31... | 1430 | — | 17200 | 7.4 | — | 23.5 | — | — | 12 | — | — | — | — | — | 690 | — |
| SEP | | | | | | | | | | | | | | | | — |
| 20... | 1100 | — | 16600 | 7.4 | — | 23.5 | 5 | — | 15 | — | — | — | — | — | 674 | — |
| NOV | | | | | | | | | | | | | | | | — |
| 07... | 1100 | — | 16300 | 7.4 | — | 22.5 | — | — | — | — | — | — | — | — | 632 | — |
| JAN , 1980 | | | | | | | | | | | | | | | | — |
| 22... | 1100 | — | 16400 | 7.4 | — | 25.5 | 5 | — | 12 | — | — | — | — | — | 970 | — |
| MAR | | | | | | | | | | | | | | | | — |
| 20... | 1100 | — | 17400 | 7.6 | — | 25.0 | — | — | 20 | — | — | — | — | — | 1020 | — |
| MAY | | | | | | | | | | | | | | | | — |
| 01... | 0945 | — | 22100 | 7.3 | — | 27.5 | — | — | 15 | — | — | — | — | — | 990 | — |
| JUN | | | | | | | | | | | | | | | | — |
| 26... | 1500 | — | 17800 | 7.3 | — | 22.0 | 0 | — | 20 | — | — | — | — | — | 1000 | — |
| FEB , 1970 | | | | | | | | | | | | | | | | — |
| 02... | | | | | | | | | | | | | | | 659 | — |
| 03... | | | | | | | | | | | | | | | 916 | — |
| MAR | | | | | | | | | | | | | | | | — |
| 12... | | | | | | | | | | | | | | | 962 | — |
| SEP | | | | | | | | | | | | | | | | — |
| 02... | | | | | | | | | | | | | | | 618 | — |
| NOV | | | | | | | | | | | | | | | | — |
| 04... | | | | | | | | | | | | | | | 674 | — |
| JAN , 1971 | | | | | | | | | | | | | | | | — |
| 18... | | | | | | | | | | | | | | | 690 | — |
| MAR | | | | | | | | | | | | | | | | — |
| 16... | | | | | | | | | | | | | | | 674 | — |
| MAY | | | | | | | | | | | | | | | | — |
| 13... | | | | | | | | | | | | | | | 632 | — |
| FEB , 1972 | | | | | | | | | | | | | | | | — |
| 11... | 1310 | | | | | | | | | | | | | | 970 | — |
| MAR | | | | | | | | | | | | | | | | — |
| 07... | 1510 | | | | | | | | | | | | | | 1020 | — |
| APR | | | | | | | | | | | | | | | | — |
| 11... | 1425 | | | | | | | | | | | | | | 990 | — |
| MAY | | | | | | | | | | | | | | | | — |
| 16... | 1412 | | | | | | | | | | | | | | 1000 | — |
| JUN | | | | | | | | | | | | | | | | — |
| 14... | 1012 | | | | | | | | | | | | | | 1100 | — |
| JUL | | | | | | | | | | | | | | | | — |
| 13... | 1040 | | | | | | | | | | | | | | 1100 | — |
| AUG | | | | | | | | | | | | | | | | — |
| 10... | 1020 | | | | | | | | | | | | | | 1300 | — |
| SEP | | | | | | | | | | | | | | | | — |
| 14... | 1330 | | | | | | | | | | | | | | 1230 | — |
| OCT | | | | | | | | | | | | | | | | — |
| 19... | 1000 | | | | | | | | | | | | | | 1300 | — |
| NOV | | | | | | | | | | | | | | | | — |
| 16... | 1000 | | | | | | | | | | | | | | 1300 | — |
| DEC | | | | | | | | | | | | | | | | — |
| 14... | 1000 | | | | | | | | | | | | | | 1200 | — |
| JAN , 1973 | | | | | | | | | | | | | | | | — |
| 18... | 0935 | | | | | | | | | | | | | | 1200 | — |
| FEB | | | | | | | | | | | | | | | | — |
| 15... | 1000 | | | | | | | | | | | | | | 1400 | — |
| MAR | | | | | | | | | | | | | | | | — |
| 15... | 0950 | | | | | | | | | | | | | | 1800 | — |
| APR | | | | | | | | | | | | | | | | — |
| 18... | 1430 | | | | | | | | | | | | | | 1400 | — |
| MAY | | | | | | | | | | | | | | | | — |
| 17... | 1010 | | | | | | | | | | | | | | 1200 | — |
| JUN | | | | | | | | | | | | | | | | — |
| 13... | 1630 | | | | | | | | | | | | | | 1300 | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Massasoit. | | | | | | | | | | | | | | | | | | |
|---|------|----------------------------------|--------------------------|--|---|--|--|--|-----------|------|----------------------------------|--------------------------|--|---|--|--|--|---|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | OXYGEN DEMAND, BIOCHEM UNLIMITED 5 DAY (MG/L) | HARD- NESS, NONCAR- BONATE (MG/L CACO3) | ACIDITY TOTAL HEATED (MG/L AS H) | DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | OXYGEN DEMAND, BIOCHEM UNLIMITED 5 DAY (MG/L) | HARD- NESS, NONCAR- BONATE (MG/L CACO3) | ACIDITY TOTAL HEATED (MG/L AS H) | |
| JUL, 1973 | | | | | | | | | JUN, 1975 | | | | | | | | | |
| JUL 19... | 1000 | - | - | - | - | - | 1200 | - | JUN 18... | 1600 | - | - | - | - | - | 1300 | 1100 | - |
| AUG 23... | 1030 | - | - | - | - | - | 740 | - | JUL 17... | 0935 | - | - | - | - | - | 1200 | 1000 | - |
| SEP 13... | 1050 | - | - | - | - | - | 1200 | - | AUG 20... | 1030 | - | - | - | - | - | 1200 | 1000 | - |
| OCT 11... | 0935 | - | - | - | - | - | 940 | - | SEP 15... | 1435 | - | - | - | - | - | 1300 | 1100 | - |
| NOV 15... | 0950 | - | - | - | - | - | 1500 | - | OCT 14... | 1355 | - | - | - | - | - | 1200 | 1000 | - |
| DEC 12... | 1200 | - | - | - | - | - | 1500 | - | NOV 17... | 1410 | - | - | - | - | - | 1200 | 1000 | - |
| JAN, 1974 | | | | | | | | | DEC 14... | 1000 | - | - | - | - | - | 1200 | 1000 | - |
| JAN 17... | 1110 | - | - | - | - | - | 640 | - | JAN, 1976 | | | | | | | | | |
| FEB 20... | 1020 | - | - | - | - | - | 1300 | - | JAN 22... | 1030 | - | - | - | - | - | 1300 | 1100 | - |
| MAR 19... | 0930 | - | - | - | - | - | 1200 | - | FEB 23... | 1335 | - | - | - | - | - | 1300 | 1000 | - |
| APR 17... | 0950 | - | - | - | - | - | 1100 | - | MAR 19... | 1455 | - | - | - | - | - | 1300 | 1100 | - |
| MAY 22... | 1010 | - | - | - | - | - | 640 | - | APR 24... | 1415 | - | - | - | - | - | 1300 | 1100 | - |
| JUN 20... | 1050 | - | - | - | - | - | 1200 | - | MAY 20... | 0910 | - | - | - | - | - | 1300 | 1100 | - |
| JUL 30... | 0920 | - | - | - | - | - | 680 | - | JUN 23... | 1005 | - | - | - | - | - | 1200 | 1000 | - |
| AUG 14... | 0935 | - | - | - | - | - | 1000 | - | JUL 19... | 1505 | - | - | - | - | - | 1300 | 1100 | - |
| SEP 14... | 1010 | - | - | - | - | - | 650 | - | AUG 16... | 1200 | - | - | - | - | - | 1300 | 1100 | - |
| SEP 14... | 1100 | - | - | - | - | - | 1000 | - | SEP 17... | 1200 | - | - | - | - | - | 1300 | 1100 | - |
| SEP 19... | 0940 | - | - | - | - | - | 1200 | - | SEP 14... | 1045 | - | - | - | - | - | 1300 | 1100 | - |
| OCT 15... | 1005 | - | - | - | - | - | 1200 | - | OCT 20... | 1100 | - | - | - | - | - | 1200 | 1000 | - |
| NOV 20... | 1050 | - | - | - | - | - | 590 | - | NOV 17... | 1555 | - | - | - | - | - | 1200 | 1000 | - |
| DEC 18... | 1340 | - | - | - | - | - | 1300 | - | DEC 14... | 1015 | - | - | - | - | - | 1300 | 1000 | - |
| JAN, 1975 | | | | | | | | | JAN, 1977 | | | | | | | | | |
| JAN 14... | 0940 | - | - | - | - | - | 1300 | - | JAN 20... | 1455 | - | - | - | - | - | 1200 | 990 | - |
| FEB 18... | 1542 | - | - | - | - | - | 1300 | - | FEB 24... | 1035 | - | - | - | - | - | 1300 | 1100 | - |
| MAR 18... | 1552 | - | - | - | - | - | 1300 | - | MAR 23... | 0950 | 1.009 | - | - | - | - | 1200 | 1000 | - |
| APR 12... | 1315 | - | - | - | - | - | 1300 | - | APR 22... | 1025 | - | - | - | - | - | 1300 | 1100 | - |
| MAY 17... | 1450 | - | - | - | - | - | 1300 | - | MAY 15... | 1330 | - | - | - | - | - | 1200 | 1000 | - |
| MAY 14... | 1645 | - | - | - | - | - | 1300 | - | | 1330 | - | - | - | - | - | 1200 | 1000 | - |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303457087154301 - North monitor, Mesquite. | | | | | | | | | | | | | | | | | | | |
|--|------|----------------------------------|--------------------------|---|---|---|--|---|--|------------|------|----------------------------------|--|--|---|--|------------------------------------|--|-----|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL LEVEL | OXYGEN DEMAND, CHEM- ICAL LEVEL | OXYGEN DEMAND, BIOCHEM- ICAL 5 DAY LEVEL | HARD- NESS (MG/L AS CaCO3) | HARD- NESS MOMCAR- BONATE (MG/L AS CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) | DATE | TIME | ACIDITY (MG/L AS CaCO3) | CALCIUM DIS- SOLVED (MG/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CaCO3) | |
| JUL , 1977 | | | | | | | | | | FEB , 1970 | | | | | | | | | |
| 19... | 1335 | — | — | — | — | — | 670 | 400 | — | 02... | — | — | 101 | 95 | 3290 | 50 | 328 | — | 269 |
| 19... | 1400 | — | — | — | — | — | 1200 | 970 | — | 03... | — | — | 149 | 126 | 4000 | 58 | 292 | 0 | 239 |
| AUG | | | | | | | | | | 04... | — | — | — | — | — | — | — | — | — |
| 18... | 1020 | — | — | — | — | — | 640 | 380 | — | 12... | — | — | 159 | 132 | 4280 | 55 | 302 | 0 | 248 |
| SEP | | | | | | | | | | 02... | — | — | 102 | 85 | 3520 | 57 | 316 | 0 | 259 |
| 21... | 1320 | 1.005 | — | — | — | — | 660 | 390 | — | 04... | — | — | 105 | 96 | 3630 | 61 | 320 | 0 | 262 |
| 05... | 1000 | — | — | — | — | — | 660 | 400 | — | 18... | — | — | 108 | 98 | 3410 | 62 | 315 | 0 | 258 |
| DEC | | | | | | | | | | 04... | — | — | 106 | 96 | 3490 | 54 | 318 | 0 | 261 |
| 15... | 1015 | — | — | — | — | — | 600 | 340 | — | 14... | — | — | 85 | 93 | — | — | 320 | 0 | 262 |
| FEB , 1978 | | | | | | | | | | 14... | — | — | 108 | 89 | 3370 | 52 | 316 | 0 | 259 |
| 09... | 1300 | — | — | — | — | — | 660 | 400 | — | 13... | — | — | 104 | 84 | — | — | 322 | 0 | 264 |
| 27... | | | | | | | | | | 09... | — | — | 94 | 100 | — | — | 319 | 0 | 262 |
| MAR | | | | | | | | | | 07... | — | — | — | — | — | — | — | — | — |
| 27... | 1300 | 1.005 | — | — | — | — | 700 | 440 | — | 12... | — | — | 82 | 170 | — | — | 326 | 0 | 267 |
| 04... | | | | | | | | | | 12... | — | — | 79 | 98 | — | — | 328 | 0 | 269 |
| JUN | | | | | | | | | | 15... | — | — | 97 | 94 | — | — | 330 | 0 | 271 |
| 14... | 1240 | — | — | — | — | — | 620 | 360 | — | 14... | — | — | 103 | 96 | — | — | 318 | 0 | 261 |
| AUG | | | | | | | | | | 12... | — | — | 134 | 110 | — | — | 304 | 0 | 269 |
| 03... | 1100 | — | — | — | — | — | 630 | 370 | — | 02... | — | — | 150 | 132 | — | — | 290 | 0 | 238 |
| SEP | | | | | | | | | | 04... | — | — | 152 | 143 | — | — | 286 | 0 | 235 |
| 21... | 0945 | 1.007 | — | — | — | — | 630 | 370 | — | 11... | 1310 | — | 170 | 140 | 4400 | 62 | 284 | 0 | 233 |
| NOV | | | | | | | | | | 07... | 1510 | — | 170 | 140 | — | — | — | — | — |
| 08... | 1015 | — | — | — | — | — | 620 | 360 | — | 11... | 1425 | — | 150 | 130 | — | — | 283 | 0 | 232 |
| DEC | | | | | | | | | | 14... | 1412 | — | 157 | 130 | — | — | 279 | 0 | 229 |
| JAN , 1979 | | | | | | | | | | 14... | 1012 | — | 200 | 130 | — | — | 277 | 0 | 227 |
| 13... | 1030 | — | — | — | — | — | 620 | 360 | — | 13... | 1040 | — | 200 | 130 | — | — | 274 | 0 | 225 |
| JUN , 1979 | | | | | | | | | | 10... | 1020 | — | 210 | 180 | — | — | 272 | 0 | 223 |
| 24... | 1015 | — | — | — | — | — | 1100 | 800 | — | 14... | 1330 | — | 200 | 170 | 5000 | 110 | 272 | 0 | 223 |
| MAR | | | | | | | | | | | | | | | | | | | |
| 08... | 1015 | 1.009 | — | — | — | — | 1000 | 760 | — | | | | | | | | | | |
| APR | | | | | | | | | | | | | | | | | | | |
| 24... | 1100 | — | — | — | — | — | 910 | 670 | — | | | | | | | | | | |
| JUN | | | | | | | | | | | | | | | | | | | |
| 05... | 0945 | — | — | — | — | — | 770 | 520 | — | | | | | | | | | | |
| JUL | | | | | | | | | | | | | | | | | | | |
| 31... | 1430 | — | — | — | — | — | 630 | 370 | — | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | | | | | |
| 20... | 1100 | 1.008 | — | — | — | — | 670 | 410 | — | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | | | | | | |
| 07... | 1100 | — | — | — | — | — | 640 | 380 | — | | | | | | | | | | |
| JAN , 1980 | | | | | | | | | | | | | | | | | | | |
| 22... | 1100 | 1.006 | — | — | 130 | — | 770 | 510 | .9 | | | | | | | | | | |
| MAR | | | | | | | | | | | | | | | | | | | |
| 20... | 1100 | — | — | — | — | — | 770 | 510 | — | | | | | | | | | | |
| MAY | | | | | | | | | | | | | | | | | | | |
| 01... | 0945 | — | — | — | — | — | 1100 | 800 | — | | | | | | | | | | |
| JUN | | | | | | | | | | | | | | | | | | | |
| 26... | 1500 | 1.006 | — | — | 220 | — | 680 | 430 | 1.0 | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Monsanto. | | | | | | | | | | | | | | | | | | | |
|--|-------|----------------------------------|--|--|--|---|---------------------------------------|------------------------------------|--|------------|------|----------------------------------|--|--|--|---|---------------------------------------|------------------------------------|--|
| DATE | TIME | ACIDITY (MG/L AS CaCO3) | CALCIUM DIS- SOLVED (MG/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) | SODIUM, DIS- SOLVED (MG/L AS Na) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CaCO3) | DATE | TIME | ACIDITY (MG/L AS CaCO3) | CALCIUM DIS- SOLVED (MG/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) | SODIUM, DIS- SOLVED (MG/L AS Na) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS HCO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CaCO3) |
| OCT , 1972 | 1000 | — | 210 | 180 | — | — | 269 | 0 | 221 | SEP , 1974 | 0940 | — | 170 | 180 | 5000 | 95 | 268 | 0 | 220 |
| NOV | 16... | — | 210 | 180 | — | — | 272 | 0 | 223 | OCT | 1005 | — | 190 | 170 | — | — | 269 | 0 | 221 |
| DEC | 14... | — | 200 | 160 | — | — | 270 | 0 | 221 | NOV | 1050 | — | 100 | 83 | — | — | 270 | 0 | 221 |
| JAN , 1973 | 0925 | — | 200 | 160 | — | — | 267 | 0 | 219 | DEC | 1340 | — | 231 | 160 | — | — | 270 | 0 | 221 |
| FEB | 1000 | — | 240 | 180 | — | — | 268 | 0 | 220 | JAN , 1975 | 0940 | — | 210 | 190 | — | — | 257 | 0 | 211 |
| MAR | 0950 | — | 300 | 250 | 5000 | 110 | 266 | 0 | 218 | FEB | 1542 | — | 220 | 180 | — | — | 254 | 0 | 208 |
| APR | 1430 | — | 240 | 190 | — | — | 266 | 0 | 218 | MAR | 1552 | — | 200 | 190 | — | — | 254 | 0 | 208 |
| MAY | 1010 | — | 220 | 170 | — | — | 267 | 0 | 219 | APR | 1315 | — | 230 | 180 | 5000 | 100 | 260 | 0 | 213 |
| JUN | 1630 | — | 240 | 180 | — | — | 264 | 0 | 217 | MAY | 1450 | — | 230 | 180 | — | — | 260 | 0 | 213 |
| JUL | 19... | — | 200 | 160 | — | — | 268 | 0 | 220 | JUN | 1645 | — | 240 | 170 | — | — | 259 | 0 | 212 |
| AUG | 1030 | — | 125 | 105 | — | — | 270 | 0 | 221 | JUL | 1600 | — | 220 | 180 | — | — | 263 | 0 | 216 |
| SEP | 1050 | — | 200 | 160 | 4800 | 78 | 272 | 0 | 223 | AUG | 0935 | — | 210 | 170 | — | — | 258 | 0 | 212 |
| OCT | 0935 | — | 160 | 130 | — | — | 272 | 0 | 223 | SEP | 1030 | — | 220 | 170 | — | — | 261 | 0 | 214 |
| NOV | 0950 | — | 240 | 220 | — | — | 271 | 0 | 222 | OCT | 1435 | — | 230 | 170 | 5200 | 100 | 262 | 0 | 215 |
| DEC | 1200 | — | 220 | 220 | 5300 | 170 | 261 | 0 | 214 | NOV | 1355 | — | 190 | 180 | — | — | 264 | 0 | 217 |
| JAN , 1974 | 1110 | — | 100 | 95 | — | — | 266 | 0 | 218 | DEC | 1410 | — | 210 | 170 | — | — | 265 | 0 | 217 |
| FEB | 1020 | — | 210 | 190 | — | — | 266 | 0 | 218 | JAN , 1976 | 1000 | — | 200 | 180 | — | — | 264 | 0 | 217 |
| MAR | 0930 | — | 200 | 170 | 5400 | 120 | 265 | 0 | 217 | FEB | 1030 | — | 210 | 180 | — | — | 263 | 0 | 216 |
| APR | 0950 | — | 180 | 155 | — | — | 272 | 0 | 223 | MAR | 1335 | — | 190 | 190 | — | — | 264 | 0 | 217 |
| MAY | 1010 | — | 100 | 95 | — | — | 271 | 0 | 222 | APR | 1455 | — | 220 | 170 | 5300 | 88 | 263 | 0 | 216 |
| JUN | 1050 | — | 200 | 170 | — | — | 272 | 0 | 223 | MAY | 1415 | — | 220 | 180 | — | — | 266 | 0 | 218 |
| JUL | 0920 | — | 110 | 98 | — | — | 269 | 0 | 221 | JUN | 0910 | — | 230 | 180 | — | — | 264 | 0 | 217 |
| AUG | 0935 | — | 160 | 150 | — | — | 268 | 0 | 220 | JUL | 1005 | — | 220 | 170 | — | — | 266 | 0 | 218 |
| 1010 | 1100 | — | 170 | 140 | — | — | 268 | 0 | 220 | AUG | 1505 | — | 220 | 180 | — | — | 266 | 0 | 218 |
| 16... | — | — | — | — | — | — | — | — | — | 17... | 1200 | — | 240 | 170 | — | — | 264 | 0 | 217 |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303457087154301 - North monitor, Massachusetts. | | | | | | | | | | | | | |
|---|-------|---|--|--|--|---|---|---|---|------------|------|---|--|
| DATE | TIME | ACIDITY (mg/L AS CaCO ₃) | CALCIUM DIS- SOLVED (mg/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (mg/L AS Mg) | SODIUM, DIS- SOLVED (mg/L AS Na) | POTAS- SIUM, DIS- SOLVED (mg/L AS K) | BICAR- BONATE (mg/L AS CO ₃) | CAR- BONATE (mg/L AS CO ₃) | ALKA- LITY (mg/L AS CaCO ₃) | DATE | TIME | ACIDITY (mg/L AS CaCO ₃) | CALCIUM DIS- SOLVED (mg/L AS Ca) |
| SEP , 1976 | 14... | — | 210 | 180 | 5200 | 96 | 266 | 0 | 218 | APR , 1979 | 1100 | — | 150 |
| OCT , 1976 | 1100 | — | 220 | 170 | — | — | 265 | 0 | 217 | JAN , 1980 | 0945 | — | 92 |
| NOV , 1976 | 1555 | — | 220 | 170 | — | — | 267 | 0 | 219 | JUL , 1980 | 1430 | — | 98 |
| DEC , 1976 | 1015 | — | 210 | 180 | — | — | 266 | 0 | 218 | SEP , 1980 | 1100 | — | 100 |
| JAN , 1977 | 1455 | — | 200 | 170 | — | — | 258 | 0 | 212 | NOV , 1980 | 1100 | — | 100 |
| FEB , 1977 | 1035 | — | 220 | 180 | — | — | 268 | 0 | 220 | JAN , 1980 | 1100 | 45 | 120 |
| MAR , 1977 | 0950 | — | 190 | 100 | 5200 | 85 | 263 | 0 | 216 | MAR , 1980 | 1100 | — | 110 |
| APR , 1977 | 1025 | — | 210 | 198 | — | — | 267 | 0 | 219 | MAY , 1980 | 0945 | — | 170 |
| MAY , 1977 | 1330 | — | 200 | 170 | 5200 | 85 | 269 | 0 | 221 | JUN , 1980 | 1300 | 50 | 110 |
| JUL , 1977 | 1335 | — | 110 | 95 | — | — | 322 | 0 | 264 | | | | |
| AUG , 1977 | 1400 | — | 200 | 170 | — | — | 276 | 0 | 226 | | | | |
| SEP , 1977 | 1020 | — | 100 | 95 | — | — | 321 | 0 | 263 | | | | |
| OCT , 1977 | 1320 | — | 100 | 95 | 3400 | 68 | 321 | 0 | 263 | | | | |
| NOV , 1977 | 1000 | — | 100 | 100 | — | — | 320 | 0 | 262 | | | | |
| DEC , 1977 | 1015 | — | 100 | 85 | — | — | 318 | 0 | 261 | | | | |
| JAN , 1978 | 1300 | — | 100 | 100 | — | — | 318 | 0 | 261 | | | | |
| FEB , 1978 | 1300 | — | 110 | 100 | 3800 | 65 | 320 | 0 | 262 | | | | |
| MAR , 1978 | 1300 | — | 110 | 100 | — | — | 321 | 0 | 263 | | | | |
| APR , 1978 | 1300 | — | 110 | 100 | — | — | 321 | 0 | 263 | | | | |
| MAY , 1978 | 1300 | — | 110 | 100 | — | — | 317 | 0 | 260 | | | | |
| JUN , 1978 | 1240 | — | 98 | 92 | — | — | 313 | 0 | 257 | | | | |
| JUL , 1978 | 1100 | — | 100 | 93 | — | — | 325 | 0 | 267 | | | | |
| AUG , 1978 | 0945 | — | 98 | 95 | 4400 | 64 | 321 | 0 | 263 | | | | |
| SEP , 1978 | 1015 | — | 100 | 92 | — | — | 317 | 0 | 260 | | | | |
| OCT , 1978 | 1030 | — | 94 | 94 | — | — | 317 | 0 | 260 | | | | |
| NOV , 1978 | 1015 | — | 180 | 140 | — | — | 284 | 0 | 233 | | | | |
| DEC , 1978 | 1015 | — | 170 | 140 | 4600 | 76 | 293 | 0 | 240 | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Mesquite. | | | | | | | | | |
|--|------|--|-----------------------------------|-------------------------------------|------------------------------------|------------------------------------|--|---|---|
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL-ORIDE, DIS- SOLVED (MG/L AS CL) | FLUO-RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) | SOLIDS, TOTAL, RESIDUE AT 110 DEG. C (MG/L) |
| FEB., 1970 | | | | | | | | | |
| FEB 02... | | — | — | 5700 | — | — | — | — | — |
| FEB 03... | | — | — | 0 6700 | 3.1 | 18 | 11200 | 10400 | — |
| MAR 12... | | 19 | 0 7100 | — | 3.1 | 18 | 11900 | 11900 | — |
| SEP 02... | | — | — | — | — | — | — | — | — |
| NOV 02... | | — | — | 0 5750 | 3.4 | 18 | 9700 | 9700 | — |
| NOV 04... | | 32 | — | 5700 | 2.5 | 18 | 9810 | 9810 | — |
| JAN., 1971 | | | | | | | | | |
| JAN 18... | | — | — | 5800 | 3.1 | 17 | 9710 | 9710 | — |
| MAR 16... | | — | — | 0 5750 | 3.4 | 18 | 9690 | 9690 | — |
| APR 16... | | 16 | — | — | — | 15 | — | — | — |
| MAY 13... | | 16 | — | 5800 | 3.2 | 18 | 9590 | 9590 | — |
| JUN 07... | | 13 | — | — | — | — | — | — | — |
| JUL 07... | | 16 | — | — | — | — | — | — | — |
| AUG 12... | | 16 | — | — | — | 16 | — | — | — |
| SEP 15... | | 33 | — | — | — | — | — | — | — |
| OCT 14... | | 17 | — | — | — | — | — | — | — |
| NOV 12... | | 16 | — | — | — | — | — | — | — |
| JAN., 1972 | | | | | | | | | |
| JAN 04... | | 18 | — | — | — | 16 | — | — | — |
| FEB 11... | 1310 | 14 | — | — | — | — | — | — | — |
| MAR 07... | 1510 | 14 | — | — | — | — | — | — | — |
| APR 11... | 1425 | 11 | 7 7500 | — | 3.1 | 17 | 12400 | 12400 | — |
| MAY 16... | 1412 | 11 | — | — | — | — | — | — | — |
| JUN 14... | 1012 | 14 | — | — | — | 16 | — | — | — |
| JUL 13... | 1040 | 14 | — | — | — | 16 | — | — | — |
| AUG 10... | 1020 | 14 | — | — | — | 16 | — | — | — |
| SEP 14... | 1330 | 14 | 0 7900 | — | 3.6 | 16 | 14000 | 14000 | — |
| OCT 19... | 1000 | 14 | — | — | — | 15 | — | — | — |
| 303657087154301 - North monitor, Mesquite. | | | | | | | | | |
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL-ORIDE, DIS- SOLVED (MG/L AS CL) | FLUO-RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) | SOLIDS, TOTAL, RESIDUE AT 110 DEG. C (MG/L) |
| NOV., 1972 | | | | | | | | | |
| NOV 16... | 1000 | 11 | — | — | — | 16 | — | — | — |
| DEC 14... | 1000 | 11 | — | — | — | 16 | — | — | — |
| JAN., 1973 | | | | | | | | | |
| JAN 18... | 0935 | 11 | — | — | — | 15 | — | — | — |
| FEB 15... | 1000 | 11 | — | — | — | 16 | — | — | — |
| MAR 15... | 0950 | 11 | — | 8100 | 3.0 | 16 | 14100 | — | — |
| APR 18... | 1430 | 11 | — | — | — | 15 | — | — | — |
| MAY 17... | 1010 | 11 | — | 8100 | — | 17 | — | — | — |
| JUN 13... | 1630 | 13 | — | 8300 | — | 18 | — | — | — |
| JUL 19... | 1000 | 14 | — | 8000 | — | — | — | — | — |
| AUG 23... | 1030 | 17 | — | 6300 | — | 17 | — | — | — |
| SEP 13... | 1050 | 11 | — | 8200 | 3.3 | 17 | 13500 | — | — |
| OCT 11... | 0935 | 17 | — | 8300 | — | 18 | — | — | — |
| NOV 15... | 0950 | 17 | — | 8400 | — | — | — | — | — |
| DEC 12... | 1200 | 17 | — | 8900 | 2.7 | 18 | 14500 | — | — |
| JAN., 1974 | | | | | | | | | |
| JAN 17... | 1110 | 17 | — | 6300 | — | — | — | — | — |
| FEB 20... | 1020 | 11 | — | 8400 | — | — | — | — | — |
| MAR 19... | 0930 | 13 | — | 8700 | — | 18 | 14800 | — | — |
| APR 17... | 0950 | — | — | 8200 | — | — | — | — | — |
| MAY 22... | 1010 | 14 | — | 6100 | — | — | — | — | — |
| JUN 20... | 1050 | 14 | — | 8700 | — | — | — | — | — |
| JUL 30... | 0920 | 17 | — | 4800 | — | — | — | — | — |
| AUG 16... | 0955 | — | — | 3400 | — | — | — | — | — |
| SEP 16... | 1100 | 14 | — | 7400 | — | — | — | — | — |
| SEP 19... | 0940 | 17 | — | 8700 | 3.2 | 18 | 16400 | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303AS7087154301 - North monitor, Mesquite. | | | | | | | | | | | | | | 303AS7087154301 - North monitor, Mesquite. | | | | | | | | | | | |
|--|------|---|---|--|---|--|---|---|---|---|---|---|---|---|------|------|---|---|--|---|--|---|---|---|---|
| DATE | TIME | CATION DIOXIDE DIS- SOLVED AS CO ₂ | SULFATE DIS- SOLVED AS SO ₄ | CHL- ORIDE DIS- SOLVED AS CL | FLUO- RIDE DIS- SOLVED AS F | SILICA DIS- SOLVED AS SiO ₂ | SOLIDS RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS SUN OF CONSTIT- UENTS DIS- SOLVED (MG/L) | SOLIDS RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS SUN OF CONSTIT- UENTS DIS- SOLVED (MG/L) | SOLIDS RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS SUN OF CONSTIT- UENTS DIS- SOLVED (MG/L) | SOLIDS RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS SUN OF CONSTIT- UENTS DIS- SOLVED (MG/L) | DATE | TIME | CATION DIOXIDE DIS- SOLVED AS CO ₂ | SULFATE DIS- SOLVED AS SO ₄ | CHL- ORIDE DIS- SOLVED AS CL | FLUO- RIDE DIS- SOLVED AS F | SILICA DIS- SOLVED AS SiO ₂ | SOLIDS RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS SUN OF CONSTIT- UENTS DIS- SOLVED (MG/L) | SOLIDS RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS SUN OF CONSTIT- UENTS DIS- SOLVED (MG/L) |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| OCT 15... 1974 | 1005 | 17 | — | 8800 | — | — | — | — | — | — | — | — | — | JAN 1977 | 1405 | 21 | — | 9100 | — | — | — | — | — | — | — |
| NOV 20... 1974 | 1030 | 17 | — | 6000 | — | — | — | — | — | — | — | — | — | FEB 24... 1977 | 1035 | 17 | — | 8700 | — | — | — | — | — | — | — |
| DEC 18... 1974 | 1340 | 17 | — | 8700 | — | — | — | — | — | — | — | — | — | MAR 23... 1977 | 0950 | 17 | — | 8900 | 3.1 | 17 | 15180 | — | — | — | — |
| JAN 16... 1975 | 0940 | 10 | — | 9000 | — | — | — | — | — | — | — | — | — | APR 22... 1977 | 1025 | 8.5 | — | 8700 | — | — | — | — | — | — | — |
| FEB 18... 1975 | 1542 | 16 | — | 9100 | — | — | — | — | — | — | — | — | — | JUN 15... 1977 | 1330 | 8.6 | — | 8600 | 3.2 | 18 | 15000 | — | — | — | — |
| MAR 18... 1975 | 1552 | 10 | — | 9200 | — | — | — | — | — | — | — | — | — | JUL 19... 1977 | 1335 | 13 | — | 5900 | — | — | — | — | — | — | — |
| APR 12... 1975 | 1315 | 17 | — | 8800 | 2.8 | 18 | 15200 | — | — | — | — | — | — | AUG 19... 1977 | 1400 | 14 | — | 8700 | — | — | — | — | — | — | — |
| MAY 17... 1975 | 1450 | 13 | — | 8600 | — | — | — | — | — | — | — | — | — | SEP 18... 1977 | 1020 | 16 | — | 5900 | — | — | — | — | — | — | — |
| JUN 14... 1975 | 1645 | 13 | — | 8700 | — | — | — | — | — | — | — | — | — | OCT 21... 1977 | 1320 | 13 | — | 5900 | 3.2 | 16 | 10500 | — | — | — | — |
| JUL 18... 1975 | 1600 | 17 | — | 8600 | — | — | — | — | — | — | — | — | — | DEC 27... 1977 | 1000 | 16 | — | 6100 | — | — | — | — | — | — | — |
| AUG 17... 1975 | 0925 | 13 | — | 8900 | 3.3 | 18 | — | — | — | — | — | — | — | FEB 15... 1978 | 1015 | 16 | — | 5900 | — | — | — | — | — | — | — |
| SEP 20... 1975 | 1030 | 10 | — | 8700 | 3.3 | — | — | — | — | — | — | — | — | MAR 09... 1978 | 1300 | 20 | — | 6000 | — | — | — | — | — | — | — |
| OCT 15... 1975 | 1435 | 13 | — | 8700 | 3.0 | 17 | 16600 | — | — | — | — | — | — | MAY 22... 1978 | 1300 | 16 | — | 6000 | 3.2 | 18 | 10100 | — | — | — | — |
| NOV 14... 1975 | 1355 | 11 | — | 8700 | — | — | — | — | — | — | — | — | — | JUN 04... 1978 | 1530 | 20 | — | 5900 | — | — | — | — | — | — | — |
| DEC 17... 1975 | 1410 | 13 | — | 8800 | — | — | — | — | — | — | — | — | — | AUG 14... 1978 | 1240 | 20 | — | 6300 | — | — | — | — | — | — | — |
| JAN 16... 1976 | 1000 | 13 | — | 8700 | — | — | — | — | — | — | — | — | — | SEP 03... 1978 | 1100 | 20 | — | 6000 | — | — | — | — | — | — | — |
| FEB 22... 1976 | 1030 | 17 | — | 8800 | — | — | — | — | — | — | — | — | — | NOV 21... 1978 | 0945 | 26 | — | 6000 | 3.1 | 17 | 10800 | — | — | — | — |
| MAR 23... 1976 | 1335 | 11 | — | 8600 | — | — | — | — | — | — | — | — | — | DEC 08... 1978 | 1015 | 20 | — | 5900 | — | — | — | — | — | — | — |
| APR 19... 1976 | 1435 | 13 | — | 8700 | 3.2 | 17 | 15000 | — | — | — | — | — | — | JAN 13... 1979 | 1030 | 25 | — | 6100 | — | — | — | — | — | — | — |
| MAY 26... 1976 | 1415 | 11 | — | 8800 | — | — | — | — | — | — | — | — | — | MAR 24... 1979 | 1015 | 23 | — | 8000 | — | — | — | — | — | — | — |
| JUN 20... 1976 | 0910 | 17 | — | 8800 | — | — | — | — | — | — | — | — | — | MAY 08... 1979 | 1015 | 19 | — | 7100 | 3.2 | 18 | 12900 | — | — | — | — |
| JUL 23... 1976 | 1005 | 13 | — | 8800 | — | — | — | — | — | — | — | — | — | APR 24... 1979 | 1100 | 19 | — | 7400 | — | — | — | — | — | — | — |
| AUG 19... 1976 | 1505 | 13 | — | 8900 | — | — | — | — | — | — | — | — | — | JUN 05... 1979 | 0945 | 25 | — | 6700 | — | — | — | — | — | — | — |
| SEP 17... 1976 | 1200 | 17 | — | 8900 | — | — | — | — | — | — | — | — | — | JUL 31... 1979 | 1430 | 20 | — | 6200 | — | — | — | — | — | — | — |
| OCT 14... 1976 | 1045 | 17 | — | 8600 | 3.4 | — | 18400 | — | — | — | — | — | — | SEP 20... 1979 | 1100 | 20 | — | 5700 | 3.0 | 17 | 10700 | 9650 | — | — | — |
| NOV 20... 1976 | 1100 | 13 | — | 8900 | — | — | — | — | — | — | — | — | — | NOV 07... 1980 | 1100 | 20 | — | 5400 | — | — | — | — | — | — | — |
| DEC 17... 1976 | 1355 | 14 | — | 8700 | — | — | — | — | — | — | — | — | — | JAN 22... 1980 | 1100 | 20 | 24 | 6400 | 2.8 | 20 | 10100 | 11000 | — | — | — |
| JAN 16... 1977 | 1015 | 11 | — | 8600 | — | — | — | — | — | — | — | — | — | MAR 20... 1980 | 1100 | 13 | — | 5000 | — | — | — | — | — | — | — |
| | | | | | | | | | | | | | | MAY 01... 1980 | 0945 | 22 | — | 7700 | — | — | — | — | — | — | — |
| | | | | | | | | | | | | | | JUN 28... 1980 | 1500 | 24 | 17 | 6100 | 3.6 | 16 | 10400 | 10100 | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303457087154301 - North monitor, Massachusetts. | | | | | | | | | | | |
|---|------|--|---|---|---|---|---|---|---|---|---|
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) | SOLIDS, VOLA- TILE ON TONG, TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) |
| FEB 02... 1970 | 1310 | — | — | — | — | — | — | — | — | — | — |
| MAR 03... 1970 | 1420 | — | — | — | — | — | — | — | — | — | — |
| SEP 12... 1970 | 1430 | — | — | — | — | — | — | — | — | — | — |
| OCT 02... 1970 | 1440 | — | — | — | — | — | — | — | — | — | — |
| NOV 04... 1970 | 1450 | — | — | — | — | — | — | — | — | — | — |
| JAN 04... 1971 | 1510 | — | — | — | — | — | — | — | — | — | — |
| MAR 18... 1971 | 1425 | — | — | — | — | — | — | — | — | — | — |
| MAR 18... 1971 | 1412 | — | — | — | — | — | — | — | — | — | — |
| APR 16... 1971 | 1412 | — | — | — | — | — | — | — | — | — | — |
| MAY 11... 1971 | 1412 | — | — | — | — | — | — | — | — | — | — |
| JUN 14... 1971 | 1012 | — | — | — | — | — | — | — | — | — | — |
| JUL 13... 1972 | 1040 | — | — | — | — | — | — | — | — | — | — |
| AUG 10... 1972 | 1020 | — | — | — | — | — | — | — | — | — | — |
| SEP 14... 1972 | 1330 | — | — | — | — | — | — | — | — | — | — |
| OCT 19... 1972 | 1000 | — | — | — | — | — | — | — | — | — | — |
| NOV 16... 1972 | 1000 | — | — | — | — | — | — | — | — | — | — |
| DEC 14... 1972 | 1000 | — | — | — | — | — | — | — | — | — | — |
| JAN 14... 1973 | 0935 | — | — | — | — | — | — | — | — | — | — |
| FEB 13... 1973 | 1000 | — | — | — | — | — | — | — | — | — | — |
| MAR 15... 1973 | 0950 | — | — | — | — | — | — | — | — | — | — |
| APR 18... 1973 | 1430 | — | — | — | — | — | — | — | — | — | — |
| MAY 17... 1973 | 1010 | — | — | — | — | — | — | — | — | — | — |
| JUN 13... 1973 | 1630 | — | — | — | — | — | — | — | — | — | — |
| JUL 19... 1973 | 1000 | — | — | — | — | — | — | — | — | — | — |
| AUG 23... 1973 | 1030 | — | — | — | — | — | — | — | — | — | — |
| SEP 13... 1973 | 1050 | — | — | — | — | — | — | — | — | — | — |
| OCT 11... 1973 | 0935 | — | — | — | — | — | — | — | — | — | — |
| NOV 15... 1973 | 0950 | — | — | — | — | — | — | — | — | — | — |
| DEC 12... 1973 | 1200 | — | — | — | — | — | — | — | — | — | — |
| JAN 17... 1974 | 1110 | — | — | — | — | — | — | — | — | — | — |
| FEB 20... 1974 | 1020 | — | — | — | — | — | — | — | — | — | — |
| MAR 19... 1974 | 0930 | — | — | — | — | — | — | — | — | — | — |
| APR 17... 1974 | 0950 | — | — | — | — | — | — | — | — | — | — |
| MAY 22... 1974 | 1010 | — | — | — | — | — | — | — | — | — | — |
| JUN 20... 1974 | 1050 | — | — | — | — | — | — | — | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Monsanto. | | | | | | | | | | | | | | | |
|--|------|--|---|---|---|---|---|------------|------|--|---|---|---|---|---|
| 303657087154301 - North monitor, Monsanto. | | | | | | | | | | | | | | | |
| DATE | TIME | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) | NITRO- GEN, TOTAL (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | DATE | TIME | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) | NITRO- GEN, TOTAL (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) |
| FEB , 1970 | | | | | | | | NOV , 1972 | | | | | | | |
| 03... | | .94 | | 8.8 | .010 | | | 16... | 1000 | .00 | | 8.7 | | | |
| MAR | | | | | | | | DEC | | .45 | | 9.4 | | | |
| 12... | | 1.5 | | 8.5 | .000 | | | JAN , 1973 | | .00 | | 9.2 | | | |
| SEP | | | | | | | | 18... | 0935 | .00 | | 9.0 | | | |
| 02... | | | | | | | | FEB | | .00 | | 8.3 | | | |
| NOV | | 4.9 | | 10 | .020 | | 0 | MAR | | .36 | | 9.1 | | | |
| 04... | | | | | | | | 15... | 0950 | .00 | | 9.8 | | | |
| JAN , 1971 | | | | | | | | APR | | .00 | | 9.0 | | | |
| 18... | | 3.8 | | 9.2 | | | | MAY | | .00 | | 9.0 | | | |
| MAR | | .44 | | 6.3 | .020 | | 130 | 18... | 1430 | .00 | | 9.0 | | | |
| APR | | | | | | | | 17... | 1010 | .00 | | 9.0 | | | |
| 16... | | .93 | | 8.4 | .010 | | | JUN | | 1.2 | | 9.0 | | | |
| MAY | | | | | | | | 13... | 1630 | .00 | | 8.8 | | | |
| 13... | | | | | | | | JUL | | .00 | | 7.9 | | | |
| JUN | | | | | | | | AUG | | .48 | | 7.9 | | | |
| 09... | | .43 | | 7.9 | | | | SEP | | .45 | | 10 | | | |
| JUL | | 1.6 | | 9.4 | | | | 13... | 1050 | .17 | | 9.1 | | | |
| 07... | | | | | | | | OCT | | 1.2 | | 9.1 | | | |
| SEP | | 1.6 | | 10 | | | | NOV | | 1.2 | | 11 | | | |
| 15... | | .00 | | 11 | | | | DEC | | .02 | | 9.5 | | | 20 |
| OCT | | | | | | | | JAN , 1974 | | .16 | | 7.5 | | | |
| 14... | | | | | | | | FEB | | 1.2 | | 11 | | | |
| NOV | | .00 | | 8.5 | | | | MAR | | .45 | | 10 | | | |
| 12... | | 3.9 | | 14 | | | | APR | | .79 | | 10 | | | |
| DEC | | | | | | | | MAY | | .00 | | 9.6 | | | |
| 09... | | 3.1 | | 19 | .000 | | | 17... | 0950 | .00 | | 7.1 | | | |
| JAN , 1972 | | | | | | | | 22... | 1010 | .00 | | 7.1 | | | |
| 04... | | | | | | | | JUN | | 1.5 | | 9.3 | | | |
| FEB | | .00 | | 16 | | | | 30... | 0920 | .10 | | 7.4 | | | |
| 11... | 1310 | | | | | | | AUG | | .00 | | 7.6 | | | |
| MAR | | | | | | | | 16... | 1010 | .06 | | 6.8 | | | |
| 07... | 1510 | 1.0 | | 10 | | | | SEP | | .00 | | 6.8 | | | |
| APR | | .34 | | 8.0 | | | | OCT | | .00 | | 6.8 | | | |
| 11... | 1425 | | | | | | | 15... | 1005 | .00 | | 6.8 | | | |
| MAY | | | | | | | | | | | | | | | |
| 16... | 1412 | 1.8 | | 8.2 | | | | | | | | | | | |
| JUN | | | | | | | | | | | | | | | |
| 14... | 1012 | .14 | | 9.1 | | .022 | | | | | | | | | |
| JUL | | | | | | | | | | | | | | | |
| 13... | 1040 | 5.0 | | 14 | | | | | | | | | | | |
| AUG | | | | | | | | | | | | | | | |
| 10... | 1020 | .00 | | 10 | | | | | | | | | | | |
| SEP | | | | | | | | | | | | | | | |
| 14... | 1330 | .00 | | 8.8 | .010 | .008 | | | | | | | | | |
| OCT | | | | | | | | | | | | | | | |
| 19... | 1000 | .37 | | 9.6 | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

303&57087154301 - North monitor, Messante.

303&57087154301 - North monitor, Messante.

| DATE | TIME | NITRO- GEN. TOTAL (MG/L AS N) | NITRO- GEN. DIS- SOLVED (MG/L AS N) | PHOS- PHOS. TOTAL (MG/L AS P) | PHOS- PHOS. DIS- SOLVED (MG/L AS P) | PHOS- PHOS. TOTAL (MG/L AS P) | PHOS- PHOS. DIS- SOLVED (MG/L AS P) | ALUM- IM. DIS- SOLVED (UG/L AS AL) |
|--|------|---|--|---|--|---|--|---|
| NOV , 1974 | | | | | | | | |
| 20... | 1030 | .06 | — | .010 | — | .010 | — | — |
| DEC | | | | | | | | |
| 18... | 1340 | .00 | — | .010 | — | .000 | — | — |
| JAN , 1975 | | | | | | | | |
| 16... | 0940 | .20 | — | .000 | — | .000 | — | — |
| FEB | | | | | | | | |
| 18... | 1542 | .40 | — | .020 | — | .000 | — | — |
| 18... | 1552 | .40 | — | .020 | — | .000 | — | — |
| MAR | | | | | | | | |
| 12... | 1315 | .50 | — | .010 | — | .000 | — | — |
| APR | | | | | | | | |
| 17... | 1450 | .60 | — | .010 | — | .000 | — | — |
| MAY | | | | | | | | |
| 14... | 1645 | .20 | — | .010 | — | .000 | — | — |
| JUN | | | | | | | | |
| 18... | 1600 | .20 | — | .010 | — | .000 | — | — |
| JUL | | | | | | | | |
| 17... | 0935 | .60 | — | .000 | — | .000 | — | — |
| AUG | | | | | | | | |
| 20... | 1030 | .70 | — | .000 | — | .000 | — | — |
| SEP | | | | | | | | |
| 15... | 1435 | .40 | — | .000 | — | .000 | — | — |
| OCT | | | | | | | | |
| 14... | 1335 | .20 | — | .010 | — | .000 | — | — |
| NOV | | | | | | | | |
| 17... | 1410 | .20 | — | .010 | — | .010 | — | — |
| DEC | | | | | | | | |
| 16... | 1000 | .20 | — | .030 | — | .010 | — | — |
| JAN , 1976 | | | | | | | | |
| 22... | 1030 | .50 | — | .020 | — | .010 | — | — |
| FEB | | | | | | | | |
| 23... | 1335 | 1.0 | — | .000 | — | .000 | — | — |
| MAR | | | | | | | | |
| 19... | 1455 | .30 | — | .010 | — | .000 | — | — |
| APR | | | | | | | | |
| 26... | 1415 | .10 | — | .010 | — | .000 | — | — |
| MAY | | | | | | | | |
| 20... | 0910 | .10 | — | .010 | — | .010 | — | — |
| JUN | | | | | | | | |
| 23... | 1005 | .10 | — | .020 | — | .020 | — | — |
| JUL | | | | | | | | |
| 19... | 1505 | .60 | — | .010 | — | .000 | — | — |
| AUG | | | | | | | | |
| 17... | 1200 | .10 | — | .020 | — | .000 | — | — |
| SEP | | | | | | | | |
| 14... | 1045 | .47 | — | .020 | — | .000 | — | — |
| OCT | | | | | | | | |
| 20... | 1100 | .37 | — | .010 | — | .000 | — | — |
| NOV | | | | | | | | |
| 17... | 1555 | .50 | — | .010 | — | .010 | — | — |
| DEC | | | | | | | | |
| 14... | 1015 | .30 | — | .000 | — | .000 | — | — |
| 303&57087154301 - North monitor, Messante. | | | | | | | | |
| JAN , 1977 | | | | | | | | |
| 20... | 1435 | .30 | — | .010 | — | .010 | — | — |
| FEB | | | | | | | | |
| 24... | 1035 | .10 | — | .000 | — | .000 | — | — |
| MAR | | | | | | | | |
| 09... | 0950 | .40 | — | .010 | — | .010 | — | — |
| APR | | | | | | | | |
| 22... | 1025 | .40 | — | .010 | — | .000 | — | — |
| JUN | | | | | | | | |
| 15... | 1330 | .00 | — | .010 | — | .010 | — | — |
| JUL | | | | | | | | |
| 19... | 1335 | .10 | — | .010 | — | .000 | — | — |
| AUG | | | | | | | | |
| 19... | 1400 | .20 | — | .020 | — | .000 | — | — |
| SEP | | | | | | | | |
| 18... | 1020 | .30 | — | .010 | — | .000 | — | — |
| OCT | | | | | | | | |
| 21... | 1320 | .20 | — | .020 | — | .010 | — | — |
| NOV | | | | | | | | |
| 07... | 1000 | .10 | — | .020 | — | .000 | — | — |
| DEC | | | | | | | | |
| 15... | 1015 | .00 | — | .010 | — | .000 | — | — |
| FEB , 1978 | | | | | | | | |
| 09... | 1300 | .00 | — | .020 | — | .000 | — | — |
| MAR | | | | | | | | |
| 22... | 1300 | .22 | — | .010 | — | .000 | — | — |
| APR | | | | | | | | |
| 04... | 1530 | .10 | — | .010 | — | .000 | — | — |
| MAY | | | | | | | | |
| 14... | 1240 | .32 | — | .010 | — | .000 | — | — |
| JUN | | | | | | | | |
| 03... | 1100 | .20 | — | .020 | — | .010 | — | — |
| SEP | | | | | | | | |
| 21... | 0945 | .60 | — | .010 | — | .010 | — | — |
| NOV | | | | | | | | |
| 08... | 1015 | .06 | — | .010 | — | .000 | — | — |
| DEC | | | | | | | | |
| 13... | 1030 | .40 | — | .020 | — | .010 | — | — |
| JAN , 1979 | | | | | | | | |
| 24... | 1015 | — | — | .010 | — | .000 | — | — |
| MAR | | | | | | | | |
| 08... | 1015 | 1.4 | — | .010 | — | .000 | — | — |
| APR | | | | | | | | |
| 24... | 1100 | .32 | — | .020 | — | .000 | — | — |
| MAY | | | | | | | | |
| 05... | 0945 | .65 | — | .030 | — | .010 | — | — |
| JUN | | | | | | | | |
| 31... | 1430 | .06 | — | .020 | — | .000 | — | — |
| SEP | | | | | | | | |
| 20... | 1100 | .68 | — | .010 | — | .010 | — | — |
| NOV | | | | | | | | |
| 07... | 1100 | .80 | — | .010 | — | .010 | — | — |
| JAN , 1980 | | | | | | | | |
| 22... | 1100 | .64 | — | .000 | — | .000 | — | — |
| MAR | | | | | | | | |
| 20... | 1100 | .36 | — | .010 | — | .000 | — | — |
| APR | | | | | | | | |
| 01... | 0945 | 1.0 | — | .010 | — | .000 | — | — |
| MAY | | | | | | | | |
| 26... | 1500 | .28 | — | .010 | — | .000 | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Massachusetts. | | | | | | | | | |
|---|-------|--|--|---|--|---|---|---|--|
| DATE | TIME | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BORON, TOTAL REDUC- IBLE (UG/L AS B) | BORON, DIS- SOLVED (UG/L AS B) | CADMIUM, DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) | COPPER, DIS- SOLVED (UG/L AS CU) |
| FEB, 1970 | | | | | | | | | |
| MAR | 03... | | | | | | | | 40 |
| MAR | 12... | 10 | | | | | | | |
| SEP | 02... | | | | | | | | |
| NOV | 04... | | | | | | | | |
| JAN, 1971 | | | | | | | | | 20 |
| MAR | 18... | | | | | | | 0 | 0 |
| MAY | 16... | 0 | | | | | | | 2 |
| JUL | 13... | | | | | | | | 2 |
| SEP | 07... | | | | | | | | 0 |
| SEP | 15... | | | | | | | | |
| OCT | 14... | | | | | | | | 5 |
| NOV | 12... | | | | | | | | 0 |
| JAN, 1972 | | | | | | | | | 0 |
| MAR | 04... | | | | | | | | 0 |
| MAR | 07... | | | | | | | | 1 |
| APR | 11... | | | | | | | | 0 |
| MAY | 1412 | | | 4300 | 4300 | | | | 0 |
| JUN | 16... | | | 4300 | 4300 | | | | 0 |
| JUL | 1012 | | | 4600 | 4600 | | | | 0 |
| AUG | 13... | | | 4600 | 4600 | | | | 0 |
| SEP | 1020 | | | 5100 | 5100 | | | | 0 |
| OCT | 14... | | | 4800 | 4800 | | | | 0 |
| NOV | 19... | | | 5200 | 5200 | | | | 1 |
| NOV | 16... | | | 5200 | 5200 | | | | |
| DEC | 14... | | | 5200 | 5200 | | | | |
| JAN, 1973 | | | | 4600 | 4700 | | | | |
| MAR | 18... | | | | | | | | |
| MAY | 18... | | | | | | | | |
| SEP | 17... | | | | | | | | |
| NOV | 13... | | | | | | | | |
| DEC | 12... | | | | | | | | |
| MAR, 1974 | | | | | | | | | |
| SEP | 19... | | | | | | | | |
| MAR, 1975 | | | | | | | | | |
| SEP | 12... | | | | | | | | |
| SEP | 15... | | | | | | | | |
| NOV | 17... | | | | | | | | |
| MAR, 1976 | | | | | | | | | |
| SEP | 15... | | | | | | | | |
| SEP | 14... | | | | | | | | |
| SEP | 21... | | | | | | | | |
| MAR, 1978 | | | | | | | | | |
| SEP | 22... | | | | | | | | |
| SEP | 21... | | | | | | | | |
| MAR, 1979 | | | | | | | | | |
| SEP | 08... | | | | | | | | |
| SEP | 20... | | | | | | | | |
| JAN, 1980 | | | | | | | | | |
| JUN | 22... | | | | | | | | |
| JUN | 26... | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Massachusetts. | | | | | | | | | |
|---|------|--|---------------------------------|--------------------------------|--------------------------------|-----------------------------------|---------------------------------------|---------------------------------------|--------------------------------|
| DATE | TIME | IRON, TOTAL RECON- ENABLE (UG/L AS FE) | SIG- RECON- ENABLE (UG/L AS FE) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM, DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | ZINC, DIS- SOLVED (UG/L AS ZN) |
| FEB , 1970 | | | | | | | | | |
| 02... | | — | — | — | — | — | — | — | — |
| 03... | | — | — | — | — | — | — | — | — |
| MAR , 1970 | | — | — | — | — | — | — | — | — |
| 12... | | — | — | 1600 | 0 | 280 | 10 | 19000 | 20 |
| SEP , 1970 | | — | — | — | — | — | — | 12000 | — |
| 02... | | — | — | — | — | — | — | — | — |
| 04... | | — | — | 940 | — | — | 20 | 14000 | 30 |
| JUN , 1971 | | — | — | — | — | — | — | — | — |
| 18... | | — | — | 1000 | — | — | 20 | 15000 | — |
| MAR , 1971 | | — | — | 1200 | 0 | — | 10 | 12000 | 30 |
| MAY , 1971 | | — | — | 470 | — | — | 0 | 14000 | 60 |
| JUN , 1971 | | — | — | — | — | — | — | 14000 | — |
| 09... | | — | — | — | — | — | — | — | — |
| JUL , 1971 | | — | — | 760 | — | — | — | — | 10 |
| SEP , 1971 | | — | — | 840 | — | — | — | — | 10 |
| 15... | | — | — | 1300 | — | — | — | — | 20 |
| NOV , 1971 | | — | — | 1100 | — | — | — | — | 20 |
| JAN , 1972 | | — | — | — | — | — | — | — | — |
| 04... | | — | — | — | — | — | — | — | — |
| MAR , 1972 | | — | — | — | — | — | — | — | — |
| 07... | 1510 | — | — | 1600 | — | — | — | 16000 | 10 |
| APR , 1972 | | — | — | — | — | — | — | 18000 | — |
| 11... | 1425 | — | — | — | — | — | — | 25000 | 40 |
| SEP , 1972 | | — | — | 300 | — | — | — | 27000 | — |
| FEB , 1973 | | — | — | — | — | — | — | 36000 | 20 |
| 15... | 1000 | — | — | 620 | — | — | — | 21000 | — |
| MAR , 1973 | | — | — | 1600 | — | — | — | 20000 | 10 |
| 13... | 1050 | — | — | 1800 | 0 | 280 | 29 | 21000 | 30 |
| DEC , 1973 | | — | — | 1600 | — | — | — | 23000 | 50 |
| MAR , 1974 | | — | — | 1600 | — | — | — | 23000 | — |
| 19... | 0930 | — | — | 1600 | — | — | — | 20000 | 10 |
| SEP , 1974 | | — | — | — | — | — | — | — | — |
| 19... | 0940 | — | — | — | — | — | — | — | — |
| DEC , 1974 | | — | — | — | — | — | — | — | — |
| MAR , 1975 | | — | — | 1300 | — | — | — | — | — |
| 12... | 1315 | — | — | — | — | — | — | — | — |
| SEP , 1975 | | — | — | 550 | — | — | — | 24000 | — |
| 15... | 1435 | — | — | — | — | — | — | — | — |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Monsanto. | | | | | | | | | | 303657087154301 - North monitor, Monsanto. | | | | | | | | | |
|--|------|---------------------------|-----------------------------------|--|---------------------------------------|----------------------------|----------------------------------|----------------|------------|--|---------------------------|-----------------------------------|--|---------------------------------------|----------------------------|----------------------------------|----------------|--|--|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INOR-GANIC, TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INOR-GANIC, TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | | |
| FEB , 1970 | | | | | | | | | FEB , 1973 | | | | | | | | | | |
| 03... | | — | 1.0 | — | — | — | — | — | 15... | 1000 | 67 | 12 | — | 55 | — | — | — | | |
| MAR 12... | | 59 | 2.0 | 6.0 | 57 | — | — | — | MAR 15... | 0950 | 67 | 10 | — | 57 | — | — | — | | |
| NOV 04... | | 67 | 4.0 | — | 63 | — | — | — | APR 18... | 1430 | — | 6.0 | 6.5 | — | — | — | — | | |
| JAN , 1971 | | | | | | | | | MAY 17... | 1010 | — | 3.5 | 2.5 | — | — | — | — | | |
| 18... | | 66 | 2.0 | — | 64 | — | — | — | JUN 13... | 1630 | — | 2.0 | — | — | — | — | — | | |
| MAR 16... | | 68 | 2.0 | 1.0 | 66 | 64 | — | — | JUL 19... | 1000 | — | 5.0 | 5.0 | — | — | — | — | | |
| APR 16... | | 69 | 1.0 | — | 68 | — | — | — | SEP 13... | 1050 | — | — | 5.0 | — | — | — | — | | |
| JUN 09... | | 62 | 6.0 | — | 56 | — | — | — | OCT 11... | 0935 | — | — | 2.5 | — | — | — | — | | |
| JUL 07... | | 66 | 10 | — | 56 | — | — | — | NOV 15... | 0950 | — | — | 5.0 | — | — | — | — | | |
| SEP 15... | | 68 | 5.0 | — | 63 | — | — | — | DEC 12... | 1200 | — | — | .8 | — | — | — | — | | |
| OCT 14... | | 98 | 2.0 | — | 56 | — | — | — | JAN , 1974 | | | | | | | | | | |
| NOV 12... | | 63 | 2.0 | — | 61 | — | — | — | FEB 20... | 1110 | — | — | 2.0 | — | — | — | — | | |
| DEC 09... | | 75 | 1.0 | — | 74 | — | — | — | MAR 20... | 1020 | — | — | 8.0 | — | — | — | — | | |
| JAN , 1972 | | | | | | | | | APR 19... | 0930 | — | — | .0 | — | — | — | — | | |
| 04... | | 66 | 3.0 | — | 63 | — | — | — | MAY 17... | 0950 | — | — | 3.0 | — | — | — | — | | |
| MAR 07... | 1510 | 72 | 4.0 | — | 68 | — | — | — | JUN 22... | 1010 | — | — | 1.0 | — | — | — | — | | |
| APR 11... | 1425 | 86 | .0 | — | 86 | — | — | — | JUL 20... | 1050 | — | — | 1.0 | — | — | — | — | | |
| MAY 16... | 1412 | 65 | 5.0 | — | 60 | — | — | — | AUG 30... | 0920 | — | — | 1.0 | — | — | — | — | | |
| JUN 14... | 1012 | — | 12 | — | — | — | — | — | SEP 16... | 1010 | — | — | 1.0 | — | — | — | — | | |
| JUL 13... | 1040 | — | 20 | — | — | — | — | — | OCT 19... | 0940 | — | — | .0 | — | — | — | — | | |
| AUG 10... | 1020 | 66 | 6.0 | — | 60 | — | — | — | NOV 15... | 1005 | — | — | .0 | — | — | — | — | | |
| SEP 14... | 1330 | 60 | 10 | — | 50 | — | — | — | DEC 20... | 1050 | — | — | 1.0 | — | — | — | — | | |
| OCT 19... | 1000 | 67 | 9.0 | — | 58 | — | — | — | JAN , 1975 | | | | | | | | | | |
| NOV 16... | 1000 | 67 | 8.0 | — | 59 | — | — | — | FEB 16... | 0940 | — | — | 3.0 | — | — | — | — | | |
| DEC 14... | 1000 | — | — | — | 63 | — | — | — | MAR 18... | 1542 | — | — | .0 | — | — | — | — | | |
| JAN , 1973 | | | | | | | | | | | | | | | | | | | |
| 0735 | | 57 | 3.0 | — | 54 | — | — | — | | | | | | | | | | | |

Table 23.--Water-quality analyses of water samples from monitor wells at injection site 1--Continued

| 303657087154301 - North monitor, Monsanto. | | | | | | | | | | | |
|--|------|---------------------------|-----------------------------------|--|---------------------------------------|--|----------------------------|----------------------------------|----------------|---|---|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INUR-GANIC, TOTAL (MG/L AS C) | CARBON, INUR-GANIC, DIS-SOLVED (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | | |
| FEB , 1975 | | | | | | | | | | | |
| MAR 18... | 1352 | - | - | .0 | - | - | - | - | - | - | - |
| MAR 22... | 1315 | - | - | .0 | - | - | - | - | - | - | - |
| APR 17... | 1450 | - | - | .0 | - | - | - | - | - | - | - |
| MAY 14... | 1645 | - | - | 1.0 | - | - | - | - | - | - | - |
| JUN 18... | 1600 | - | - | .0 | - | - | - | - | - | - | - |
| JUL 17... | 0935 | - | - | .0 | - | - | - | - | - | - | - |
| AUG 20... | 1030 | - | - | .0 | - | - | - | - | - | - | - |
| SEP 15... | 1435 | - | - | .0 | - | - | - | - | - | - | - |
| OCT 17... | 1410 | - | - | 1.0 | - | - | - | - | - | - | - |
| NOV 16... | 1000 | - | - | 2.0 | - | - | - | - | - | - | - |
| DEC 22... | 1030 | - | - | .0 | - | - | - | - | - | - | - |
| JAN 23... | 1335 | - | - | .0 | - | - | - | - | - | - | - |
| FEB 19... | 1455 | - | - | 2.0 | - | - | - | - | - | - | - |
| MAR 26... | 1415 | - | - | .0 | - | - | - | - | - | - | - |
| APR 20... | 0910 | - | - | .0 | - | - | - | - | - | - | - |
| MAY 23... | 1005 | - | - | 1.0 | - | - | - | - | - | - | - |
| JUN 19... | 1505 | - | - | 4.0 | - | - | - | - | - | - | - |
| JUL 17... | 1200 | - | - | 2.0 | - | - | - | - | - | - | - |
| AUG 14... | 1045 | - | - | 3.0 | - | - | - | - | - | - | - |
| SEP 07... | 1100 | - | - | 2.0 | - | - | - | - | - | - | - |
| OCT 17... | 1355 | - | - | 1.0 | - | - | - | - | - | - | - |
| NOV 16... | 1015 | - | - | 1.0 | - | - | - | - | - | - | - |
| DEC 20... | 1455 | - | - | 2.0 | - | - | - | - | - | - | - |
| JAN 24... | 1035 | - | - | 2.0 | - | - | - | - | - | - | - |
| 303657087154301 - North monitor, Monsanto. | | | | | | | | | | | |
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INUR-GANIC, TOTAL (MG/L AS C) | CARBON, INUR-GANIC, DIS-SOLVED (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | | |
| MAR , 1977 | | | | | | | | | | | |
| APR 23... | 0930 | - | - | 1.0 | - | - | - | - | - | - | - |
| MAY 22... | 1025 | - | - | 8.0 | - | - | - | - | - | - | - |
| JUN 15... | 1330 | - | - | 2.8 | - | - | - | - | - | - | - |
| JUL 19... | 1335 | - | - | 1.8 | - | - | - | - | - | - | - |
| AUG 19... | 1400 | - | - | 3.2 | - | - | - | - | - | - | - |
| SEP 18... | 1020 | - | - | 1.3 | - | - | - | - | - | - | - |
| OCT 21... | 1320 | - | - | 1.0 | - | - | - | - | - | - | - |
| NOV 27... | 1000 | - | - | 8.0 | - | - | - | - | - | - | - |
| DEC 15... | 1015 | - | - | 2.0 | - | - | - | - | - | - | - |
| FEB , 1978 | | | | | | | | | | | |
| MAR 09... | 1300 | - | - | 2.0 | - | - | - | - | - | - | - |
| APR 21... | 1300 | - | - | 2.0 | - | - | - | - | - | - | - |
| MAY 04... | 1530 | - | - | 1.0 | - | - | - | - | - | - | - |
| JUN 14... | 1240 | - | - | 2.0 | - | - | - | - | - | - | - |
| AUG 03... | 1100 | - | - | 1.0 | - | - | - | - | - | - | - |
| SEP 21... | 0945 | - | - | .0 | - | - | - | - | - | - | - |
| NOV 08... | 1015 | - | - | 1.2 | - | - | - | - | - | - | - |
| DEC 13... | 1030 | - | - | .8 | - | - | - | - | - | - | - |
| JAN , 1979 | | | | | | | | | | | |
| FEB 24... | 1015 | - | - | 7.2 | - | - | - | - | - | - | - |
| MAR 24... | 1100 | - | - | 1.2 | - | - | - | - | - | - | - |
| APR 03... | 0945 | - | - | 4.0 | - | - | - | - | - | - | - |
| MAY 31... | 1430 | - | - | 2.0 | - | - | - | - | - | - | - |
| JUN 20... | 1100 | - | - | 2.8 | - | - | - | - | - | - | - |
| JUL 07... | 1100 | - | - | 7.0 | - | - | - | - | - | - | - |
| AUG 22... | 1100 | - | - | 1.3 | - | - | - | - | - | - | - |
| SEP 20... | 1100 | - | - | 2.7 | - | - | - | - | - | - | - |
| OCT 01... | 0945 | - | - | .8 | - | - | - | - | - | - | - |
| NOV 26... | 1500 | - | - | 3.0 | - | - | - | - | - | - | - |

Table 24.--Dissolved gas analyses of samples collected at monitor wells at injection site 1

[Neither hydrogen sulfide (H₂S) nor nitrous oxide (N₂O) found in any sample.]

Concentration in milligrams per liter
Partial pressures in atmospheres at temperature shown

| Date | Temperature °C | Methane (CH ₄) | Carbon dioxide (CO ₂) | Nitrogen (N ₂) | Oxygen (O ₂) | Argon (Ar) |
|--------------------------------|----------------|----------------------------|-----------------------------------|----------------------------|--------------------------|--------------|
| Shallow well (303538087145501) | | | | | | |
| 02/19/75 | 29.5 | 3.0 .148 | 1.75 .0013 | 23.7 1.33 | 0.1 .0027 | 0.82 .015 |
| 02/25/76 | 30.0 | 3.0 .15 | 1.3 .001 | 26 1.44 | .41 .011 | -- |
| 05/04/78 | 22.5 | 3.2 .15 | 3.1 .0020 | 23 1.22 | .02 .0003 | .86 .015 |
| 09/21/78 | 26.0 | 3.1 .15 | 3.1 .002 | 22 1.22 | .02 .0004 | .86 .016 |
| 03/08/79 | 29.0 | 3.3 .143 | 2.8 .0017 | 22 1.13 | .01 .0003 | .85 .014 |
| South well (303417087141701) | | | | | | |
| 12/11/73 | -- | 24 | 14 | 6.0 | -- | -- |
| 02/19/75 | 34.5 | 50 2.69 | 27 .023 | 10.3 .63 | .20 .0047 | .28 .005 |
| 02/25/76 | 35.0 | 48 2.56 | 42 .035 | 8.5 .51 | .22 .006 | -- |
| 02/25/76 | 35.0 | 45 2.41 | 42 .035 | 7.9 .48 | .20 .006 | -- |
| 08/18/76 | 24.0 | 70 3.1 | 53 .034 | 12.7 .65 | .1 .002 | -- |
| 10/27/77 | 24.0 | 40 1.81 | 56 .036 | 5.1 .26 | .05 .001 | .12 .002 |
| 05/04/78 | 23.0 | 38 1.68 | 60 .038 | -- | -- | -- |
| 09/21/78 | 23.0 | 55 2.47 | 47 .030 | 8.6 .45 | 0.06 .0013 | 0.19 .003 |
| 03/08/79 | 29.0 | 31 1.54 | 42 .031 | 4.7 .27 | .07 .0017 | .16 .003 |
| 01/21/80 | 26.0 | 45 2.1 | 47 .033 | 8.9 .50 | .02 .0003 | .22 .004 |

Table 24.--Dissolved gas analyses of samples collected at monitor wells
at injection site 1--Continued

Concentration in milligrams per liter
Partial pressures in atmospheres at temperature shown

| Date | Tempera- ture °C | Methane (CH ₄) | Carbon dioxide (CO ₂) | Nitro- gen (N ₂) | Oxygen (O ₂) | Argon (Ar) |
|------------------------------|---------------------|-------------------------------|---|------------------------------------|-----------------------------|---------------|
| North well (303657087154301) | | | | | | |
| 02/18/75 | 34.0 | 21 1.12 | 15 .012 | 18.6 1.12 | .01 .0007 | .67 .013 |
| 02/25/76 | 35.0 | 22 1.18 | 16 .013 | 21 1.29 | .33 .009 | -- |
| 10/27/77 | 27.0 | 17 .79 | 14 .010 | 22 1.21 | .05 .001 | .89 .015 |
| 05/04/78 | 23.0 | 14 .61 | 14 .0092 | 18 .92 | .02 .0003 | .67 .012 |
| 09/21/78 | 23.0 | 15 .66 | 15 .009 | 18 .96 | .02 .0005 | .72 .013 |
| 03/08/79 | 20.7 | 16 .79 | 15 .011 | 15 .86 | .04 .0009 | .60 .012 |
| 01/22/80 | 26.0 | 21 1.0 | 17 .012 | 25 1.36 | .4 .01 | .82 .015 |
| 03/20/80 | 25.5 | 15 .71 | 15 .010 | -- | -- | -- |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303413087043802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
|---|-----------|--------------------------------|---|------------------------|----------------------|---------------------------------------|--|-------------------------------|-------------------------------|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCTANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COUNT UNITS) | TUR- BID- DITY (JTU) | TUR- BID- DITY (MTU) |
| DEC, 1974 | 1300 | 990 | 1050 | 8.7 | — | 31.0 | 90 | — | — |
| | 20... | — | 950 | 8.8 | — | 31.0 | 90 | — | — |
| | 1330 | 1100 | — | — | — | — | — | — | — |
| | JUL, 1975 | 0850 | — | 2400 | 8.8 | 24.0 | 100 | 6 | — |
| AUG | 21... | — | 1340 | 8.9 | — | 24.0 | — | 2 | — |
| | 1005 | — | — | — | — | — | — | — | — |
| | 17... | — | 1290 | 8.9 | — | 24.0 | — | 3 | — |
| | OCT | 1545 | 1340 | 8.9 | — | 24.0 | — | 5 | — |
| NOV | 1610 | — | 1330 | 8.9 | — | 24.0 | — | 6 | — |
| | 1335 | — | 1400 | 8.8 | — | 24.0 | — | 6 | — |
| | JAN, 1976 | 1115 | 1190 | 8.7 | — | 24.0 | 110 | 6 | — |
| | FEB | 1030 | 1260 | 8.8 | — | 23.5 | — | 7 | — |
| MAR | 20... | — | 1300 | 8.9 | — | 24.0 | — | 3 | — |
| | 1410 | — | 1320 | 9.0 | — | 24.0 | — | 3 | — |
| | 1515 | — | 1280 | 9.0 | — | 24.0 | — | 4 | — |
| | 1605 | — | 1330 | 8.9 | — | 24.0 | — | 2 | — |
| JUN | 0900 | — | 1360 | 8.9 | — | 24.0 | 80 | 2 | — |
| | 21... | — | 1320 | 8.9 | — | 24.0 | — | 3 | — |
| | 1425 | — | 1320 | 8.8 | — | 24.0 | — | 3 | — |
| | 1425 | — | 1320 | 8.8 | — | 24.0 | — | 2 | — |
| OCT | 1510 | — | 1300 | 8.8 | — | 24.5 | — | 2 | — |
| | 1510 | — | 1300 | 8.8 | — | 24.5 | — | 2 | — |
| | DEC | 1245 | 1300 | 8.8 | — | 24.5 | — | 2 | — |
| | JAN, 1977 | 1400 | — | 1320 | 8.7 | 24.5 | 120 | 2 | — |
| FEB | 1015 | — | 1300 | 9.0 | — | 24.5 | — | 2 | — |
| | 1510 | — | 1310 | 9.0 | — | 24.5 | — | 2 | — |
| | APR | 1025 | 1360 | 9.0 | — | 24.5 | — | 1 | — |
| | MAY | 1025 | — | 1360 | 9.0 | 24.5 | — | 2 | — |

| 303413087043802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
|---|-----------|--------------------------------|---|------------------------|----------------------|---------------------------------------|--|-------------------------------|-------------------------------|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCTANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COUNT UNITS) | TUR- BID- DITY (JTU) | TUR- BID- DITY (MTU) |
| JUN, 1977 | 1435 | — | 1360 | 8.7 | — | 24.0 | — | 1 | — |
| | 20... | — | 1320 | 8.7 | — | 24.0 | 80 | 3 | — |
| | AUG | 1510 | 1380 | 8.8 | — | 24.0 | — | 1 | — |
| | SEP | 1500 | 1350 | 8.7 | — | 24.5 | — | 2 | — |
| OCT | 1040 | — | 1340 | 8.6 | — | 24.5 | — | 2 | — |
| | DEC | 1415 | 1340 | 9.0 | — | 24.0 | — | 2 | — |
| | FEB, 1978 | 1000 | 1280 | 8.9 | — | 24.0 | 70 | 2 | — |
| | MAR | 1415 | 1300 | 8.9 | — | 25.0 | — | — | 4.0 |
| MAY | 1615 | — | 1320 | 8.8 | — | 25.0 | 50 | — | 1.0 |
| | JUN | 1430 | 1320 | 8.8 | — | 25.0 | — | — | 1.0 |
| | AUG | 0845 | 1340 | 8.7 | — | 24.5 | 150 | — | 1.0 |
| | SEP | 1330 | 1360 | 8.8 | — | 24.5 | — | — | 1.0 |
| NOV | 1330 | — | 1340 | 8.7 | — | 24.5 | — | — | 1.0 |
| | DEC | 1500 | 1300 | 8.7 | — | 24.5 | 70 | — | 1.0 |
| | JAN, 1979 | 1415 | 1320 | 8.6 | — | 24.5 | — | — | 2.0 |
| | MAR | 1400 | 1300 | 9.0 | — | 26.0 | — | — | 2.0 |
| APR | 1500 | — | 1330 | 8.8 | — | 26.0 | — | — | 2.0 |
| | JUN | 0930 | 1300 | 8.7 | — | 26.0 | 70 | — | 1.0 |
| | JUL | 0930 | 1330 | 8.7 | — | 26.0 | — | — | 1.0 |
| | SEP | 0930 | 1320 | 8.7 | — | 25.5 | — | — | 1.0 |
| NOV | 0915 | — | 1280 | 8.8 | — | 26.0 | — | — | 2.0 |
| | JAN, 1980 | 1530 | 1280 | 8.7 | — | 26.5 | 5 | — | 1.0 |
| | MAR | 1115 | 1300 | 8.7 | — | 26.0 | — | — | .00 |
| | APR | 1000 | 1320 | 8.8 | — | 26.0 | — | — | 2.0 |
| JUN | 0900 | — | 1300 | 8.7 | — | 26.0 | 50 | — | 2.0 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303413067063802 - Shallow monitor, American Cyanamid. | | | | | | | | | | | | | | 303413067063802 - Shallow monitor, American Cyanamid. | | | | | | | | | | | | | |
|---|------|----------------------------------|--------------------------|--|--|--|--|--|--|---|-----------|------|----------------------------------|---|--|--|--|--|--|--|---|----|--|--|--|--|--|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, CHEM- ICAL (MG/L) | HARD- NESS, MILLER- MANN (MG/L AS CaCO3) | HARD- NESS, MILLER- MANN (MG/L AS CaCO3) | ACTIVITY TOTAL HEATED (MG/L AS H) | DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, CHEM- ICAL (MG/L) | HARD- NESS, MILLER- MANN (MG/L AS CaCO3) | HARD- NESS, MILLER- MANN (MG/L AS CaCO3) | ACTIVITY TOTAL HEATED (MG/L AS H) | | | | | | |
| DEC, 1974 | 1300 | — | — | — | — | — | — | 15 | 0 | — | JUN, 1977 | 1435 | — | — | — | 16 | — | — | — | 9 | 0 | — | | | | | |
| JAN, 1975 | 1330 | — | — | — | — | — | — | 22 | 0 | — | JUL, 1977 | 0945 | — | — | — | 24 | — | — | — | 8 | 0 | — | | | | | |
| JUL, 1975 | 0650 | — | — | 26 | — | — | — | 8 | 0 | .0 | AUG, 1977 | 1510 | — | — | — | 19 | — | — | — | 6 | 0 | — | | | | | |
| AUG, 1975 | 1005 | — | — | — | — | — | — | 7 | 0 | — | SEP, 1977 | 1500 | — | — | — | 15 | — | — | — | 7 | 0 | — | | | | | |
| SEP, 1975 | 1120 | — | — | — | — | — | — | 7 | 0 | — | OCT, 1977 | 1040 | — | — | — | 30 | — | — | — | 7 | 0 | — | | | | | |
| OCT, 1975 | 1545 | — | — | — | — | — | — | 6 | 0 | — | DEC, 1977 | 1415 | — | — | — | 16 | — | — | — | 6 | 0 | — | | | | | |
| NOV, 1975 | 1610 | — | — | — | — | — | — | 7 | 0 | — | FEB, 1978 | 1000 | — | — | — | 17 | — | — | — | 7 | 0 | — | | | | | |
| DEC, 1975 | 1335 | — | — | — | — | — | — | 8 | 0 | — | MAR, 1978 | 1415 | — | — | — | 16 | — | — | — | 6 | 0 | — | | | | | |
| JAN, 1976 | 1115 | — | — | 110 | — | — | — | 6 | 0 | .0 | MAY, 1978 | 1615 | — | — | — | 16 | — | — | — | 7 | 0 | .0 | | | | | |
| FEB, 1976 | 1030 | — | — | — | — | — | — | 7 | 0 | — | JUN, 1978 | 1430 | — | — | — | 21 | — | — | — | 7 | 0 | — | | | | | |
| MAR, 1976 | 1410 | — | — | — | — | — | — | 7 | 0 | — | AUG, 1978 | 0945 | — | — | — | 20 | — | — | — | 7 | 0 | — | | | | | |
| APR, 1976 | 1515 | — | — | — | — | — | — | 7 | 0 | — | SEP, 1978 | 1330 | — | — | — | 16 | — | — | — | 6 | 0 | — | | | | | |
| MAY, 1976 | 1405 | — | — | — | — | — | — | 9 | 0 | — | NOV, 1978 | 1330 | — | — | — | 21 | — | — | — | 6 | 0 | — | | | | | |
| JUN, 1976 | 0900 | — | — | — | — | — | — | 8 | 0 | — | DEC, 1978 | 1500 | — | — | — | 20 | — | — | — | 7 | 0 | .0 | | | | | |
| JUL, 1976 | 0720 | — | — | 32 | — | — | — | 7 | 0 | .0 | JAN, 1979 | 1415 | — | — | — | 30 | — | — | — | 8 | 0 | — | | | | | |
| AUG, 1976 | 1425 | — | — | — | — | — | — | 8 | 0 | — | MAR, 1979 | 1400 | — | — | — | 18 | — | — | — | 6 | 0 | — | | | | | |
| SEP, 1976 | 1425 | — | — | — | — | — | — | 7 | 0 | — | APR, 1979 | 1500 | — | — | — | 25 | — | — | — | 5 | 0 | — | | | | | |
| OCT, 1976 | 1510 | — | — | 22 | — | — | — | 6 | 0 | — | JUN, 1979 | 0930 | — | — | — | 30 | — | — | — | 7 | 0 | .0 | | | | | |
| NOV, 1976 | 1510 | — | — | 29 | — | — | — | 9 | 0 | — | JUL, 1979 | 0930 | — | — | — | — | — | — | — | 5 | 0 | — | | | | | |
| DEC, 1976 | 1245 | — | — | 33 | — | — | — | 6 | 0 | — | SEP, 1979 | 0930 | — | — | — | 17 | — | — | — | 5 | 0 | — | | | | | |
| JAN, 1977 | 1400 | — | — | 32 | — | — | — | 8 | 0 | .0 | NOV, 1979 | 0915 | — | — | — | 30 | — | — | — | 6 | 0 | — | | | | | |
| FEB, 1977 | 1015 | — | — | — | — | — | — | 8 | 0 | — | JAN, 1980 | 1530 | .999 | — | — | — | — | — | — | 5 | 0 | .0 | | | | | |
| MAR, 1977 | 1510 | .999 | — | 18 | — | — | — | 7 | 0 | — | MAR, 1980 | 1115 | — | — | — | 40 | — | — | — | 5 | 0 | — | | | | | |
| APR, 1977 | 1025 | — | — | 33 | — | — | — | 7 | 0 | — | APR, 1980 | 1000 | — | — | — | 24 | — | — | — | 4 | 0 | — | | | | | |
| MAY, 1977 | 1025 | — | — | 24 | — | — | — | 7 | 0 | — | JUN, 1980 | 0900 | .999 | — | — | 20 | — | — | — | 5 | 0 | .0 | | | | | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

303413067063802 - Shallow monitor, American Crossmaid.

303413067063802 - Shallow monitor, American Crossmaid.

| DATE | TIME | ACIDITY (MG/L AS CAO3) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS CO3) | CAR- BONATE (MG/L AS CO3) | ALKA- LITY (MG/L AS CAO3) |
|------------|------|---------------------------------|--|--|--|---|--------------------------------------|------------------------------------|---------------------------------------|
| DEC., 1974 | | | | | | | | | |
| 20... | 1300 | — | 4.5 | .9 | 320 | 5.0 | 540 | 8 | 473 |
| 20... | 1330 | — | 7.3 | .8 | 320 | 5.0 | 648 | 4 | 555 |
| JUL., 1975 | | | | | | | | | |
| 14... | 0830 | .0 | 2.2 | .7 | 330 | 5.6 | 613 | 44 | 576 |
| AUG. | 1005 | — | 1.5 | .7 | — | — | 618 | 41 | 575 |
| SEP. | 1120 | — | 1.4 | .7 | — | — | 620 | 41 | 577 |
| OCT. | 1545 | — | 1.6 | .6 | — | — | 618 | 40 | 573 |
| NOV. | 1610 | — | 1.7 | .7 | — | — | 611 | 47 | 579 |
| DEC. | 1335 | — | 1.9 | .7 | — | — | 619 | 30 | 598 |
| JAN., 1976 | | | | | | | | | |
| 20... | 1115 | .0 | 1.6 | .5 | 330 | 5.2 | 638 | 34 | 580 |
| FEB. | 1030 | — | 1.6 | .7 | — | — | 615 | 40 | 584 |
| MAR. | 1410 | — | 1.7 | .6 | — | — | 632 | 41 | 587 |
| APR. | 1315 | — | 1.6 | .7 | — | — | 576 | 47 | 551 |
| MAY. | 1605 | — | 2.1 | .8 | — | — | 630 | 44 | 590 |
| JUN. | 0900 | — | 2.0 | .7 | — | — | 632 | 42 | 588 |
| JUL. | 0920 | .0 | 1.6 | .6 | 320 | 5.3 | 633 | 42 | 589 |
| AUG. | 1425 | — | 1.9 | .7 | — | — | 635 | 42 | 591 |
| SEP. | 1425 | — | 1.5 | .7 | — | — | 641 | 38 | 589 |
| OCT. | 1510 | — | 1.4 | .7 | — | — | 637 | 38 | 586 |
| NOV. | 1510 | — | 2.3 | .8 | — | — | 639 | 38 | 587 |
| DEC. | 1245 | — | 1.4 | .7 | — | — | 632 | 39 | 583 |
| JAN., 1977 | | | | | | | | | |
| 19... | 1400 | .0 | 1.6 | .9 | 320 | 5.8 | 647 | 29 | 579 |
| FEB. | 1015 | — | 7.1 | .8 | — | — | 629 | 43 | 588 |
| MAR. | 1510 | — | 1.7 | .7 | — | — | 626 | 45 | 588 |
| APR. | 1025 | — | 1.5 | .9 | — | — | 618 | 47 | 585 |
| MAY. | 1025 | — | 1.5 | .7 | — | — | 635 | 36 | 581 |
| JUN. | 0900 | .0 | 1.1 | .5 | 320 | 4.7 | 650 | 30 | 583 |
| JUL. | 1435 | — | 2.3 | .8 | — | — | 657 | 18 | 569 |
| AUG. | 0945 | — | 1.9 | .7 | 330 | 4.8 | 645 | 32 | 582 |
| SEP. | 1510 | — | 1.2 | .7 | — | — | 649 | 31 | 594 |
| OCT. | 1360 | — | 1.5 | .7 | — | — | 654 | 29 | 585 |
| NOV. | 1040 | — | 1.8 | .5 | — | — | 654 | 24 | 576 |
| DEC. | 1415 | — | 1.5 | .6 | — | — | 623 | 45 | 586 |
| JAN., 1978 | | | | | | | | | |
| 08... | 1000 | — | 1.6 | .6 | 330 | 4.3 | 620 | 30 | 592 |
| MAR. | 1415 | — | 1.4 | .7 | — | — | 633 | 40 | 586 |
| APR. | 1615 | .0 | 1.7 | .7 | 330 | 4.5 | 710 | 28 | 630 |
| MAY. | 1430 | — | 1.5 | .7 | — | — | 640 | 33 | 580 |
| JUN. | 0945 | .0 | 1.8 | .6 | 340 | 4.6 | 642 | 30 | 577 |
| SEP. | 1330 | — | 1.4 | .7 | — | — | 654 | 38 | 600 |
| OCT. | 1330 | — | 1.4 | .6 | — | — | 661 | 31 | 594 |
| NOV. | 1500 | .0 | 1.6 | .6 | 320 | 4.8 | 660 | 29 | 590 |
| DEC. | 1415 | — | 2.1 | .6 | — | — | 554 | 29 | 585 |
| JAN., 1979 | | | | | | | | | |
| 07... | 1400 | — | 1.4 | .6 | — | — | 627 | 49 | 596 |
| APR. | 1580 | — | 1.2 | .6 | — | — | 644 | 36 | 588 |
| JUN. | 0930 | .0 | 1.5 | .7 | 310 | 5.2 | 647 | 32 | 580 |
| JUL. | 0930 | — | 1.2 | .6 | — | — | 648 | 31 | 583 |
| SEP. | 0930 | — | 1.1 | .6 | — | — | 642 | 30 | 577 |
| NOV. | 0915 | — | 1.4 | .7 | — | — | 629 | 34 | 573 |
| JAN., 1980 | | | | | | | | | |
| 08... | 1530 | .0 | .9 | .7 | 310 | 5.0 | 645 | 33 | 584 |
| MAR. | 1115 | — | .8 | .8 | — | — | 639 | 32 | 580 |
| APR. | 1000 | — | .8 | .5 | — | — | 640 | 34 | 582 |
| JUN. | 0900 | .0 | 1.1 | .5 | 320 | 4.7 | 650 | 30 | 583 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303413087063802 - Shallow monitor, America Crossaid. | | | | | | | | | | | | | |
|--|------|-------------------------------------|--|------------------------------------|--|--|--|--|--|--|--|--|--|
| DATE | TIME | CHLORIDE DIS- (MG/L AS CL) | SULFATE DIS- (MG/L AS SO ₄) | FLUORIDE DIS- (MG/L AS F) | SILICA DIS- (MG/L AS SiO ₂) | SOLIDS, RESIDUE AT 100°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) | SOLIDS, RESIDUE AT 100°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) | SOLIDS, RESIDUE AT 110°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) | SOLIDS, RESIDUE AT 110°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) |
| DEC, 1974 | 1300 | 1.8 | 4.2 | 4.9 | 19 | 614 | 724 | — | — | — | — | — | — |
| JAN, 1975 | 1330 | 1.9 | 4.1 | 5.0 | 19 | 569 | 764 | — | — | — | — | — | — |
| JUL, 1975 | 0650 | 1.6 | .2 | 3.8 | 14 | 840 | 789 | — | — | — | — | — | — |
| AUG | 1005 | 1.4 | — | 4.6 | — | — | — | — | — | — | — | — | — |
| SEP | 1120 | 1.4 | — | 5.0 | — | — | — | — | — | — | — | — | — |
| OCT | 1545 | 1.4 | — | 4.9 | — | — | — | — | — | — | — | — | — |
| NOV | 1610 | 1.4 | — | 4.9 | — | — | — | — | — | — | — | — | — |
| DEC | 1335 | 1.7 | — | 4.7 | — | — | — | — | — | — | — | — | — |
| JAN, 1976 | 1115 | 2.3 | .4 | 4.8 | 12 | 803 | 794 | — | — | — | — | — | — |
| FEB | 1030 | 1.8 | — | 5.1 | — | — | — | — | — | — | — | — | — |
| MAR | 1410 | 1.4 | — | 4.8 | — | — | — | — | — | — | — | — | — |
| APR | 1515 | 1.1 | — | 4.5 | — | — | — | — | — | — | — | — | — |
| MAY | 1605 | 1.2 | — | 4.7 | — | — | — | — | — | — | — | — | — |
| JUN | 0900 | 1.4 | 4.0 | 4.8 | — | — | — | — | — | — | — | — | — |
| JUL | 0920 | 1.4 | 3.0 | 4.7 | 14 | 817 | 795 | — | — | — | — | — | — |
| AUG | 1425 | 1.4 | 4.2 | 4.8 | — | — | — | — | — | — | — | — | — |
| SEP | 1425 | 1.8 | .8 | 4.9 | — | — | — | — | — | — | — | — | — |
| OCT | 1510 | 1.8 | 1.0 | 4.6 | — | — | — | — | — | — | — | — | — |
| NOV | 1510 | 1.8 | .7 | 4.7 | — | — | — | — | — | — | — | — | — |
| DEC | 1245 | 1.8 | 3.2 | 4.5 | — | — | — | — | — | — | — | — | — |
| JAN, 1977 | 1400 | 2.3 | 4.7 | 4.7 | 15 | 803 | 789 | — | — | — | — | — | — |
| FEB | 1015 | 1.1 | — | 4.8 | — | — | — | — | — | — | — | — | — |
| MAR | 1510 | 1.1 | 3.2 | 4.8 | — | — | — | — | — | — | — | — | — |
| APR | 1025 | 1.1 | .6 | 4.5 | — | — | — | — | — | — | — | — | — |
| MAY | 1025 | 1.1 | 7.0 | 4.7 | — | — | — | — | — | — | — | — | — |
| JUN | 0900 | 2.3 | 3.4 | 5.8 | 20 | 808 | 794 | — | — | — | — | — | — |

| 303413087063802 - Shallow monitor, America Crossaid. | | | | | | | | | | | | | |
|--|------|-------------------------------------|--|------------------------------------|--|--|--|--|--|--|--|--|--|
| DATE | TIME | CHLORIDE DIS- (MG/L AS CL) | SULFATE DIS- (MG/L AS SO ₄) | FLUORIDE DIS- (MG/L AS F) | SILICA DIS- (MG/L AS SiO ₂) | SOLIDS, RESIDUE AT 100°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) | SOLIDS, RESIDUE AT 100°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) | SOLIDS, RESIDUE AT 110°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) | SOLIDS, RESIDUE AT 110°C DIS- (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS- (MG/L) |
| JUN, 1977 | 1435 | — | — | 5.0 | — | — | — | — | — | — | — | — | — |
| JUL | 0945 | 2.1 | 2.1 | 4.6 | 13 | 816 | 802 | — | — | — | — | — | — |
| AUG | 1510 | 1.2 | 1.2 | 5.0 | — | — | — | — | — | — | — | — | — |
| SEP | 1500 | .2 | .2 | 4.4 | — | — | — | — | — | — | — | — | — |
| OCT | 1040 | 2.6 | 2.6 | 4.2 | — | — | — | — | — | — | — | — | — |
| NOV | 1415 | 2.3 | 2.3 | 4.3 | — | — | — | — | — | — | — | — | — |
| DEC | 1000 | 4.9 | 4.9 | 4.9 | 15 | 796 | 807 | — | — | — | — | — | — |
| JAN, 1978 | 1415 | 5.7 | 5.7 | 4.9 | — | — | — | — | — | — | — | — | — |
| FEB | 1615 | 5.8 | 5.8 | 4.5 | 15 | 812 | 834 | — | — | — | — | — | — |
| MAR | 1430 | 4.4 | 4.4 | 4.6 | — | — | — | — | — | — | — | — | — |
| APR | 0945 | 6.2 | 6.2 | 4.5 | 15 | 834 | 833 | — | — | — | — | — | — |
| MAY | 1330 | 4.3 | 4.3 | 4.6 | — | — | — | — | — | — | — | — | — |
| JUN | 1330 | 3.5 | 3.5 | 4.7 | — | — | — | — | — | — | — | — | — |
| JUL | 1300 | 3.0 | 3.0 | 4.7 | 15 | 798 | 789 | — | — | — | — | — | — |
| AUG | 1415 | 4.6 | 4.6 | 4.9 | — | — | — | — | — | — | — | — | — |
| SEP | 1400 | 3.9 | 3.9 | 4.8 | — | — | — | — | — | — | — | — | — |
| OCT | 1300 | 3.3 | 3.3 | 4.7 | — | — | — | — | — | — | — | — | — |
| NOV | 0930 | 5.6 | 5.6 | 4.7 | 17 | 816 | 793 | — | — | — | — | — | — |
| DEC | 0930 | 3.7 | 3.7 | 4.6 | — | — | — | — | — | — | — | — | — |
| JAN, 1979 | 0930 | 4.7 | 4.7 | 4.8 | — | — | — | — | — | — | — | — | — |
| FEB | 0915 | 5.6 | 5.6 | 5.0 | — | — | — | — | — | — | — | — | — |
| MAR | 1330 | 5.3 | 5.3 | 5.6 | 18 | 803 | 783 | — | — | — | — | — | — |
| APR | 1115 | 7.7 | 7.7 | 5.5 | — | — | — | — | — | — | — | — | — |
| MAY | 1000 | 6.1 | 6.1 | 5.8 | — | — | — | — | — | — | — | — | — |
| JUN | 0900 | 2.3 | 3.4 | 5.8 | 20 | 808 | 794 | — | — | — | — | — | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303413087043802 - Shallow monitor, American Cyanamid. | | | | | | | | | | | | | |
|---|------|--|--|---|---|---|---|---|---|---|---|---|---|
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C. TOTAL (MG/L) | SOLIDS, VOL- TILE ON ION- TION, TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) |
| JUN, 1977 | 1435 | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL 20... | 0945 | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG 16... | 1510 | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP 19... | 1300 | — | — | — | — | — | — | — | — | — | — | — | — |
| OCT 2... | 1040 | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC 12... | 1415 | — | — | — | — | — | — | — | — | — | — | — | — |
| FEB 08... | 1000 | 940 | 0 | — | — | — | — | — | — | — | — | — | — |
| MAR 20... | 1415 | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY 02... | 1615 | 850 | 76 | — | — | — | — | — | — | — | — | — | — |
| JUN 12... | 1430 | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG 02... | 0945 | 820 | 66 | — | — | — | — | — | — | — | — | — | — |
| SEP 19... | 1330 | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV 06... | 1330 | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC 11... | 1500 | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1979 | 1415 | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR 07... | 1400 | — | — | — | — | — | — | — | — | — | — | — | — |
| APR 30... | 1300 | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN 12... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL 24... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP 19... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV 06... | 0915 | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1980 | 1530 | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR 18... | 1115 | — | — | — | — | — | — | — | — | — | — | — | — |
| APR 29... | 1000 | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN 18... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC, 1977 | 1300 | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1978 | 1415 | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR 07... | 1400 | — | — | — | — | — | — | — | — | — | — | — | — |
| APR 30... | 1300 | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN 12... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL 24... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP 19... | 0930 | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV 06... | 0915 | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1980 | 1530 | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR 18... | 1115 | — | — | — | — | — | — | — | — | — | — | — | — |
| APR 29... | 1000 | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN 18... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303413087063802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
|---|------|--------------------------------------|------------------------|------------------------------|-------------------------------------|--------------------------------|---|-------------------------------------|---|
| DATE | TIME | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | DIS-SOLVED (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | PHOS-PHORUS, TOTAL (MG/L AS P) | PHOS-PHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P) | ALUM-INIUM, DIS-SOLVED (UG/L AS AL) | |
| DEC, 1974 | 1300 | .43 | .40 | 3.8 | .080 | .080 | .080 | — | — |
| JUL, 1975 | 1330 | .60 | — | 1.6 | .080 | .080 | .080 | 20 | — |
| AUG | 0830 | .60 | — | 1.8 | .070 | .070 | .070 | — | — |
| SEP | 1005 | .24 | — | 1.3 | .080 | .080 | .080 | — | — |
| OCT | 1120 | .28 | — | 1.2 | .080 | .080 | .080 | — | — |
| NOV | 1545 | .37 | — | 1.6 | .080 | .080 | .080 | — | — |
| DEC | 1610 | .32 | — | 1.3 | .110 | .110 | .090 | — | — |
| JAN, 1976 | 1335 | .42 | — | 1.6 | .080 | .080 | .080 | 10 | — |
| FEB | 1115 | .23 | — | 1.2 | .080 | .080 | .080 | — | — |
| MAR | 1030 | .33 | — | 1.4 | .090 | .090 | .090 | — | — |
| APR | 1410 | .24 | — | 1.3 | .080 | .080 | .080 | — | — |
| MAY | 1515 | .18 | — | 1.2 | .080 | .080 | .080 | — | — |
| JUN | 1605 | .17 | — | 1.1 | .090 | .090 | .090 | — | — |
| JUL | 0900 | .27 | — | 1.2 | .090 | .090 | .090 | — | — |
| AUG | 0920 | .17 | — | 1.2 | .090 | .090 | .090 | — | — |
| SEP | 1425 | .08 | — | 1.0 | .090 | .090 | .090 | — | — |
| OCT | 1425 | .17 | — | 1.1 | .080 | .080 | .080 | — | — |
| NOV | 1510 | .19 | — | 1.1 | .080 | .080 | .080 | — | — |
| DEC | 1510 | .12 | — | 1.1 | .080 | .080 | .080 | — | — |
| JAN, 1977 | 1245 | .23 | — | 1.2 | .090 | .090 | .090 | — | — |
| FEB | 1400 | .27 | — | 1.3 | .090 | .090 | .090 | — | — |
| MAR | 1015 | .19 | — | 1.0 | .080 | .080 | .080 | — | — |
| APR | 1510 | .19 | — | 1.1 | .080 | .080 | .080 | — | — |
| MAY | 1025 | .29 | — | 1.1 | .080 | .080 | .080 | — | — |
| JUN | 1025 | .16 | — | 1.4 | .110 | .110 | .110 | — | — |

| 303413087063802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
|---|------|--------------------------------------|------------------------|------------------------------|-------------------------------------|--------------------------------|---|-------------------------------------|---|
| DATE | TIME | NITRO-GEN, ORGANIC TOTAL (MG/L AS N) | DIS-SOLVED (MG/L AS N) | NITRO-GEN, TOTAL (MG/L AS N) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | PHOS-PHORUS, TOTAL (MG/L AS P) | PHOS-PHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P) | ALUM-INIUM, DIS-SOLVED (UG/L AS AL) | |
| JUN, 1977 | 1435 | .00 | — | 1.0 | .080 | .080 | .080 | — | — |
| JUL | 0945 | .27 | — | 1.2 | .080 | .080 | .080 | — | — |
| AUG | 1510 | .02 | — | 1.0 | .090 | .090 | .090 | — | — |
| SEP | 1500 | .27 | — | 1.2 | .080 | .080 | .080 | — | — |
| OCT | 1040 | .13 | — | 1.1 | .080 | .080 | .080 | — | — |
| NOV | 1415 | .11 | — | 1.1 | .080 | .080 | .080 | — | — |
| DEC | 1000 | .23 | — | 1.2 | .090 | .090 | .090 | — | — |
| JAN | 1415 | .23 | — | 1.2 | .090 | .090 | .090 | — | — |
| FEB | 1615 | .26 | — | 1.2 | .100 | .100 | .100 | — | — |
| MAR | 1430 | .30 | — | 1.2 | .130 | .130 | .090 | — | — |
| APR | 0845 | .32 | — | 1.3 | .080 | .080 | .080 | — | — |
| MAY | 1330 | .12 | — | 1.2 | .100 | .100 | .100 | — | — |
| JUN | 1330 | .17 | — | .98 | .070 | .070 | .070 | — | — |
| JUL | 1500 | .07 | — | — | .090 | .090 | .080 | — | — |
| AUG | 1415 | .47 | — | 1.4 | .080 | .080 | .080 | — | — |
| SEP | 1400 | .68 | — | 1.6 | .110 | .110 | .090 | — | — |
| OCT | 1500 | .17 | — | 1.1 | .100 | .100 | .100 | — | — |
| NOV | 0930 | .07 | — | 1.1 | .100 | .100 | .100 | — | — |
| DEC | 0930 | .53 | — | 1.7 | .100 | .100 | .100 | — | — |
| JAN | 0915 | .35 | — | 1.4 | .100 | .100 | .100 | — | — |
| FEB | 1530 | .46 | — | 1.9 | .100 | .100 | .090 | — | — |
| MAR | 1115 | .51 | — | 1.8 | .090 | .090 | .090 | — | — |
| APR | 1000 | .44 | — | 1.5 | .110 | .110 | .110 | — | — |
| MAY | 0900 | .16 | — | 1.4 | .110 | .110 | .110 | — | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303413087063802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
|---|------|---|---|---|---|---|--|--|--|
| DATE | TIME | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BORON, TOTAL REDUC- IBLE (UG/L AS B) | CADMIUM, DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) | COPPER, DIS- SOLVED (UG/L AS CU) | DATE | TIME |
| JUL 14... | 0650 | 0 | — | — | 0 | 0 | 0 | DET 1974 | 1300 |
| JAN 20... | 1115 | 0 | — | — | 0 | 0 | 0 | 20... | 1320 |
| JUL 21... | 0920 | 1 | — | — | — | — | 0 | JUL 1975 | 0850 |
| JAN 19... | 1400 | 0 | — | — | — | — | 0 | JAN 1976 | 1115 |
| JUL 20... | 0945 | 0 | — | — | — | — | 0 | JUL 20... | 0920 |
| FEB 08... | 1000 | 2 | — | — | — | — | 0 | JAN 1977 | 1400 |
| MAY 02... | 1615 | 2 | — | — | — | — | 0 | JUL 20... | 0945 |
| AUG 11... | 1500 | 1 | — | — | — | — | 0 | FEB 1978 | 1000 |
| SEP 12... | 0930 | 2 | — | — | — | — | 0 | MAY 08... | 1615 |
| JAN 08... | 1530 | 2 | 0 | — | — | — | 1 | AUG 02... | 0845 |
| JUN 18... | 0900 | 2 | <50 | — | — | — | 2 | SEP 12... | 0845 |
| | | | | | | | | JUN 1979 | 1330 |
| | | | | | | | | DET 11... | 1500 |
| | | | | | | | | JAN 1979 | 0930 |
| | | | | | | | | JAN 1980 | 0930 |
| | | | | | | | | 08... | 1530 |
| | | | | | | | | JUN 18... | 0900 |
| | | | | | | | | | |
| 303413087063802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
| DATE | TIME | IRON, TOTAL REDUC- IBLE (UG/L AS FE) | IRON, SIS- TEMIC REDUC- IBLE (UG/L AS FE) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM, DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | ZINC, DIS- SOLVED (UG/L AS ZN) |
| JUL 14... | 0650 | — | — | 140 | — | — | — | 130 | — |
| JAN 20... | 1115 | — | — | 140 | — | — | — | 100 | — |
| JUL 21... | 0920 | — | — | 170 | 8 | — | 0 | 60 | 3 |
| JAN 19... | 1400 | — | — | 160 | 8 | — | 10 | 180 | 10 |
| JUL 20... | 0945 | — | — | 130 | — | — | — | 160 | 10 |
| FEB 08... | 1000 | — | — | 110 | — | — | — | 200 | 0 |
| MAY 02... | 1615 | — | — | 110 | — | — | — | 130 | 0 |
| AUG 11... | 1500 | 2300 | — | 100 | — | — | — | 170 | 10 |
| SEP 12... | 0845 | 2300 | — | 110 | — | — | — | 130 | 0 |
| JUN 1979 | 1330 | 210 | — | — | — | — | — | 90 | 0 |
| DET 11... | 1500 | 350 | — | 80 | — | — | — | — | — |
| JAN 1979 | 0930 | 10 | 0 | 40 | — | — | — | 120 | 0 |
| JAN 1980 | 0930 | 90 | 40 | 50 | — | — | — | 160 | 10 |
| 08... | 1530 | — | — | — | — | — | — | 90 | 0 |
| JUN 18... | 0900 | — | — | 30 | — | — | — | 130 | 0 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303413067063802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
|---|------|---------------------------|-----------------------------------|--|---|--|----------------------------|----------------------------------|----------------|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INTR-ORGANIC, TOTAL (MG/L AS C) | CARBON, INTR-ORGANIC, DIS-SOLVED (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) |
| DEC, 1974 | | | | | | | | | |
| 20... | 1300 | — | 9.0 | — | — | — | — | — | — |
| 20... | 1330 | — | 6.0 | — | — | — | — | — | — |
| JUL, 1975 | | | | | | | | | |
| 16... | 0830 | — | — | 3.0 | — | — | .00 | — | — |
| AUG | | | | | | | | | |
| 21... | 1005 | — | — | 3.0 | — | — | — | — | — |
| SEP | | | | | | | | | |
| 17... | 1120 | — | — | 5.0 | — | — | — | — | — |
| OCT | | | | | | | | | |
| 15... | 1545 | — | — | 3.0 | — | — | — | — | — |
| DEC | | | | | | | | | |
| 15... | 1335 | — | — | 5.0 | — | — | — | — | — |
| JAN, 1976 | | | | | | | | | |
| 20... | 1115 | — | — | 4.0 | — | — | .00 | — | — |
| FEB | | | | | | | | | |
| 26... | 1030 | — | — | 6.0 | — | — | — | — | — |
| MAR | | | | | | | | | |
| 20... | 1410 | — | — | 6.0 | — | — | — | — | — |
| APR | | | | | | | | | |
| 27... | 1515 | — | — | 4.0 | — | — | — | — | — |
| MAY | | | | | | | | | |
| 18... | 1405 | — | — | 7.0 | — | — | — | — | — |
| JUN | | | | | | | | | |
| 24... | 0900 | — | — | 4.0 | — | — | — | .00 | — |
| JUL | | | | | | | | | |
| 21... | 0920 | — | — | 3.0 | — | — | .00 | — | — |
| AUG | | | | | | | | | |
| 18... | 1425 | — | — | 4.0 | — | — | — | — | — |
| SEP | | | | | | | | | |
| 15... | 1425 | — | — | 5.0 | — | — | — | — | — |
| OCT | | | | | | | | | |
| 18... | 1510 | — | — | 4.0 | — | — | — | — | — |
| NOV | | | | | | | | | |
| 15... | 1510 | — | 3.0 | — | — | — | — | — | 0 |
| DEC | | | | | | | | | |
| 15... | 1245 | — | — | 2.0 | — | — | — | — | — |
| JAN, 1977 | | | | | | | | | |
| 19... | 1400 | — | — | 6.0 | — | — | .00 | — | — |
| FEB | | | | | | | | | |
| 22... | 1015 | — | — | 11 | — | — | — | — | — |
| MAR | | | | | | | | | |
| 23... | 1510 | — | — | 4.0 | — | — | — | — | — |
| APR | | | | | | | | | |
| 21... | 1025 | — | — | 4.0 | — | — | — | — | — |
| MAY | | | | | | | | | |
| 19... | 1025 | — | — | 8.0 | — | — | — | — | — |
| JUN | | | | | | | | | |
| 14... | 1435 | — | — | 10 | — | — | .00 | .00 | — |

| 303413067063802 - Shallow monitor, American Cyanamid. | | | | | | | | | |
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INTR-ORGANIC, TOTAL (MG/L AS C) | CARBON, INTR-ORGANIC, DIS-SOLVED (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) |
| JUL, 1977 | | | | | | | | | |
| 20... | 0945 | — | — | — | — | — | .00 | — | — |
| AUG | | | | | | | | | |
| 16... | 1510 | — | — | 8.0 | — | — | — | — | — |
| SEP | | | | | | | | | |
| 19... | 1500 | — | — | 4.0 | — | — | — | — | — |
| OCT | | | | | | | | | |
| 26... | 1040 | — | — | .0 | — | — | — | — | — |
| DEC | | | | | | | | | |
| 12... | 1415 | — | — | 4.0 | — | — | — | — | — |
| FEB, 1978 | | | | | | | | | |
| 08... | 1000 | — | — | 6.0 | — | — | .00 | — | — |
| MAR | | | | | | | | | |
| 20... | 1415 | — | — | 6.0 | — | — | — | — | — |
| APR | | | | | | | | | |
| 02... | 1615 | — | — | 6.0 | — | — | .00 | — | — |
| JUN | | | | | | | | | |
| 12... | 1430 | — | — | 6.0 | — | — | — | — | — |
| AUG | | | | | | | | | |
| 02... | 0845 | — | — | 5.0 | — | — | .00 | — | — |
| SEP | | | | | | | | | |
| 19... | 1330 | — | — | 5.0 | — | — | — | — | — |
| NOV | | | | | | | | | |
| 06... | 1330 | — | — | 7.0 | — | — | — | .00 | — |
| DEC | | | | | | | | | |
| 11... | 1500 | — | — | 6.7 | — | — | .00 | .00 | — |
| JAN, 1979 | | | | | | | | | |
| 23... | 1415 | — | — | 6.0 | — | — | — | .00 | — |
| MAR | | | | | | | | | |
| 07... | 1400 | — | — | — | — | — | — | .00 | — |
| APR | | | | | | | | | |
| 30... | 1500 | — | — | 7.6 | — | — | — | .00 | — |
| JUN | | | | | | | | | |
| 12... | 0930 | — | — | 9.0 | — | — | .00 | .00 | 0 |
| JUL | | | | | | | | | |
| 24... | 0930 | — | — | — | — | — | — | .00 | — |
| SEP | | | | | | | | | |
| 19... | 0930 | — | — | 10 | — | — | — | .00 | — |
| NOV | | | | | | | | | |
| 06... | 0915 | — | — | 5.7 | — | — | — | .00 | — |
| JAN, 1980 | | | | | | | | | |
| 08... | 1530 | — | — | 9.1 | — | — | — | — | — |
| MAR | | | | | | | | | |
| 18... | 1115 | — | — | 8.6 | — | — | — | .00 | — |
| APR | | | | | | | | | |
| 29... | 1000 | — | — | 10 | — | — | — | .00 | — |
| JUN | | | | | | | | | |
| 18... | 0900 | — | — | 7.8 | — | — | .00 | .00 | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | | | | | | | | | | | | 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | | | | | | | | | | | |
|---|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|------------|------|--------------------------------|--|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | | | | | | | | | | | | | | | | | | | | |
| AUG , 1971 | — | — | 281 | 8.1 | — | 26.0 | 0 | — | — | MAY , 1977 | 1315 | — | 6900 | 8.1 | — | 25.5 | — | 30 | — | | | | | | | | | | | | | | | | | | | | |
| 10... | — | — | 19600 | 7.5 | — | 33.5 | 5 | — | — | JUN | 1630 | — | 7500 | 7.9 | — | 25.0 | — | 30 | — | | | | | | | | | | | | | | | | | | | | |
| SEP | — | — | — | — | — | — | — | — | — | JUL | 1445 | — | 6600 | 7.9 | — | 26.0 | 70 | 10 | — | | | | | | | | | | | | | | | | | | | | |
| AUG , 1975 | 1125 | — | 10400 | 7.6 | — | 26.5 | 15 | 50 | — | AUG | 1120 | — | 7300 | 7.8 | — | 26.0 | — | 16 | — | | | | | | | | | | | | | | | | | | | | |
| 21... | — | — | 9600 | 7.7 | — | 26.0 | — | 35 | — | SEP | — | — | 6600 | 7.8 | — | 27.0 | — | 11 | — | | | | | | | | | | | | | | | | | | | | |
| 16... | 1510 | — | 9300 | 7.7 | — | 25.5 | — | 30 | — | OCT | 1130 | — | 6350 | 7.8 | — | 26.5 | — | 9 | — | | | | | | | | | | | | | | | | | | | | |
| 18... | — | — | 9300 | 7.6 | — | 25.0 | — | 35 | — | NOV | 1515 | — | 6300 | 7.9 | — | 25.0 | 100 | — | — | | | | | | | | | | | | | | | | | | | | |
| 0910 | — | — | 9000 | 7.7 | — | 25.0 | — | 30 | — | DEC | 1200 | — | 6300 | 7.9 | — | 25.5 | — | 30 | — | | | | | | | | | | | | | | | | | | | | |
| 15... | 1405 | — | 8500 | 7.7 | — | 23.0 | 110 | 35 | — | JAN , 1976 | 1110 | — | 6050 | 8.0 | — | 22.0 | 170 | 25 | — | | | | | | | | | | | | | | | | | | | | |
| 21... | 1015 | — | 9200 | 7.7 | — | 24.5 | — | 25 | — | FEB , 1978 | 1300 | — | 6600 | 8.0 | — | 25.0 | — | 10 | — | | | | | | | | | | | | | | | | | | | | |
| 23... | 1540 | — | 8800 | 7.8 | — | 25.0 | — | 25 | — | MAR | 1040 | — | 6400 | 7.8 | — | 25.0 | — | — | — | | | | | | | | | | | | | | | | | | | | |
| 20... | 1610 | — | 8700 | 7.7 | — | 26.0 | 10 | 25 | — | APR | 1700 | — | 6500 | 7.8 | — | 26.0 | — | — | — | | | | | | | | | | | | | | | | | | | | |
| 28... | 1350 | — | — | 7.7 | — | 24.0 | 80 | 35 | — | MAY | 1400 | — | 6300 | 7.8 | — | 25.0 | 100 | — | — | | | | | | | | | | | | | | | | | | | | |
| 13... | 1125 | — | 7700 | 7.8 | — | 24.0 | — | 25 | — | JUN | 1330 | — | 6800 | 8.0 | — | 24.0 | 55 | 11 | — | | | | | | | | | | | | | | | | | | | | |
| 13... | 1340 | — | 8200 | 7.7 | — | 24.0 | — | 20 | — | JUL | 1530 | — | 6500 | 7.7 | — | 26.0 | — | 13 | — | | | | | | | | | | | | | | | | | | | | |
| 13... | 1440 | — | — | 7.7 | — | 24.5 | 90 | 20 | — | SEP | 1630 | — | 7400 | 7.8 | — | 26.0 | — | 13 | — | | | | | | | | | | | | | | | | | | | | |
| 13... | 1615 | — | 8400 | 7.8 | — | 25.5 | — | 40 | — | NOV | 1300 | — | 6300 | 7.8 | — | 25.0 | 100 | — | 9.0 | | | | | | | | | | | | | | | | | | | | |
| 1515 | — | — | 8200 | 7.7 | — | 25.5 | 30 | 30 | — | DEC | 1545 | — | 6250 | 7.9 | — | 25.5 | — | 8.0 | — | | | | | | | | | | | | | | | | | | | | |
| 1330 | — | — | 8800 | 7.7 | — | 25.5 | — | 25 | — | JAN , 1979 | 1300 | — | 6500 | 7.8 | — | 25.5 | — | 10 | — | | | | | | | | | | | | | | | | | | | | |
| 1510 | — | — | 7100 | 7.5 | — | 26.0 | — | 35 | — | MAR | 1130 | — | 7000 | 7.7 | — | 25.0 | — | 25 | — | | | | | | | | | | | | | | | | | | | | |
| 0925 | — | — | 7150 | 7.6 | — | 26.0 | — | 20 | — | APR | 1310 | — | 6600 | 7.8 | — | 24.0 | 30 | 40 | — | | | | | | | | | | | | | | | | | | | | |
| 1610 | — | — | 7000 | 7.6 | — | 24.0 | — | 25 | — | MAY | 1000 | — | 7900 | 8.0 | — | 26.0 | — | 8.0 | — | | | | | | | | | | | | | | | | | | | | |
| 1610 | — | — | 7000 | 7.5 | — | 24.0 | — | 20 | — | JUN | 1530 | — | 6800 | 7.8 | — | 26.0 | — | 12 | — | | | | | | | | | | | | | | | | | | | | |
| 14... | 1500 | — | 7100 | 7.7 | — | 24.0 | 50 | 20 | — | SEP | 1540 | — | 7300 | 7.9 | — | 26.0 | — | 9.0 | — | | | | | | | | | | | | | | | | | | | | |
| JUN , 1977 | 1330 | — | 6450 | 7.9 | — | 24.5 | — | 30 | — | NOV | 1300 | — | 6950 | 8.0 | — | 23.0 | 50 | 12 | — | | | | | | | | | | | | | | | | | | | | |
| 17... | — | — | 6550 | 7.8 | — | 24.5 | — | 25 | — | JAN , 1980 | 1100 | — | 7000 | 8.0 | — | 25.5 | — | 6.0 | — | | | | | | | | | | | | | | | | | | | | |
| 21... | 1400 | — | 6500 | 7.9 | — | 25.0 | 100 | 9 | — | MAR | 1455 | — | 7200 | 8.0 | — | 26.0 | — | 65 | — | | | | | | | | | | | | | | | | | | | | |
| 24... | 0900 | — | — | 7.9 | — | — | — | — | — | APR | 1450 | — | 7350 | 7.9 | — | 24.0 | 40 | 8.0 | — | | | | | | | | | | | | | | | | | | | | |
| 20... | 1010 | — | 6500 | 7.9 | — | 25.0 | — | — | — | MAY | 1100 | — | — | — | — | — | — | — | — | | | | | | | | | | | | | | | | | | | | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303405087064401 - Deep-test monitor, American Cyanamid. | | | | | | | | | | | | | | | | |
|---|--------|----------------------------------|--------------------------|--|---|--|--|------|-----------|----------------------------------|--------------------------|--|---|--|--|-----|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, BIOCHEM 5 DAY (MG/L) | HARD- NESS, MILLICAR- BONATE (MG/L CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) | DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (MG/L) | OXYGEN DEMAND, BIOCHEM 5 DAY (MG/L) | HARD- NESS, MILLICAR- BONATE (MG/L CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) | |
| AUG., 1971 | 10... | - | - | - | - | 24 | 0 | - | MAY, 1977 | 18... | - | - | - | 150 | 0 | - |
| | SEP... | - | - | - | - | 1040 | 793 | - | JUN... | 1630 | - | - | - | 190 | 0 | - |
| | 1125 | - | - | - | - | 340 | 14 | .0 | JUL... | 1445 | - | - | - | 150 | 0 | .3 |
| | 1310 | - | - | - | - | 290 | 0 | - | AUG... | 1120 | - | - | - | 180 | 0 | - |
| | 1110 | - | - | - | - | 290 | 0 | - | SEP... | 1130 | - | - | - | 140 | 0 | - |
| | 0910 | - | - | - | - | 270 | 0 | - | OCT... | 1515 | - | - | - | 140 | 0 | - |
| | 1405 | - | - | - | - | 270 | 0 | - | NOV... | 1200 | - | - | - | 150 | 0 | - |
| | 1015 | - | - | - | - | 260 | 0 | - | DEC... | 1110 | - | - | - | 140 | 0 | - |
| | 1540 | - | - | - | - | 270 | 0 | - | FEB, 1978 | 1300 | - | - | - | 150 | 0 | .3 |
| | 1610 | - | - | - | - | 220 | 0 | - | MAR... | 1040 | - | - | - | 160 | 0 | - |
| AUG., 1975 | 1330 | - | - | - | - | 230 | 0 | .1 | MAY | 1700 | - | - | - | 150 | 0 | .3 |
| | 1125 | - | - | - | - | 170 | 0 | - | JUN | 1400 | - | - | - | 160 | 0 | - |
| | 1340 | - | - | - | - | 180 | 0 | - | JUL | 1530 | - | - | - | 190 | 0 | .8 |
| | 1440 | - | - | - | - | 200 | 0 | - | SEP | 1630 | - | - | - | 160 | 0 | - |
| | 1615 | - | - | - | - | 210 | 0 | - | NOV | 1300 | - | - | - | 210 | 0 | - |
| | 1515 | - | - | - | - | 200 | 0 | - | DEC | 1345 | - | - | - | 170 | 0 | 1.3 |
| | 1330 | - | - | - | - | 180 | 0 | .3 | JAN, 1979 | 1300 | - | - | - | 190 | 0 | - |
| | 1510 | - | - | - | - | 170 | 0 | - | MAR | 1130 | - | - | - | 170 | 0 | - |
| | 0925 | - | - | - | - | 160 | 0 | - | APR | 1310 | - | - | - | 210 | 0 | - |
| | 1610 | - | - | - | - | 160 | 0 | - | MAY | 1000 | - | - | - | 200 | 0 | 2.0 |
| AUG., 1977 | 1610 | - | - | - | - | 150 | 0 | - | JUN | 1530 | - | - | - | 230 | 0 | - |
| | 1300 | - | - | - | - | 160 | 0 | .0 | JUL | 1330 | - | - | - | 160 | 0 | - |
| | 1400 | - | - | - | - | 150 | 0 | - | SEP | 1540 | - | - | - | 180 | 0 | - |
| | 0900 | - | - | - | - | 160 | 0 | - | NOV | 1300 | - | - | - | 180 | 0 | - |
| | 1010 | - | - | - | - | 150 | 0 | - | DEC | 1100 | - | - | - | 170 | 0 | - |
| | | - | - | - | - | 250 | 0 | - | JAN, 1980 | 1455 | - | - | - | 180 | 0 | - |
| | | - | - | - | - | 257 | 0 | - | MAR | 1450 | - | - | - | 170 | 0 | - |
| | | - | - | - | - | 257 | 0 | - | APR | 1100 | - | - | - | 180 | 0 | 2.3 |
| | | - | - | - | - | 257 | 0 | - | MAY | 1003 | - | - | - | 180 | 0 | - |
| | | - | - | - | - | 257 | 0 | - | JUN | 1.003 | - | - | - | 180 | 0 | - |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303405087046401 - Deep-test monitor, American Creamid. | | | | | | | | | |
|--|------|-----------------------------|--|---|--|----------------------------------|--------------------------------|-----------------------------------|------|
| DATE | TIME | ACIDITY (M/L AS CAO3) | CALCIUM DIS- SOLVED (M/L AS CA) | MAGNE- SIUM DIS- SOLVED (M/L AS MG) | POTAS- SIUM DIS- SOLVED (M/L AS K) | BICAR- BONATE (M/L AS CO3) | CAR- BONATE (M/L AS CO3) | ALKA- LITY (M/L AS CAO3) | |
| MAY, 1971 | | | | | | | | | |
| MAY 10... | 1815 | - | 18 | 25 | - | - | 1380 | 0 | 1300 |
| MAY 13... | 1630 | - | 25 | 31 | - | - | 1380 | 0 | 1220 |
| MAY 21... | 1445 | 16 | 17 | 26 | 1500 | 40 | 1730 | 0 | 1420 |
| MAY 16... | 1120 | - | 23 | 30 | - | - | 1700 | 0 | 1390 |
| MAY 17... | 1130 | - | 16 | 25 | - | - | 1790 | 0 | 1470 |
| MAY 18... | 1515 | - | 16 | 25 | - | - | 1820 | 0 | 1490 |
| MAY 19... | 1200 | - | 16 | 25 | 1380 | 42 | 1880 | 0 | 1540 |
| MAY 20... | 1110 | - | 16 | 25 | - | - | 1840 | 0 | 1530 |
| MAY 21... | 1300 | 15 | 16 | 26 | 1300 | - | 1880 | 0 | 1540 |
| MAY 22... | 1040 | - | 18 | 28 | - | - | 1900 | 0 | 1560 |
| MAY 23... | 1700 | 15 | 16 | 26 | 1600 | 42 | 1890 | 0 | 1550 |
| MAY 24... | 1400 | - | 18 | 27 | - | - | 1900 | 0 | 1560 |
| MAY 25... | 1530 | 40 | 22 | 32 | 1500 | 41 | 1890 | 0 | 1530 |
| MAY 26... | 1630 | - | 18 | 28 | - | - | 1930 | 0 | 1580 |
| MAY 27... | 1300 | - | 27 | 34 | - | - | 1750 | 0 | 1400 |
| MAY 28... | 1545 | 65 | 19 | 29 | 1400 | 48 | 1920 | 0 | 1580 |
| MAY 29... | 1300 | - | 17 | 35 | - | - | 1910 | 0 | 1570 |
| MAY 30... | 1130 | - | 18 | 30 | - | - | 1880 | 0 | 1540 |
| MAY 31... | 1310 | - | 26 | 34 | - | - | 1800 | 0 | 1480 |
| MAY 32... | 1000 | 99 | 16 | 38 | 1300 | 38 | 1910 | 0 | 1570 |
| MAY 33... | 1530 | - | 29 | 39 | - | - | 1870 | 0 | 1530 |
| MAY 34... | 1540 | - | 15 | 29 | - | - | 1840 | 0 | 1530 |
| MAY 35... | 1500 | - | 21 | 32 | - | - | 1810 | 0 | 1480 |
| MAY 36... | 1100 | 65 | 16 | 38 | 1400 | 32 | 1900 | 0 | 1560 |
| MAY 37... | 1435 | - | 25 | 28 | - | - | 1990 | 0 | 1630 |
| MAY 38... | 1430 | - | 22 | 27 | - | - | 1940 | 0 | 1590 |
| MAY 39... | 1100 | 114 | 21 | 29 | 1400 | 24 | 1940 | 0 | 1590 |

| 303405087046401 - Deep-test monitor, American Creamid. | | | | | | | | | |
| DATE | TIME | ACIDITY (M/L AS CAO3) | CALCIUM DIS- SOLVED (M/L AS CA) | MAGNE- SIUM DIS- SOLVED (M/L AS MG) | POTAS- SIUM DIS- SOLVED (M/L AS K) | BICAR- BONATE (M/L AS CO3) | CAR- BONATE (M/L AS CO3) | ALKA- LITY (M/L AS CAO3) | |
| MAY, 1971 | | | | | | | | | |
| MAY 10... | 1815 | - | 7.7 | 1.0 | 44 | 1.8 | 126 | 0 | 103 |
| MAY 13... | 1630 | - | 148 | 140 | 4120 | 66 | 315 | 0 | 238 |
| MAY 21... | 1125 | .0 | 65 | 41 | 2100 | 39 | 394 | 0 | 323 |
| MAY 16... | 1510 | - | 54 | 37 | - | - | 371 | 0 | 321 |
| MAY 17... | 1110 | - | 53 | 37 | - | - | 377 | 0 | 326 |
| MAY 18... | 0910 | - | 40 | 36 | - | - | 399 | 0 | 327 |
| MAY 19... | 1405 | - | 47 | 37 | - | - | 404 | 0 | 331 |
| MAY 20... | 1015 | - | 44 | 34 | 2000 | 38 | 412 | 0 | 338 |
| MAY 21... | 1540 | - | 44 | 38 | - | - | 445 | 0 | 381 |
| MAY 22... | 1610 | - | 37 | 32 | - | - | 572 | 0 | 469 |
| MAY 23... | 1330 | 7.0 | 39 | 31 | 1900 | 35 | 582 | 0 | 477 |
| MAY 24... | 1125 | - | 27 | 24 | 1700 | 33 | 812 | 0 | 646 |
| MAY 25... | 1340 | - | 28 | 24 | - | - | 862 | 0 | 658 |
| MAY 26... | 1440 | - | 32 | 28 | 1680 | 36 | 684 | 0 | 561 |
| MAY 27... | 1615 | - | 34 | 29 | 1880 | 36 | 630 | 0 | 517 |
| MAY 28... | 1515 | - | 34 | 28 | - | - | 1080 | 0 | 886 |
| MAY 29... | 1330 | 15 | 28 | 26 | 1760 | 32 | 1170 | 0 | 940 |
| MAY 30... | 1510 | - | 25 | 25 | - | - | 1310 | 0 | 1070 |
| MAY 31... | 0925 | 14 | 24 | 24 | - | - | 1400 | 0 | 1150 |
| MAY 32... | 1610 | - | 23 | 23 | - | - | 1290 | 0 | 1060 |
| MAY 33... | 1610 | - | 24 | 24 | - | - | 1170 | 0 | 940 |
| MAY 34... | 1500 | - | 22 | 24 | - | - | 1270 | 0 | 1040 |
| MAY 35... | 1330 | .0 | 22 | 25 | 1600 | 36 | 1350 | 0 | 1110 |
| MAY 36... | 1400 | - | 20 | 23 | - | - | 1440 | 0 | 1180 |
| MAY 37... | 0900 | - | 21 | 27 | - | - | 1500 | 0 | 1230 |
| MAY 38... | 1010 | - | 18 | 24 | 1500 | 37 | 1550 | 0 | 1270 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | | | | | | | | | | | | |
|---|-------|---------------------------------------|---|---|--|---|--|--|---|------------|-------|---------------------------------------|---|---|--|---|--|--|---|----|
| DATE | TIME | CARBON DIOXIDE (MG/L) AS CO2 | SULFATE DIS- SOLVED (MG/L) AS SO4 | CHL- ORIDE- DIS- SOLVED (MG/L) AS CL | FLUO- RIDE- DIS- SOLVED (MG/L) AS F | SILICA, DIS- SOLVED (MG/L) AS SiO2 | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, C DIS- SOLVED (MG/L) | SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C SOLVED (MG/L) | DATE | TIME | CARBON DIOXIDE (MG/L) AS CO2 | SULFATE DIS- SOLVED (MG/L) AS SO4 | CHL- ORIDE- DIS- SOLVED (MG/L) AS CL | FLUO- RIDE- DIS- SOLVED (MG/L) AS F | SILICA, DIS- SOLVED (MG/L) AS SiO2 | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, C DIS- SOLVED (MG/L) | SOLIDS, SUSP. TOTAL, RESIDUE AT 110 DEG. C SOLVED (MG/L) | |
| AUG , 1971 | 10... | — | 6.0 | 13 | .6 | 8.2 | 152 | 146 | — | MAY , 1977 | 18... | 1315 | 20 | 500 | 1100 | 6.5 | — | — | — | — |
| SEP | 09... | 16 | 28 | 6700 | 4.1 | 14 | 11400 | 11400 | — | JUN | 13... | 1630 | 30 | 410 | 1300 | 5.2 | — | — | — | — |
| AUG , 1975 | 1125 | 16 | 12 | 3300 | 3.9 | 14 | 5860 | 5780 | — | JUL | 20... | 1445 | 35 | 870 | 870 | 4.8 | 16 | 4260 | 4200 | — |
| SEP | 16... | 12 | — | 3100 | 4.0 | — | — | — | — | AUG | 17... | 1120 | 43 | 760 | 1200 | 5.4 | — | — | — | — |
| OCT | 16... | 13 | — | 3100 | 4.0 | — | — | — | — | SEP | 20... | 1130 | 45 | 980 | 670 | 5.4 | — | — | — | — |
| NOV | 19... | 16 | — | 3100 | 4.2 | — | — | — | — | OCT | 23... | 1515 | 46 | 1100 | 620 | 5.1 | — | — | — | — |
| DEC | 1605 | 13 | — | 3100 | 4.1 | — | — | — | — | NOV | 15... | 1200 | 30 | 960 | 610 | 5.6 | 19 | 4140 | 4110 | 6 |
| JAN , 1976 | 1015 | 13 | 4.0 | 2900 | 4.4 | 13 | 5300 | 5250 | — | DEC | 13... | 1110 | 37 | 1000 | 570 | 5.1 | — | — | — | — |
| FEB | 26... | 15 | — | 2800 | 4.4 | — | — | — | — | FEB , 1978 | 06... | 1500 | 30 | 1300 | 610 | 5.1 | 20 | 4120 | — | 5 |
| MAR | 20... | 15 | — | 2600 | 4.6 | — | — | — | — | MAR | 21... | 1040 | 30 | 950 | 720 | 5.4 | — | — | — | — |
| APR | 1550 | 19 | 110 | 2800 | 4.7 | 16 | 5860 | 5230 | — | MAY | 01... | 1700 | 48 | 1200 | 480 | 4.9 | 20 | 4170 | 4330 | 16 |
| MAY | 13... | 26 | 280 | 2000 | 5.2 | 18 | 4540 | 4490 | — | JUN | 13... | 1400 | 48 | 1300 | 460 | 5.6 | — | — | — | — |
| JUN | 13... | 22 | — | — | — | — | — | — | — | JUL | 31... | 1530 | 30 | 1200 | 500 | 4.9 | 19 | 4300 | 4260 | 4 |
| JUL | 13... | 20 | 120 | 2000 | 4.8 | 16 | 4680 | 4360 | — | SEP | 20... | 1630 | 62 | 1200 | 440 | 5.2 | — | — | — | — |
| AUG | 1615 | 27 | 290 | 2100 | 5.1 | — | — | — | — | NOV | 07... | 1300 | 49 | 1100 | 880 | 5.3 | — | — | — | — |
| SEP | 1515 | 37 | 300 | 1900 | 5.1 | 18 | 4640 | 4650 | — | DEC | 12... | 1545 | 49 | 1300 | 380 | 5.2 | 19 | 4150 | 4150 | — |
| OCT | 1300 | 42 | 430 | 1700 | 5.3 | — | — | — | — | JAN , 1979 | 22... | 1300 | 38 | 1300 | 390 | 5.4 | — | — | — | — |
| NOV | 1510 | 71 | 420 | 1600 | 5.5 | — | — | — | — | MAR | 07... | 1130 | 48 | 1400 | 490 | 5.6 | — | — | — | — |
| DEC | 0923 | 52 | 480 | 1500 | 5.2 | — | — | — | — | APR | 30... | 1310 | 57 | 1400 | 990 | 5.3 | — | — | — | — |
| JAN | 1610 | 47 | 375 | 1600 | 5.0 | — | — | — | — | MAY | 13... | 1000 | 48 | 1500 | 310 | 5.2 | 21 | 4270 | 4180 | — |
| FEB | 1610 | 64 | 470 | 1400 | 4.7 | — | — | — | — | JUL | 23... | 1530 | 30 | 1100 | 970 | 4.9 | — | — | — | — |
| MAR | 1500 | 43 | 550 | 1400 | 5.5 | 18 | — | 4330 | — | SEP | 17... | 1540 | 47 | 1400 | 560 | 5.4 | — | — | — | — |
| APR | 1330 | 29 | 750 | 1100 | 5.0 | — | — | — | — | NOV | 05... | 1500 | 36 | 1200 | 830 | 5.4 | — | — | — | — |
| MAY | 1400 | 38 | 560 | 1100 | 4.8 | — | — | — | — | JAN , 1980 | 10... | 1100 | 30 | 1560 | 310 | 6.9 | 20 | 4400 | 4330 | — |
| JUN | 0900 | 31 | 900 | 950 | 5.2 | 19 | 4130 | 4220 | — | MAR | 17... | 1455 | 32 | 1500 | 540 | 5.2 | — | — | — | — |
| JUL | 1010 | — | — | — | — | — | — | — | — | APR | 28... | 1450 | 31 | 1400 | 530 | 5.3 | — | — | — | — |
| AUG | 20... | — | — | — | — | — | — | — | — | JUN | 25... | 1100 | 38 | 1400 | 700 | 4.6 | 23 | 4600 | 4540 | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | | | | | |
|---|-------|--|--|---|---|---|---|---|---|---|---|---|---|
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C. TOTAL (MG/L) | SOLIDS, VOL- TILE ON FION, TOTAL (MG/L) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) |
| AUG , 1971 | 10... | - | - | - | - | - | - | - | - | - | - | - | - |
| SEP 06... | - | - | - | - | - | - | - | - | - | - | - | - | - |
| AUG , 1973 | 1125 | - | - | - | - | - | - | - | - | - | - | - | - |
| SEP 14... | 1510 | - | - | - | - | - | - | - | - | - | - | - | - |
| OCT 14... | 1110 | - | - | - | - | - | - | - | - | - | - | - | - |
| NOV 19... | 0910 | - | - | - | - | - | - | - | - | - | - | - | - |
| DEC 15... | 1405 | - | - | - | - | - | - | - | - | - | - | - | - |
| JAN , 1976 | 1015 | - | - | - | - | - | - | - | - | - | - | - | - |
| FEB 21... | 1540 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAR 20... | 1610 | - | - | - | - | - | - | - | - | - | - | - | - |
| APR 28... | 1550 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAY 13... | 1125 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUN 13... | 1340 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUL 13... | 1440 | - | - | - | - | - | - | - | - | - | - | - | - |
| SEP 13... | 1615 | - | - | - | - | - | - | - | - | - | - | - | - |
| OCT 24... | 1515 | - | - | - | - | - | - | - | - | - | - | - | - |
| NOV 21... | 1330 | - | - | - | - | - | - | - | - | - | - | - | - |
| DEC 21... | 1510 | - | - | - | - | - | - | - | - | - | - | - | - |
| JAN , 1977 | 0925 | - | - | - | - | - | - | - | - | - | - | - | - |
| FEB 16... | 1610 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAR 16... | 1610 | - | - | - | - | - | - | - | - | - | - | - | - |
| APR 14... | 1300 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAY 17... | 1330 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUN 17... | 1330 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUL 21... | 1400 | - | - | - | - | - | - | - | - | - | - | - | - |
| AUG 24... | 0900 | - | - | - | - | - | - | - | - | - | - | - | - |
| SEP 20... | 1010 | - | - | - | - | - | - | - | - | - | - | - | - |
| 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | | | | | |
| NOV , 1977 | 1315 | - | - | - | - | - | - | - | - | - | - | - | - |
| JAN 13... | 1630 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUL 20... | 1445 | - | - | - | - | - | - | - | - | - | - | - | - |
| AUG 17... | 1120 | - | - | - | - | - | - | - | - | - | - | - | - |
| SEP 20... | 1130 | - | - | - | - | - | - | - | - | - | - | - | - |
| OCT 23... | 1515 | - | - | - | - | - | - | - | - | - | - | - | - |
| NOV 15... | 1200 | - | - | - | - | - | - | - | - | - | - | - | - |
| DEC 13... | 1110 | - | - | - | - | - | - | - | - | - | - | - | - |
| FEB , 1978 | 1500 | 4220 | 170 | - | - | - | - | - | - | - | - | - | - |
| MAR 21... | 1040 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAY 01... | 1700 | 4360 | 170 | - | - | - | - | - | - | - | - | - | - |
| JUN 13... | 1400 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUL 31... | 1530 | 4350 | 460 | - | - | - | - | - | - | - | - | - | - |
| SEP 20... | 1630 | - | - | - | - | - | - | - | - | - | - | - | - |
| NOV 07... | 1300 | - | - | - | - | - | - | - | - | - | - | - | - |
| DEC 12... | 1545 | - | - | - | - | - | - | - | - | - | - | - | - |
| JAN , 1979 | 1300 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAR 07... | 1130 | - | - | - | - | - | - | - | - | - | - | - | - |
| APR 30... | 1310 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAY 13... | 1000 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUL 23... | 1530 | - | - | - | - | - | - | - | - | - | - | - | - |
| SEP 17... | 1540 | - | - | - | - | - | - | - | - | - | - | - | - |
| NOV 05... | 1500 | - | - | - | - | - | - | - | - | - | - | - | - |
| JAN , 1980 | 1100 | - | - | - | - | - | - | - | - | - | - | - | - |
| MAR 17... | 1435 | - | - | - | - | - | - | - | - | - | - | - | - |
| APR 28... | 1450 | - | - | - | - | - | - | - | - | - | - | - | - |
| JUN 25... | 1100 | - | - | - | - | - | - | - | - | - | - | - | - |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | | 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | |
|---|-------|--------------------|-------------|------------------|-------------|--------------------|-------------|---------------------|-------------|---|-------------|------------------------|--------------|--------------------|-------------|------------------|-------------|--------------------|-------------|
| DATE | TIME | NITRO-GEN, ORGANIC | | NITRO-GEN, TOTAL | | PHOS-PHORUS, TOTAL | | PHOS-PHORUS, SOLVED | | PHOS-PHORUS, ORTHOPHOSPHATE | | ALUM-INIUM, DIS-SOLVED | | NITRO-GEN, ORGANIC | | NITRO-GEN, TOTAL | | PHOS-PHORUS, TOTAL | |
| | | (MG/L AS N) | (MG/L AS N) | (MG/L AS N) | (MG/L AS N) | (MG/L AS P) | (MG/L AS P) | (MG/L AS P) | (MG/L AS P) | (MG/L AS P) | (MG/L AS P) | (MG/L AS AL) | (MG/L AS AL) | (MG/L AS N) | (MG/L AS N) | (MG/L AS N) | (MG/L AS N) | (MG/L AS P) | (MG/L AS P) |
| SEP 1971 | 13... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| AUG 1975 | 1125 | 1.0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| SEP 14... | 1510 | .28 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| OCT 14... | 1110 | .10 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| NOV 19... | 0910 | .23 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| DEC 15... | 1405 | .45 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JAN 1976 | 1015 | .85 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| FEB 21... | 1540 | 1.8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAR 20... | 1610 | 3.6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| APR 28... | 1500 | 5.1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAY 13... | 1125 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUN 13... | 1340 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUL 13... | 1440 | 7.7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| AUG 13... | 1615 | 7.4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| SEP 24... | 1515 | 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| OCT 21... | 1330 | 14 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| NOV 19... | 1510 | 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| DEC 14... | 0925 | 16 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JAN 1977 | 1410 | 18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| FEB 14... | 1610 | 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAR 14... | 1300 | 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| APR 17... | 1230 | 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAY 21... | 1400 | 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUN 24... | 0900 | 23 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUL 20... | 1010 | 23 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| AUG 14... | 1315 | 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| SEP 13... | 1100 | 56 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| OCT 13... | 1430 | 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| NOV 18... | 1445 | 18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| DEC 17... | 1120 | 25 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JAN 1978 | 1130 | 16 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| FEB 06... | 1500 | 26 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAR 21... | 1040 | 28 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| APR 01... | 1700 | 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAY 13... | 1400 | 32 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUN 31... | 1530 | 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUL 20... | 1630 | 36 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| AUG 07... | 1300 | 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| SEP 12... | 1545 | 19 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| OCT 22... | 1300 | 54 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| NOV 07... | 1130 | 75 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| DEC 20... | 1310 | 40 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JAN 1979 | 1000 | 38 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| FEB 23... | 1530 | 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAR 17... | 1540 | 67 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| APR 05... | 1500 | 42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| MAY 10... | 1100 | 38 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUN 17... | 1455 | 51 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| JUL 23... | 1450 | 42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| AUG 25... | 1100 | 56 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 30340509704401 - Deep-test monitor, American Cyanamid. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------|--|-------------------------------------|--|-------------------------------------|--|---|--|---|--|--|--|--|--|---|--|--|--|--|--|---|--|---|--|--|--|--|--|--|--|---|--|
| DATE | | TIME | | ARSENIC | | BARIUM | | BORON | | Cadmium | | CHROMIUM | | COPPER | | IRON | | IRON | | IRON | | LEAD | | LITHIUM | | MANGANESE | | STRONTIUM | | ZINC | | | |
| DATE | | TIME | | BIS- SOLVED (UG/L) (AS AS) | | DIS- SOLVED (UG/L) (AS BA) | | TOTAL REDUC- ERABLE (UG/L) (AS B) | | BORON DIS- SOLVED (UG/L) (AS B) | | Cadmium DIS- SOLVED (UG/L) (AS CD) | | CHROMIUM MIXED, VALENT, DIS- SOLVED (UG/L) (AS CR) | | COPPER DIS- SOLVED (UG/L) (AS CU) | | TOTAL REDUC- ERABLE (UG/L) (AS FE) | | PERCENT REDUC- ERABLE (UG/L) (AS FE) | | IRON DIS- SOLVED (UG/L) (AS FE) | | LEAD DIS- SOLVED (UG/L) (AS PB) | | LITHIUM DIS- SOLVED (UG/L) (AS LI) | | MANGANESE DIS- SOLVED (UG/L) (AS MN) | | STRONTIUM DIS- SOLVED (UG/L) (AS SR) | | ZINC DIS- SOLVED (UG/L) (AS ZN) | |
| AUG. 1971 | | 10... | | 0 | | — | | — | | 360 | | — | | — | | 0 | | — | | — | | 0 | | — | | — | | 220 | | 20 | | | |
| SEP. 09... | | — | | 10 | | — | | — | | 4400 | | — | | 0 | | 0 | | — | | — | | 2300 | | 0 | | 40 | | — | | 30 | | | |
| AUG. 1975 | | 1125 | | 4 | | — | | — | | 710 | | 0 | | 0 | | 0 | | — | | — | | 2400 | | 1 | | 50 | | 5000 | | 10 | | | |
| JAN. 1976 | | 1015 | | 4 | | — | | — | | 2500 | | 0 | | 0 | | 0 | | — | | — | | 2400 | | 2 | | 30 | | 4300 | | 20 | | | |
| APR. 28... | | 1530 | | 12 | | — | | — | | 2400 | | 1 | | 0 | | 0 | | — | | — | | 710 | | 7 | | 20 | | 4300 | | 0 | | | |
| MAY 13... | | 1125 | | 14 | | — | | — | | 1200 | | 0 | | 0 | | 0 | | — | | — | | 2000 | | 7 | | 50 | | 2900 | | 10 | | | |
| JUL 13... | | 1615 | | 9 | | — | | — | | 1500 | | 0 | | 0 | | 0 | | — | | — | | 1000 | | 5 | | 40 | | 3700 | | 0 | | | |
| JUL 21... | | 1330 | | 22 | | — | | — | | 1400 | | — | | — | | 0 | | — | | — | | 930 | | — | | — | | 3400 | | 10 | | | |
| JAN. 1977 | | 1330 | | 15 | | — | | — | | 2600 | | — | | — | | 0 | | — | | — | | 1400 | | — | | — | | 3000 | | 0 | | | |
| JUL 20... | | 1445 | | 20 | | — | | — | | 1600 | | — | | — | | 0 | | — | | — | | — | | — | | — | | 3000 | | — | | | |
| FEB. 1978 | | 1500 | | 42 | | — | | — | | 930 | | — | | — | | 0 | | — | | — | | 590 | | — | | — | | 2600 | | 0 | | | |
| MAY 01... | | 1700 | | 64 | | — | | — | | 1000 | | — | | — | | 2 | | 2400 | | 2400 | | 630 | | — | | — | | 2000 | | — | | | |
| JUL 31... | | 1530 | | 61 | | — | | — | | 920 | | — | | — | | 0 | | 2500 | | 2500 | | 1000 | | — | | — | | 2300 | | 0 | | | |
| DEC 12... | | 1545 | | 63 | | — | | — | | 730 | | — | | — | | 0 | | 2700 | | 2700 | | 970 | | — | | — | | 2500 | | 10 | | | |
| JUN. 1979 | | 1000 | | 120 | | — | | — | | 470 | | — | | — | | 0 | | 3700 | | 3700 | | 150 | | — | | — | | 2200 | | 10 | | | |
| JAN. 1980 | | 1100 | | 140 | | 200 | | — | | 500 | | — | | — | | 2 | | 3900 | | 3900 | | 490 | | — | | — | | 3000 | | 0 | | | |
| JUN 25... | | 1100 | | — | | CSO | | — | | 1000 | | — | | — | | 0 | | 3900 | | 3900 | | 3100 | | — | | — | | 2900 | | 10 | | | |
| | | | | | | | | | | | | | | | | | | 1800 | | 1800 | | 1500 | | — | | — | | 3400 | | 20 | | | |
| | | | | | | | | | | | | | | | | | | 2500 | | 2500 | | 280 | | — | | — | | 3200 | | 10 | | | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | | 303405087064601 - Deep-test monitor, American Cyanamid. | | | | | | | | | |
|---|-------|---------------------------|-----------------------------------|--|---|----------------------------|----------------------------------|----------------|--|---|------|---------------------------|-----------------------------------|--|---|----------------------------|----------------------------------|----------------|--|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, INTR-ORGANIC, DIS-SOLVED (MG/L AS C) | CARBON, INTR-ORGANIC, TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | | DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, INTR-ORGANIC, DIS-SOLVED (MG/L AS C) | CARBON, INTR-ORGANIC, TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | |
| SEP, 1971 | 09... | — | 4.0 | — | — | — | — | — | | MAY, 1977 | 1315 | — | — | — | — | — | — | — | |
| AUG, 1975 | 1125 | — | — | — | — | — | — | — | | JUL | 1445 | — | — | — | — | 1.3 | — | — | |
| SEP | 1510 | — | — | — | — | — | — | — | | AUG | 1120 | — | — | — | — | .10 | — | — | |
| OCT | 1110 | — | — | — | — | — | — | — | | SEP | 1130 | — | — | — | — | .80 | — | — | |
| NOV | 0910 | — | — | — | — | — | — | — | | OCT | 1515 | — | — | — | — | 1.6 | — | — | |
| DEC | 1605 | — | — | — | — | — | — | — | | NOV | 1200 | — | — | — | — | — | — | — | |
| JAN, 1976 | 1015 | — | — | — | — | — | — | — | | DEC | 1110 | — | — | — | — | .50 | — | — | |
| FEB | 1540 | — | — | — | — | — | — | — | | FEB, 1978 | 1300 | — | — | — | — | .80 | — | — | |
| MAR | 1610 | — | — | — | — | — | — | — | | MAR | 1040 | — | — | — | — | 1.1 | — | — | |
| APR | 1330 | — | — | — | — | — | — | — | | MAY | 1700 | — | — | — | — | .30 | — | — | |
| MAY | 1125 | — | — | — | — | — | — | — | | JUN | 1400 | — | — | — | — | 1.2 | — | — | |
| JUN | 1340 | — | — | — | — | — | — | — | | JUL | 1530 | — | — | — | — | .70 | — | — | |
| JUL | 1615 | — | — | — | — | — | — | — | | SEP | 1630 | — | — | — | — | .20 | — | — | |
| AUG | 1515 | — | — | — | — | — | — | — | | NOV | 1300 | — | — | — | — | .20 | 93 | — | |
| SEP | 1330 | — | — | — | — | — | — | — | | DEC | 1545 | — | — | — | — | .10 | 110 | — | |
| OCT | 0925 | — | — | — | — | — | — | — | | JAN, 1979 | 1300 | — | — | — | — | 2.8 | 110 | — | |
| NOV | 1610 | — | — | — | — | — | — | — | | MAY | 1130 | — | — | — | — | 1.3 | 85 | — | |
| DEC | 1610 | — | — | — | — | — | — | — | | APR | 1310 | — | — | — | — | 2.1 | 75 | — | |
| JAN, 1977 | 1300 | — | — | — | — | — | — | — | | JUN | 1000 | — | — | — | — | .70 | 120 | 1 | |
| FEB | 1330 | — | — | — | — | — | — | — | | JUL | 1530 | — | — | — | — | 2.8 | 95 | — | |
| MAR | 1010 | — | — | — | — | — | — | — | | SEP | 1540 | — | — | — | — | — | 110 | — | |
| APR | 0935 | — | — | — | — | — | — | — | | NOV | 1500 | — | — | — | — | .70 | 98 | — | |
| MAY | 0940 | — | — | — | — | — | — | — | | JAN, 1980 | 1100 | — | — | — | — | 1.4 | 110 | — | |
| JUN | 1010 | — | — | — | — | — | — | — | | MAR | 1455 | — | — | — | — | 1.2 | 110 | — | |
| | | — | — | — | — | — | — | — | | APR | 1450 | — | — | — | — | 2.4 | 120 | — | |
| | | — | — | — | — | — | — | — | | JUN | 1100 | — | — | — | — | .00 | 120 | — | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 3035570870A3801 - Standby injection well, American Cyanamid. | | | | | | | | | | | | | | | | | | | 3035570870A3801 - Standby injection well, American Cyanamid. | | | | | | | | | | | | | | | | | | |
|--|------|--------------------------------|---|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|-----------|-------|--------------------------------|---|------------------------|----------------------|---------------------------------------|---|------------------------------|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOUS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COEHLT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOUS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COEHLT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | | | | | | | | | | | | | | | | | | |
| MAY, 1975 | | | | | | | | | | JUN, 1977 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20... | 1030 | 1350 | 12300 | 7.5 | 7.5 | 27.0 | 0 | 70 | — | JUN, 1977 | 1345 | — | 15900 | 7.8 | — | 31.0 | — | 30 | — | | | | | | | | | | | | | | | | | | |
| 20... | 1100 | 1500 | 25100 | 7.3 | 7.3 | 28.0 | 5 | 140 | — | JUL | 0925 | — | 16700 | 7.7 | — | 30.0 | 20 | 35 | — | | | | | | | | | | | | | | | | | | |
| 20... | 1130 | 1500 | 24550 | 7.7 | 7.7 | 30.0 | 10 | 1000 | — | AUG | 1350 | — | 17400 | 7.7 | — | 30.5 | — | 35 | — | | | | | | | | | | | | | | | | | | |
| 20... | 1230 | — | 19900 | 7.6 | 7.6 | — | — | — | — | SEP | 17... | — | 15700 | 7.7 | — | 31.0 | — | 25 | — | | | | | | | | | | | | | | | | | | |
| JUL | 1000 | — | 15000 | 7.2 | 7.2 | 32.5 | 5 | 1 | — | SEP | 1420 | — | 15700 | 7.7 | — | 31.0 | — | 25 | — | | | | | | | | | | | | | | | | | | |
| AUG | 0935 | — | 20000 | 7.6 | 7.6 | 33.5 | — | 190 | — | OCT | 1400 | — | 14800 | 7.7 | — | 30.0 | — | 20 | — | | | | | | | | | | | | | | | | | | |
| 16... | 1550 | — | 22500 | 7.6 | 7.6 | 32.5 | — | 35 | — | NOV | 1500 | — | 16500 | 7.3 | — | 30.0 | 10 | — | — | | | | | | | | | | | | | | | | | | |
| 22... | 1410 | — | 22000 | 7.6 | 7.6 | 32.5 | — | 35 | — | DEC | 1400 | — | 15000 | 7.5 | — | 31.0 | — | 20 | — | | | | | | | | | | | | | | | | | | |
| 14... | 1905 | — | 21600 | 7.5 | 7.5 | 32.5 | — | 45 | — | FEB, 1978 | 0930 | — | 14800 | 7.6 | — | 28.0 | 25 | 30 | — | | | | | | | | | | | | | | | | | | |
| 19... | 1340 | — | 22600 | 7.6 | 7.6 | 32.5 | — | 20 | — | MAR | 1340 | — | 15900 | 7.5 | — | 29.5 | — | 35 | — | | | | | | | | | | | | | | | | | | |
| 17... | 1410 | — | 23500 | 7.5 | 7.5 | 34.0 | 5 | 15 | — | MAY | 1330 | — | 15400 | 7.7 | — | 31.0 | 30 | — | 30 | — | | | | | | | | | | | | | | | | | |
| JAN, 1976 | | | | | | | | | | JUN | 1115 | — | 16200 | 7.5 | — | 31.0 | — | — | 40 | — | | | | | | | | | | | | | | | | | |
| 21... | 1125 | — | 15000 | 7.7 | 7.7 | 32.5 | — | 40 | — | AUG | 1100 | — | 18400 | 7.4 | — | 31.0 | 22 | — | 40 | — | | | | | | | | | | | | | | | | | |
| 21... | 0925 | — | 16900 | 7.7 | 7.7 | 32.5 | — | 20 | — | SEP | 1420 | — | 19000 | 7.4 | — | 31.0 | — | — | 30 | — | | | | | | | | | | | | | | | | | |
| 28... | 1415 | — | 16500 | 7.8 | 7.8 | 32.5 | — | 30 | — | NOV | 1000 | — | 16800 | 7.4 | — | 31.5 | — | 18 | — | | | | | | | | | | | | | | | | | | |
| 19... | 0935 | — | 17500 | 7.7 | 7.7 | 32.5 | — | 35 | — | DEC | 1330 | — | 12900 | 7.5 | — | 32.5 | 10 | — | 35 | — | | | | | | | | | | | | | | | | | |
| 21... | 1610 | — | 17300 | 7.8 | 7.8 | 32.5 | 0 | 30 | — | JAN, 1979 | 1515 | — | 17000 | 7.2 | — | 30.5 | — | 25 | — | | | | | | | | | | | | | | | | | | |
| AUG | 1705 | — | 15400 | 7.6 | 7.6 | 32.0 | — | 30 | — | MAR | 0915 | — | 14400 | 7.7 | — | 31.0 | — | 25 | — | | | | | | | | | | | | | | | | | | |
| 17... | 1130 | — | 15500 | 7.6 | 7.6 | 32.0 | — | 15 | — | MAY | 1110 | — | 13400 | 7.4 | — | 30.5 | — | 10 | — | | | | | | | | | | | | | | | | | | |
| 16... | 1410 | — | 17000 | 7.8 | 7.8 | 32.5 | — | 20 | — | JUN | 1445 | — | 15000 | 7.6 | — | 31.0 | 5 | — | 45 | — | | | | | | | | | | | | | | | | | |
| 19... | 1415 | — | 14800 | 7.7 | 7.7 | 32.5 | — | 35 | — | JUL | 1330 | — | 14000 | 7.6 | — | 31.0 | — | 50 | — | | | | | | | | | | | | | | | | | | |
| 15... | 0940 | — | 15000 | 7.6 | 7.6 | 32.0 | — | 20 | — | SEP | 1545 | — | 15500 | 7.4 | — | 31.0 | — | 23 | — | | | | | | | | | | | | | | | | | | |
| JAN, 1977 | | | | | | | | | | NOV | 1530 | — | 18800 | 7.4 | — | 31.0 | — | — | — | — | | | | | | | | | | | | | | | | | |
| 15... | 0915 | — | 11800 | 7.7 | 7.7 | 30.0 | 10 | 25 | — | JAN, 1980 | 1400 | — | 14100 | 7.4 | — | 33.5 | 20 | — | 12 | — | | | | | | | | | | | | | | | | | |
| 18... | 1330 | — | 15600 | 7.7 | 7.7 | 30.0 | — | 25 | — | MAR | 1425 | — | 13600 | 7.7 | — | 33.5 | — | — | 20 | — | | | | | | | | | | | | | | | | | |
| FEB | 1330 | — | 15600 | 7.7 | 7.7 | 30.0 | — | 25 | — | APR | 1100 | — | 13500 | 7.6 | — | 32.5 | — | — | 35 | — | | | | | | | | | | | | | | | | | |
| 22... | 1105 | — | 17600 | 7.8 | 7.8 | 30.0 | — | 20 | — | JUN | 1030 | — | 14000 | 7.5 | — | 33.5 | 10 | — | 30 | — | | | | | | | | | | | | | | | | | |
| 24... | 1215 | — | 16500 | 7.8 | 7.8 | 31.0 | 5 | 10 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20... | 1700 | — | 15700 | 7.8 | 7.8 | 32.0 | — | 2 | — | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

30335707063801 - Steady injection well, American Cyanamid.

| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN BIODIESEL UNITED 5 DAY | HARD- NESS (MG/L AS CaCO3) | HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) |
|-----------|------|----------------------------------|--------------------------|---|--|--|--|--|--|
| MAY, 1975 | | | | | | | | | |
| 20... | 1030 | — | — | — | — | — | 520 | 220 | — |
| 21... | 1100 | — | — | — | — | — | 1500 | 1700 | — |
| 20... | 1220 | — | 1.007 | — | 94 | .3 | 1200 | 990 | — |
| JUL | | | | | | | | | |
| 18... | 1000 | — | — | — | — | — | 1100 | 930 | .4 |
| AUG | | | | | | | | | |
| 22... | 0925 | — | — | — | — | — | 960 | 740 | — |
| SEP | | | | | | | | | |
| 17... | 1550 | — | — | — | — | — | 1400 | 1100 | — |
| OCT | | | | | | | | | |
| 16... | 1410 | — | — | — | — | — | 1200 | 1000 | — |
| NOV | | | | | | | | | |
| 19... | 1305 | — | — | — | — | — | 1300 | 1100 | — |
| DEC | | | | | | | | | |
| 17... | 1340 | — | — | — | — | — | 1200 | 1000 | — |
| JAN, 1976 | | | | | | | | | |
| 21... | 1410 | — | — | — | — | — | 1200 | 1000 | .5 |
| FEB | | | | | | | | | |
| 21... | 1125 | — | — | — | — | — | 1200 | 930 | — |
| MAR | | | | | | | | | |
| 23... | 0925 | — | — | — | — | — | 800 | 530 | — |
| APR | | | | | | | | | |
| 19... | 1415 | — | — | — | — | — | 690 | 400 | — |
| MAY | | | | | | | | | |
| 25... | 0925 | — | — | — | — | — | 740 | 450 | — |
| JUN | | | | | | | | | |
| 21... | 1610 | — | — | — | 730 | — | 730 | 440 | .2 |
| JUL | | | | | | | | | |
| 19... | 1705 | — | — | — | — | — | 670 | 370 | — |
| AUG | | | | | | | | | |
| 16... | 1130 | — | — | — | — | — | 710 | 410 | — |
| SEP | | | | | | | | | |
| 19... | 1410 | — | — | — | 100 | — | 700 | 390 | — |
| NOV | | | | | | | | | |
| 16... | 1415 | — | — | — | 110 | — | 700 | 450 | — |
| DEC | | | | | | | | | |
| 15... | 0940 | — | — | — | 120 | — | 780 | 440 | — |
| JAN, 1977 | | | | | | | | | |
| 18... | 0915 | — | — | — | 110 | — | 750 | 380 | .1 |
| FEB | | | | | | | | | |
| 22... | 1330 | — | — | — | — | — | 710 | 310 | — |
| MAR | | | | | | | | | |
| 24... | 1105 | 1.013 | — | — | 82 | — | 820 | 450 | — |
| APR | | | | | | | | | |
| 20... | 1215 | — | — | — | 220 | .7 | 770 | 320 | — |
| MAY | | | | | | | | | |
| 18... | 1700 | — | — | — | 113 | — | 670 | 120 | — |

30335707063801 - Steady injection well, American Cyanamid.

| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN BIODIESEL UNITED 5 DAY | HARD- NESS (MG/L AS CaCO3) | HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3) | ACIDITY TOTAL HEATED (MG/L AS H) |
|-----------|------|----------------------------------|--------------------------|---|--|--|--|--|--|
| JUN, 1977 | | | | | | | | | |
| 13... | 1345 | — | — | — | 180 | — | 670 | 130 | — |
| JUL | | | | | | | | | |
| 21... | 0925 | — | — | — | 174 | — | 730 | 190 | .4 |
| AUG | | | | | | | | | |
| 17... | 1330 | — | — | — | 90 | — | 750 | 230 | — |
| SEP | | | | | | | | | |
| 20... | 1420 | — | — | — | 140 | — | 620 | 0 | — |
| OCT | | | | | | | | | |
| 26... | 1400 | — | — | — | 300 | — | 610 | 0 | — |
| NOV | | | | | | | | | |
| 15... | 1300 | — | — | — | — | — | 840 | 340 | — |
| DEC | | | | | | | | | |
| 13... | 1400 | — | — | — | 480 | — | 770 | 200 | — |
| FEB, 1978 | | | | | | | | | |
| 07... | 0930 | — | — | — | 300 | — | 640 | 0 | .5 |
| MAR | | | | | | | | | |
| 21... | 1340 | — | — | — | 370 | — | 840 | 240 | — |
| APR | | | | | | | | | |
| 02... | 1330 | — | — | — | 240 | — | 680 | 0 | .3 |
| MAY | | | | | | | | | |
| 13... | 1115 | — | — | — | 400 | — | 710 | 36 | — |
| JUN | | | | | | | | | |
| 02... | 1100 | — | — | — | 276 | — | 810 | 210 | .8 |
| SEP | | | | | | | | | |
| 20... | 1420 | — | — | — | 120 | — | 820 | 190 | — |
| NOV | | | | | | | | | |
| 07... | 1000 | — | — | — | 430 | — | 910 | 400 | — |
| DEC | | | | | | | | | |
| 12... | 1330 | — | — | — | 400 | — | 580 | 0 | 1.2 |
| JAN, 1979 | | | | | | | | | |
| 22... | 1515 | — | — | — | 410 | — | 1100 | 690 | — |
| MAR | | | | | | | | | |
| 07... | 0915 | — | — | — | 430 | — | 690 | 18 | — |
| MAY | | | | | | | | | |
| 01... | 1110 | — | — | — | 400 | — | 620 | 0 | — |
| JUN | | | | | | | | | |
| 12... | 1445 | — | — | — | 380 | — | 640 | 0 | 1.7 |
| JUL | | | | | | | | | |
| 23... | 1330 | — | — | — | 540 | — | 640 | 0 | — |
| SEP | | | | | | | | | |
| 18... | 1545 | — | — | — | — | — | 790 | 200 | — |
| NOV | | | | | | | | | |
| 06... | 1330 | — | — | — | 260 | — | 1000 | 630 | — |
| JAN, 1980 | | | | | | | | | |
| 09... | 1400 | 1.005 | — | — | 180 | — | 690 | 11 | 2.4 |
| MAR | | | | | | | | | |
| 18... | 1425 | — | — | — | 440 | — | 730 | 11 | — |
| APR | | | | | | | | | |
| 30... | 1100 | — | — | — | 320 | — | 700 | 0 | — |
| JUN | | | | | | | | | |
| 24... | 1030 | 1.005 | — | — | 320 | — | 700 | 0 | 1.6 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

300357007043001 - Steady injection well, American Crossland.

300357007043001 - Steady injection well, American Crossland.

| DATE | TIME | ACIDITY (M/L AS CAO3) | CALCIUM DIS- SOLVED (M/L AS CA) | MAGNE- SIUM, DIS- SOLVED (M/L AS MG) | SODIUM, DIS- SOLVED (M/L AS NA) | POTAS- SIUM, DIS- SOLVED (M/L AS K) | BICAR- BONATE (M/L AS HCO3) | CAR- BONATE (M/L AS CO3) | ALKA- LITY (M/L AS CAO3) |
|-----------|------|--------------------------------|---|---|---|--|--------------------------------------|-----------------------------------|-----------------------------------|
| MAY, 1973 | | | | | | | | | |
| 20... | 1030 | — | 110 | 56 | 2400 | 50 | 345 | 0 | 229 |
| 20... | 1100 | — | 470 | 160 | 4940 | — | 113 | 0 | 134 |
| 20... | 1130 | — | — | — | — | — | 130 | 0 | 107 |
| 20... | 1200 | — | 290 | 110 | 3730 | 73 | 232 | 0 | 207 |
| JUL | | | | | | | | | |
| 14... | 1000 | 20 | 200 | 140 | 3900 | 72 | 208 | 0 | 171 |
| AUG | | | | | | | | | |
| 22... | 0935 | — | 170 | 130 | — | — | 273 | 0 | 224 |
| SEP | | | | | | | | | |
| 17... | 1530 | — | 230 | 190 | — | — | 239 | 0 | 212 |
| OCT | | | | | | | | | |
| 14... | 1410 | — | 220 | 170 | — | — | 249 | 0 | 204 |
| NOV | | | | | | | | | |
| 19... | 1305 | — | 220 | 180 | — | — | 235 | 0 | 209 |
| DEC | | | | | | | | | |
| 17... | 1340 | — | 220 | 170 | — | — | 234 | 0 | 208 |
| JAN, 1974 | | | | | | | | | |
| 21... | 1410 | 25 | 200 | 170 | 4500 | 100 | 269 | 0 | 221 |
| MAR | | | | | | | | | |
| 21... | 1125 | — | 190 | 100 | — | — | 348 | 0 | 285 |
| APR | | | | | | | | | |
| 2... | 0925 | — | 140 | 110 | — | — | 337 | 0 | 274 |
| MAY | | | | | | | | | |
| 15... | 1415 | — | 110 | 100 | — | — | 330 | 0 | 287 |
| JUN | | | | | | | | | |
| 25... | 0935 | — | 130 | 100 | — | — | 344 | 0 | 282 |
| JUL | | | | | | | | | |
| 21... | 1610 | 10 | 120 | 100 | 3200 | 60 | 357 | 0 | 293 |
| AUG | | | | | | | | | |
| 18... | 1705 | — | 110 | 95 | — | — | 340 | 0 | 295 |
| SEP | | | | | | | | | |
| 16... | 1130 | — | 120 | 100 | — | — | 367 | 0 | 301 |
| OCT | | | | | | | | | |
| 19... | 1410 | — | 120 | 98 | — | — | 382 | 0 | 313 |
| NOV | | | | | | | | | |
| 16... | 1415 | — | 130 | 110 | — | — | 396 | 0 | 325 |
| DEC | | | | | | | | | |
| 13... | 0940 | — | 130 | 110 | — | — | 409 | 0 | 335 |
| JAN, 1977 | | | | | | | | | |
| 18... | 0915 | 5.0 | 130 | 100 | 3200 | 63 | 480 | 0 | 349 |
| FEB | | | | | | | | | |
| 22... | 1330 | — | 120 | 100 | — | — | 489 | 0 | 401 |
| MAR | | | | | | | | | |
| 24... | 1105 | — | 130 | 120 | — | — | 452 | 0 | 371 |
| APR | | | | | | | | | |
| 20... | 1215 | — | 120 | 110 | 3200 | 60 | 547 | 0 | 449 |
| MAY | | | | | | | | | |
| 18... | 1700 | — | 110 | 95 | — | — | 640 | 0 | 541 |
| JUN, 1977 | | | | | | | | | |
| 13... | 1345 | — | 110 | 96 | — | — | 656 | 0 | 538 |
| JUL | | | | | | | | | |
| 21... | 0925 | 21 | 120 | 100 | 3200 | 42 | 652 | 0 | 535 |
| AUG | | | | | | | | | |
| 17... | 1330 | — | 120 | 110 | — | — | 640 | 0 | 525 |
| SEP | | | | | | | | | |
| 20... | 1620 | — | 100 | 90 | — | — | 771 | 0 | 632 |
| OCT | | | | | | | | | |
| 14... | 1400 | — | 96 | 90 | — | — | 799 | 0 | 635 |
| NOV | | | | | | | | | |
| 15... | 1500 | — | 140 | 120 | 3700 | 66 | 611 | 0 | 591 |
| DEC | | | | | | | | | |
| 13... | 1400 | — | 110 | 120 | — | — | 696 | 0 | 571 |
| FEB, 1978 | | | | | | | | | |
| 07... | 0930 | 28 | 100 | 91 | 3100 | — | 830 | 0 | 680 |
| MAR | | | | | | | | | |
| 21... | 1340 | — | 140 | 120 | — | — | 720 | 0 | 597 |
| MAY | | | | | | | | | |
| 02... | 1330 | 15 | 99 | 100 | 3200 | 50 | 840 | 0 | 690 |
| JUN | | | | | | | | | |
| 13... | 1115 | — | 120 | 100 | — | — | 822 | 0 | 674 |
| AUG | | | | | | | | | |
| 02... | 1100 | 40 | 120 | 120 | 3800 | 61 | 728 | 0 | 597 |
| SEP | | | | | | | | | |
| 20... | 1420 | — | 130 | 120 | — | — | 766 | 0 | 628 |
| NOV | | | | | | | | | |
| 07... | 1000 | — | 150 | 130 | — | — | 626 | 0 | 513 |
| DEC | | | | | | | | | |
| 12... | 1330 | 60 | 79 | 90 | 3100 | 58 | 878 | 0 | 720 |
| JAN, 1979 | | | | | | | | | |
| 21... | 1515 | — | 180 | 150 | — | — | 460 | 0 | 377 |
| MAR | | | | | | | | | |
| 07... | 0915 | — | 110 | 100 | — | — | 819 | 0 | 672 |
| MAY | | | | | | | | | |
| 01... | 1110 | — | 98 | 92 | — | — | 869 | 0 | 713 |
| JUN | | | | | | | | | |
| 12... | 1445 | 84 | 94 | 100 | 2800 | 61 | 825 | 0 | 677 |
| JUL | | | | | | | | | |
| 23... | 1330 | — | 180 | 100 | — | — | 827 | 0 | 678 |
| SEP | | | | | | | | | |
| 18... | 1545 | — | 120 | 120 | — | — | 720 | 0 | 590 |
| NOV | | | | | | | | | |
| 06... | 1530 | — | 160 | 150 | — | — | 470 | 0 | 390 |
| JAN, 1980 | | | | | | | | | |
| 02... | 1400 | 119 | 120 | 91 | 3000 | 61 | 828 | 0 | 679 |
| MAR | | | | | | | | | |
| 18... | 1425 | — | 110 | 110 | — | — | 874 | 0 | 720 |
| APR | | | | | | | | | |
| 30... | 1100 | — | 100 | 110 | — | — | 872 | 0 | 715 |
| JUN | | | | | | | | | |
| 24... | 1030 | 79 | 110 | 99 | 2800 | 58 | 857 | 0 | 703 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303357087063801 - Standby injection well, American Cyanamid. | | | | | | | | | |
|--|------|-----------------------------------|----------------------------|------------------------------|------------------------------|-----------------------------|--|------------------------------------|--|
| DATE | TIME | CARBON DIOXIDE DIS- (MG/L) AS CO2 | SULFATE DIS- (MG/L) AS SO4 | CHL- RIDE, DIS- (MG/L) AS CL | FLUO- RITE, DIS- (MG/L) AS F | SILICA, DIS- (MG/L) AS SiO2 | SOLIDS, RESIDUE AT 180 DEER, C DIS- (MG/L) | SOLIDS, SUM OF TLENTS, DIS- (MG/L) | SOLIDS, SUP- RESIDUE AT 110 DEER, C (MG/L) |
| MAY, 1975 | | | | | | | | | |
| 20... | 1030 | 18 | .0 | 3800 | 4.4 | 15 | 7060 | 6630 | — |
| 20... | 1100 | 13 | — | 8800 | 3.9 | 24 | 16100 | — | — |
| 20... | 1130 | 4.2 | — | 9200 | 4.0 | 16 | 16200 | — | — |
| 20... | 1230 | 10 | — | 6700 | 4.1 | 21 | 12000 | — | — |
| JUL | | | | | | | | | |
| 16... | 1000 | 21 | — | 6800 | 2.7 | 14 | 12700 | — | — |
| AUG | | | | | | | | | |
| 22... | 0935 | 11 | 11 | 6600 | 3.3 | 14 | — | — | — |
| SEP | | | | | | | | | |
| 17... | 1550 | 10 | — | 7700 | 3.5 | — | — | — | — |
| OCT | | | | | | | | | |
| 16... | 1410 | 10 | — | 8000 | 3.3 | — | — | — | — |
| NOV | | | | | | | | | |
| 19... | 1505 | 13 | — | 8300 | 3.4 | — | — | — | — |
| DEC | | | | | | | | | |
| 17... | 1340 | 10 | — | 8200 | 3.2 | — | — | — | — |
| JAN, 1976 | | | | | | | | | |
| 21... | 1410 | 14 | — | 7600 | 3.4 | 15 | 13300 | — | — |
| FEB | | | | | | | | | |
| 21... | 1125 | 11 | — | 5100 | 3.8 | — | — | — | — |
| MAR | | | | | | | | | |
| 28... | 0925 | 11 | — | 5600 | 3.8 | — | — | — | — |
| APR | | | | | | | | | |
| 19... | 1415 | 8.9 | 9.0 | 5000 | 3.7 | — | — | — | — |
| MAY | | | | | | | | | |
| 25... | 0955 | 11 | 5.0 | 5400 | 3.6 | — | — | — | — |
| JUN | | | | | | | | | |
| 21... | 1610 | 9.1 | 8.0 | 5100 | 3.8 | 17 | 9020 | 8800 | — |
| AUG | | | | | | | | | |
| 19... | 1705 | 14 | 29 | 5100 | 3.6 | — | — | — | — |
| SEP | | | | | | | | | |
| 16... | 1130 | 15 | 31 | 5000 | 4.0 | — | — | — | — |
| OCT | | | | | | | | | |
| 19... | 1410 | 9.7 | 22 | 5100 | 3.8 | — | — | — | — |
| NOV | | | | | | | | | |
| 16... | 1415 | 13 | 28 | 5300 | 3.9 | — | — | — | — |
| DEC | | | | | | | | | |
| 15... | 0940 | 16 | 25 | 5400 | 3.3 | — | — | — | — |
| JAN, 1977 | | | | | | | | | |
| 18... | 0915 | 14 | 85 | 5100 | 4.2 | 18 | 9050 | 8940 | — |
| FEB | | | | | | | | | |
| 22... | 1350 | 16 | 80 | 5100 | 4.2 | — | — | — | — |
| MAR | | | | | | | | | |
| 24... | 1105 | 11 | 88 | 5900 | 3.8 | — | — | — | — |
| APR | | | | | | | | | |
| 20... | 1215 | 14 | 140 | 5000 | 4.0 | 19 | 9140 | 8940 | — |
| MAY | | | | | | | | | |
| 18... | 1700 | 17 | 172 | 5400 | 4.8 | — | — | — | — |

| 303357087063801 - Standby injection well, American Cyanamid. | | | | | | | | | |
|--|------|-----------------------------------|----------------------------|------------------------------|------------------------------|-----------------------------|--|------------------------------------|--|
| DATE | TIME | CARBON DIOXIDE DIS- (MG/L) AS CO2 | SULFATE DIS- (MG/L) AS SO4 | CHL- RIDE, DIS- (MG/L) AS CL | FLUO- RITE, DIS- (MG/L) AS F | SILICA, DIS- (MG/L) AS SiO2 | SOLIDS, RESIDUE AT 180 DEER, C DIS- (MG/L) | SOLIDS, SUM OF TLENTS, DIS- (MG/L) | SOLIDS, SUP- RESIDUE AT 110 DEER, C (MG/L) |
| JAN, 1977 | | | | | | | | | |
| 13... | 1345 | 17 | 160 | 4800 | 4.5 | — | — | — | — |
| JUL | | | | | | | | | |
| 21... | 0925 | 21 | 170 | 4900 | 4.1 | 20 | 9240 | 8900 | — |
| AUG | | | | | | | | | |
| 17... | 1350 | 20 | 170 | 5300 | 4.4 | — | — | — | — |
| SEP | | | | | | | | | |
| 20... | 1420 | 25 | 300 | 4300 | 4.6 | — | — | — | — |
| OCT | | | | | | | | | |
| 26... | 1400 | 26 | 336 | 4500 | 4.0 | — | — | — | — |
| NOV | | | | | | | | | |
| 1500 | | 49 | 230 | 6100 | 4.1 | 20 | 10300 | 10700 | 33 |
| DEC | | | | | | | | | |
| 1400 | | 35 | — | 5500 | 3.9 | — | — | — | — |
| FEB, 1978 | | | | | | | | | |
| 07... | 0930 | 33 | 390 | 4100 | 4.3 | 21 | 8250 | — | 41 |
| MAR | | | | | | | | | |
| 21... | 1340 | 37 | 360 | 5900 | 3.9 | — | — | — | — |
| APR | | | | | | | | | |
| 02... | 1330 | 27 | 450 | 4300 | 3.9 | 21 | 8540 | 8640 | 54 |
| MAY | | | | | | | | | |
| 13... | 1115 | 42 | 490 | 5000 | 4.5 | — | — | — | — |
| JUN | | | | | | | | | |
| 02... | 1100 | 46 | 300 | 5200 | 3.9 | 20 | 9320 | 10000 | 42 |
| SEP | | | | | | | | | |
| 20... | 1420 | 49 | 390 | 4700 | 3.7 | — | — | — | — |
| NOV | | | | | | | | | |
| 07... | 1000 | 40 | 300 | 6000 | 3.8 | — | — | — | — |
| DEC | | | | | | | | | |
| 12... | 1330 | 44 | 550 | 3800 | 4.4 | 20 | 8070 | 8150 | — |
| JAN, 1979 | | | | | | | | | |
| 22... | 1515 | 46 | 200 | 7000 | 3.6 | — | — | — | — |
| MAR | | | | | | | | | |
| 07... | 0915 | 26 | 480 | 4600 | 4.3 | — | — | — | — |
| APR | | | | | | | | | |
| 01... | 1110 | 55 | 570 | 4700 | 4.4 | — | — | — | — |
| MAY | | | | | | | | | |
| 12... | 1445 | 33 | 540 | 4100 | 4.2 | 20 | 8420 | 8140 | — |
| JUL | | | | | | | | | |
| 23... | 1330 | 33 | 480 | 4400 | 4.2 | — | — | — | — |
| SEP | | | | | | | | | |
| 18... | 1545 | 46 | 330 | 5400 | 4.3 | — | — | — | — |
| NOV | | | | | | | | | |
| 06... | 1530 | 30 | 190 | 6200 | 3.9 | — | — | — | — |
| JAN, 1980 | | | | | | | | | |
| 09... | 1400 | 53 | 330 | 4300 | 5.5 | 22 | 8600 | 8360 | — |
| MAR | | | | | | | | | |
| 18... | 1425 | 28 | 560 | 4200 | 5.0 | — | — | — | — |
| APR | | | | | | | | | |
| 30... | 1100 | 35 | 530 | 3800 | 5.5 | — | — | — | — |
| JUN | | | | | | | | | |
| 24... | 1030 | 43 | 540 | 4500 | 5.0 | 18 | 8540 | 8570 | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303357087063801 - Steady injection well, American Crossmaid. | | | | | | | | | | | | | | | |
|--|------|--|---|---|--|---|--|-----------|------|--|---|---|--|---|--|
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C. TOTAL (MG/L) | SOLIDS, VOLU- MINE TOTAL (MG/L) | NI- TRO- GEN, NITRATE TOTAL (MG/L) | NI- TRO- GEN, NITRATE DIS- SOLVED (MG/L) | NI- TRO- GEN, AMMONIA TOTAL (MG/L) | NI- TRO- GEN, AMMONIA DIS- SOLVED (MG/L) | DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C. TOTAL (MG/L) | SOLIDS, VOLU- MINE TOTAL (MG/L) | NI- TRO- GEN, NITRATE TOTAL (MG/L) | NI- TRO- GEN, NITRATE DIS- SOLVED (MG/L) | NI- TRO- GEN, AMMONIA TOTAL (MG/L) | NI- TRO- GEN, AMMONIA DIS- SOLVED (MG/L) |
| MAY, 1975 | | | | | | | | JUN, 1977 | | | | | | | |
| 20... | 1020 | — | — | .00 | — | .000 | — | JUL 13... | 1345 | — | — | .00 | — | .000 | — |
| 20... | 1100 | — | — | .00 | — | .010 | — | JUL 21... | 0925 | — | — | .01 | — | .000 | — |
| 20... | 1220 | — | — | .00 | — | .010 | — | AUG 16... | 1350 | — | — | .00 | — | .000 | — |
| JUL 16... | 1000 | — | — | .00 | — | .000 | — | SEP 17... | 1420 | — | — | .00 | — | .010 | — |
| AUG 22... | 0935 | — | — | .00 | — | .000 | — | OCT 20... | 1400 | — | — | .00 | — | .000 | — |
| SEP 17... | 1350 | — | — | .00 | — | .000 | — | NOV 15... | 1500 | — | — | .01 | — | .000 | — |
| OCT 17... | 1410 | — | — | .00 | — | .000 | — | DEC 13... | 1400 | — | — | .00 | — | .000 | — |
| NOV 16... | 1305 | — | — | .02 | — | .010 | — | FEB 07... | 0930 | 9030 | 170 | .01 | — | .000 | — |
| DEC 17... | 1340 | — | — | .03 | — | .020 | — | MAR 21... | 1340 | — | — | .00 | — | .000 | — |
| JAN, 1976 | | | | | | | | APR 21... | 1330 | 8150 | 270 | .00 | — | .000 | — |
| 21... | 1410 | — | — | .03 | — | .020 | — | MAY 13... | 1115 | — | — | .00 | — | .000 | — |
| 21... | 1125 | — | — | .00 | — | .000 | — | AUG 02... | 1100 | 9590 | 448 | .00 | — | .000 | — |
| 28... | 0925 | — | — | .00 | — | .000 | — | SEP 20... | 1420 | — | — | .00 | — | .000 | — |
| MAY 19... | 1415 | — | — | .00 | — | .000 | — | NOV 07... | 1000 | — | — | .00 | — | .000 | — |
| JUN 25... | 0935 | — | — | .00 | — | .000 | — | DEC 12... | 1330 | — | — | .00 | — | .000 | — |
| JUL 21... | 1610 | — | — | .00 | — | .000 | — | JAN, 1979 | | | | | | | |
| AUG 19... | 1705 | — | — | .00 | — | .000 | — | MAR 22... | 1515 | — | — | .01 | — | .000 | — |
| SEP 16... | 1130 | — | — | .00 | — | .010 | — | APR 07... | 0915 | — | — | .00 | — | .000 | — |
| OCT 19... | 1410 | — | — | .00 | — | .010 | — | MAY 01... | 1110 | — | — | .00 | — | .010 | — |
| NOV 16... | 1415 | — | — | .00 | — | .000 | — | JUN 12... | 1445 | — | — | .00 | — | .000 | — |
| DEC 15... | 0940 | — | — | .00 | — | .000 | — | JUL 23... | 1330 | — | — | .00 | — | .000 | — |
| JAN, 1977 | | | | | | | | SEP 18... | 1545 | — | — | .00 | — | .000 | — |
| 18... | 0915 | — | — | .00 | — | .000 | — | NOV 06... | 1530 | — | — | .00 | — | .000 | — |
| FEB 22... | 1350 | — | — | .00 | — | .010 | — | JAN, 1980 | | | | | | | |
| MAR 24... | 1105 | — | — | .00 | — | .010 | — | MAR 09... | 1400 | — | — | .00 | — | .000 | — |
| APR 20... | 1215 | — | — | .00 | — | .000 | — | MAR 18... | 1425 | — | — | .00 | — | .000 | — |
| MAY 18... | 1700 | — | — | .00 | — | .000 | — | APR 30... | 1100 | — | — | .01 | — | .000 | — |
| | | | | | | | | JUN 24... | 1030 | — | — | .00 | — | .000 | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303357087063801 - Standby injection well, American Cyanamid. | | | | | | | | | | | | | | | 303357087063801 - Standby injection well, American Cyanamid. | | | | | | | | | | | | | | |
|--|------|--|--|---|--|--|---|-----------|------|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | NITRO- GEN. ORGANIC TOTAL (MG/L AS N) | NITRO- GEN. DIS- SOLVED (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, DIS- SOLVED (MG/L AS P) | PHOS- PHORUS, ORTHOPH- OSPHATE DISSOL. (MG/L AS P) | ALUM- INUM, DIS- SOLVED (MG/L AS AL) | DATE | TIME | NITRO- GEN. ORGANIC TOTAL (MG/L AS N) | NITRO- GEN. DIS- SOLVED (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, DIS- SOLVED (MG/L AS P) | PHOS- PHORUS, ORTHOPH- OSPHATE DISSOL. (MG/L AS P) | ALUM- INUM, DIS- SOLVED (MG/L AS AL) | | | | | | | | | | | | | | |
| MAY, 1975 | 1030 | .60 | — | .010 | — | .000 | — | JUN, 1977 | 1345 | 6.0 | — | .030 | — | .010 | — | | | | | | | | | | | | | | |
| 20... | 1100 | 1.3 | — | .010 | — | .000 | — | JUL... | 0725 | 6.8 | — | .020 | — | .010 | — | | | | | | | | | | | | | | |
| 20... | 1230 | 1.1 | — | — | — | .000 | 0 | AUG... | 1350 | 7.5 | — | .030 | — | .020 | — | | | | | | | | | | | | | | |
| JUL... | 1000 | .60 | — | .000 | — | .000 | 0 | SEP... | 1420 | 8.6 | — | .050 | — | .020 | — | | | | | | | | | | | | | | |
| AUG... | 0935 | 1.1 | — | .020 | — | .020 | — | OCT... | 1400 | 7.6 | — | .030 | — | .010 | — | | | | | | | | | | | | | | |
| 17... | 1350 | .30 | — | .010 | — | .000 | — | NOV... | 1500 | 6.2 | — | .020 | — | .010 | — | | | | | | | | | | | | | | |
| 16... | 1410 | .65 | — | .010 | — | .000 | — | DEC... | 1400 | 7.6 | — | .040 | — | .010 | — | | | | | | | | | | | | | | |
| 19... | 1305 | .40 | — | .030 | — | .010 | — | FEB, 1978 | 0930 | 9.4 | — | .050 | — | .020 | — | | | | | | | | | | | | | | |
| DEC... | 1340 | .40 | — | .030 | — | .010 | — | MAR... | 1340 | 9.4 | — | .040 | — | .010 | — | | | | | | | | | | | | | | |
| JAN, 1976 | 1410 | .35 | — | .010 | — | .010 | 0 | APR... | 1330 | 9.1 | — | .050 | — | .020 | — | | | | | | | | | | | | | | |
| 21... | 1125 | .20 | — | .010 | — | .010 | — | MAY... | 1115 | 8.8 | — | .040 | — | .010 | — | | | | | | | | | | | | | | |
| 21... | 0925 | .35 | — | .010 | — | .000 | — | JUN... | 1100 | 9.0 | — | .030 | — | .020 | — | | | | | | | | | | | | | | |
| 28... | 1415 | .20 | — | .010 | — | .010 | — | SEP... | 1420 | 8.4 | — | .040 | — | .020 | — | | | | | | | | | | | | | | |
| MAY... | 0955 | .10 | — | .020 | — | .000 | — | NOV... | 1000 | 5.2 | — | .030 | — | .030 | — | | | | | | | | | | | | | | |
| JUL... | 1610 | .20 | — | .010 | — | .010 | — | DEC... | 1330 | 12 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| AUG... | 1705 | .27 | — | .030 | — | .020 | — | JAN, 1979 | 1515 | 6.5 | — | .020 | — | .000 | — | | | | | | | | | | | | | | |
| 19... | 1130 | 1.1 | — | .020 | — | .010 | — | MAR... | 0915 | 18 | — | .070 | — | .010 | — | | | | | | | | | | | | | | |
| 16... | 1410 | 1.4 | — | .020 | — | .000 | — | APR... | 1110 | 16 | — | .040 | — | .010 | — | | | | | | | | | | | | | | |
| 19... | 1415 | 1.1 | — | .010 | — | .010 | — | MAY... | 1445 | 11 | — | .040 | — | .020 | — | | | | | | | | | | | | | | |
| DEC... | 0940 | 1.9 | — | .010 | — | .010 | — | JUL... | 1330 | 12 | — | .060 | — | .030 | — | | | | | | | | | | | | | | |
| JAN, 1977 | 0915 | 3.2 | — | .040 | — | .010 | — | SEP... | 1545 | 16 | — | .030 | — | .010 | — | | | | | | | | | | | | | | |
| 18... | 1350 | 4.8 | — | .020 | — | .010 | — | NOV... | 1330 | 8.5 | — | .020 | — | .000 | — | | | | | | | | | | | | | | |
| FEB... | 1105 | 2.7 | — | .030 | — | .020 | — | JAN, 1980 | 1400 | 14 | — | .040 | — | .020 | — | | | | | | | | | | | | | | |
| MAR... | 1215 | 4.4 | — | .020 | — | .010 | — | MAR... | 1425 | 15 | — | .050 | — | .030 | — | | | | | | | | | | | | | | |
| 20... | 1700 | 6.4 | — | .020 | — | .010 | — | APR... | 1100 | 19 | — | .040 | — | .020 | — | | | | | | | | | | | | | | |
| APR... | | | | | | | | MAY... | 1030 | 16 | — | .070 | — | .010 | — | | | | | | | | | | | | | | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303357067063801 - Steady injection well, American Cyanamid. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-------|--|-----------------------------------|--|-----------------------------------|--|---|--|----------------------------------|--|--|--|-----------------------------------|--|---|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|-----------------------------------|--|----|--|
| DATE | | TIME | | ARSENIC | | BARIUM | | BORON | | CADMIUM | | COPPER | | IRON | | LEAD | | LITHIUM | | MANGANESE | | STRONTIUM | | ZINC | | | | | |
| | | | | DIS- SOLVED (UG/L AS AS) | | DIS- SOLVED (UG/L AS BM) | | TOTAL REDUC- IBLE (UG/L AS B) | | DIS- SOLVED (UG/L AS B) | | HEXA- VALENT DIS- SOLVED (UG/L AS CR) | | DIS- SOLVED (UG/L AS CU) | | SUS- PENDED REDUC- IBLE (UG/L AS FE) | | DIS- SOLVED (UG/L AS FE) | | DIS- SOLVED (UG/L AS LI) | | DIS- SOLVED (UG/L AS MN) | | DIS- SOLVED (UG/L AS SR) | | DIS- SOLVED (UG/L AS ZN) | | | |
| MAY, 1975 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20... | | 1230 | | 13 | | - | | - | | 3900 | | 0 | | 0 | | - | | - | | 20 | | - | | 13000 | | - | | - | |
| JUL | | 16... | | 7 | | - | | - | | 1500 | | 0 | | 0 | | - | | - | | 70 | | - | | 36000 | | - | | - | |
| JAN, 1976 | | 1410 | | 3 | | - | | - | | 3100 | | 0 | | 0 | | - | | - | | 1400 | | 0 | | 24000 | | 10 | | 10 | |
| JUL | | 21... | | 6 | | - | | - | | 2200 | | - | | 0 | | - | | - | | 560 | | 0 | | 22000 | | 20 | | 20 | |
| JAN, 1977 | | 0915 | | 10 | | - | | - | | 4200 | | - | | 0 | | - | | - | | 770 | | 6 | | 26000 | | 30 | | 30 | |
| JUL | | 18... | | 21 | | - | | - | | 5100 | | - | | 0 | | - | | - | | 30 | | - | | 15000 | | 10 | | 10 | |
| FEB, 1978 | | 0925 | | 6 | | - | | - | | 2700 | | - | | 1 | | - | | - | | 300 | | - | | 15000 | | 0 | | 0 | |
| MAY | | 07... | | 13 | | - | | - | | 2600 | | - | | 3 | | - | | - | | - | | - | | 14000 | | - | | - | |
| JUL | | 1330 | | 20 | | - | | - | | 3200 | | - | | 5 | | - | | - | | 130 | | - | | 14000 | | 10 | | 10 | |
| MAY | | 02... | | 21 | | - | | - | | 2900 | | - | | 5 | | - | | - | | 640 | | - | | 18000 | | - | | - | |
| DEC | | 12... | | 29 | | - | | - | | 2800 | | - | | 4 | | - | | - | | 470 | | - | | 13000 | | 0 | | 0 | |
| JUN, 1979 | | 1330 | | 32 | | - | | - | | 1680 | | - | | 2 | | - | | - | | 120 | | - | | 14000 | | 10 | | 10 | |
| JAN, 1980 | | 1400 | | 44 | | 200 | | - | | 3100 | | - | | 2 | | - | | - | | 590 | | - | | 15000 | | 20 | | 20 | |
| JUN | | 24... | | 48 | | 100 | | - | | - | | - | | 2 | | - | | - | | 500 | | - | | 12000 | | 0 | | 0 | |
| JUN | | 1030 | | | | | | | | | | | | | | 1500 | | 1300 | | 340 | | - | | 13000 | | 20 | | 20 | |
| JUN | | | | | | | | | | | | | | | | 1600 | | 1000 | | 570 | | - | | 14000 | | 20 | | 20 | |
| JUN | | | | | | | | | | | | | | | | 1600 | | 310 | | - | | - | | 14000 | | 20 | | 20 | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303357087043801 - Standby injection well, American Cyanamid. | | | | | | | | | | 303357087043801 - Standby injection well, American Cyanamid. | | | | | | | | | |
|--|------|---------------------------|-----------------------------------|--|--------------------------------------|----------------------------|----------------------------------|----------------|-----------|--|---------------------------|-----------------------------------|--|--------------------------------------|----------------------------|----------------------------------|----------------|--|--|
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INOR-GANIC TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, INOR-GANIC TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO-CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) | | |
| MAY, 1975 | | | | | | | | | JUN, 1977 | | | | | | | | | | |
| 20... | 1030 | — | .0 | — | — | — | — | — | JUL 13... | 1345 | — | — | — | — | — | — | — | | |
| 20... | 1100 | — | — | 3.0 | — | — | — | — | JUL 21... | 0925 | — | — | — | — | .80 | — | — | | |
| 20... | 1220 | — | — | 4.0 | — | — | — | — | AUG 16... | 1350 | — | — | — | — | .70 | — | — | | |
| JUL 16... | 1000 | — | — | 2.0 | — | .00 | — | — | SEP 17... | 1420 | — | — | — | — | .30 | — | — | | |
| 22... | 0935 | — | — | 1.0 | — | — | — | — | OCT 20... | 1400 | — | — | — | — | 2.5 | — | — | | |
| 22... | 1350 | — | — | .0 | — | — | — | — | NOV 15... | 1500 | — | — | — | — | 2.5 | — | — | | |
| 16... | 1410 | — | — | .0 | — | — | — | — | DEC 13... | 1400 | — | — | — | — | 2.0 | — | — | | |
| 19... | 1305 | — | — | 6.0 | — | — | — | — | FEB 07... | 0930 | — | — | — | — | .50 | — | — | | |
| 17... | 1340 | — | — | 1.0 | — | — | — | — | MAR 21... | 1340 | — | — | — | — | — | — | — | | |
| JUN, 1976 | | | | | | | | | APR 21... | 1330 | — | — | — | — | .80 | — | — | | |
| 21... | 1410 | — | — | 1.0 | — | .01 | — | — | JUN 13... | 1115 | — | — | — | — | .40 | — | — | | |
| 21... | 1125 | — | — | 1.0 | — | — | — | — | AUG 02... | 1100 | — | — | — | — | .35 | — | — | | |
| 28... | 0925 | — | — | .0 | — | — | — | — | SEP 20... | 1420 | — | — | — | — | .10 | — | — | | |
| 19... | 1415 | — | — | .0 | — | — | — | — | NOV 07... | 1000 | — | — | — | — | .30 | 23 | — | | |
| JUL 21... | 0935 | — | — | 1.0 | — | .00 | — | — | DEC 12... | 1330 | — | — | — | — | .70 | 38 | — | | |
| 21... | 1610 | — | — | .0 | — | — | — | — | JAN, 1979 | 1515 | — | — | — | — | .70 | 13 | — | | |
| 16... | 1705 | — | — | 3.0 | — | — | — | — | MAR 07... | 0915 | — | — | — | — | .70 | 50 | — | | |
| 16... | 1130 | — | — | 6.0 | — | — | — | — | APR 07... | 1110 | — | — | — | — | .70 | 25 | 3 | | |
| 19... | 1410 | — | — | 4.0 | — | — | — | — | JUN 12... | 1445 | — | — | — | — | 1.5 | 40 | — | | |
| 16... | 1415 | — | 5.0 | — | — | — | — | — | JUL 23... | 1330 | — | — | — | — | — | 32 | — | | |
| 15... | 0940 | — | — | 6.0 | — | .00 | — | — | SEP 19... | 1345 | — | — | — | — | .55 | 15 | — | | |
| JUN, 1977 | | | | | | | | | NOV 06... | 1530 | — | — | — | — | .50 | 40 | — | | |
| 16... | 0915 | — | — | 11 | — | — | — | — | JAN, 1980 | 1400 | — | — | — | — | 1.0 | 35 | — | | |
| 18... | 1330 | — | — | 11 | — | .07 | — | — | MAR 09... | 1425 | — | — | — | — | 2.5 | 42 | — | | |
| 22... | 1045 | — | — | — | — | .01 | — | — | APR 18... | 1100 | — | — | — | — | .70 | 39 | — | | |
| 24... | 1105 | — | — | — | — | — | — | — | MAY 30... | 1030 | — | — | — | — | — | — | — | | |
| 28... | 1215 | — | — | 11 | — | — | — | — | JUN 24... | | — | — | — | — | — | — | — | | |
| MAY 18... | 1700 | — | — | 20 | — | — | — | — | | | — | — | — | — | — | — | — | | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

303514087054801 - North monitor, American Cyanamid.

303514087054801 - North monitor, American Cyanamid.

| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MHO) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COUNT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) |
|-----------|------|--------------------------------|---|------------------------|----------------------|---------------------------------------|--|------------------------------|------------------------------|
| MAY, 1975 | | | | | | | | | |
| MAY 14... | 1400 | — | 10000 | 8.0 | — | — | 0 | — | — |
| MAY 20... | 1300 | 1280 | 10700 | 8.5 | — | 27.0 | 0 | 40 | — |
| MAY 20... | 1330 | 1450 | 13000 | 8.3 | — | — | 0 | 130 | — |
| MAY 20... | 1400 | — | 9000 | 8.4 | — | 29.0 | 20 | 35 | — |
| JUL 14... | 1430 | — | 7000 | 7.7 | — | 23.0 | 5 | 10 | — |
| AUG 21... | 1435 | — | 6400 | 7.9 | — | 23.0 | — | 5 | — |
| SEP 17... | 0940 | — | 5900 | 7.8 | — | 23.0 | — | 7 | — |
| OCT 16... | 0950 | — | 5900 | 7.9 | — | 23.0 | — | 4 | — |
| NOV 19... | 1105 | — | 6500 | 7.8 | — | 23.0 | — | 3 | — |
| DEC 17... | 0950 | — | 5850 | 7.8 | — | 23.0 | — | 4 | — |
| JAN, 1976 | | | | | | | | | |
| JAN 20... | 1420 | — | 6000 | 7.8 | — | 23.0 | 0 | 5 | — |
| FEB 26... | 1320 | — | 6200 | 7.8 | — | 23.0 | — | 4 | — |
| MAR 26... | 0900 | — | 5950 | 7.8 | — | 23.0 | — | 3 | — |
| APR 27... | 1715 | — | 6500 | 7.8 | — | 23.5 | — | 3 | — |
| MAY 19... | 0900 | — | 6100 | 7.8 | — | 23.5 | — | 3 | — |
| JUN 24... | 1310 | — | 6000 | 7.9 | — | 23.5 | — | 3 | — |
| JUL 20... | 1415 | — | 5900 | 7.8 | — | 24.0 | 5 | 2 | — |
| AUG 19... | 1000 | — | 6500 | 7.8 | — | 24.0 | — | 2 | — |
| SEP 15... | 1040 | — | 6800 | 7.7 | — | 24.0 | — | 2 | — |
| OCT 19... | 1005 | — | 6300 | 7.8 | — | 24.0 | — | 1 | — |
| NOV 14... | 1010 | — | 6450 | 7.8 | — | 24.0 | — | 1 | — |
| DEC 14... | 1245 | — | 6400 | 7.8 | — | 24.0 | — | 2 | — |
| JAN, 1977 | | | | | | | | | |
| JAN 16... | 1350 | — | 7400 | 7.5 | — | 26.0 | 10 | 2 | — |
| FEB 23... | 0920 | — | 6500 | 7.9 | — | 24.0 | — | 2 | — |
| MAR 24... | 1440 | — | 6400 | 7.7 | — | 24.0 | — | 2 | — |
| APR 20... | 1440 | — | 6100 | 7.5 | — | 24.0 | 5 | 2 | — |
| MAY, 1977 | | | | | | | | | |
| MAY 19... | 1340 | — | 6900 | 7.8 | — | 24.0 | — | 1 | — |
| JUN 14... | 0930 | — | 7350 | 7.8 | — | 25.0 | — | 1 | — |
| JUL 20... | 1150 | — | 6600 | 7.7 | — | 24.5 | 5 | 3 | — |
| AUG 17... | 0920 | — | 6550 | 7.7 | — | 24.5 | — | 1 | — |
| SEP 20... | 0930 | — | 6600 | 7.7 | — | 25.0 | — | 1 | — |
| OCT 07... | 1245 | — | 6600 | 7.7 | — | 24.5 | — | 2 | — |
| NOV 14... | 1445 | — | 7100 | 7.6 | — | 24.0 | 19 | — | — |
| DEC 13... | 0940 | — | 6500 | 7.8 | — | 24.5 | — | 2 | — |
| FEB, 1978 | | | | | | | | | |
| FEB 07... | 1310 | — | 6500 | 7.7 | — | 22.0 | 10 | 2 | — |
| MAR 21... | 0850 | — | 6600 | 7.8 | — | 24.0 | — | — | 4.0 |
| MAY 02... | 0930 | — | 6550 | 7.7 | — | 24.5 | 20 | — | 1.0 |
| JUN 13... | 0915 | — | 6800 | 7.7 | — | 24.5 | — | — | 1.0 |
| AUG 01... | 1145 | — | 6800 | 7.7 | — | 25.0 | 10 | — | 1.0 |
| SEP 19... | 1550 | — | 6650 | 7.6 | — | 25.0 | — | — | 1.0 |
| NOV 06... | 1600 | — | 6650 | 7.6 | — | 24.5 | — | — | 1.0 |
| DEC 11... | 1300 | — | 6550 | 7.6 | — | 24.5 | 10 | — | 2.0 |
| JAN, 1979 | | | | | | | | | |
| JAN 23... | 1000 | — | 6600 | 7.6 | — | 24.0 | — | — | 2.0 |
| MAR 06... | 1330 | — | 6550 | 7.7 | — | 24.5 | — | — | 2.0 |
| MAY 01... | 1420 | — | 6700 | 7.6 | — | 25.0 | — | — | 3.0 |
| JUN 11... | 1415 | — | 6500 | 7.6 | — | 24.5 | 0 | — | 1.0 |
| JUL 28... | 1230 | — | 6550 | 7.6 | — | 25.0 | — | — | — |
| SEP 18... | 1230 | — | 6750 | 7.6 | — | 25.0 | — | — | 1.0 |
| NOV 06... | 1145 | — | 7100 | 7.6 | — | 25.0 | — | — | 1.0 |
| JAN, 1980 | | | | | | | | | |
| JAN 07... | 1410 | — | 6900 | 7.5 | — | 23.5 | 5 | — | 2.0 |
| MAR 19... | 1000 | — | 6550 | 7.9 | — | 24.5 | — | — | 1.0 |
| APR 28... | 1615 | — | 6750 | 7.7 | — | 25.0 | — | — | 2.0 |
| JUN 23... | 1530 | — | 6600 | 7.7 | — | 22.0 | 0 | — | 1.0 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303514087054001 - North monitor, American Cyanamid. | | | | | | | | | | | | | | | |
|---|------|----------------------------------|--------------------------|---|---|---|---|-----------|------|----------------------------------|--------------------------|---|---|---|---|
| DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN DEMAND, BIOCHEM 5 DAY (MG/L) | HARD- NESS MUSK- BONATE (MG/L CHOC3) | ACTIVITY TOTAL HEATED (MG/L AS H) | DATE | TIME | DENSITY (GM/ML AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) | OXYGEN DEMAND, BIOCHEM 5 DAY (MG/L) | HARD- NESS MUSK- BONATE (MG/L CHOC3) | ACTIVITY TOTAL HEATED (MG/L AS H) |
| MAY, 1975 | 1400 | — | — | — | — | 430 | — | MAY, 1977 | 1340 | — | — | 101 | — | 140 | — |
| MAY, 1975 | 1300 | — | — | — | — | 410 | — | JUN, 1977 | 0930 | — | — | 76 | — | 160 | — |
| MAY, 1975 | 1330 | — | — | — | — | 620 | — | JUL, 1977 | 1150 | — | — | 128 | — | 150 | 0.2 |
| MAY, 1975 | 1400 | — | 1.003 | 47 | — | 370 | — | AUG, 1977 | 0930 | — | — | 95 | — | 160 | — |
| MAY, 1975 | 1430 | — | — | — | — | 200 | 0.2 | SEP, 1977 | 0930 | — | — | 60 | — | 140 | — |
| MAY, 1975 | 1435 | — | — | — | — | 140 | 0 | OCT, 1977 | 1245 | — | — | 110 | — | 160 | — |
| MAY, 1975 | 0940 | — | — | — | — | 140 | 0 | NOV, 1977 | 1445 | — | — | — | — | 190 | — |
| MAY, 1975 | 0950 | — | — | — | — | 140 | 0 | DEC, 1977 | 0940 | — | — | 60 | — | 150 | — |
| MAY, 1975 | 1105 | — | — | — | — | 140 | 0 | FEB, 1978 | 1310 | — | — | 72 | — | 160 | 0.1 |
| MAY, 1975 | 0950 | — | — | — | — | 140 | 0 | MAR, 1978 | 0850 | — | — | 60 | — | 140 | — |
| MAY, 1975 | 1620 | — | — | 9 | — | 150 | 0.2 | MAY, 1978 | 0930 | — | — | 54 | — | 160 | 0.1 |
| MAY, 1975 | 1320 | — | — | — | — | 130 | 0 | JUN, 1978 | 0915 | — | — | 100 | — | 150 | — |
| MAY, 1975 | 0900 | — | — | — | — | 130 | 0 | AUG, 1978 | 1145 | — | — | 49 | — | 150 | 0.3 |
| MAY, 1975 | 1715 | — | — | — | — | 150 | 0 | SEP, 1978 | 1550 | — | — | 180 | — | 150 | — |
| MAY, 1975 | 0900 | — | — | — | — | 140 | 0 | NOV, 1978 | 1600 | — | — | 120 | — | 150 | — |
| MAY, 1975 | 1310 | — | — | — | — | 140 | 0 | DEC, 1978 | 1300 | — | — | 120 | — | 170 | 0.4 |
| MAY, 1975 | 1415 | — | — | 470 | — | 140 | 0.2 | JAN, 1979 | 1000 | — | — | — | — | 170 | — |
| MAY, 1975 | 1000 | — | — | — | — | 130 | 0 | MAR, 1979 | 1330 | — | — | 94 | — | 150 | — |
| MAY, 1975 | 1040 | — | — | — | — | 170 | 0 | MAY, 1979 | 1620 | — | — | 65 | — | 170 | — |
| MAY, 1975 | 1005 | — | — | 61 | — | 150 | 0 | JUN, 1979 | 1415 | — | — | 75 | — | 170 | 0.5 |
| MAY, 1975 | 1010 | — | — | 61 | — | 140 | 0 | JUL, 1979 | 1220 | — | — | 73 | — | 160 | — |
| MAY, 1975 | 1245 | — | — | — | — | 150 | 0 | SEP, 1979 | 1220 | — | — | 100 | — | 160 | — |
| MAY, 1975 | 1350 | — | — | 110 | — | 220 | 0.0 | NOV, 1979 | 1145 | — | — | 90 | — | 190 | — |
| MAY, 1975 | 0930 | — | — | — | — | 140 | 0 | JAN, 1980 | 1410 | 1.001 | — | — | 220 | 0.9 | |
| MAY, 1975 | 1440 | 1.001 | — | — | — | 150 | — | MAR, 1980 | 1000 | — | — | 54 | — | 170 | — |
| MAY, 1975 | 1440 | — | — | 46 | — | 150 | — | APR, 1980 | 1615 | — | — | 72 | — | 170 | — |
| MAY, 1975 | 1440 | — | — | — | — | — | — | JUN, 1980 | 1530 | 1.001 | — | 50 | — | 150 | 0.5 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

303514087054801 - North monitor, American Creamaid.

303514087054801 - North monitor, American Creamaid.

| DATE | TIME | ACIDITY (mg/L AS CaCO ₃) | CALCIUM DIS- SOLVED (mg/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (mg/L AS Mg) | SODIUM, DIS- SOLVED (mg/L AS Na) | POTAS- SIUM, DIS- SOLVED (mg/L AS K) | BICAR- BONATE (mg/L AS HCO ₃) | CHL- ORIDE (mg/L AS ClO ₃) | ALKA- LITY (mg/L AS CaCO ₃) | DATE | TIME | ACIDITY (mg/L AS CaCO ₃) | CALCIUM DIS- SOLVED (mg/L AS Ca) | MAGNE- SIUM, DIS- SOLVED (mg/L AS Mg) | SODIUM, DIS- SOLVED (mg/L AS Na) | POTAS- SIUM, DIS- SOLVED (mg/L AS K) | BICAR- BONATE (mg/L AS HCO ₃) | CHL- ORIDE (mg/L AS ClO ₃) | ALKA- LITY (mg/L AS CaCO ₃) |
|-----------|------|---|--|--|--|---|---|--|---|-----------|------|---|--|--|--|---|---|--|---|
| | | | | | | | | | | | | | | | | | | | |
| MAY, 1975 | 1400 | — | 80 | 52 | 1980 | 30 | 348 | 0 | 302 | MAY, 1977 | 1300 | — | 23 | 21 | — | — | 438 | 0 | 339 |
| 14... | 1300 | — | 70 | 54 | 2020 | 41 | 367 | 0 | 301 | JUN | 0930 | — | 26 | 22 | — | — | 442 | 0 | 343 |
| 20... | 1330 | — | 110 | 80 | 2600 | 48 | 320 | 0 | 317 | JUL | 1130 | 14 | 23 | 22 | 1400 | 25 | 447 | 0 | 347 |
| 20... | 1400 | — | 60 | 52 | 1970 | 30 | 386 | 0 | 317 | AUG | 0930 | — | 24 | 23 | — | — | 444 | 0 | 344 |
| JUL | 1430 | 10 | 32 | 28 | 1500 | 27 | 413 | 0 | 339 | SEP | 0930 | — | 22 | 21 | — | — | 448 | 0 | 347 |
| 14... | 1435 | — | 22 | 21 | — | — | 416 | 0 | 341 | OCT | 1245 | — | 26 | 23 | — | — | 437 | 0 | 338 |
| 21... | 0940 | — | 21 | 21 | — | — | 418 | 0 | 343 | NOV | 1445 | — | 28 | 27 | 1500 | 25 | 433 | 0 | 335 |
| 17... | 0930 | — | 20 | 21 | — | — | 416 | 0 | 341 | DEC | 0940 | — | 24 | 22 | — | — | 449 | 0 | 348 |
| 16... | 1105 | — | 21 | 20 | — | — | 421 | 0 | 345 | FEB, 1978 | 0940 | 5.0 | 25 | 22 | 1300 | 24 | 450 | 0 | 349 |
| 19... | 0930 | — | 21 | 20 | — | — | 424 | 0 | 348 | MAR | 1310 | — | 23 | 21 | — | — | 450 | 0 | 349 |
| 17... | 0930 | — | 21 | 20 | — | — | 424 | 0 | 348 | MAY | 0850 | — | 23 | 21 | — | — | 450 | 0 | 349 |
| JAN, 1976 | 1620 | 10 | 25 | 21 | 1400 | 25 | 428 | 0 | 351 | MAY | 0930 | 5.0 | 25 | 22 | 1400 | 22 | 440 | 0 | 340 |
| 20... | 1220 | — | 22 | 19 | — | — | 432 | 0 | 354 | JUN | 0915 | — | 24 | 21 | — | — | 447 | 0 | 347 |
| 26... | 0900 | — | 21 | 19 | — | — | 448 | 0 | 347 | AUG | 1145 | 15 | 24 | 22 | 1400 | 22 | 444 | 0 | 344 |
| 27... | 1715 | — | 22 | 22 | — | — | 434 | 0 | 356 | SEP | 1530 | — | 23 | 23 | — | — | 456 | 0 | 374 |
| 19... | 0900 | — | 19 | 22 | — | — | 435 | 0 | 357 | NOV | 1600 | — | 24 | 21 | — | — | 459 | 0 | 376 |
| 24... | 1310 | — | 22 | 21 | — | — | 444 | 0 | 364 | DEC | 1300 | 20 | 25 | 24 | 1300 | 25 | 448 | 0 | 367 |
| JUN | 1415 | 10 | 28 | 22 | 1350 | 27 | 446 | 0 | 366 | JAN, 1979 | 1300 | — | 28 | 25 | — | — | 449 | 0 | 368 |
| 20... | 1000 | — | 19 | 19 | — | — | 446 | 0 | 366 | MAR | 1000 | — | 25 | 22 | — | — | 451 | 0 | 370 |
| 19... | 1040 | — | 26 | 25 | — | — | 436 | 0 | 358 | MAY | 1330 | — | 25 | 22 | — | — | 451 | 0 | 370 |
| 25... | 1040 | — | 22 | 22 | — | — | 441 | 0 | 362 | JUN | 1420 | — | 27 | 24 | — | — | 451 | 0 | 370 |
| 19... | 1005 | — | 22 | 22 | — | — | 441 | 0 | 362 | JUL | 1415 | 25 | 28 | 24 | 1400 | 26 | 448 | 0 | 367 |
| 16... | 1010 | — | 23 | 21 | — | — | 441 | 0 | 362 | AUG | 1415 | — | 26 | 24 | — | — | 450 | 0 | 369 |
| 14... | 1245 | — | 24 | 22 | — | — | 442 | 0 | 363 | SEP | 1230 | — | 24 | 24 | — | — | 450 | 0 | 370 |
| JAN, 1977 | 1350 | .0 | 33 | 34 | 1400 | 30 | 409 | 0 | 355 | NOV | 1145 | — | 30 | 27 | — | — | 430 | 0 | 350 |
| 18... | 0720 | — | 23 | 21 | — | — | 444 | 0 | 364 | JAN, 1980 | 1410 | 45 | 31 | 34 | 1500 | 28 | 435 | 0 | 357 |
| 23... | 0720 | — | 24 | 22 | — | — | 438 | 0 | 359 | MAR | 1000 | — | 28 | 25 | — | — | 454 | 0 | 370 |
| MAR | 1440 | — | 23 | 22 | — | — | 436 | 0 | 358 | APR | 1615 | — | 27 | 25 | — | — | 448 | 0 | 367 |
| 20... | 1440 | — | 23 | 22 | 1300 | 26 | 436 | 0 | 358 | JUN | 1530 | 25 | 25 | 21 | 1300 | 23 | 451 | 0 | 370 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303514087054801 - North monitor, American Cyanamid. | | | | | | | | | | |
|---|-------|---|---|---|--|---|--|---|---|---|
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL- ORIDE, DIS- SOLVED (MG/L AS CL) | FLU- ORIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, TOTAL RESIDUE AT 110 DEG. C (MG/L) |
| MAY, 1977 | | | | | | | | | | |
| 19... | 1340 | 11 | 1.0 | 1900 | 4.0 | — | — | — | — | — |
| JUN | 0930 | 11 | 1.4 | 1900 | 4.2 | — | — | — | — | — |
| JUL | 1150 | 14 | 1.6 | 1900 | 3.9 | 19 | 3590 | 3620 | — | — |
| AUG | 0930 | 14 | .0 | 1900 | 4.2 | — | — | — | — | — |
| SEP | 0930 | 14 | — | 1900 | 4.1 | — | — | — | — | — |
| OCT | 1245 | 14 | 4.4 | 2000 | 3.7 | — | — | — | — | — |
| NOV | 1445 | 17 | 1.8 | 2000 | 1.2 | 19 | 3790 | 3820 | 1 | — |
| DEC | 0940 | 11 | 4.9 | 1940 | 3.6 | — | — | — | — | — |
| JAN, 1978 | | | | | | | | | | |
| 07... | 1310 | 14 | 7.3 | 1900 | 4.0 | 19 | 3510 | 3530 | 2 | — |
| MAR | 0850 | 11 | 6.8 | 1800 | 4.0 | — | — | — | — | — |
| MAY | 0930 | 14 | 4.3 | 2000 | 3.7 | 20 | 3590 | 3720 | 9 | — |
| JUN | 0915 | 14 | 4.1 | 1900 | 4.0 | — | — | — | — | — |
| AUG | 1145 | 14 | 7.2 | 1900 | 3.7 | 19 | 3580 | 3620 | 2 | — |
| SEP | 1350 | 18 | 11 | 1900 | 3.8 | — | — | — | — | — |
| NOV | 1400 | 18 | 11 | 1900 | 3.7 | — | — | — | — | — |
| DEC | 1300 | 18 | 13 | 1900 | 3.8 | 19 | 3590 | 3550 | — | — |
| JAN, 1979 | | | | | | | | | | |
| 23... | 1000 | 18 | 10 | 1900 | 4.1 | — | — | — | — | — |
| MAR | 1330 | 14 | 11 | 2200 | 3.8 | — | — | — | — | — |
| MAY | 1420 | 18 | 9.3 | 1900 | 3.9 | — | — | — | — | — |
| JUN | 1415 | 18 | 9.6 | 2000 | 3.8 | 20 | 3610 | 3740 | — | — |
| JUL | 1230 | 18 | 1.0 | 1900 | — | — | — | — | — | — |
| SEP | 18... | 18 | 4.8 | 1700 | 4.0 | — | — | — | — | — |
| NOV | 1145 | 17 | 6.4 | 1900 | 4.1 | — | — | — | — | — |
| JAN, 1980 | | | | | | | | | | |
| 07... | 1410 | 22 | 7.4 | 2000 | 4.7 | 20 | 3690 | 3850 | — | — |
| MAR | 1000 | 9.1 | 7.3 | 2000 | 4.4 | — | — | — | — | — |
| APR | 1615 | 14 | 2.9 | 1900 | 5.4 | — | — | — | — | — |
| JUN | 1330 | 14 | 7.8 | 1900 | 4.5 | 19 | 3450 | 3530 | — | — |

| 303514087054801 - North monitor, American Cyanamid. | | | | | | | | | | |
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL- ORIDE, DIS- SOLVED (MG/L AS CL) | FLU- ORIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, TOTAL RESIDUE AT 110 DEG. C (MG/L) |
| MAY, 1975 | | | | | | | | | | |
| 14... | 1400 | 5.9 | 8.0 | 3100 | 4.1 | 19 | 5540 | 5480 | — | — |
| 20... | 1300 | 1.9 | 4.0 | 3200 | 4.1 | 17 | 5690 | 5600 | — | — |
| 20... | 1330 | 2.6 | .4 | 4200 | 3.7 | 18 | 7530 | 7530 | — | — |
| 20... | 1400 | 2.5 | .4 | 3000 | 4.2 | 17 | 5290 | 5340 | — | — |
| JUL | 1430 | 13 | — | 2200 | 4.0 | 18 | 4120 | — | — | — |
| AUG | 1435 | 8.4 | — | 2200 | 3.9 | — | — | — | — | — |
| SEP | 0940 | 11 | — | 1900 | 4.0 | — | — | — | — | — |
| OCT | 0930 | 8.4 | — | 1900 | 4.0 | — | — | — | — | — |
| NOV | 1105 | 11 | — | 1900 | 4.1 | — | — | — | — | — |
| DEC | 0930 | 11 | — | 1900 | 3.9 | — | — | — | — | — |
| JAN, 1976 | | | | | | | | | | |
| 20... | 1620 | 11 | 29 | 1900 | 3.5 | 18 | 3300 | 3440 | — | — |
| FEB | 1320 | 11 | — | 1900 | 4.3 | — | — | — | — | — |
| MAR | 0900 | 11 | — | 1900 | 4.2 | — | — | — | — | — |
| APR | 1715 | 11 | — | 2100 | 4.2 | — | — | — | — | — |
| MAY | 0900 | 11 | — | 1900 | 3.9 | — | — | — | — | — |
| JUN | 1310 | 8.9 | 6.2 | 1900 | 3.8 | — | — | — | — | — |
| JUL | 1415 | 11 | 5.0 | 1900 | 1.9 | 19 | 3448 | 3570 | — | — |
| AUG | 1000 | 11 | 2.4 | 1900 | 3.8 | — | — | — | — | — |
| SEP | 1040 | 14 | 11 | 2000 | 4.1 | — | — | — | — | — |
| OCT | 1005 | 11 | — | 1900 | 3.8 | — | — | — | — | — |
| NOV | 1010 | 11 | .0 | 1900 | 3.9 | — | — | — | — | — |
| DEC | 1245 | 11 | 4.0 | 1900 | 3.9 | — | — | — | — | — |
| JAN, 1977 | | | | | | | | | | |
| 18... | 1330 | 21 | 7.0 | 2300 | 4.0 | 19 | 4130 | 4240 | — | — |
| FEB | 0720 | 8.9 | 3.5 | 1900 | 4.2 | — | — | — | — | — |
| MAR | 1440 | 14 | 2.0 | 1900 | 3.8 | — | — | — | — | — |
| APR | 1440 | 22 | 9.2 | 2000 | 4.0 | 20 | 3450 | 3620 | — | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303514067054601 - North monitor, American Cyanamid. | | | | | | | | | | | | | | |
|---|------|---|---|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C. (MG/L) | SOLIDS, VOLU- TILE ON ION- TION (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L) |
| MAY, 1975 | 1300 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1330 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1400 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL | 1430 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG | 1435 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP | 0940 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| OCT | 0950 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV | 1105 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC | 0950 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1976 | 1430 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1320 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| FEB | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR | 1715 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| APR | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY | 1310 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN | 1415 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL | 1000 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG | 1040 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP | 1005 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| OCT | 1010 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV | 1245 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC | 1350 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1977 | 1300 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1000 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1005 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV | 1010 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC | 1245 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1977 | 1350 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| FEB | 0920 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR | 1440 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| APR | 1440 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY, 1977 | 1340 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN | 0930 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL | 1150 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG | 0930 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP | 0930 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| OCT | 1245 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV | 1445 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC | 0940 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| FEB, 1978 | 1310 | 3530 | 0 | — | — | — | — | — | — | — | — | — | — | — |
| MAR | 0650 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| APR | 0930 | 3510 | 56 | — | — | — | — | — | — | — | — | — | — | — |
| MAY | 0915 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN | 1145 | 3640 | 132 | — | — | — | — | — | — | — | — | — | — | — |
| JUL | 1530 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG | 1600 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP | 1300 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| OCT | 1000 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV | 1330 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC | 1420 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1979 | 1415 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| FEB | 1230 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR | 1230 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| APR | 1145 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY | 1410 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN | 1000 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL | 1615 | — | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG | 1530 | — | — | — | — | — | — | — | — | — | — | — | — | — |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303514087054801 - North monitor, American Cyanamid. | | | | | | | | | | | | | | | 303514087054801 - North monitor, American Cyanamid. | | | | | | | | | | | | | | |
|---|------|--|--|---|--|---|---|-----------|------|--|--|---|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| DATE | TIME | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, DIS- SOLVED (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, DTS- SOLVED (MG/L AS P) | PHOS- PHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P) | ALUM- INUM, DTS- SOLVED (UG/L AS AL) | DATE | TIME | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, DIS- SOLVED (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, DTS- SOLVED (MG/L AS P) | PHOS- PHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P) | ALUM- INUM, DTS- SOLVED (UG/L AS AL) | | | | | | | | | | | | | | |
| MAY, 1975 | 1400 | — | — | — | — | — | 100 | MAY, 1977 | 1340 | .08 | — | .010 | — | .010 | — | | | | | | | | | | | | | | |
| 14... | 1300 | .10 | — | .010 | — | .000 | — | JUN... | 0930 | .00 | — | .020 | — | .010 | — | | | | | | | | | | | | | | |
| 20... | 1330 | .70 | — | .010 | — | .000 | — | JUL... | 1150 | .03 | — | .020 | — | .010 | — | | | | | | | | | | | | | | |
| 20... | 1400 | .50 | — | .020 | — | .000 | 0 | AUG... | 0930 | .14 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| JUL... | 1430 | .50 | — | .010 | — | .000 | 10 | SEP... | 0930 | .04 | — | .030 | — | .020 | — | | | | | | | | | | | | | | |
| AUG... | 1435 | .40 | — | .020 | — | .020 | — | OCT... | 1245 | .00 | — | .010 | — | .010 | — | | | | | | | | | | | | | | |
| SEP... | 0940 | .14 | — | .020 | — | .020 | — | NOV... | 1445 | .06 | — | .020 | — | .010 | — | | | | | | | | | | | | | | |
| OCT... | 0950 | .28 | — | .020 | — | .020 | — | DEC... | 0940 | .04 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| NOV... | 1105 | .22 | — | .020 | — | .020 | — | FEB, 1978 | 1310 | .00 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| DEC... | 0950 | .12 | — | .030 | — | .030 | — | MAR... | 0850 | .00 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| JAN, 1976 | 1620 | .16 | — | .020 | — | .020 | 20 | MAY... | 0930 | .08 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| FEB... | 1320 | .16 | — | .020 | — | .020 | — | JUN... | 0915 | .11 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| MAR... | 0900 | .04 | — | .020 | — | .020 | — | AUG... | 1145 | .10 | — | .030 | — | .020 | — | | | | | | | | | | | | | | |
| APR... | 1715 | .10 | — | .020 | — | .020 | — | SEP... | 1550 | .16 | — | .030 | — | .020 | — | | | | | | | | | | | | | | |
| MAY... | 0900 | .06 | — | .030 | — | .030 | — | NOV... | 1600 | .00 | — | .030 | — | .030 | — | | | | | | | | | | | | | | |
| JUN... | 1310 | .17 | — | .030 | — | .030 | — | DEC... | 1300 | .12 | — | .010 | — | .010 | — | | | | | | | | | | | | | | |
| JUL... | 1415 | .00 | — | .020 | — | .020 | — | JAN, 1979 | 1000 | .00 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| AUG... | 1000 | .00 | — | .040 | — | .020 | — | MAR... | 1330 | .26 | — | .020 | — | .010 | — | | | | | | | | | | | | | | |
| SEP... | 1040 | .07 | — | .020 | — | .010 | — | MAY... | 1420 | .08 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| OCT... | 1005 | .30 | — | .040 | — | .040 | — | JUN... | 1415 | .07 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| NOV... | 1010 | .00 | — | .020 | — | .020 | — | JUL... | 1230 | .00 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| DEC... | 1245 | .12 | — | .010 | — | .010 | — | SEP... | 1230 | .84 | — | .040 | — | .020 | — | | | | | | | | | | | | | | |
| JAN, 1977 | 1350 | .00 | — | .020 | — | .010 | — | NOV... | 1145 | .25 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| FEB... | 0920 | .10 | — | .020 | — | .020 | — | JAN, 1980 | 1410 | .34 | — | .020 | — | .020 | — | | | | | | | | | | | | | | |
| MAR... | 1440 | .10 | — | .020 | — | .020 | — | MAR... | 1000 | .28 | — | .020 | — | .010 | — | | | | | | | | | | | | | | |
| APR... | 1440 | .19 | — | .020 | — | .020 | — | APR... | 1615 | .36 | — | .030 | — | .020 | — | | | | | | | | | | | | | | |
| MAY... | 1440 | .19 | — | .020 | — | .020 | — | JUN... | 1530 | .16 | — | .030 | — | .010 | — | | | | | | | | | | | | | | |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

| 303514087054801 - North monitor, American Crossland. | | | | | | | | | |
|--|------|---|---|---|--|--|---|---|------|
| DATE | TIME | ARSENIC DIS- SOLVED (UG/L) AS (A) | BARIUM, DIS- SOLVED (UG/L) AS (A) | BORON, TOTAL RECD- ENRABLE (UG/L) AS (B) | BORON, DIS- SOLVED (UG/L) AS (B) | CADMIUM, DIS- SOLVED (UG/L) AS (C) | CADMIUM, TOTAL RECD- ENRABLE (UG/L) AS (C) | COPPER, DIS- SOLVED (UG/L) AS (C) | DATE |
| MAY, 1975 | 1400 | 9 | — | — | 1700 | 0 | 2 | 0 | 4 |
| 14... | 1400 | 9 | — | — | 2300 | 0 | 0 | 0 | 0 |
| JUL | 1430 | 8 | — | — | 380 | 0 | 0 | 0 | 0 |
| 14... | 1430 | 5 | — | — | 2100 | 0 | 0 | 0 | 0 |
| JUL | 1430 | 7 | — | — | — | — | — | 11 | 11 |
| 20... | 1415 | 5 | — | — | 2700 | — | — | 0 | 0 |
| JAN, 1977 | 1350 | 2 | — | — | 1800 | — | — | 0 | 0 |
| 20... | 1150 | 2 | — | — | 2000 | — | — | 0 | 0 |
| FEB, 1978 | 1310 | 2 | — | — | 2000 | — | — | 0 | 0 |
| 07... | 0930 | 3 | — | — | 2000 | — | — | 0 | 0 |
| MAY | 1150 | 3 | — | — | 2500 | — | — | 0 | 0 |
| 02... | 1445 | 3 | — | — | 2500 | — | — | 0 | 0 |
| FEB, 1978 | 1310 | 2 | — | — | 2500 | — | — | 0 | 0 |
| 07... | 0930 | 3 | — | — | 2400 | — | — | 0 | 0 |
| AUG | 1145 | 4 | 100 | — | 1000 | — | — | 1 | 1 |
| 01... | 1145 | 4 | 100 | — | 1000 | — | — | 1 | 1 |
| DEC | 1300 | 4 | 100 | — | 2700 | — | — | 1 | 1 |
| 11... | 1300 | 4 | 100 | — | 2700 | — | — | 1 | 1 |
| JAN, 1979 | 1415 | 310 | 150 | 310 | 160 | — | — | — | — |
| 11... | 1415 | 300 | 50 | 300 | 250 | — | — | — | — |
| JAN, 1980 | 1410 | 340 | — | 340 | 250 | — | — | — | — |
| 07... | 1410 | 340 | — | 340 | 250 | — | — | — | — |
| JUL | 1530 | 340 | — | 340 | 250 | — | — | — | — |

| 303514087054801 - North monitor, American Crossland. | | | | | | | | | | |
|--|------|--|---|--|---|---|--|---|---|---|
| DATE | TIME | IRON, TOTAL RECD- ENRABLE (UG/L) AS (E) | IRON, DIS- SOLVED (UG/L) AS (E) | IRON, TOTAL RECD- ENRABLE (UG/L) AS (E) | IRON, DIS- SOLVED (UG/L) AS (E) | LEAD, DIS- SOLVED (UG/L) AS (F) | LITHIUM, DIS- SOLVED (UG/L) AS (G) | MANGA- NESE, DIS- SOLVED (UG/L) AS (H) | STRON- TIUM, DIS- SOLVED (UG/L) AS (I) | ZINC, DIS- SOLVED (UG/L) AS (J) |
| MAY, 1975 | 1400 | — | — | — | 1000 | 12 | 140 | 10 | 12000 | 50 |
| 14... | 1300 | — | — | — | 20 | — | — | — | 8000 | — |
| 20... | 1330 | — | — | — | 1000 | 0 | 130 | 20 | 14000 | — |
| JUL | 1400 | — | — | — | 210 | 10 | — | 6 | 2800 | 10 |
| 14... | 1430 | — | — | — | 100 | 0 | — | 10 | 3300 | 20 |
| JAN, 1976 | 1620 | — | — | — | 130 | — | — | — | 3100 | 0 |
| 20... | 1415 | — | — | — | 160 | — | — | — | 5000 | 0 |
| JUL | 1350 | — | — | — | — | — | — | — | 3700 | — |
| 18... | 1440 | — | — | — | 30 | — | — | — | 3000 | 0 |
| MAY | 1150 | — | — | — | 200 | — | — | — | 3700 | — |
| 02... | 1445 | 260 | — | 260 | 230 | — | — | — | 2900 | 0 |
| FEB, 1978 | 1310 | 320 | — | 320 | 190 | — | — | — | 3900 | 10 |
| MAY | 0930 | 260 | — | 260 | 110 | — | — | — | 2300 | 0 |
| AUG | 1145 | 450 | — | 450 | 200 | — | — | — | 3300 | 0 |
| 01... | 1300 | 260 | — | 260 | 160 | — | — | — | 3500 | 10 |
| 11... | 1415 | 310 | 150 | 310 | 250 | — | — | — | 4000 | 10 |
| JAN, 1980 | 1410 | 300 | 50 | 300 | 250 | — | — | — | 3000 | 10 |
| 07... | 1410 | 340 | — | 340 | 250 | — | — | — | 3000 | 10 |
| JUL | 1530 | 340 | — | 340 | 250 | — | — | — | 3000 | 10 |

Table 25.--Water-quality analyses of water samples from monitor wells and injection well 1 at injection site 2--Continued

303514087054001 - North sealer, American Cyanamid.

303514087054001 - North sealer, American Cyanamid.

| DATE | TIME | CARBON, ORGANIC | | | CARBON, INORGANIC | | | CARBON, ORGANIC | | | CARBON, INORGANIC | | | CYANIDE | | | THIO-CYANATE | | | PHENOLS (UG/L) |
|-----------|------|-------------------|-----------------------|--------------------------|-------------------|-----------------------|--------------------------|-------------------|-----------------------|--------------------------|-------------------|-----------------------|--------------------------|--------------------|------------------------|---------------------------|---------------------|-------------------------|----------------------------|----------------|
| | | TOTAL (MG/L AS C) | DISSOLVED (MG/L AS C) | UNDETERMINED (MG/L AS C) | TOTAL (MG/L AS C) | DISSOLVED (MG/L AS C) | UNDETERMINED (MG/L AS C) | TOTAL (MG/L AS C) | DISSOLVED (MG/L AS C) | UNDETERMINED (MG/L AS C) | TOTAL (MG/L AS C) | DISSOLVED (MG/L AS C) | UNDETERMINED (MG/L AS C) | TOTAL (MG/L AS CN) | DISSOLVED (MG/L AS CN) | UNDETERMINED (MG/L AS CN) | TOTAL (MG/L AS SCN) | DISSOLVED (MG/L AS SCN) | UNDETERMINED (MG/L AS SCN) | |
| MAY, 1975 | | | | | | | | | | | | | | | | | | | | |
| 20... | 1300 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1330 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1400 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL | | | | | | | | | | | | | | | | | | | | |
| 14... | 1430 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG | | | | | | | | | | | | | | | | | | | | |
| 21... | 1435 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP | | | | | | | | | | | | | | | | | | | | |
| 17... | 0940 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| OCT | | | | | | | | | | | | | | | | | | | | |
| 14... | 0950 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV | | | | | | | | | | | | | | | | | | | | |
| 19... | 1105 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC | | | | | | | | | | | | | | | | | | | | |
| 17... | 0950 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1976 | | | | | | | | | | | | | | | | | | | | |
| 20... | 1420 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| FEB | | | | | | | | | | | | | | | | | | | | |
| 20... | 1320 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR | | | | | | | | | | | | | | | | | | | | |
| 21... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| APR | | | | | | | | | | | | | | | | | | | | |
| 27... | 1715 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY | | | | | | | | | | | | | | | | | | | | |
| 19... | 0900 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN | | | | | | | | | | | | | | | | | | | | |
| 24... | 1310 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUL | | | | | | | | | | | | | | | | | | | | |
| 20... | 1415 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| AUG | | | | | | | | | | | | | | | | | | | | |
| 19... | 1000 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| SEP | | | | | | | | | | | | | | | | | | | | |
| 15... | 1040 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| OCT | | | | | | | | | | | | | | | | | | | | |
| 19... | 1005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| NOV | | | | | | | | | | | | | | | | | | | | |
| 16... | 1010 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| DEC | | | | | | | | | | | | | | | | | | | | |
| 14... | 1245 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN, 1977 | | | | | | | | | | | | | | | | | | | | |
| 18... | 1350 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| FEB | | | | | | | | | | | | | | | | | | | | |
| 23... | 0920 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAR | | | | | | | | | | | | | | | | | | | | |
| 24... | 1440 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| APR | | | | | | | | | | | | | | | | | | | | |
| 20... | 1440 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY | | | | | | | | | | | | | | | | | | | | |
| 20... | 1440 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JUN | | | | | | | | | | | | | | | | | | | | |
| 23... | 1530 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

Table 26.--Dissolved gas analyses of samples collected at injection site 2

[ND, not detected; CT, contaminated sample; LS, lost sample.
Hydrogen sulfide (H₂S) not found in any sample.]

Concentrations in milligrams per liter
Partial pressures in atmospheres at temperature shown

| Date | Temperature °C | Methane (CH ₄) | Carbon dioxide (CO ₂) | Nitrogen (N ₂) | Nitrous oxide (N ₂ O) | Oxygen (O ₂) | Argon (Ar) |
|---|----------------|----------------------------|-----------------------------------|----------------------------|----------------------------------|--------------------------|----------------------|
| Waste (303413087063800) | | | | | | | |
| 12/12/78 | 19.0 | ND | <u>16</u> .0091 | <u>22</u> 1.09 | <u>0.08</u> .0001 | <u>0.03</u> .0007 | <u>0.85</u> .0139 |
| 06/12/79 | 29.5 | ND | <u>14</u> .010 | <u>17</u> 1.02 | <u>11</u> .010 | <u><.01</u> <.0003 | <u>.70</u> .014 |
| Primary injection well--backflush (303413087063899) | | | | | | | |
| 11/14/77 | 23.0 | <u><.01</u> <.0004 | <u>5.1</u> .0032 | <u>24</u> 1.23 | <u>42</u> .039 | <u><.02</u> <.0004 | <u>.71</u> .012 |
| 11/15/77 | 23.0 | <u>.01</u> .0006 | <u>5.7</u> .0036 | <u>28</u> 1.41 | <u>72</u> .067 | <u><.02</u> <.0005 | <u>.56</u> .009 |
| 11/17/77 | 24.0 | <u>.01</u> .0006 | <u>9.5</u> .0062 | <u>43</u> 2.22 | <u>92</u> .089 | <u><.05</u> <.001 | <u>.49</u> .008 |
| Shallow well (303413087063802) | | | | | | | |
| 06/12/79 | 26.0 | <u>2.1</u> .098 | <u>2.1</u> .0015 | <u>24</u> 1.32 | ND | <u><.01</u> <.0003 | <u>.92</u> .017 |
| Deep-test well (303405087064601) | | | | | | | |
| 05/13/76 | 24.0 | <u>7.3</u> .33 | <u>20</u> .0131 | <u>121</u> 6.2 | ND | <u><.4</u> <.0008 | -- |
| 05/13/76 | 24.5 | <u>8.4</u> .38 | <u>15</u> .0097 | <u>93</u> 4.8 | ND | <u><.05</u> <.0011 | -- |
| 08/19/76 | 27.0 | <u>5.4</u> .26 | <u>31</u> .022 | <u>97</u> 5.22 | ND | <u><.1</u> <.002 | -- |
| 02/21/77 | 24.5 | <u>1.2</u> .05 | <u>12</u> .008 | -- | ND | -- | -- |
| 02/21/77 | 24.5 | <u>2.0</u> .09 | <u>10</u> .007 | -- | ND | -- | -- |
| 11/15/77 | 25.0 | <u>3.1</u> .144 | <u>31</u> .020 | <u>145</u> 7.56 | ND | <u><0.1</u> <.002 | <u>.51</u> .008 |
| 02/06/78 | 19.0 | <u>1.65</u> .068 | <u>38</u> .021 | <u>70</u> 3.33 | ND | <u>.03</u> .0007 | <u>.27</u> .0041 |
| 05/01/78 | 25.0 | <u>2.9</u> .13 | <u>49</u> .033 | <u>153</u> 8.3 | ND | <u>.2</u> .005 | <u>.51</u> .009 |
| 07/31/78 | 24.0 | <u>4.4</u> .20 | <u>24</u> .016 | <u>158</u> 8.5 | ND | <u><.07</u> <.002 | <u>.58</u> .0103 |

Table 26.--Dissolved gas analyses of samples collected at injection site 2--Continued

Concentrations in milligrams per liter
Partial pressures in atmospheres at temperature shown

| Date | Temperature °C | Methane (CH ₄) | Carbon dioxide (CO ₂) | Nitrogen (N ₂) | Nitrous oxide (N ₂ O) | Oxygen (O ₂) | Argon (Ar) |
|---|----------------|----------------------------|-----------------------------------|----------------------------|----------------------------------|--------------------------|---------------------|
| Deep-test well (303405087064601)--Continued | | | | | | | |
| 12/12/78 | 23.0 | <u>1.9</u> .086 | <u>35</u> .023 | <u>168</u> 8.9 | ND | <u>.18</u> .0042 | <u>.67</u> .0118 |
| 06/13/79 | 24.5 | <u>1.3</u> .058 | <u>46</u> .031 | <u>80</u> 4.3 | ND | <u>.05</u> .001 | <u>.29</u> .0052 |
| 01/10/80 | 22.5 | <u>1.7</u> .076 | <u>31</u> .020 | <u>85</u> 4.4 | ND | <u>.06</u> .001 | <u>.31</u> .0054 |
| Standby injection well (303357087063801) | | | | | | | |
| 11/15/77 | 29.0 | <u>18</u> .89 | <u>38</u> .028 | <u>82</u> 4.54 | ND | <u>.5</u> .012 | <u>.90</u> .016 |
| 02/07/78 | 24.0 | <u>10.1</u> .46 | <u>41</u> .026 | <u>68</u> 3.50 | ND | <u><.02</u> <.0005 | <u>.59</u> .0097 |
| 05/02/78 | 31.0 | <u>14</u> .74 | <u>49</u> .038 | <u>101</u> 6.0 | ND | <u>.1</u> .004 | <u>.1</u> .004 |
| 08/02/78 | 31.0 | <u>7.9</u> .41 | <u>42</u> .033 | <u>33</u> 1.97 | ND | <u><.02</u> <.0005 | <u>.38</u> .0076 |
| 12/12/78 | 29.0 | <u>7.0</u> .354 | <u>49</u> .037 | LS | LS | LS | LS |
| 06/12/79 | 32.0 | <u>7.1</u> .38 | <u>47</u> .038 | <u>47</u> 2.87 | ND | <u>.04</u> .001 | <u>.41</u> .0083 |
| North well (303514087054801) | | | | | | | |
| 08/19/76 | 27.0 | <u>5.8</u> .28 | <u>7.7</u> .005 | <u>18.6</u> 1.01 | ND | <u><0.1</u> <.002 | -- |
| 11/16/77 | 24.0 | <u>8.0</u> .36 | <u>9.6</u> .0062 | <u>22</u> 1.11 | ND | <u><.02</u> <.0004 | <u>.86</u> .014 |
| 02/07/78 | 21.0 | <u>6.9</u> .30 | <u>11.1</u> .0067 | CT | CT | CT | CT |
| 05/02/78 | 24.5 | <u>8.3</u> .37 | <u>12</u> .0080 | <u>23</u> 1.23 | ND | <u>.08</u> .002 | <u>.86</u> .015 |
| 08/01/78 | 25.0 | <u>8.2</u> .38 | <u>10</u> .007 | <u>22</u> 1.22 | ND | <u>.03</u> .0008 | <u>.85</u> .0155 |
| 12/11/78 | 23.5 | <u>6.8</u> .307 | <u>10</u> .0068 | <u>21</u> 1.13 | ND | <u>.04</u> .0010 | <u>.87</u> .0154 |
| 06/11/79 | 24.0 | <u>7.7</u> .35 | <u>11</u> .0072 | <u>24</u> 1.29 | ND | <u>.09</u> .002 | <u>.93</u> .017 |
| 01/07/80 | 23.8 | <u>8.7</u> .40 | <u>13</u> .0084 | <u>22</u> 1.17 | ND | <u>.35</u> .008 | <u>.83</u> .0148 |

Table 27.--Water-quality analyses of water samples from regional monitor wells

| 302241086504001 - Regional monitor 1. | | | | | | | | | | | | | | | | | |
|---------------------------------------|------|--------------------------------|---|------------------------|----------------------|---------------------------------------|---|------------------------------|------------------------------|---|--|--|--|--|---|---|---|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPEC- IFIC CON- DUCT- ANCE (MICRO- MHO/C) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COULT- ERS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHL- ORIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 100 DEG C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) | SOLIDS, SUMP, TOTAL RESIDUE AT 110 DEG C (MG/L) |
| | | | | | | | | | | | | | | | | | |
| DEC , 1973 | 1023 | — | 10100 | 7.6 | — | 32.2 | 5 | 15 | — | 9.0 | 50 | 3200 | 3.3 | 23 | 5620 | 5760 | — |
| 20... | 1323 | — | 10200 | 7.9 | — | 33.0 | 5 | 15 | — | 7.1 | 8.9 | 3300 | 2.9 | 23 | 5670 | 5720 | — |
| 20... | 1723 | — | 10200 | 7.6 | — | — | 7 | — | — | 9.0 | 9.4 | 3200 | 2.4 | 23 | 5690 | 5600 | — |
| MAY , 1977 | 1105 | 1220 | 5300 | — | — | 28.5 | — | — | — | — | — | 1500 | — | — | 2930 | — | — |
| 13... | 1120 | 1320 | 5200 | — | — | 22.5 | — | — | — | — | — | 2800 | — | — | 4690 | — | — |
| 13... | 1130 | 1350 | 12500 | — | — | 28.0 | — | — | — | — | — | 4000 | — | — | 7160 | — | — |
| 13... | 1145 | 1400 | 15700 | — | — | 26.5 | — | — | — | — | — | 5300 | — | — | 8990 | — | — |
| JAN , 1980 | 1730 | — | 7900 | 7.6 | — | 26.0 | 50 | — | 18 | 16 | 4.0 | 2500 | 3.0 | 26 | 4440 | 4470 | — |
| 22... | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 302241086504001 - Regional monitor 1. | | | | | | | | | | | | | | | | | |
| DATE | TIME | SAMP- LING DEPTH (FT) | SPEC- IFIC CON- DUCT- ANCE (MICRO- MHO/C) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COULT- ERS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | SOLIDS, RESIDUE AT 105 DEG C, TOTAL (MG/L) | SOLIDS, TITLE ON TILE - TITR- TION, TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRITE TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) |
| | | | | | | | | | | | | | | | | | |
| DEC , 1973 | 1023 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1323 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1723 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY , 1977 | 1105 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | 1120 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | 1130 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | 1145 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN , 1980 | 1730 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 22... | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 302241086504001 - Regional monitor 1. | | | | | | | | | | | | | | | | | |
| DATE | TIME | SAMP- LING DEPTH (FT) | SPEC- IFIC CON- DUCT- ANCE (MICRO- MHO/C) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE, WATER (DEG C) | COLOR (PLAT- INUM COULT- ERS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) | NITRO- GEN, TOTAL (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, DIS- SOLVED (MG/L AS P) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, DIS- SOLVED (MG/L AS P) | PHOS- PHORUS, TOTAL (MG/L AS P) |
| | | | | | | | | | | | | | | | | | |
| DEC , 1973 | 1023 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1323 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 20... | 1723 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| MAY , 1977 | 1105 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | 1120 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | 1130 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 13... | 1145 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| JAN , 1980 | 1730 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 22... | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

Table 27.--Water-quality analyses of water samples from regional monitor wells--Continued

| 304232087002201 - Residual monitor 2. | | | | | | | | | | 304232087002201 - Residual monitor 2. | | | | | | | | | | | | |
|---------------------------------------|------|---|---|---|--|--|--|---|--|---------------------------------------|------|--|---|---|--|---|--|---|--|--|--|---|
| DATE | TIME | ACTIVITY (NE/L) AS (C03) | CHLORINE DIS- SOLVED (NE/L) AS (C01) | MANGANESE SULFATE SOLVED (NE/L) AS (M0) | SODIUM DIS- SOLVED (NE/L) AS (M0) | POTASSIUM SULFATE SOLVED (NE/L) AS (K) | BICARBONATE (NE/L) AS (C03) | CARBONATE (NE/L) AS (C03) | ALKALINITY (NE/L) AS (C03) | DATE | TIME | NITROGEN ORGANIC TOTAL (NE/L) AS (N) | NITROGEN DIS- SOLVED (NE/L) AS (N) | IRON TOTAL SOLVED (NE/L) AS (I) | IRON DIS- SOLVED (NE/L) AS (I) | PHOSPHORUS TOTAL (NE/L) AS (P) | PHOSPHORUS DIS- SOLVED (NE/L) AS (P) | PHOSPHORUS ORTHOPHOSPHATE TOTAL (NE/L) AS (P) | PHOSPHORUS ORTHOPHOSPHATE DIS- SOLVED (NE/L) AS (P) | ALUMINUM TOTAL SOLVED (NE/L) AS (AL) | | |
| JAN , 1974 | 1255 | — | 5.0 | 2.0 | 320 | 11 | 347 | 14 | 324 | JAN , 1974 | 1255 | .25 | — | — | — | .030 | — | .015 | — | — | — | |
| 14... | 1555 | — | 3.0 | 2.0 | 320 | 9.7 | 370 | 12 | 323 | 14... | 1555 | .40 | — | — | — | .040 | — | .034 | — | — | — | |
| 15... | 1235 | — | 3.0 | 1.7 | 320 | 11 | 355 | 22 | 328 | 15... | 1235 | — | — | — | — | — | — | — | — | — | — | |
| MAY , 1977 | 0945 | — | 4.3 | 2.8 | — | — | 326 | 13 | 297 | MAY , 1977 | 0945 | — | — | — | — | — | — | — | — | — | — | |
| 11... | 0915 | — | 4.3 | 2.5 | — | — | 327 | 15 | 301 | 11... | 0915 | .08 | — | — | — | .030 | — | .030 | — | — | — | |
| 11... | 1000 | — | 4.5 | 2.5 | — | — | — | — | — | 11... | 1000 | — | — | — | — | — | — | — | — | — | — | |
| 11... | 1100 | — | 4.8 | 2.5 | — | — | 330 | 10 | 304 | 11... | 1100 | .34 | — | — | — | .030 | — | .030 | — | — | — | |
| SEP , 1977 | 1743 | — | 4.1 | 2.7 | 380 | 11 | 348 | 1 | 303 | SEP , 1977 | 1743 | — | — | — | — | — | — | — | — | — | — | |
| JUN , 1980 | 1130 | 0.0 | 3.7 | 2.5 | 340 | 9.1 | 378 | 0 | 310 | JUN , 1980 | 1130 | — | — | — | — | — | — | — | — | — | — | |
| 08... | — | — | — | — | — | — | — | — | — | 08... | — | — | — | — | — | — | — | — | — | — | — | |
| DATE | TIME | ACTIVITY (NE/L) AS (C02) | CHLORINE DIS- SOLVED (NE/L) AS (C01) | MANGANESE SULFATE SOLVED (NE/L) AS (M0) | SODIUM DIS- SOLVED (NE/L) AS (M0) | POTASSIUM SULFATE SOLVED (NE/L) AS (K) | BICARBONATE (NE/L) AS (C03) | CARBONATE (NE/L) AS (C03) | ALKALINITY (NE/L) AS (C03) | DATE | TIME | ARSENIC DIS- SOLVED (NE/L) AS (AS) | IRON TOTAL SOLVED (NE/L) AS (I) | IRON DIS- SOLVED (NE/L) AS (I) | IRON TOTAL SOLVED (NE/L) AS (I) | IRON DIS- SOLVED (NE/L) AS (I) | PHOSPHORUS TOTAL (NE/L) AS (P) | PHOSPHORUS DIS- SOLVED (NE/L) AS (P) | PHOSPHORUS ORTHOPHOSPHATE TOTAL (NE/L) AS (P) | PHOSPHORUS ORTHOPHOSPHATE DIS- SOLVED (NE/L) AS (P) | ALUMINUM TOTAL SOLVED (NE/L) AS (AL) | |
| JAN , 1974 | 1255 | 1.0 | 13 | 310 | 2.0 | 33 | 672 | 902 | — | JAN , 1974 | 1255 | 0 | — | — | — | — | — | — | — | — | — | |
| 14... | 1555 | 1.3 | 5.4 | 320 | 2.0 | 33 | 670 | 894 | — | 14... | 1555 | 18 | — | — | — | — | — | — | — | — | — | |
| 15... | 1235 | 0.8 | 10 | 310 | 3.0 | 34 | 666 | 892 | — | 15... | 1235 | 0 | — | — | — | — | — | — | — | — | — | |
| MAY , 1977 | 0945 | 1.2 | — | 430 | — | — | 986 | — | — | MAY , 1977 | 0945 | — | — | — | — | — | — | — | — | — | — | |
| 11... | 0915 | 1.5 | — | 400 | — | — | 982 | — | — | 11... | 0915 | — | — | — | — | — | — | — | — | — | — | |
| 11... | 1000 | 1.5 | — | 400 | — | — | 986 | — | — | 11... | 1000 | — | — | — | — | — | — | — | — | — | — | |
| 11... | 1100 | 1.5 | — | 400 | — | — | 1000 | — | — | 11... | 1100 | — | — | — | — | — | — | — | — | — | — | |
| SEP , 1977 | 1743 | 2.4 | 13 | 400 | 2.2 | 34 | 998 | 1030 | — | SEP , 1977 | 1743 | — | — | — | — | — | — | — | — | — | — | |
| JUN , 1980 | 1130 | 3.0 | 5.0 | 370 | 2.9 | 36 | 976 | 976 | — | JUN , 1980 | 1130 | — | — | — | — | — | — | — | — | — | — | |
| 08... | — | — | — | — | — | — | — | — | — | 08... | — | — | — | — | — | — | — | — | — | — | — | |
| DATE | TIME | SOLIDS, RESIDUE AT 105 TOTAL (NE/L) AS (N) | SOLIDS, TILE ON TILE TOTAL (NE/L) AS (N) | NITROGEN GEN. TOTAL (NE/L) AS (N) | NITROGEN DIS- SOLVED (NE/L) AS (N) | NITROGEN GEN. TOTAL (NE/L) AS (N) | NITROGEN DIS- SOLVED (NE/L) AS (N) | NITROGEN GEN. TOTAL (NE/L) AS (N) | NITROGEN DIS- SOLVED (NE/L) AS (N) | DATE | TIME | CARBON, TOTAL (NE/L) AS (C) | CARBON, ORGANIC TOTAL (NE/L) AS (C) | CARBON, DIS- SOLVED (NE/L) AS (C) | CARBON, GEN. TOTAL (NE/L) AS (C) | CARBON, DIS- SOLVED (NE/L) AS (C) | CARBON, GEN. TOTAL (NE/L) AS (C) | CARBON, DIS- SOLVED (NE/L) AS (C) | CARBON, GEN. TOTAL (NE/L) AS (C) | CARBON, DIS- SOLVED (NE/L) AS (C) | PHENOLS (NE/L) AS (P) | |
| JAN , 1974 | 1255 | — | — | — | — | — | — | — | — | JAN , 1974 | 1255 | 82 | 5.0 | — | — | — | — | — | — | — | — | — |
| 14... | 1555 | — | — | — | — | — | — | — | — | 14... | 1555 | 81 | 2.0 | — | — | — | — | — | — | — | — | — |
| 15... | 1235 | — | — | — | — | — | — | — | — | 15... | 1235 | — | — | — | — | — | — | — | — | — | — | — |
| MAY , 1977 | 0945 | — | — | — | — | — | — | — | — | MAY , 1977 | 0945 | — | — | — | — | — | — | — | — | — | — | — |
| 11... | 0915 | — | — | — | — | — | — | — | — | 11... | 0915 | — | — | — | — | — | — | — | — | — | — | — |
| 11... | 1000 | — | — | — | — | — | — | — | — | 11... | 1000 | — | — | — | — | — | — | — | — | — | — | — |
| 11... | 1100 | — | — | — | — | — | — | — | — | 11... | 1100 | — | — | — | — | — | — | — | — | — | — | — |
| SEP , 1977 | 1743 | — | — | — | — | — | — | — | — | SEP , 1977 | 1743 | — | — | — | — | — | — | — | — | — | — | — |
| JUN , 1980 | 1130 | — | — | — | — | — | — | — | — | JUN , 1980 | 1130 | — | — | — | — | — | — | — | — | — | — | — |
| 08... | — | — | — | — | — | — | — | — | — | 08... | — | — | — | — | — | — | — | — | — | — | — | — |

Table 27.--Water-quality analyses of water samples from regional monitor wells--Continued

| 3059400865806401 - Regional monitor 3. | | | | | | | | | |
|--|-------|---|---|--|---|---|--|---|--|
| DATE | TIME | SAMP- LING DEPTH (FT) | SPE- CIFIC CON- DUCT- ANCE (MICRO- MOS) | PH FIELD (UNITS) | PH LAB (UNITS) | TEMPER- ATURE WATER (DEG C) | COLOR (PLAT- INUM COBALT UNITS) | TUR- BID- ITY (JTU) | TUR- BID- ITY (NTU) |
| FEB , 1961 | 07... | — | — | 8.3 | — | — | — | — | — |
| JAN , 1974 | 1430 | 815 | 269 | 8.2 | — | 28.0 | 5 | 530 | — |
| FEB , 1980 | 1500 | — | 280 | 7.9 | — | 21.5 | 5 | — | 2.0 |
| 20... | — | — | — | — | — | — | — | — | — |
| DATE | TIME | DENSITY (GRAMS AT 20 C) | SPE- CIFIC GRAVITY | OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | OXYGEN BIOCHEM UNTIL 5 DAY (MG/L) | HARD- NESS (MG/L AS CACO3) | HARD- NESS, NONCAR- BONATE (MG/L AS CACO3) | ACIDITY TOTAL HEATED (MG/L AS H) |
| FEB , 1961 | 07... | — | — | — | — | — | 82 | — | — |
| JAN , 1974 | 1430 | — | — | — | 32 | — | 72 | 0 | — |
| FEB , 1980 | 1500 | .999 | — | — | 22 | — | 87 | 0 | .4 |
| 20... | — | — | — | — | — | — | — | — | — |
| DATE | TIME | ACIDITY (MG/L AS CACO3) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE (MG/L AS CO3) | CAR- BONATE (MG/L AS CO3) | ALKAL- INITY (MG/L AS CACO3) |
| FEB , 1961 | 07... | — | 22 | 6.6 | 27 | 7.2 | 158 | 4 | — |
| JAN , 1974 | 1430 | — | 15 | 8.4 | 28 | 7.3 | 163 | 0 | 134 |
| FEB , 1980 | 1500 | 20 | 19 | 9.5 | 26 | 6.5 | 170 | 0 | 139 |
| 20... | — | — | — | — | — | — | — | — | — |
| DATE | TIME | CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | SOLIDS, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L) | SOLIDS, SUM OF RESIDUE AT 110 DEG. C DIS- SOLVED (MG/L) |
| FEB , 1961 | 07... | — | .4 | 4.0 | .4 | 20 | 175 | 170 | — |
| JAN , 1974 | 1430 | 1.6 | 7.6 | 5.8 | .4 | 19 | 149 | 172 | — |
| FEB , 1980 | 1500 | 3.4 | 7.6 | 4.5 | .5 | 20 | 172 | 178 | — |
| 20... | — | — | — | — | — | — | — | — | — |

| 3059400865806401 - Regional monitor 3. | | | | | | | | | |
|--|------|--|---|---|---|---|--|---|--|
| DATE | TIME | SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) | SOLIDS, VOLAT- ILE ON ION- TATION, TOTAL (MG/L) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) | NITRO- GEN, NITRATE TOTAL (MG/L AS N) |
| JAN , 1974 | 1430 | — | — | .00 | — | .010 | — | .290 | — |
| FEB , 1980 | 1500 | — | — | .01 | — | .000 | — | .190 | — |
| 20... | — | — | — | — | — | — | — | — | — |
| DATE | TIME | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | NITRO- GEN, ORGANIC TOTAL (MG/L AS N) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, TOTAL (MG/L AS P) | PHOS- PHORUS, TOTAL (MG/L AS P) | ALUM- INUM, SOLVED (UG/L AS AL) |
| JAN , 1974 | 1430 | 1.9 | — | 2.2 | .240 | — | .027 | — | 10 |
| FEB , 1980 | 1500 | .13 | — | .33 | .010 | — | .010 | — | — |
| 20... | — | — | — | — | — | — | — | — | — |
| DATE | TIME | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BORON, TOTAL REDUC- ERABLE (UG/L AS B) | BORON, DIS- SOLVED (UG/L AS B) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) | COPPER, DIS- SOLVED (UG/L AS CU) |
| JAN , 1974 | 1430 | 0 | — | — | 50 | 3 | 0 | 0 | 3 |
| FEB , 1980 | 1500 | 2 | 100 | — | 10 | — | — | — | 0 |
| 20... | — | — | — | — | — | — | — | — | — |
| DATE | TIME | IRON, TOTAL REDUC- ERABLE (UG/L AS FE) | IRON, SUS- PENDED ERABLE (UG/L AS FE) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM DIS- SOLVED (UG/L AS LI) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | ZINC, DIS- SOLVED (UG/L AS ZN) |
| JAN , 1974 | 1430 | — | — | 0 | 3 | 0 | 17 | 0 | 20 |
| FEB , 1980 | 1500 | 340 | 240 | 100 | — | — | — | 520 | 20 |
| 20... | — | — | — | — | — | — | — | — | — |
| DATE | TIME | CARBON, TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, INOR- GANIC, TOTAL (MG/L AS C) | CARBON, INOR- GANIC, TOTAL (MG/L AS C) | CYANIDE TOTAL (MG/L AS CN) | THIO- CYANATE TOTAL (MG/L AS SCN) | PHENOLS (UG/L) |
| JAN , 1974 | 1430 | 47 | 2.0 | — | 45 | — | — | — | — |
| FEB , 1980 | 1500 | — | — | 1.5 | — | — | — | .00 | — |
| 20... | — | — | — | — | — | — | — | — | — |

Table 28.--Dissolved gas analyses of samples collected at the regional monitor wells

[Neither hydrogen sulfide (H₂S) nor nitrous oxide (N₂O) found in any sample.]

Concentrations in milligrams per liter
Partial pressures in atmospheres at temperature shown

| Date | Temperature °C | Methane (CH ₄) | Carbon dioxide (CO ₂) | Nitrogen (N ₂) | Oxygen (O ₂) | Argon (Ar) |
|-----------------------------------|----------------|----------------------------|-----------------------------------|----------------------------|--------------------------|---------------------|
| Regional well 1 (303241086540401) | | | | | | |
| 01/23/80 | 26.0 | <u>3.7</u> .18 | <u>12</u> .008 | <u>21</u> 1.18 | <u>0.04</u> .001 | <u>0.83</u> .015 |
| Regional well 2 (304252087002201) | | | | | | |
| 01/08/80 | 24.0 | <u>.68</u> .031 | <u>2.8</u> .0018 | <u>24</u> 1.30 | <u>.04</u> .001 | <u>.94</u> .0167 |
| Regional well 3 (305940086580601) | | | | | | |
| 02/20/80 | 22.0 | <u>.06</u> .003 | <u>1.3</u> .0008 | -- | -- | -- |

Table 29.--Bacteriological data for samples collected at monitor wells at injection site 1

[Numbers are in Most Probable Number of organisms per 100 milliliters]

| Source | Date | Total aerobes | Total anaerobes | Dentrifiers | Sulfate reducers |
|--------------|----------|---------------|-----------------|-------------|------------------|
| Shallow well | 08/17/76 | -- | -- | 0 | -- |
| South well | 08/18/76 | -- | -- | 33 | -- |
| North well | 08/17/76 | -- | -- | 13 | -- |
| | 04/11/77 | -- | -- | 2 | -- |

Table 30.--Bacteriological data for samples collected of pre-injected waste, growth on head of injection well 1, and of samples from monitor wells at injection site 2

[Numbers are in Most Probable Number of organisms per 100 milliliters; positive refers to presence rather than absence but not enumerated; TNTC, too numerous to count]

| Source | Date | Total aerobes | Total anaerobes | Dentrifiers | Sulfate reducers |
|---|----------|------------------|--------------------|-------------|---------------------|
| Waste (treated) | 05/13/76 | positive | -- | positive | -- |
| | 08/19/76 | -- | -- | 0 | -- |
| | 02/07/78 | 15,000 | 30 | 90 | 30 |
| | 05/01/78 | TNTC | -- | -- | -- |
| | 08/01/78 | 4,200 | 460 | 2,400 | -- |
| | 06/12/79 | -- | 2,400 | 2,400 | -- |
| | 06/24/80 | 3,100 | 2,400 | 2,400 | 1,100 |
| Waste (untreated) | 05/13/76 | positive | -- | positive | -- |
| Bacterial growth at injection well head | 05/13/76 | positive | -- | positive | -- |
| Shallow well | 08/18/76 | -- | -- | 2,400 | -- |
| | 11/15/76 | -- | -- | 1,600 | -- |
| | 08/02/78 | 1,500 | 1,100 | 2,400 | -- |
| | 06/12/79 | -- | 460 | 3 | -- |
| Deep-test well | 05/13/76 | positive | -- | positive | -- |
| | 05/13/76 | positive | -- | positive | -- |
| | 08/19/76 | -- | -- | 13 | -- |
| | 11/16/76 | -- | -- | 0 | -- |
| | 12/14/76 | -- | -- | 4 | -- |
| | 02/21/77 | 400 | -- | 13 | -- |
| | 04/26/77 | -- | 3,300 | 17 | -- |
| | 11/15/77 | 3,200 | 2,300 | 1,100 | 1,100 |
| | 11/16/77 | 2,200 | 2,300 | 11,000 | 2,400 |
| | 02/06/78 | 1,200 | 30 | 30 | 24,000 |
| | 05/01/78 | 12,000 | 240 | -- | -- |
| | 07/31/78 | 700 | 93 | 3 | -- |
| | 06/13/79 | -- | 2,400 | 23 | -- |
| | 06/25/80 | 400 | 1,100 | 210 | 240 |

Table 30.--Bacteriological data for samples collected of pre-injected waste, growth on head of injection well 1, and of samples from monitor wells at injection site 2

| Source | Date | Total aerobes | Total anaerobes | Dentrifiers | Sulfate reducers |
|---------------------------|----------|------------------|--------------------|-------------|---------------------|
| Standby injection well | 08/19/76 | -- | -- | positive | -- |
| | 11/16/76 | -- | -- | 8 | -- |
| | 04/24/77 | 50 | 1,900 | 17 | -- |
| | 11/15/77 | 1,200 | 2,300 | 240 | 1,500 |
| | 11/16/77 | 8 | 2,300 | 23 | 460 |
| | 02/07/78 | 300 | 40 | 40 | 2,400 |
| | 05/01/78 | 38,000 | 23 | -- | -- |
| | 08/02/78 | 400 | 4 | 23 | -- |
| | 06/12/79 | -- | 23 | 93 | -- |
| | 06/24/80 | 1,000 | 460 | 2,400 | 23 |
| North well | 08/19/76 | -- | -- | 0 | -- |
| | 11/16/76 | -- | -- | 2 | -- |
| | 12/14/76 | -- | -- | 4 | -- |
| | 04/26/77 | 5 | 10 | 3 | -- |
| | 11/15/77 | 38 | 4 | 240 | 10 |
| | 11/16/77 | 50 | 10 | 23 | 4 |
| | 02/07/78 | 1000 | 30 | 30 | 30 |
| | 05/01/78 | 600 | 3 | -- | -- |
| | 08/01/78 | 100 | 3 | 3 | -- |
| | 06/11/79 | -- | 3 | 3 | -- |

Table 31.--Concentrations of organic compounds in waste, backflush of injection well 1, and monitor wells at injection site 2

| Sample source | Date | Concentration in milligram per liter | | | | Uniden- tified compound ^{1/} |
|-----------------------------|--------------------|--------------------------------------|---------------|---------|----------|--|
| | | Acetone | Acrylonitrile | Ethanol | Methanol | |
| Shallow | 06-12-79 | 0 | 0 | 0 | 0 | 0 |
| North | 04-20-77 | 0 | 0 | 0 | 0 | 0 |
| | 11-16-77 | 0 | 0 | 0 | 0 | 0 |
| | 02-07-78 | 0 | 0 | 0 | 0 | 0 |
| | 06-11-79 | 0 | 0 | 0 | 0 | 0 |
| Standby injection | 04-20-77 | 0 | 0 | 0 | 0 | 0 |
| | 11-15-77 | 0 | 0 | 0 | 0 | 0 |
| | 02-07-78 | 0 | 0 | 0 | 0 | 0 |
| | 06-12-79 | 0 | 0 | 0 | 0 | .40 |
| Deep-test | 04-20-77 | 0 | 0 | 0 | 0 | ^{2/} .2 |
| | 11-15-77 | 0 | 0 | 0 | 0 | .12 |
| | 02-06-78 | 0 | 0 | 0 | 0 | .30 |
| | 06-13-79 | 0 | 0 | 0 | 0 | .90 |
| Waste | 04-19-77 | 1.1 | 86 | .2 | 5.0 | 300 |
| | 11-14-77 | 1.6 | 90 | 0 | 5.2 | 149 |
| | 02-07-78 | 2.1 | 108 | 0 | 5.3 | 342 |
| | 06-12-79 | 0 | 36 | 0 | 21 | 806 |
| Primary injection backflush | 11-15-77 (9:00 AM) | 1.4 | 16 | 0 | 5.6 | 197 |
| | 11-17-77 (9:30 AM) | 1.5 | 8.3 | 0 | 5.3 | 95 |

^{1/} On gas chromatograph, a peak following that of acrylonitrile which is probably a degradation or hydrolysis product of it (M. Yates, written commun., June 17, 1977). Value calculated as acrylonitrile.

^{2/} Not a confirmed value, but corresponds in retention time on chromatograph.