

78-852 HYDROLOGIC DATA FOR THE SOUTHWEST SUBSURFACE-INJECTION TEST SITE, ST. PETERSBURG, FLORIDA

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HYDROLOGIC DATA FOR THE SOUTHWEST
SUBSURFACE-INJECTION TEST SITE,
ST. PETERSBURG, FLORIDA

OPEN-FILE REPORT 78-852

Prepared in cooperation with the
CITY OF ST. PETERSBURG, FLORIDA



CONVERSION FACTORS

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

<u>U.S. inch-pound units</u>	<u>Multiply by</u>	<u>To obtain metric units</u>
inch (in)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
gallon	3.785 3.785×10^{-3}	liter (L) cubic meter (m ³)
gallon per minute (gal/min)	0.6309	liter per second (L/s)
foot squared per day (ft ² /d)	0.0929	meter squared per day (m ² /d)
gallon per day per foot [(gal/d)/ft]	0.0124	meter squared per day (m ² /d)
pound per square inch (lb/in ²)	6.8948×10^3	Newton per square meter (N/m ²)
pound per square foot (lb/ft ²)	47.8803	Newton per square meter (N/m ²)
foot per day (ft/d)	0.3048	meter per day (m/d)
gallon per minute per foot of drawdown [(gal/min)/ft]	0.207	liter per second per meter [(L/s)/m]
microsecond per foot (ms/ft)	3.2808	microsecond per meter (ms/m)

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

HYDROLOGIC DATA FOR THE SOUTHWEST SUBSURFACE-

INJECTION TEST SITE, ST. PETERSBURG, FLORIDA

By J. J. Hickey and R. M. Spechler

Open-File Report 78-852

Prepared in cooperation with the

CITY OF ST. PETERSBURG, FLORIDA

Tallahassee, Florida

1979

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

For additional information write to:

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

CONTENTS

	Page
Conversion factors	inside front cover
Abstract	1
Introduction	2
Purpose and scope	2
Previous investigations	4
Regional hydrogeologic setting	4
Well construction at the test site	5
Hydrologic data	5
Withdrawal tests	5
Injection test	11
Water-quality analyses	14
Quality of water in wells near the injection test site	15
References	17

ILLUSTRATIONS

	Page
Figure 1. Map showing location of the Southwest St. Petersburg injection test site, other proposed injection sites, and Tampa Bay area municipal well fields	3
2. Map showing location of exploratory hole and wells at the test site	6
3. Construction diagram of wells A3, B6, B7, B8, and B9 ...	7
4. Construction diagram of wells A2, B1, B2, B3, B4, B5, and E1	8
5. Construction diagram of injection well A1	9
6. Graphic lithologic log of exploratory hole E1	10
7. Hydrographs for wells B1, B2, B4, and B8	12
8. Hydrographs for wells B3, B5, B6, B7, and B9	13
9. Map showing location of selected wells near the Southwest St. Petersburg test site	16

TABLES

	Page
Table 1. Record of wells for the Southwest St. Petersburg injection test site	18
2. Water levels in wells B1, B3, B4, B5, and B6 during well B8 withdrawal test	19
3. Water levels in well B2 during well B8 withdrawal test .	21

	Page
Table 4. Water levels in well B7 during well B8 withdrawal test .	22
5. Water levels in well B8 during well B8 withdrawal test .	23
6. Water levels in well B9 during well B8 withdrawal test .	23
7. Water levels in wells A2, B1, B3, B5, B6, B7, and B8 during well A3 withdrawal test	24
8. Water levels in well B2 during well A3 withdrawal test .	26
9. Water levels in well B4 during well A3 withdrawal test .	27
10. Water levels in well B9 during well A3 withdrawal test .	28
11. Water levels in well A3 during well A3 withdrawal test .	28
12. Drawdown in wells A3 and B2 during well A3 short-term withdrawal tests	29
13. Well head pressure in well A3 during injection test	30
14. Water levels in well B1 during well A3 injection test ..	32
15. Water levels in well B2 during well A3 injection test ..	33
16. Water levels in well B3 during well A3 injection test ..	34
17. Water levels in well B4 during well A3 injection test ..	35
18. Water levels in well B5 during well A3 injection test ..	36
19. Water levels in well B6 during well A3 injection test ..	37
20. Water levels in well B7 during well A3 injection test ..	38
21. Water levels in well B8 during well A3 injection test ..	39
22. Water levels in well B9 during well A3 injection test ..	40
23. Chemical and Rhodamine WT analyses of water from selected wells at the test site	41
24. Concentrations of trace elements in water from selected wells at the test site	81
25. Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site	87
26. Record of wells near the Southwest St. Petersburg test site	97
27. Chemical analyses of water from selected wells near the test site	98
28. Concentrations of nitrogen, phosphorus, and coliform in water from selected wells near the test site	102
29. Concentrations of trace elements in water from selected wells near the test site	103

HYDROLOGIC DATA FOR THE SOUTHWEST SUBSURFACE-
INJECTION TEST SITE, ST. PETERSBURG, FLORIDA

By J. J. Hickey and R. M. Spechler

ABSTRACT

Three injection wells, A1, A2, and A3, and nine observation wells, B1 through B9, were constructed at the Southwest St. Petersburg site to determine the feasibility of injecting wastewater treatment plant effluent into permeable zones containing saline water. Two withdrawal tests and one injection test were performed. Both withdrawal tests ran for about 3 days, one discharging 650 gallons per minute from well B8; the other discharging 6,490 gallons per minute from test well A3. The injection test was run in A3 for 91.1 days at an average rate of 2,830 gallons per minute. Injection well pressure reached a maximum of 48.1 pounds per square inch near the end of the test. Rhodamine WT was used as a tracer during the injection test and was identified in wells B3, B6, and B7.

Before the injection test, chloride concentration in well B6, 35 feet distant from the injection well, and in well B3, 733 feet distant, ranged from 19,000 to 21,000 milligrams per liter. At the end of the test, chloride concentration in B6 was 1,800 milligrams per liter and in B3 was 5,400 milligrams per liter. Eleven wells near the site were sampled before the test for water-quality analyses and chlorides ranged from 18 to 1,400 milligrams per liter.

INTRODUCTION

The city of St. Petersburg, a municipality within the Tampa Bay area, Pinellas County, Florida, is experiencing a rapid population growth with accompanying increased environmental regulation. Limits have been placed on ground-water withdrawals, and advanced regulatory standards for the discharge of wastewater treatment plant effluent to the Gulf of Mexico and Tampa Bay area are Florida state law. These limits and standards have resulted in a marked interest by the city to investigate subsurface storage of wastewater treatment plant effluent. The benefits which the city expects to gain are reduction in cost of their current treatment plant expansion program and the creation of a potential water resource for future non-potable reuse.

The U.S. Geological Survey, in cooperation with the city of St. Petersburg, is investigating storage of waste-treatment plant effluent in permeable saline water zones within the carbonate rocks that underlie the city's Southwest waste-treatment plant (fig. 1). The U.S. Geological Survey's principal interest in this investigation is to better understand the hydrodynamic and chemical behavior of the stored water. This data report for the Southwest test site is a step towards that understanding.

Purpose and Scope

The purpose of this report is to present the hydrologic data collected during the withdrawal and injection testing for the city of St. Petersburg at the Southwest test site. Data are presented in tables and illustrations and include results of the withdrawal and injection tests, hydrographs, and chemical analyses.

Data were collected to assist in the evaluation of the following objectives: (1) determine if transmissive zones exist in the subsurface which can accept large volumes of treatment plant effluent; (2) determine the water-quality profile at the site; (3) evaluate local well injection effects on freshwater; and (4) design a long-term monitoring program. These and other determinations will be given in subsequent interpretative reports.

To provide data for these objectives, an exploratory hole, three injection test wells and nine observation wells were constructed under the supervision of the city's consultant; withdrawal and injection tests were run in one injection well; a withdrawal test was run in one observation well; and water from the wells at the test site and selected wells near the site were sampled for water quality.

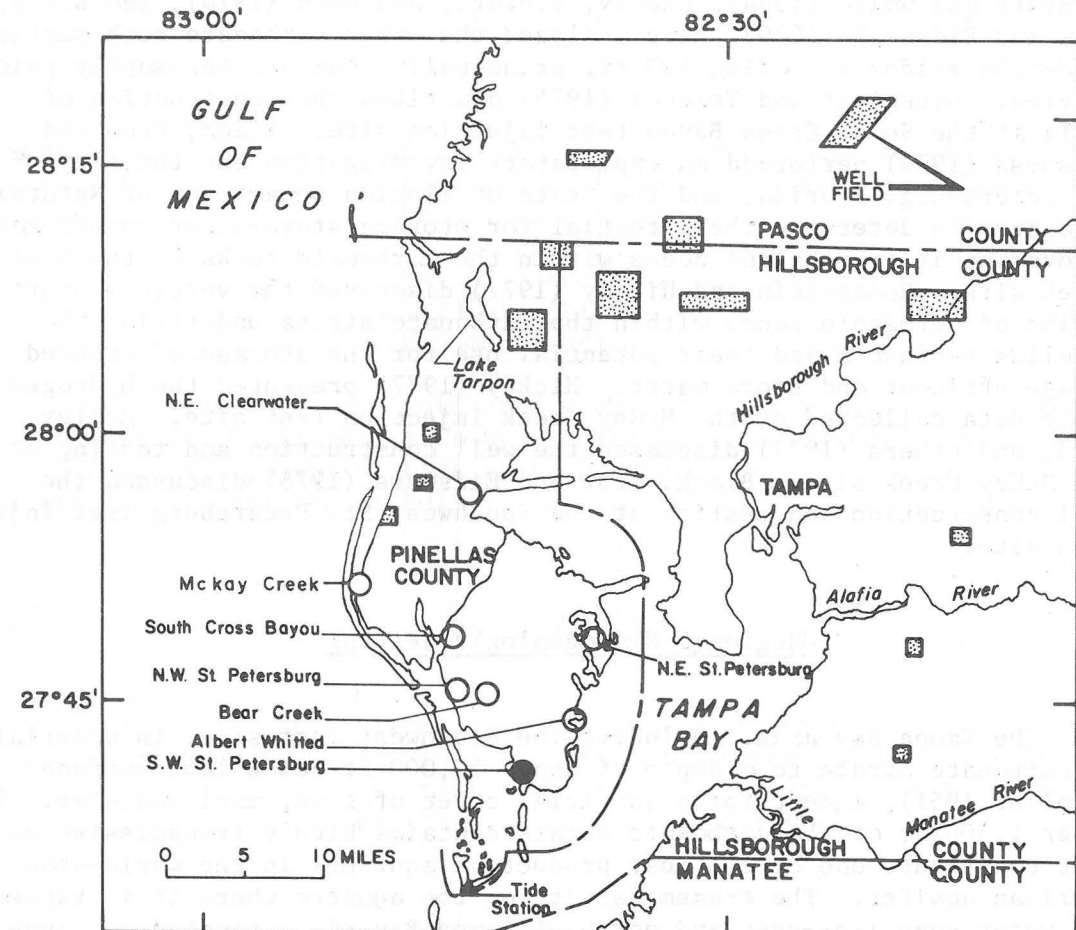


Figure 1.--Location of the Southwest St. Petersburg injection test site, other proposed injection sites, and Tampa Bay area municipal well fields.

Previous Investigations

The geology and hydrology of Pinellas County have been the subject of several prior investigations. Chen (1965) described the lithologies penetrated from 500 to 5,000 ft (feet) below land surface by an oil test hole in Pinellas County as part of his regional stratigraphic analysis of the Paleocene and Eocene rocks of Florida. Hydrologic investigations by Heath and Smith (1954), Cherry, Stewart, and Mann (1970), and Black, Crow and Eidsness (1970), have analyzed the upper carbonate rock section to depths seldom exceeding 400 ft, principally from a water-supply point of view. Greenleaf and Telesca (1975) described the construction of wells at the South Cross Bayou test injection site. Black, Crow and Eidsness (1974) performed an exploratory investigation for the city of St. Petersburg, Florida, and the State of Florida Department of Natural Resources to determine the potential for storing storm-water runoff and recovering it from saline zones within the carbonate rocks at the Bear Creek site. Rosenshein and Hickey (1977) discussed the vertical distribution of permeable zones within the carbonate strata underlying the Pinellas peninsula and their potential use for the storage of treated sewage effluent and storm water. Hickey (1977) presented the hydrogeologic data collected at the McKay Creek injection test site. Briley, Wild, and others (1977) discussed the well construction and testing at the McKay Creek site. Black, Crow and Eidsness (1978) discussed the well construction and testing at the Southwest St. Petersburg test injection site.

Regional Hydrogeologic Setting

The Tampa Bay area, including the Southwest test site, is underlain by carbonate strata to a depth of about 10,000 ft below land surface (Applin, 1951), except for a surficial cover of sand, marl and clay. The upper 1,300 ft of the carbonate strata contains highly transmissive zones that constitute one of the most productive aquifers in the world--the Floridan aquifer. The transmissivity of the aquifer where it is tapped for water supplies--east and north of Tampa Bay--is estimated to range from about 32,000 ft²/d (square feet per day) to more than 270,000 ft²/d (Rosenstein and Hickey, 1977). Permeable zones within the aquifer are thought to be separated by carbonate strata of low permeability (Rosenstein and Hickey, 1977). In general, the flow of potable ground water is toward the Gulf of Mexico and Tampa Bay.

The upper part of the carbonate strata in the Tampa Bay area generally is overlain by less than 200 ft of surficial sand, marl and clay. The clay commonly forms the basal strata of the surficial deposits and in northwest Hillsborough County, is in part a weathered residue of the underlying carbonate rock. There, according to Sinclair (1974, p. 24-26), the clay has a vertical hydraulic conductivity of less than 0.003 ft/d (feet per day).

The surficial sand is generally less than 35 ft thick. During dry weather it is saturated to within 5 to 10 ft of the land surface. During wet weather, the water table in the sand is at or near land surface. The sand in northwest Hillsborough County has a horizontal hydraulic conductivity of 13 ft/d and a vertical hydraulic conductivity in the range of 0.36 ft/d to 13 ft/d (Sinclair, 1974, p. 13).

Well Construction at the Test Site

An exploratory hole, E1, three injection wells, A1, A2, and A3, and nine observation wells, B1 through B9 were constructed at the test site (table 1). Well construction and data collection during drilling were supervised by the city's consultant, Black, Crow and Eidsness, Inc. (1978). Figure 2 shows the location of the exploratory hole and wells at the site. Figures 3, 4, and 5 show the construction of the wells (Black, Crow and Eidsness, 1978). All of these wells, with the exception of well B9, have good communication with the strata.

Drill cuttings were collected every 10 ft from each well at the Southwest St. Petersburg site by the drilling contractor. These cuttings were forwarded to the Florida State Bureau of Geology, as required by state law. A graphic lithologic log of well E1 is shown in figure 6.

HYDROLOGIC DATA

Hydrologic data collected at the Southwest injection site include water levels during withdrawal and injection tests, water-level hydrographs, and water-quality analyses. Hydrologic data collection was designed and supervised by the U.S. Geological Survey.

Withdrawal Tests

Two withdrawal tests were performed, the first from observation well B8 and the second from test well A3 (fig. 2). The withdrawal test from well B8 began on March 28, 1977, at 2310 hours and ended on April 1, 1977, at 1000 hours. Discharge was 650 gal/min (gallons per minute). Observed water levels during this test for wells B1 through B9, are shown in tables 2 through 6. At the start of the test, water level in well B5, 636 ft distant from well B8, was 7.23 ft above mean sea level. At the end of the test, water level in B5 was 5.58 ft above mean sea level. Well B5 is open to the pumped zone.

Well A3 withdrawal test began on April 19, 1977, at 1700 hours and ended on April 22, 1977, at 1515 hours. Discharge averaged 6,490 gal/min and ranged from 6,410 to 6,580 gal/min. Observed water levels during the

DEPTH, IN FEET BELOW LAND SURFACE

0

200

400

600

800

1000

1200

92 ft.

250 ft.

310 ft.

752 ft.

830 ft.

921 ft.

1120 ft.

WELL A3 (Injection Well)

48 in.

42 in.

24 in.

GRAVEL

CEMENT

160 ft.

8 in.

480 ft.

720 ft.

850 ft.

WELL B6

16 in.

25 ft.

160 ft.

185 ft.

8 in.

551 ft.

632 ft.

650 ft.

WELL B7

12 ft.

75 ft.

94 ft.

250 ft.

400 ft.

WELL B8

16 in.

8 in.

CEMENT

CEMENT

2 in.

190 ft.

198 ft.

WELL B9

SCREEN

Figure 3.--Construction diagram of wells A3, B6, B7, B8, and B9.

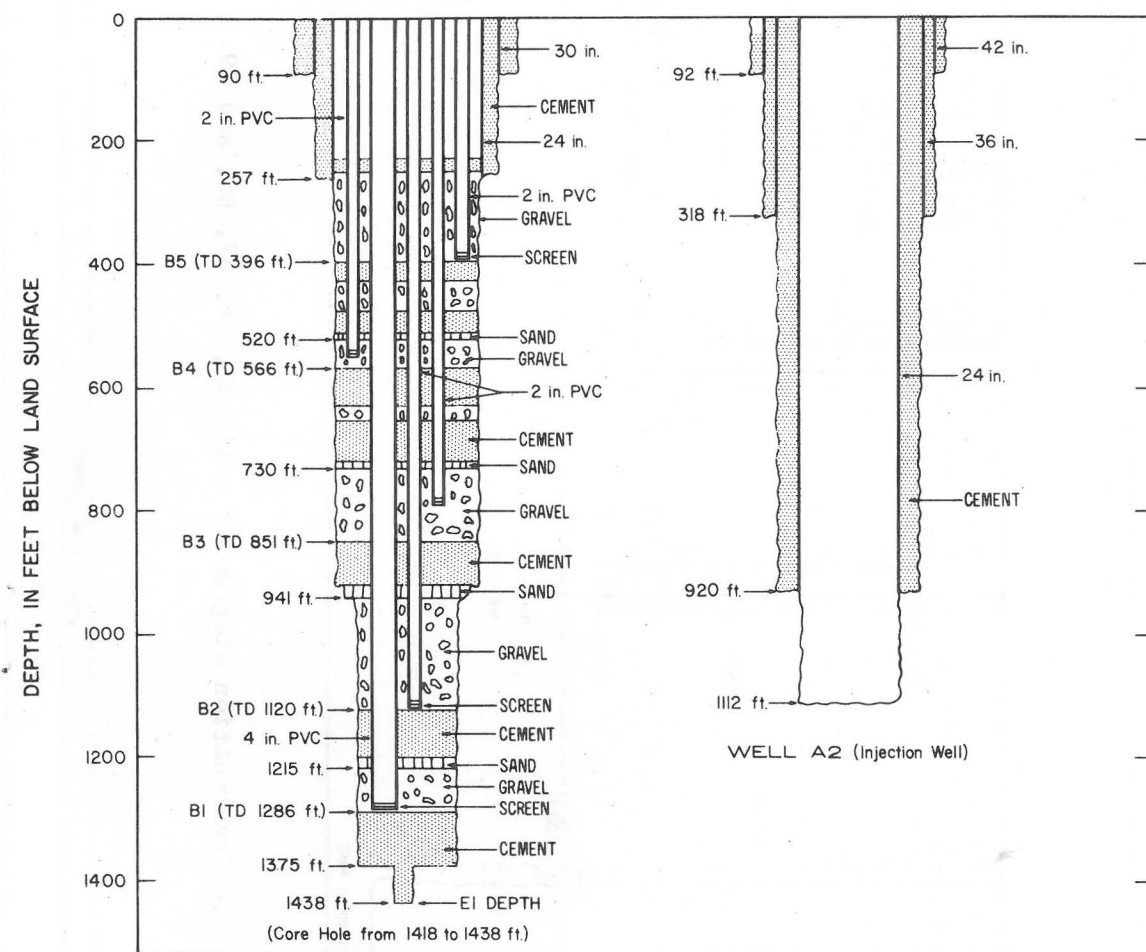


Figure 4.--Construction diagram of wells A2, B1, B2, B3, B4, B5, and E1.

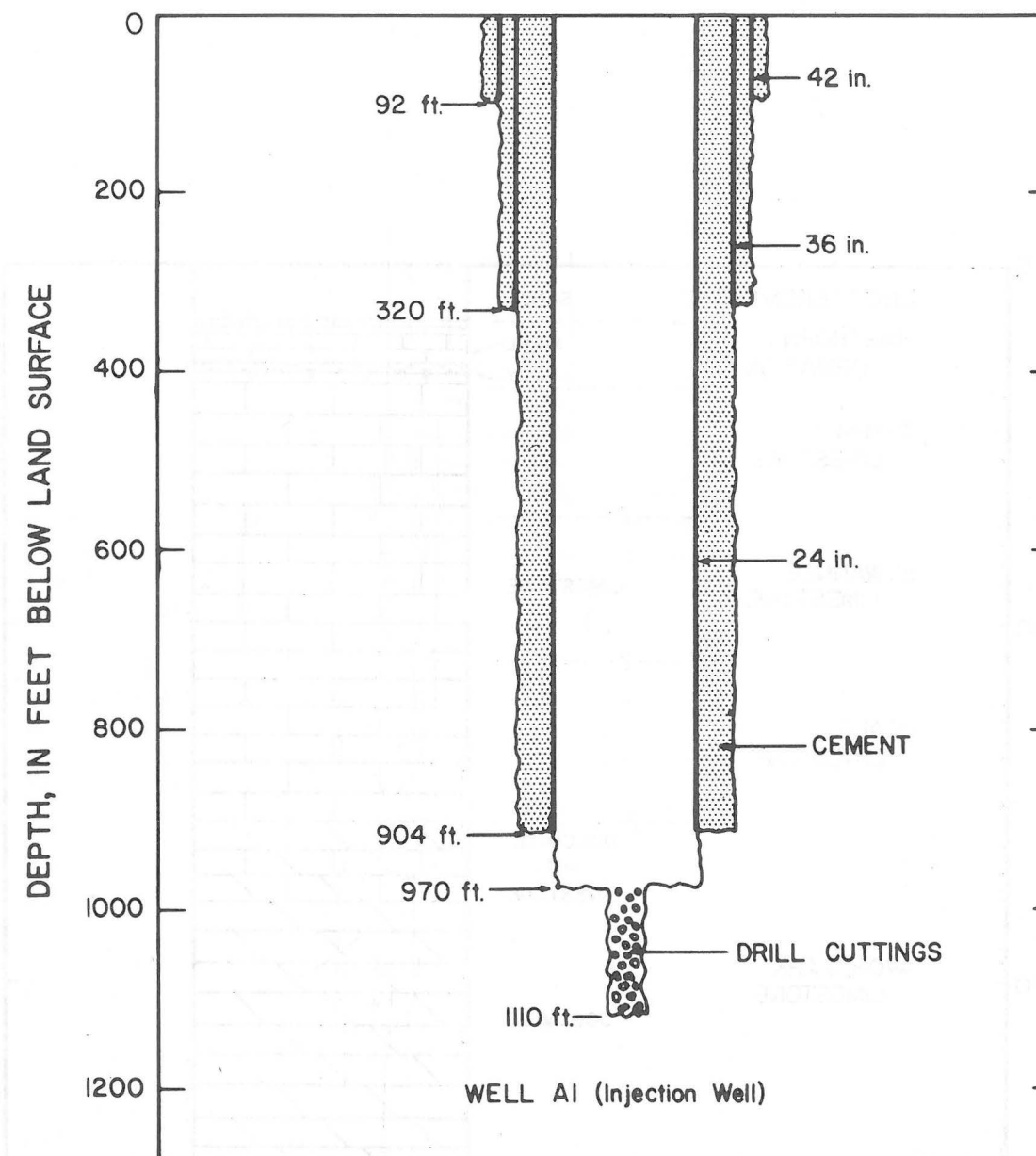


Figure 5. Construction diagram of injection well A1.

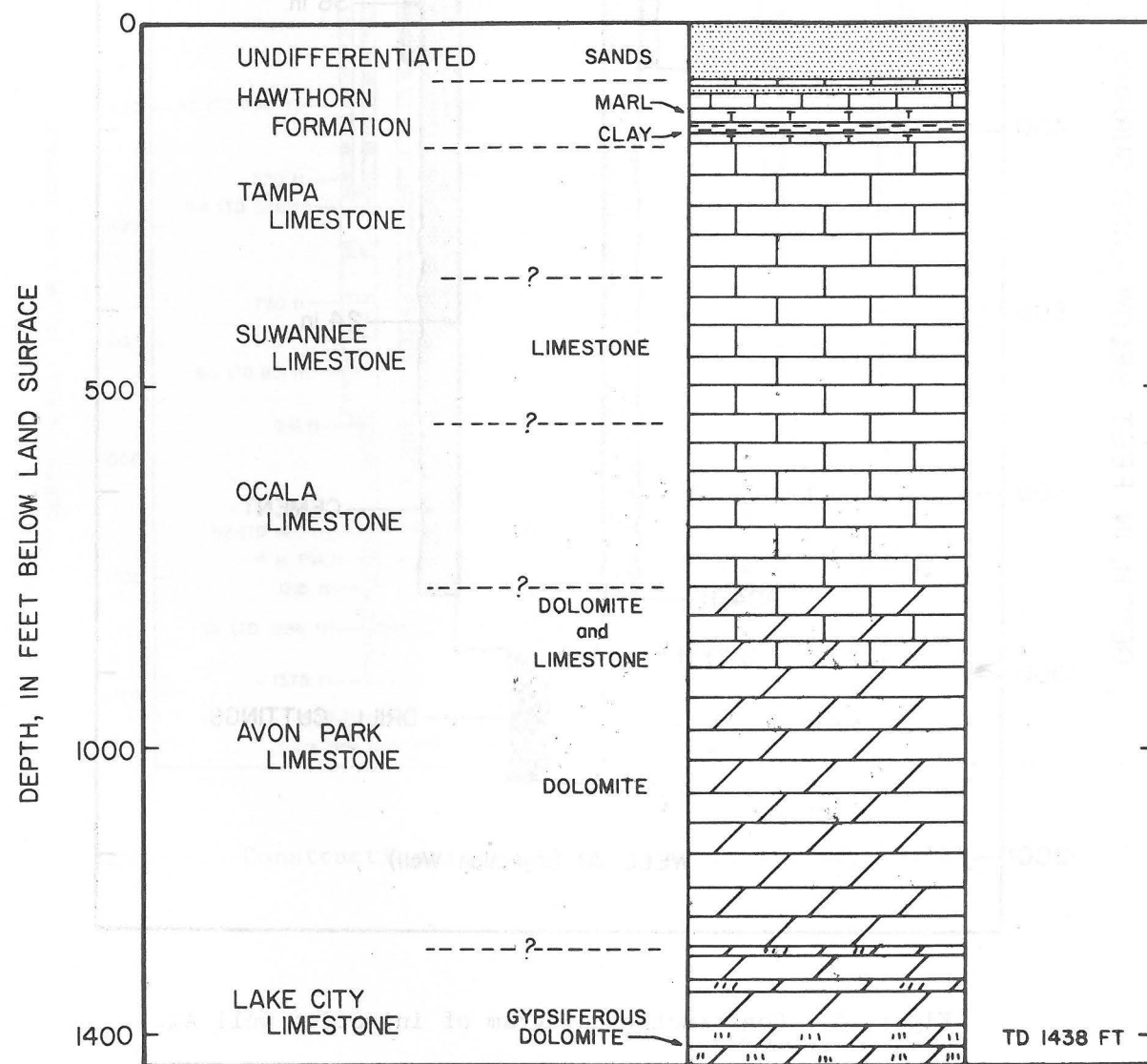


Figure 6.--Lithologic log of exploratory hole E1.

test for wells A2 and B1 through B9 are shown in tables 7 through 11. At the start of the test, water level in well B2, 733 ft distant from well A3, was 5.20 ft below mean sea level. At the end of the test, water level in B2 was 6.19 ft below mean sea level. Well B2 is open to the pumped zone.

Short-term withdrawal tests were performed in well A3 to determine the entrance and casing head losses (Jacob, 1947) in well A3 and the applicability of Darcy's equation to radial flow in the test injection zone at well B2. The drawdown results of these tests are shown in table 12.

Injection Test

The injection test in well A3 was run for 91.1 days, starting on June 21, 1977, at 1335 hours and ending on September 20, 1977, at 1500 hours. For the first 9.1 days of the test, to June 30, 1977 at 1600 hours, the average injection rate was 3,380 gal/min with a standard deviation of 80 gal/min. For the rest of the test, 82 days, the average injection rate was 2,700 gal/min with a standard deviation of 150 gal/min. Average injection rate for the total duration, 91.1 days, was 2,830 gal/min. Volume of water injected during the test was 3.7×10^8 gal (gallons). Injection water came from the city's wastewater treatment plant located at the site.

Well head injection pressures for well A3 during the test are shown in table 13. Well head pressure increased during the test reaching a maximum value of 48.1 lb/in² near the end of the test. This magnitude of pressure increase is substantially different than the magnitude of water-level increase in wells B1 through B9 (tables 14-22) during the test. The cause of the pressure increase in A3 is presently being investigated.

Water levels during the test for wells B1 through B9 are shown in tables 14 through 22. Wells B3, B6, and B7 began to flow during the test, at which time wells B3 and B7 were fitted with water manometers to record water levels and well B6 was fitted with a pressure gage. Well B6 water levels (table 19) from June 30, 1977, at 1430 hours to the end of the test were calculated from gage readings using the density of the water (table 23) in the well at the time of the reading.

Withdrawal and injection test water-level data, with the exception of the short-term withdrawal test data (table 12), have not been adjusted for environmental factors that cause natural fluctuation at the Southwest site. These factors, which have to be accounted for in hydraulic analyses, include tidal changes in the Gulf of Mexico, periodic dilation of the rock column caused by earth tides, barometric pressure changes and regional ground-water trends.

Water-level hydrographs, which include the withdrawal and injection test periods, are shown on figures 7 and 8.

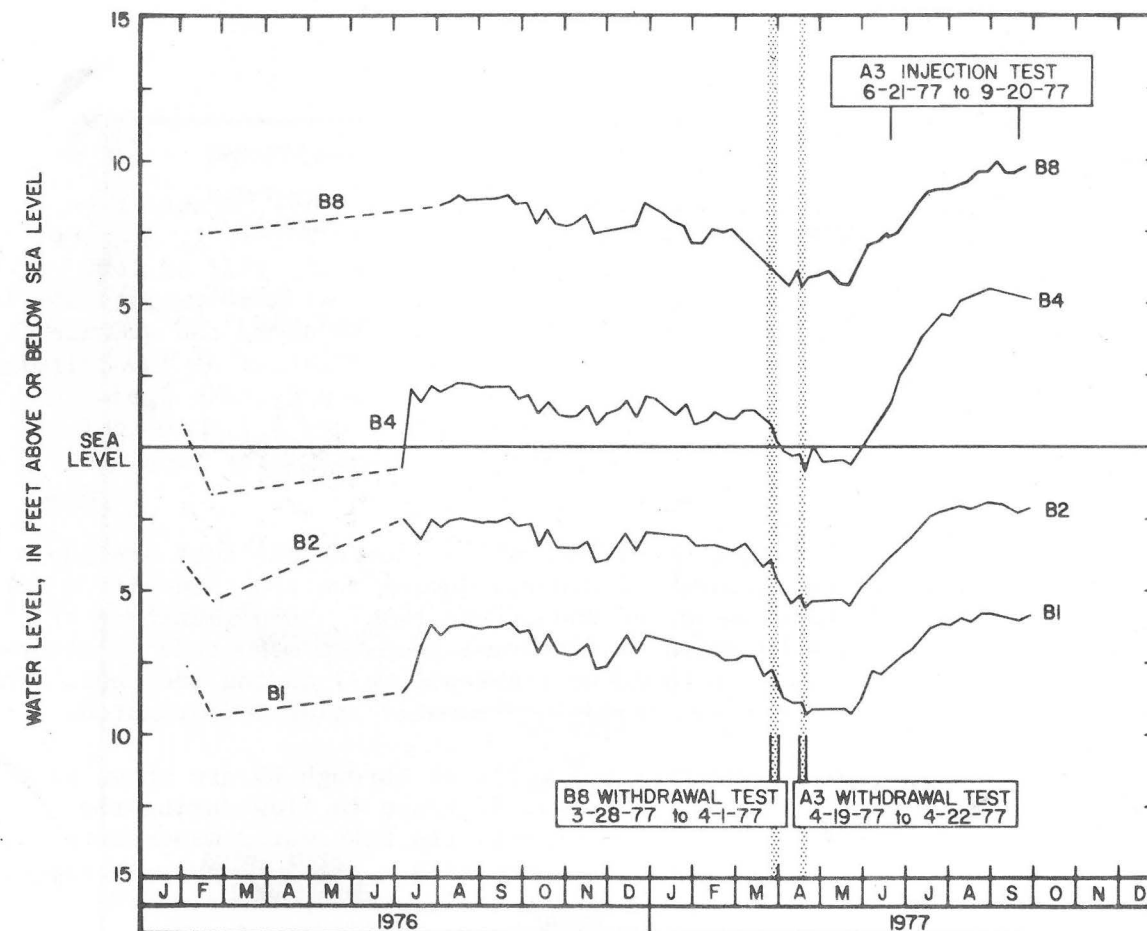


Figure 7.--Hydrographs for wells B1, B2, B4, and B8.

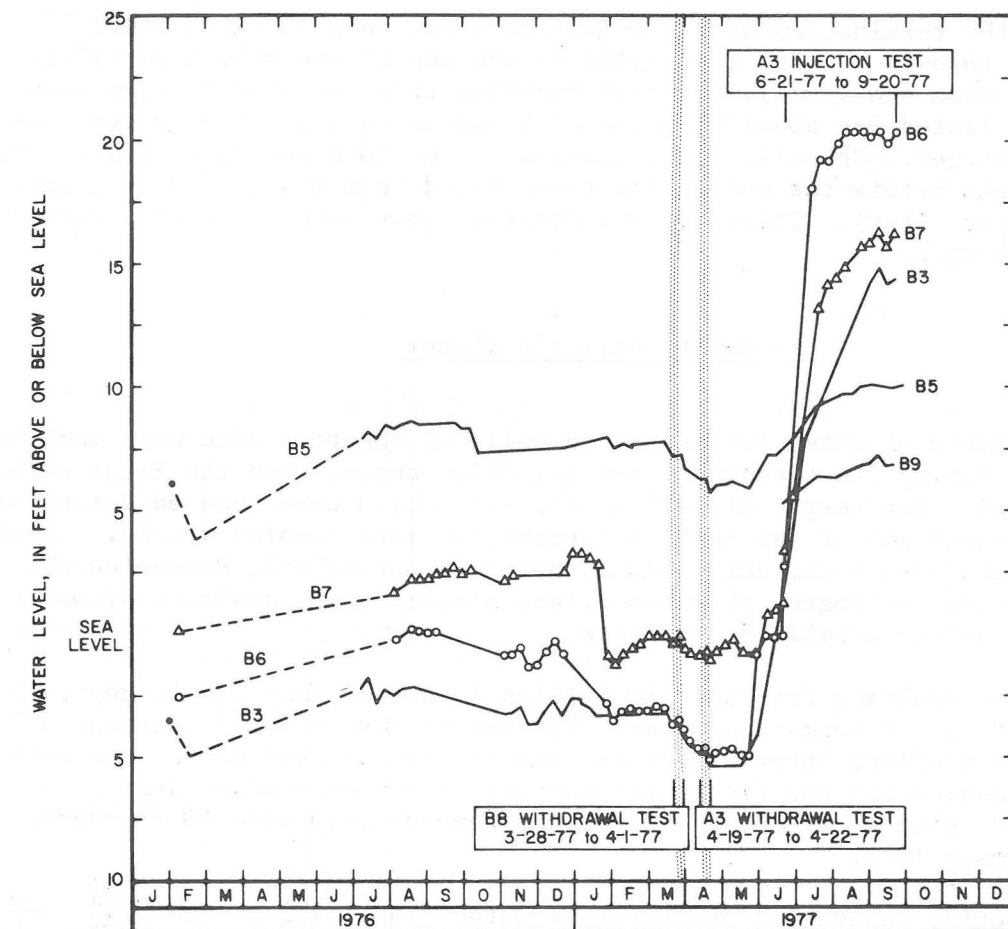


Figure 8.--Hydrographs for wells B3, B5, B6, B7, and B9.

Rhodamine WT was used as a tracer to determine the uppermost position of well A3 injected water. Table 23 shows, in addition to other water-quality analyses, the results of the Rhodamine WT analyses of water from the wells at the site before and during the injection test. Rhodamine WT analyses are expressed as parts per billion. The tracer was identified in wells B3, B6, and B7 during the injection test (table 23).

At the termination of the injection test, well A3 was allowed to backflow through a 4-in. gate valve at the top of the well head (15.24 ft above mean sea level). Initial backflow rate was about 400 gal/min. Backflow lasted for about 47 hours with approximately 7.2×10^5 gal being discharged. Chloride concentration of the injected water (table 23) for 2 weeks before the end of the test ranged from 140 to 170 mg/L (milligrams per liter). Chloride concentration just before backflow ceased was 5,800 mg/L.

Water-Quality Analyses

Analyses of water from selected wells at the test site were made before and during the withdrawal and injection tests. For the first week of the injection test, wells A2 and B1 through B8 were sampled daily and for the remainder of the test, including B9, were sampled weekly. Tables 23 through 25 show cations, anions, physical parameters, Rhodamine WT, trace metals, nitrogen, phosphorus, and microbiologic analyses of water from the selected wells at the site.

Water analyses from well B9 (tables 23 and 24) may not be representative of native formation water. Freshwater was probably introduced into B9's sampling interval during construction and because of the well's poor communication the freshwater may not have been removed during the sampling. A total of about 400 gal was removed from well B9 from July to September 1977.

Chloride concentration of native water from wells at the site varied with depth (table 23). Chloride concentration of water in the depth interval 250 to 400 ft ranged from 2,100 to 4,000 mg/L. Whereas, chloride concentration of water in the depth intervals 520 to 623 ft, 720 to 851 ft, 921 to 1,120 ft, and 1,215 to 1,276 ft ranged from 13,000 to 22,000 mg/L.

Before the injection test, chloride concentration in well B6, 35 ft distance from the injection well A3, and in well B3, 733 ft distance, ranged from 19,000 to 21,000 mg/L. At the end of the test, chloride concentration in B6 was 1,800 mg/L and in B3 was 5,400 mg/L.

The following water-quality sampling procedures were used for the observation wells. Before collecting the initial water sample from each well, with the exception of well B9, the total volume of each well was

discharged at least several times and samples collected only after temperature and either specific gravity or specific conductance became constant during pumping. All subsequent samples, and the initial sample for B9, were collected after the total volume of each well was discharged once. Water samples with the exception of samples from wells B6 and B7, which were allowed to flow for sample collection during the injection test, were pumped using either centrifugal or turbine pumps.

Prior to the injection test, from about the end of May to the early part of June, water was periodically injected into well A3 for the purpose of testing the flow metering device attached to the well's valve. This injected water explains the apparent lack of comparability between the time of water-quality changes and the time of Rhodamine WT changes in wells B3, B6, and B7 during the injection test (table 23).

QUALITY OF WATER IN WELLS NEAR THE TEST INJECTION SITE

Eleven wells near the test injection site were located and sampled in 1975 for water quality. The purpose of this activity was to provide background data prior to any long-term injection at the test site. Location of the wells is shown on figure 9. Reported construction information for these wells is given in table 26. Tables 27 through 29 show cations, anions, physical parameters, trace metal, nitrogen, phosphorus and microbiologic analyses of water from wells near the test site. Reported depth of these wells, range from 20 to 325 ft (table 26) and chloride concentration of water from these wells range from 18 to 1,400 mg/L (table 27).



Figure 9.--Location of selected wells near the Southwest St. Petersburg test site.

REFERENCES

- Applin, Paul L., 1951, Preliminary report on buried pre-Mesozoic rocks in Florida and adjacent states: U.S. Geological Survey Circular 91, 28 p.
- Black, Crow and Eidsness, Inc., 1970, Water resources investigations for the Pinellas County Water System, Pinellas County, Florida.
- _____, 1974, Results of drilling and testing for the test storm water injection well for the City of St. Petersburg, Florida.
- _____, 1978, Drilling and testing of the monitoring and injection wells at the Southwest Wastewater Treatment Plant for the City of St. Petersburg, Florida.
- Briley, Wild and Associates, Inc., and Seaburn and Robertson, Inc., 1977, Effluent disposal well investigation, McKay Creek waste water treatment facility, Pinellas County, Florida.
- Cherry, R. N., Stewart, J. W., and Mann, J. A., 1970, General hydrology of the Middle Gulf Area, Florida: Florida Geological Survey Report of Investigation 56, 96 p.
- Chen, Chih Shan, 1965, The regional lithostratigraphic analysis of Palocene and Eocene rocks of Florida: Florida Geological Survey Bulletin 45, 105 p.
- Greenleaf and Telesca, Inc., 1975, Construction of test wells, South Cross Bayou Pollution Control Facility, Pinellas County, Florida.
- Heath, Ralph C., and Smith, Peter C., 1954, Ground-water resources of Pinellas County, Florida: Florida Geological Survey Report of Investigation 12, 139 p.
- Hickey, J. J., 1977, Hydrogeologic data for the McKay Creek subsurface-injection test site, Pinellas County, Florida: U.S. Geological Survey open-file report 77-802, 62 p.
- Jacob, C. E., 1947, Drawdown test to determine effective radius of artesian wells: American Society of Civil Engineers Transactions, v. 112, p. 1047-1070.
- Rosenshein, J. S., and Hickey, J. J., 1977, Storage of treated sewage effluent and storm water in a saline aquifer, Pinellas Peninsula, Florida: Ground Water, v. 15, no. 4, p. 289-293.
- Sinclair, William C., 1974, Hydrogeologic characteristics of the surficial aquifer in northwest Hillsborough County, Florida: Florida Bureau of Geology Information Circular 86, 98 p.

Table 1.--Record of wells for the Southwest St. Petersburg injection test site

Well number	Latitude Longitude	Well name	Land surface altitude (ft above mean sea level)	Total depth (ft below land surface)	Open interval (ft below land surface)	Casing diameter (in)	Distance from injection well A3 (ft)	Distance from well B8 (ft)
A1	2742590824112.01	Injection well	7.50	970	904 - 970	24	1,501	1,400
A2	274259N0824103.01	Injection well	7.7	1,112	920 - 1,112	24	832	735
A3	274259N0824054.01	Injection well	7.5	1,120	920 - 1,120	24	--	101
B1	274259N0824102.01	Monitor 1286	7.2	1,286	1,215 - 1,286	4	733	636
B2	274259N0824102.02	Monitor 1120	7.2	1,120	941 - 1,120	2	733	636
B3	274259N0824102.03	Monitor 851	7.2	851	730 - 851	2	733	636
B4	274259N0824102.04	Monitor 566	7.2	566	520 - 566	2	733	636
B5	274259N0824102.05	Monitor 396	7.2	396	257 - 396	2	733	636
B6	274259N0824054.02	Injection Monitor 850	7.3	850	720 - 850	8	35	70
B7	274259N0824054.03	Injection Monitor 615	7.8	615	551 - 632	8	64	37
B8	274259N0824054.04	Injection Monitor 400	7.9	400	250 - 400	8	101	--
B9	274259N0824055.01	Injection Monitor 180	8.82	198	190 - 198	2	125	25
E1	274259N0824102.00	Exploratory Hole	7.2	1,438			733	636

Table 2.--Water levels in wells B1, B3, B4, B5, and B6 during well B8 withdrawal test

[Test started 3-28-77 at 2310 and ended 4-1-77 at 1000. Discharge from well B8 was 650 gal/min.]

Time (hr)	Well B1 water level (ft below mean sea level)	Well B3 water level (ft below mean sea level)	Well B4 water level (ft above (+) and below (-) mean sea level)	Well B5 water level (ft above mean sea level)	Well B6 water level (ft below mean sea level)
3/28/77					
2100	7.64	3.50	0.88	7.48	3.38
2115	7.64	3.50	0.88	7.48	3.39
2130	7.66	3.52	0.87	7.47	3.41
2145	7.66	3.52	0.87	7.46	3.42
2200	7.68	3.54	0.85	7.44	3.38
2215	7.69	3.56	0.84	7.44	3.42
2230	7.71	3.58	0.84	7.45	3.47
2245	7.71	3.59	0.81	7.10	3.49
2300	7.75	3.59	0.67	7.16	3.51
2310	7.75	3.62	0.69	7.23	3.52
2311	7.75	3.61	0.69	7.21	3.52
2312	7.75	3.62	0.70	7.16	3.52
2313	7.75	3.61	0.71	7.12	3.52
2314	7.75	3.61	0.71	7.08	3.52
2315	7.75	3.63	0.71	7.03	3.52
2316	7.75	3.63	0.71	7.01	3.52
2317	7.75	3.62	0.70	6.97	3.52
2318	7.75	3.62	0.70	6.95	3.52
2319	7.75	3.63	0.69	6.92	3.53
2320	7.75	3.62	0.68	6.89	3.53
2322	7.75	3.63	0.66	6.85	3.53
2324	7.75	3.63	0.64	6.81	3.53
2326	7.75	3.63	0.62	6.78	3.53
2328	7.75	3.64	0.60	6.75	3.53
2330	7.75	3.64	0.59	6.72	3.54

Table 2.--Water levels in wells B1, B3, B4, B5, and B6 during well B8 withdrawal test - continued

[Test started 3-28-77 at 2310 and ended 4-1-77 at 1000. Discharge from well B8 was 650 gal/min.]

Time (hr)	Well B1 water level (ft below mean sea level)	Well B3 water level (ft below mean sea level)	Well B4 water level (ft above (+) and below (-) mean sea level)	Well B5 water level (ft above mean sea level)	Well B6 water level (ft below mean sea level)
3/28/77					
2335	7.76	3.64	0.55	6.66	3.54
2340	7.79	3.66	0.52	6.61	3.55
2350	7.79	3.66	0.46	6.54	3.56
2400	7.80	3.68	0.42	6.48	3.58
3/29/77					
0015	7.83	3.70	0.37	6.42	3.60
0030	7.85	3.72	0.33	6.37	3.62
0045	7.87	3.74	0.29	6.33	3.63
0100	7.88	3.75	0.27	6.29	3.64
0130	7.92	3.77	0.22	6.23	3.68
0230	7.97	3.82	0.15	6.15	3.72
0400	8.00	3.85	0.10	6.07	3.75
0600	8.00	3.81	0.09	6.04	3.72
0830	7.89	3.71	0.20	6.10	3.62
1130	7.82	3.68	0.20	6.13	3.58
1500	7.77	3.59	0.24	6.18	3.53
2100	7.79	3.63	0.21	6.11	3.56
3/30/77					
0500	8.17	3.97	-0.14	5.80	3.93
0900	8.11	3.90	-0.10	5.81	3.86
1300	8.02	3.82	0.01	5.91	3.77
3/31/77					
0100	8.03	3.87	-0.02	5.88	3.82
1700	8.22	-	-0.25	5.68	4.02
4/1/77					
1000	8.31	4.12	-0.35	5.58	4.04

Table 3.--Water levels in well B2 during well B8 withdrawal test

[Test started 3-28-77 at 2310 hr and ended 4-1-77 at 1000 hr. Discharge from well B8 was 650 gal/min.]

Time (hr)	Water level (ft below mean sea level)	Time (hr)	Water level (ft below mean sea level)
3/28/77		2350	3.95
2200	3.91	2400	3.95
2215	3.91	3/29/77	
2230	3.92	0015	3.95
2245	3.92	0030	3.97
2300	3.92	0045	3.97
2310	3.92	0100	3.99
2311	3.92	0130	4.01
2312	3.92	0230	4.05
2313	3.93	0400	4.08
2314	3.93	0850	4.07
2315	3.93	1138	4.02
2316	3.93	1555	3.95
2317	3.93	2032	4.01
2318	3.93	3/30/77	
2319	3.93	0440	4.38
2320	3.93	0800	4.31
2322	3.93	1900	4.21
2324	3.93	2030	4.24
2326	3.93	3/31/77	
2328	3.93	0025	4.24
2330	3.93	1620	4.42
2335	3.93	4/ 1/77	
2340	3.93	1000	4.49

Table 4.--Water levels in well B7 during well B8 withdrawal test

[Test started 3-28-77 at 2310 hr and ended 4-1-77 at 1000 hr. Discharge from well B8 was 650 gal/min.]

Time (hr)	Water level (ft above (+) and below (-) mean sea level)	Time (hr)	Water level (ft above (+) and below (-) mean sea level)
3/28/77		2340	-0.21
2100	0.06	2350	-0.25
2115	0.05	2400	-0.30
2130	0.05	3/29/77	
2145	0.04	0015	-0.34
2200	0.02	0030	-0.38
2215	0.01	0045	-0.41
2230	-0.02	0100	-0.45
2245	-0.04	0130	-0.47
2300	-0.12	0230	-0.54
2310	-0.10	0400	-0.60
2311	-0.07	0600	-0.62
2312	-0.07	0830	-0.56
2313	-0.07	1130	-0.52
2314	-0.07	1500	-0.49
2315	-0.07	2100	-0.53
2316	-0.07	3/30/77	
2317	-0.08	0500	-0.87
2318	-0.09	0900	-0.83
2319	-0.09	1300	-0.72
2320	-0.10	2020	-0.76
2322	-0.11	3/31/77	
2324	-0.12	0015	-0.77
2326	-0.13	1505	-0.92
2328	-0.14	4/ 1/77	
2330	-0.16	1000	-0.99
2335	-0.18		

Table 5.--Water levels in well B8 during well B8 withdrawal test

[Test started 3-28-77 at 2310 hr and ended 4-1-77 at 1000 hr. Discharge from well B8 was 650 gal/min.]

Time (hr)	Water level (ft above (+) and below (-) mean sea level)	Time (hr)	Water level (ft above (+) and below (-) mean sea level)
3/28/77		1535	-8.33
2103	7.54	1955	-8.39
2123	7.51	3/30/77	
2150	7.52	0350	-8.33
2213	7.59	0800	-8.21
2316	-7.31	1400	-8.10
2326	-7.55	2355	-7.82
3/29/77		3/31/77	
0203	-8.03	1503	-8.22
0350	-8.49	4/ 1/77	
0840	-8.45	0928	-8.33
1140	-8.41		

Table 6.--Water levels in well B9 during well B8 withdrawal test

[Test started 3-28-77 at 2310 hr and ended 4-1-77 at 1000 hr. Discharge from well B8 was 650 gal/min.]

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
3/28/77		1150	6.14
2106	7.01	1537	6.11
2120	7.01	2005	6.03
2142	7.00	2358	5.91
2210	7.01	3/30/77	
2228	7.00	0400	5.84
2240	7.02	0758	5.78
2308	7.00	1203	5.75
2314	7.01	3/31/77	
2329	7.00	0005	5.68
2400	6.96	1500	5.52
3/29/77		4/ 1/77	
0410	6.41	0925	5.36
0835	6.22		

Table 7.--Water levels in wells A2, B1, B3, B5, B6, B7, and B8 during well A3 withdrawal test

[Test started 4-19-77 at 1700 hr and ended 4-22-77 at 1515 hr. Average discharge from well A3 was 6490 gal/min.]

Time (hr)	Well A2 water level (ft below mean sea level)	Well B1 water level (ft below mean sea level)	Well B3 water level (ft below mean sea level)	Well B5 water level (ft above mean sea level)	Well B6 water level (ft below mean sea level)	Well B7 water level (ft below mean sea level)	Well B8 water level (ft above mean sea level)
4/19/77							
1500	1.59	8.83	4.65	6.28	4.57	0.60	6.16
1515	1.62	8.83	4.67	6.28	4.58	0.61	6.16
1530	1.66	8.83	4.68	6.27	4.59	0.62	6.16
1545	1.66	8.83	4.69	6.27	4.60	0.63	6.15
1600	1.66	8.83	4.70	6.26	4.61	0.64	6.15
1615	1.66	8.84	4.72	6.25	4.63	0.67	6.14
1630	1.70	8.89	4.75	6.24	4.66	0.70	6.17
1645	1.72	8.91	4.76	6.23	4.68	0.71	6.16
1658	-	-	4.79	-	-	-	-
1700	1.75	8.94	-	6.21	4.71	0.72	6.15
1701	1.88	8.94	-	6.22	4.98	0.82	6.16
1702	2.03	8.94	-	6.22	5.17	0.82	6.16
1703	2.09	8.94	-	6.22	5.25	0.93	6.16
1704	2.06	8.94	5.12	6.22	5.23	0.95	6.16
1705	2.08	8.94	5.14	6.22	5.25	0.97	6.15
1706	2.11	8.94	5.15	6.22	5.27	0.99	6.15
1707	2.13	8.94	5.17	6.21	5.25	1.00	6.15
1708	2.13	8.94	5.18	6.21	5.30	1.01	6.15
1709	2.14	8.94	5.19	6.21	5.29	1.02	6.14
1710	2.15	8.94	5.20	6.20	5.30	1.03	6.14
1712	2.16	8.95	5.22	6.19	5.32	1.04	6.14
1714	2.18	8.96	5.23	6.18	5.33	1.07	6.13
1720	2.21	9.02	5.27	6.16	5.37	1.13	6.11
1725	2.24	9.10	5.29	6.14	5.39	1.16	6.10
1730	2.26	9.14	5.32	6.12	5.42	1.19	6.08
1740	2.30	9.20	5.35	6.08	5.45	1.23	6.04
1750	2.33	9.26	5.39	6.04	5.49	1.29	6.01
1800	2.37	9.30	5.42	6.01	5.53	1.33	5.97
1815	2.41	9.36	5.46	5.97	5.57	1.39	5.92

Table 7.--Water levels in wells A2, B1, B3, B5, B6, B7, and B8 during well A3 withdrawal test - continued

[Test started 4-19-77 at 1700 hr and ended 4-22-77 at 1515 hr. Average discharge from well A3 was 6490 gal/min.]

Time (hr)	Well A2 water level (ft below mean sea level)	Well B1 water level (ft below mean sea level)	Well B3 water level (ft below mean sea level)	Well B5 water level (ft above mean sea level)	Well B6 water level (ft below mean sea level)	Well B7 water level (ft below mean sea level)	Well B8 water level (ft above mean sea level)
4/19/77							
1830	2.45	9.40	5.49	5.92	5.60	1.43	5.87
1845	2.48	9.45	5.53	5.87	5.65	1.47	5.82
1915	2.55	9.52	5.60	5.80	5.72	1.54	5.74
1945	2.60	9.59	5.63	5.73	5.77	1.60	5.68
2015	2.64	9.63	5.69	5.68	5.81	1.65	5.62
2115	2.67	9.69	5.73	5.61	5.84	1.70	5.53
2215	2.65	9.69	5.73	5.59	5.85	1.71	5.50
2345	2.63	9.67	5.72	5.59	5.82	1.69	5.49
4/20/77							
0115	2.56	9.59	5.68	5.61	5.75	1.64	5.51
0300	2.52	9.52	5.66	5.65	5.71	1.56	5.55
0515	2.59	9.58	5.65	5.59	5.77	1.60	5.51
1245	2.51	9.48	5.56	5.63	5.69	1.55	5.56
1845	2.83	9.79	5.87	5.44	5.99	1.78	5.39
4/21/77							
0245	2.79	9.80	5.86	5.34	5.97	1.80	5.26
1045	2.79	9.81	5.83	5.35	5.98	1.79	5.26
1845	2.93	9.91	5.74	5.32	6.10	1.82	5.28
4/22/77							
1045	2.88	9.93	5.96	5.28	6.05	1.80	5.20
1515	2.70	9.67	5.77	5.45	5.86	1.60	5.38

Table 8.--Water levels in well B2 during well A3 withdrawal test

[Test began 4-19-77 at 1700 hr and ended 4-22-77 at 1515 hr. Discharge from well A3 was 6490 gal/min.]

Time (hr)	Water level (ft below mean sea level)	Time (hr)	Water level (ft below mean sea level)
4/19/77		1800	5.83
1500	5.07	1815	5.87
1515	5.08	1830	5.91
1530	5.09	1845	5.95
1545	5.10	1915	6.01
1600	5.11	1945	6.07
1615	5.13	2015	6.10
1630	5.15	2115	6.13
1645	5.17	2215	6.14
1658	5.20	2345	6.10
1702	5.54	4/20/77	
1703	5.51	0115	6.02
1704	5.57	0300	6.16
1705	5.57	0515	6.06
1706	5.58	1245	6.01
1707	5.60	1845	6.32
1708	5.61	4/21/77	
1709	5.62	0245	6.29
1710	5.63	1045	6.28
1712	5.64	1623	6.21
1714	5.65	2020	6.58
1720	5.69	4/22/77	
1725	5.71	0836	6.42
1730	5.73	1515	6.19
1740	5.77		
1750	5.81		

Table 9.--Water levels in well B4 during well A3 withdrawal test

[Test started 4-19-77 at 1700 hr and ended 4-22-77 at 1515 hr. Discharge from well A3 was 6490 gal/min.]

Time (hr)	Water level (ft below mean sea level)	Time (hr)	Water level (ft below mean sea level)
4/19/77		1740	0.71
1500	0.28	1800	0.79
1515	0.28	1815	0.85
1530	0.29	1830	0.89
1545	0.30	1845	0.94
1600	0.31	1915	1.08
1615	0.32	1945	1.14
1630	0.33	2015	1.19
1645	0.35	2115	1.26
1700	0.36	2215	1.27
1701	0.35	2345	1.27
1702	0.36	4/20/77	
1703	0.37	0115	1.21
1704	0.38	0300	1.20
1705	0.40	0515	1.26
1706	0.41	1245	1.15
1707	0.43	1845	1.39
1708	0.44	4/21/77	
1709	0.46	0245	1.40
1710	0.47	1148	1.37
1712	0.49	2028	1.55
1714	0.51	4/22/77	
1720	0.58	1045	1.51
1725	0.62	1515	1.34
1730	0.65		

Table 10.--Water levels in well B9 during well A3 withdrawal test

[Test started 4-19-77 at 1700 hr and ended 4-22-77 at 1515 hr. Discharge from well A3 was 6490 gal/min.]

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
4/19/77		2035	6.04
1510	6.00	2342	6.06
1545	6.00	4/20/77	
1605	6.00	0345	6.04
1648	5.99	1217	5.95
1700	5.99	1957	5.96
1702	5.99	4/21/77	
1710	6.00	0345	5.90
1720	6.00	1137	5.77
1727	6.00	2007	5.85
1743	6.00	4/22/77	
1807	6.00	1220	5.72
1829	6.04	1512	5.78

Table 11.--Water levels in well A3 during well A3 withdrawal test

[Test started 4-19-77 at 1700 hr and ended 4-22-77 at 1515 hr. Discharge from well A3 was 6490 gal/min.]

Time (hr)	Water level (ft below mean sea level)	Time (hr)	Water level (ft below mean sea level)
4/19/77		2325	16.21
1515	4.54	4/20/77	
1545	4.56	0330	16.19
1630	4.63	0758	16.23
1648	4.66	1210	15.93
1658	4.68	1942	16.29
1705	15.30	4/21/77	
1709	15.20	0330	16.37
1715	15.32	1130	16.28
1722	15.37	1950	16.68
1731	15.43	4/22/77	
1740	15.48	0803	16.41
1805	15.63	1514	15.87
2010	16.04		

Table 12.--Drawdown in wells A3 and B2 during well A3 short-term withdrawal tests

Date	Elapsed time (min)	Well A3 discharge (gal/min)	Well A3 drawdown (ft)	Well B2 drawdown (ft)
4/ 8/77	60	2830	2.65	0.20
4/ 8/77	60	4990	7.50	0.39
4/ 8/77	60	6080	10.28	0.48
4/19/77	65	6410	10.95	0.56
4/13/77	55	6930	14.13	0.60

Table 13.--Well head pressure in well A3 during injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min. Elevation of pressure gage was 11.27 ft above mean sea level.]

Time (hr)	Well head pressure (lb/in ²)	Time (hr)	Well head pressure (lb/in ²)
6/21/77		6/23/77	
1330	-	1600	9.6
1331	-	1800	9.5
1332	-	6/24/77	
1333	2	1000	10.0
1335	4.3	2000	10.0
1336	7.8	6/25/77	
1338	12.0	0200	10.5
1340	10.0	1000	10.9
1342	7.8	1800	10.5
1344	8.0	6/26/77	
1346	8.0	0800	11.5
1348	8.0	1800	12.0
1350	8.0	6/27/77	
1355	8.0	0200	12.8
1400	8.5	1600	13.0
1410	8.0	6/28/77	
1600	8.1	1200	14.0
1800	8.1	6/30/77	
2000	8.1	1400	15.0
2200	8.1	7/ 1/77	
2400	8.2	2200	13.0
6/22/77		7/ 5/77	
0600	8.8	1000	10.8
0800	8.8	1606	11.7
1000	8.9	1860	15.0
1600	9.1	7/11/77	
2000	9.2	1000	20.0
2400	9.3	1400	21.0
6/23/77		7/12/77	
0800	9.4	1000	22.0
1200	9.5		

Table 13.--Well head pressure in well A3 during injection test - continued

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min. Elevation of pressure gage was 11.27 ft above mean sea level.]

Time (hr)	Well head pressure (lb/in ²)	Time (hr)	Well head pressure (lb/in ²)
7/12/77		8/30/77	
1000	22.0	0600	33.0
1600	22.2	1000	33.5
7/14/77		1600	35.0
1600	23.3	9/ 6/77	
7/19/77		0600	37.5
0600	25.5	1400	27.0
1400	25.3	2000	34.5
1800	26.0	9/ 7/77	
7/26/77		0625	40.0
0600	25.0	1600	37.5
1330	26.0	9/ 8/77	
8/ 2/77		0630	38.0
0600	25.7	9/12/77	
1200	26.0	0800	40.0
8/15/77		9/13/77	
1400	32.0	1000	38.5
1800	32.0	9/14/77	
8/16/77		0600	36.5
1000	29.0	9/20/77	
1800	31.0	0600	40.0
8/17/77		1400	48.1
1400	33.5		

Table 14.--Water levels in well B1 during well A3 injection test

(Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.)

Time (hr)	Water level (ft below mean sea level)	Time (hr)	Water level (ft below mean sea level)
6/21/77		6/22/77	
1000	7.73	0830	7.44
1030	7.73	6/23/77	
1100	7.74	1650	7.43
1130	7.74	6/24/77	
1200	7.74	0900	7.34
1215	7.74	6/25/77	
1230	7.73	0200	7.52
1245	7.71	1800	7.08
1300	7.70	6/27/77	
1315	7.69	0300	7.34
1330	7.69	6/28/77	
1331	7.69	1200	7.27
1332	7.69	7/ 1/77	
1333	7.69	2300	7.98
1334	7.68	7/ 5/77	
1335	7.68	1000	7.35
1336	7.68	7/12/77	
1337	7.68	1000	6.40
1338	7.68	7/19/77	
1339	7.68	1100	6.46
1340	7.68	7/26/77	
1345	7.67	1000	6.06
1350	7.66	8/ 2/77	
1355	7.64	1000	6.37
1400	7.62	8/16/77	
1410	7.58	1000	6.11
1420	7.54	8/30/77	
1430	7.52	1000	5.97
1440	7.50	9/ 7/77	
1450	7.49	1615	5.72
1500	7.48	9/13/77	
1510	7.47	1000	5.99
1530	7.44	9/20/77	
1600	7.42	1500	5.91

Table 15.--Water levels in well B2 during well A3 injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.]

Time (hr)	Water level (ft below mean sea level)	Time (hr)	Water level (ft below mean sea level)
6/21/77		2100	3.77
1000	3.95	6/22/77	
1030	3.95	0832	3.49
1100	3.95	6/23/77	
1130	3.95	1734	3.70
1200	3.94	6/24/77	
1215	3.93	1900	3.35
1230	3.92	6/25/77	
1245	3.90	0200	3.46
1300	3.90	1800	3.46
1315	3.91	6/27/77	
1330	3.88	1700	3.60
1331	3.88	6/28/77	
1332	3.89	1200	3.35
1333	3.88	7/ 1/77	
1334	3.88	2300	3.09
1335	3.88	7/ 5/77	
1336	3.83	1000	2.80
1337	3.85	7/11/77	
1338	3.78	1400	2.83
1339	3.73	7/19/77	
1340	3.69	1100	2.53
1345	3.70	7/26/77	
1350	3.68	1000	2.14
1355	3.66	8/ 2/77	
1400	3.63	1100	2.41
1410	3.62	8/16/77	
1420	3.61	1000	2.15
1430	3.60	8/30/77	
1440	3.58	1700	1.70
1450	3.57	9/ 6/77	
1500	3.56	2033	1.64
1510	3.55	9/12/77	
1530	3.54	0904	2.06
1600	3.52	9/20/77	
1700	3.49	1500	2.03
1800	3.48		
1900	3.52		

Table 16.--Water levels in well B3 during well A3 injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.]

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
6/21/77		1900	1.81
1000	1.40	6/22/77	
1030	1.40	0836	1.62
1100	1.39	1945	1.85
1130	1.40	2300	1.61
1200	1.41	6/23/77	
1215	1.42	0700	1.81
1230	1.43	1900	1.96
1245	1.45	6/24/77	
1300	1.45	0900	1.94
1315	1.46	6/25/77	
1330	1.47	0200	1.98
1331	1.47	1800	2.26
1332	1.46	6/27/77	
1333	1.47	0300	2.82
1334	1.47	6/28/77	
1335	1.47	1200	2.94
1336	1.51	7/ 1/77	
1337	1.50	2300	3.32
1338	1.55	7/ 5/77	
1339	1.51	1800	8.05
1340	1.64	7/11/77	
1345	1.64	1030	8.43
1340	1.64	8/11/77	
1345	1.64	1145	14.24
1400	1.71	8/17/77	
1410	1.71	1400	14.08
1420	1.74	8/30/77	
1430	1.75	0700	14.29
1440	1.76	9/ 6/77	
1450	1.76	0700	14.89
1500	1.78	9/13/77	
1510	1.79	0949	14.32
1530	1.79	9/20/77	
1600	1.82	1455	14.46
1700	1.86		
1800	1.86		

Table 17.--Water levels in well B4 during well A3 injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.]

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
6/21/77		6/22/77	
1000	1.39	0100	1.54
1030	1.39	0500	1.75
1100	1.39	0900	1.80
1130	1.39	1930	1.90
1200	1.39	2300	1.70
1215	1.39	6/23/77	
1230	1.39	0700	1.79
1245	1.41	1530	1.80
1300	1.41	6/24/77	
1315	1.41	0900	2.12
1330	1.42	6/25/77	
1331	1.42	0200	1.90
1332	1.42	1800	1.98
1333	1.42	6/27/77	
1334	1.42	0300	2.22
1335	1.42	6/28/77	
1336	1.42	1200	2.58
1337	1.42	7/ 1/77	
1338	1.42	2300	2.50
1339	1.43	7/ 5/77	
1340	1.43	1000	2.89
1345	1.47	7/11/77	
1350	1.49	1415	3.42
1355	1.51	7/19/77	
1400	1.53	1030	3.96
1410	1.57	7/26/77	
1420	1.59	1000	4.47
1430	1.61	8/ 2/77	
1440	1.63	1045	4.41
1450	1.65	8/15/77	
1500	1.66	1900	5.07
1510	1.68	8/30/77	
1530	1.70	1715	5.52
1600	1.72	9/ 6/77	
1700	1.76	1435	5.48
1800	1.79	9/13/77	
1915	1.61	1000	5.20
2100	1.66	9/20/77	
2300	1.57	1500	5.35

Table 18.--Water levels in well B5 during well A3 injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.]

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
6/21/77		1500	-
1000	7.49	2300	-
1030	7.49	6/23/77	
1100	7.49	0700	-
1130	7.49	1220	8.16
1200	7.48	6/24/77	
1215	7.48	1830	7.69
1230	7.48	6/25/77	
1245	7.48	1055	7.75
1300	7.48	6/26/77	
1315	7.48	1730	7.66
1330	7.47	6/27/77	
1331	7.47	0300	7.81
1332	7.46	6/28/77	
1333	7.46	1200	7.85
1334	7.47	7/ 1/77	
1335	7.47	2300	7.39
1336	7.47	7/ 5/77	
1337	7.46	1000	7.93
1338	7.46	7/12/77	
1339	7.46	1015	8.73
1340	7.46	7/19/77	
1345	7.45	1030	9.04
1350	7.45	7/26/77	
1355	7.46	1000	9.48
1400	7.47	8/ 2/77	
1410	7.49	1000	9.32
1420	7.51	8/15/77	
1430	7.53	1430	9.95
1440	7.55	8/30/77	
1450	7.57	1000	9.93
1500	7.58	9/ 6/77	
1510	7.60	2025	10.27
1530	7.63	9/13/77	
1600	7.66	1000	9.92
1700	7.70	9/20/77	
1750	7.70	1500	10.01
6/22/77			
0839	7.68		

Table 19.--Water levels in well B6 during well A3 injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.]

Time (hr)	Water level (ft above (+) and below (-) mean sea level)	Time (hr)	Water level (ft above (+) and below (-) mean sea level)
6/21/77		6/22/77	
1000	-0.12	0100	2.55
1030	- .12	0500	2.55
1100	- .12	0900	2.70
1130	- .12	1500	2.72
1200	- .11	1930	4.19
1215	- .10	6/23/77	
1230	- .09	0915	4.13
1245	- .07	1600	6.02
1300	- .07	6/24/77	
1315	- .06	0850	6.35
1330	- .05	6/25/77	
1331	- .07	0200	9.09
1332	- .05	6/26/77	
1333	- .06	0832	10.86
1334	- .05	6/30/77	
1335	- .04	1430	13.82
1336	.02	7/ 5/77	
1337	- .01	1630	13.32
1338	.08	7/12/77	
1339	.11	1600	17.88
1340	.20	7/19/77	
1345	.17	1600	19.05
1350	.19	7/26/77	
1355	.21	1600	19.05
1400	.25	8/ 2/77	
1410	.25	0700	19.05
1420	.27	8/16/77	
1430	.29	1630	20.21
1440	.30	8/30/77	
1450	.32	0700	20.21
1730	2.61	9/ 8/77	
1800	2.60	0700	20.21
1900	2.55	9/14/77	
2100	2.55	0700	19.75
2300	2.55	9/20/77	
		0700	20.21

Table 20.--Water levels in well B7 during well A3 injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.]

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
6/21/77		0500	3.39
1000	1.22	0900	3.42
1030	1.18	1500	3.65
1100	1.18	2300	3.41
1130	1.18	6/23/77	
1200	1.18	0700	3.54
1215	1.19	1600	3.61
1230	1.20	6/24/77	
1245	1.21	0900	3.74
1300	1.22	6/25/77	
1315	1.22	0200	3.76
1330	1.23	1800	4.11
1331	1.23	6/27/77	
1332	1.23	0300	4.71
1333	1.23	6/28/77	
1334	1.23	1200	5.35
1335	1.23	7/ 1/77	
1336	1.24	2300	5.41
1337	1.25	7/ 5/77	
1338	1.26	1030	8.86
1339	1.28	7/14/77	
1340	1.30	1615	11.33
1345	1.34	7/19/77	
1350	1.36	0700	12.70
1355	1.39	7/26/77	
1400	1.42	0700	13.78
1410	1.44	8/ 2/77	
1420	1.47	0700	13.68
1430	1.49	8/16/77	
1440	1.50	1630	14.38
1450	1.52	8/31/77	
1500	1.53	0715	15.76
1510	1.54	9/ 7/77	
1530	1.55	0700	16.25
1600	1.58	9/14/77	
2100	3.38	0700	15.61
2300	3.23	9/20/77	
6/22/77		0700	16.16
0700	3.20		

Table 21.--Water levels in well B8 during well A3 injection test

[Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr. Average injection rate into well A3 from start of test to 6-30-77 at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of test was 2770 gal/min.]

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
6/21/77		6/22/77	
1000	7.42	0100	7.09
1030	7.42	0500	7.25
1100	7.41	0900	7.36
1130	7.41	1500	7.35
1200	7.42	2300	7.27
1215	7.42	6/23/77	
1230	7.43	0700	7.31
1245	7.44	1600	7.29
1300	7.44	6/24/77	
1315	7.44	0900	7.34
1330	7.45	6/25/77	
1331	7.45	0200	7.26
1332	7.45	1800	7.27
1333	7.45	6/27/77	
1334	7.45	0300	7.35
1335	7.45	6/28/77	
1336	7.46	1200	7.45
1337	7.46	7/ 1/77	
1338	7.46	2300	7.15
1339	7.46	7/ 5/77	
1340	7.45	0930	7.78
1345	7.46	7/12/77	
1350	7.46	1000	8.49
1355	7.48	7/19/77	
1400	7.48	1000	8.62
1410	7.50	7/26/77	
1420	7.52	1000	9.02
1430	7.53	8/ 2/77	
1440	7.54	1000	8.85
1450	7.55	8/16/77	
1500	7.56	1000	9.21
1510	7.57	8/30/77	
1530	7.60	1000	9.59
1600	7.64	9/ 6/77	
1700	7.68	1000	10.06
1800	7.70	9/13/77	
2100	7.17	1000	9.39
2300	7.14	9/20/77	
		1500	9.57

Table 22.--Water levels in well B9 during well A3 injection test
(Test started 6-21-77 at 1335 hr and ended 9-20-77 at 1500 hr.
Average injection rate into well A3 from start of test to 6-30-77
at 1600 hr was 3380 gal/min and from 6-30-77 at 1600 hr to end of
test was 2770 gal/min.)

Time (hr)	Water level (ft above mean sea level)	Time (hr)	Water level (ft above mean sea level)
6/21/77		6/26/77	
1025	5.23	0920	5.19
1104	4.98	1731	5.18
1153	5.21	6/27/77	
1215	5.21	0954	5.17
1230	5.22	1707	5.17
1300	5.23	7/ 5/77	
1322	5.25	1035	5.67
1326	5.23	1810	5.72
1332	5.23	7/11/77	
1334	5.23	0936	6.00
1337	5.23	7/19/77	
1341	5.23	1240	6.35
1343	5.23	7/26/77	
1345	5.23	1225	6.35
1349	5.23	8/ 2/77	
1357	5.23	1045	6.18
1401	5.23	8/ 9/77	
1406	5.23	1120	6.17
1411	5.23	8/15/77	
1417	5.23	1725	6.38
1425	5.22	1817	6.36
1535	5.24	8/22/77	
1850	5.26	1700	6.66
6/22/77		1900	6.53
1940	5.31	8/23/77	
6/23/77		1240	6.50
0933	5.23	1430	6.21
1845	5.26	8/30/77	
6/24/77		1535	6.87
1115	5.21	9/ 6/77	
1815	5.21	1730	7.34
6/25/77		9/13/77	
0956	5.22	1112	6.83
1735	5.18	9/20/77	
		1445	6.90

Table 23. -- Chemical and Rhodamine WT analyses of water from selected wells at the test site

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CHLO- RIDE. DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	DENSITY (GM/ML AT 20 C)	RHODA- MINE WT TOTAL (UG/L)
WELL NUMBER A2 SW ST PETERSBURG INJ WELL 1112 (LAT 27 42 59 LONG 082 41 03.01)										
MAY . 1977										
23...	1750	920	1112	28.2	50000	--	20000	3000	1.026	1.0
24...	1613	920	1112	28.5	49000	--	20000	3200	1.026	.00
25...	1608	920	1112	28.5	49000	--	20000	2900	1.026	.00
JUN										
22...	1831	920	1112	28.0	53000	--	20000	1300	1.026	1.0
23...	1155	920	1112	28.1	53000	--	20000	2800	1.026	6.0
23...	1850	920	1112	28.5	53000	--	20000	3000	1.026	.00
24...	1550	920	1112	28.6	53000	--	20000	3300	1.026	1.0
25...	1543	920	1112	28.5	52000	--	20000	3000	1.026	1.0
26...	1515	920	1112	28.5	53000	--	20000	2900	1.026	1.0
27...	1445	920	1112	28.6	52000	--	20000	3000	1.026	.00
JUL										
06...	1437	920	1112	28.3	53000	--	20000	1000	1.026	1.0
12...	1355	920	1112	28.3	52000	--	22000	2900	1.026	1.0
19...	1355	920	1112	28.2	53000	--	20000	3000	1.026	1.0
26...	1345	920	1112	27.9	50600	--	20000	2900	1.025	1.0
AUG										
02...	1425	920	1112	28.2	50900	--	20000	2900	1.026	1.0
09...	1510	920	1112	28.2	52000	7.1	20000	2900	1.026	1.0
16...	1615	920	1112	28.2	51200	--	20000	2700	1.026	1.0
23...	1505	920	1112	27.5	--	--	--	2700	1.025	1.0
30...	1615	920	1112	28.0	52500	--	20000	2600	1.026	1.0
SEP										
08...	1535	920	1112	27.8	52500	7.2	20000	3040	1.025	1.0
13...	1545	920	1112	28.3	52500	7.4	20000	3200	1.026	1.0
19...	1345	920	1112	28.3	52500	--	20000	3100	1.026	1.0

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	PH (UNITS)	BICAR- BONATE AS HCO3)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1120 (LAT 27 42 59 LONG 082 40 54.01)								
JAN , 1977								
25...	1137	920	1120	26.9	52000	--	--	--
APR								
13...	0130	920	1120	28.7	--	--	--	180
19...	1740	920	1120	28.7	--	--	6.9	180
19...	1950	920	1120	28.5	52000	--	--	--
19...	2325	920	1120	28.5	52000	--	--	--
20...	0330	920	1120	28.5	52000	--	--	--
20...	0755	920	1120	28.5	52000	--	--	--
20...	1200	920	1120	28.5	52000	--	--	--
20...	1545	920	1120	28.5	52000	--	--	--
20...	1930	920	1120	28.5	52000	--	--	--
20...	2340	920	1120	28.5	52000	--	--	--
21...	0325	920	1120	28.5	52000	--	--	--
21...	0755	920	1120	28.5	52000	--	--	--
21...	1130	920	1120	28.5	52000	--	--	--
21...	1610	920	1120	28.5	52000	--	--	--
21...	1945	920	1120	28.5	52000	--	--	--
21...	2325	920	1120	28.5	52000	--	--	--
22...	0320	920	1120	28.5	52000	--	--	--
22...	0800	920	1120	28.5	52000	--	--	--
22...	1200	920	1120	28.5	52000	--	--	--
22...	1345	920	1120	28.7	--	--	6.9	180
26...	1200	920	1120	28.5	52000	--	--	--
JUN								
21...	2005	920	1120	--	1100	--	--	--
21...	2045	920	1120	--	--	--	--	--
22...	1910	920	1120	--	1310	--	--	--
23...	1135	920	1120	--	5000	--	--	--
24...	1057	920	1120	--	4600	--	--	--
24...	1507	920	1120	--	--	--	--	--
25...	1035	920	1120	--	1550	--	--	--
25...	1040	920	1120	--	--	--	--	--
26...	1020	920	1120	--	1600	--	--	--
26...	1025	920	1120	--	--	--	--	--
27...	0940	920	1120	--	4600	--	--	--
27...	0944	920	1120	--	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDE SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)								
JAN , 1977								
25...	--	--	--	--	--	--	--	--
APR								
13...	480	11	1.026	38900	39700	11	--	--
19...	440	11	1.026	37800	38600	0	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	1.026	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	1.026	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	--	--	1.026	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
21...	--	--	1.026	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	440	11	1.026	37700	35800	3	--	--
26...	--	--	--	--	--	--	--	--
JUN								
21...	--	--	0.999	--	--	--	--	--
21...	--	--	--	--	--	--	--	685
22...	--	--	0.999	--	--	--	--	725
23...	--	--	0.999	--	--	--	--	640
24...	--	--	0.999	--	--	--	--	--
24...	--	--	--	--	--	--	--	615
25...	--	--	0.999	--	--	--	--	--
25...	--	--	--	--	--	--	--	610
26...	--	--	0.999	--	--	--	--	--
26...	--	--	--	--	--	--	--	985
27...	--	--	0.999	--	--	--	--	--
27...	--	--	--	--	--	--	--	935

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)									
JAN , 1977									
25...	--	--	19000	--	--	--	--	--	--
APR									
13...	0	1.1	22000	2900	.3	80	960	1200	12000
19...	0	.8	21000	2800	.4	90	940	250	13000
19...	--	--	20000	2800	--	--	--	--	--
19...	--	--	20000	2800	--	--	--	--	--
20...	--	--	20000	2700	--	--	--	--	--
20...	--	--	20000	2800	--	--	--	--	--
20...	--	--	20000	2800	--	--	--	--	--
20...	--	--	20000	2800	--	--	--	--	--
20...	--	--	21000	2800	--	--	--	--	--
20...	--	--	20000	2800	--	--	--	--	--
21...	--	--	20000	2800	--	--	--	--	--
21...	--	--	20000	2800	--	--	--	--	--
21...	--	--	21000	2800	--	--	--	--	--
21...	--	--	21000	2800	--	--	--	--	--
21...	--	--	21000	2800	--	--	--	--	--
22...	--	--	21000	3100	--	--	--	--	--
22...	--	--	21000	2800	--	--	--	--	--
22...	--	--	21000	2800	--	--	--	--	--
22...	0	1.0	19000	2800	.4	90	100	270	13000
26...	--	--	20000	--	--	--	--	--	--
JUN									
21...	--	--	190	53	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
22...	--	--	280	13	--	--	--	--	--
23...	--	--	340	68	--	--	--	--	--
24...	--	--	330	71	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
25...	--	--	320	70	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
26...	--	--	340	71	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
27...	--	--	300	65	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	PH (UNITS)	BICAR- BONATE (MG/L AS HCO3)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1120 (LAT 27 42 59 LONG 082 40 54.01)								
JUL , 1977								
05...	1007	920	1120	28.9	1900	--	--	--
11...	0925	920	1120	30.0	1050	--	--	--
18...	1700	920	1120	28.7	1000	--	--	--
18...	1725	920	1120	29.7	995	48	--	100
25...	0835	920	1120	28.4	970	--	--	--
AUG								
01...	1735	920	1120	28.5	990	--	7.1	--
01...	1800	920	1120	28.9	940	--	7.0	--
08...	1630	920	1120	29.9	940	--	--	--
08...	1730	920	1120	28.8	975	--	7.1	--
16...	1100	920	1120	29.5	874	--	7.2	--
16...	1200	920	1120	--	866	36	7.2	110
22...	1900	920	1120	27.8	850	--	7.2	--
22...	1930	920	1120	27.8	850	--	7.0	--
29...	1600	920	1120	28.3	890	--	7.1	--
29...	1630	920	1120	28.5	914	--	7.0	--
SEP								
06...	1835	920	1120	28.9	--	--	7.5	146
06...	2045	920	1120	28.5	856	--	7.1	146
12...	1520	920	1120	29.2	840	--	7.1	145
13...	1130	920	1120	29.0	814	--	7.2	145
16...	1200	920	1120	--	835	--	--	--
17...	0800	920	1120	--	840	--	--	--
18...	1000	920	1120	--	835	--	--	--
19...	0730	920	1120	--	825	--	--	--
19...	1845	920	1120	29.3	855	36	7.3	130
19...	2030	920	1120	28.5	876	59	7.2	140
20...	0900	920	1120	--	885	--	--	--
20...	1421	920	1120	--	865	--	--	--
20...	1432	920	1120	--	865	--	--	--
20...	1450	920	1120	--	870	--	--	--
20...	1457	920	1120	--	868	--	--	--
20...	1530	920	1120	--	865	--	--	--
20...	1600	920	1120	--	865	--	--	--
20...	1630	920	1120	--	865	--	--	--
20...	1700	920	1120	--	865	--	--	--
21...	0500	920	1120	--	1520	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)									
JUL , 1977									
05...	--	--	220	53	--	--	--	--	--
11...	--	--	210	66	--	--	--	--	--
18...	--	--	190	66	--	--	--	--	--
18...	0	--	200	59	.3	--	52	14	110
25...	--	--	190	54	--	--	--	--	--
AUG									
01...	--	--	190	63	--	--	--	--	--
01...	--	--	190	53	--	--	--	--	--
08...	--	--	190	55	--	--	--	--	--
08...	--	--	170	55	--	--	--	--	--
16...	--	--	160	46	--	--	--	--	--
16...	0	--	35	49	.3	--	47	11	100
22...	--	--	88	44	--	--	--	--	--
22...	--	--	190	46	--	--	--	--	--
29...	--	--	180	48	--	--	--	--	--
29...	--	--	340	47	--	--	--	--	--
SEP									
06...	--	--	--	66	--	--	--	--	--
06...	--	--	140	67	--	--	--	--	--
12...	--	--	140	59	--	--	--	--	--
13...	--	--	140	40	--	--	--	--	--
16...	--	--	160	--	--	--	--	--	--
17...	--	--	160	--	--	--	--	--	--
18...	--	--	160	--	--	--	--	--	--
19...	--	--	160	--	--	--	--	--	--
19...	0	--	150	63	.2	--	48	12	95
19...	0	--	160	64	.2	--	47	11	95
20...	--	--	170	--	--	--	--	--	--
20...	--	--	170	--	--	--	--	--	--
20...	--	--	170	--	--	--	--	--	--
20...	--	--	170	--	--	--	--	--	--
20...	--	--	170	--	--	--	--	--	--
20...	--	--	170	--	--	--	--	--	--
20...	--	--	170	--	--	--	--	--	--
20...	--	--	170	--	--	--	--	--	--
21...	--	--	350	--	--	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SUS- PENDE SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)								
JUL , 1977								
05...	--	--	0.999	--	--	--	--	1400
11...	--	--	0.999	--	--	--	--	1070
18...	--	--	0.999	--	--	--	--	525
18...	10	16	0.999	595	511	3	--	--
25...	--	--	0.999	--	--	--	--	565
AUG								
01...	--	--	0.999	--	--	--	--	725
01...	--	--	0.999	--	--	--	--	--
08...	--	--	0.999	--	--	--	--	975
08...	--	--	0.999	--	--	--	--	--
16...	--	--	0.999	--	--	--	--	1050
16...	9.2	16	0.999	498	322	3	--	--
22...	--	--	0.999	--	--	--	--	1100
22...	--	--	0.999	--	--	--	--	--
29...	--	--	0.999	--	--	--	--	--
29...	--	--	0.999	--	--	--	--	950
SEP								
06...	--	--	--	--	--	--	--	725
06...	--	--	0.999	--	--	--	--	--
12...	--	--	0.999	--	--	--	--	1065
13...	--	--	0.999	--	--	--	--	--
16...	--	--	--	--	--	3	1	--
17...	--	--	--	--	--	8	5	--
18...	--	--	--	--	--	7	4	--
19...	--	--	--	--	--	8	5	--
19...	10	16	0.999	465	459	8	--	570
19...	9.8	16	0.999	475	472	10	--	--
20...	--	--	--	--	--	1	1	--
20...	--	--	--	--	--	11	6	--
20...	--	--	--	--	--	9	4	--
20...	--	--	--	--	--	11	8	--
20...	--	--	--	--	--	8	6	--
20...	--	--	--	--	--	10	7	--
20...	--	--	--	--	--	8	6	--
20...	--	--	--	--	--	14	9	--
20...	--	--	--	--	--	17	13	--
21...	--	--	--	--	--	7	3	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH	DEPTH	TEMPER-	SPE-	OXYGEN	PH	BICAR-
		TO TOP	TO BOT-					
		OF	TOM OF		CIFIC	DEMAND,		
		SAMPLE	SAMPLE	ATURE	CON-	CHEM-		
		INTER-	INTER-	(DEG C)	DUCT-	ICAL		
		VAL	VAL		ANCE	(HIGH		
		(FT)	(FT)		(MICRO-	LEVEL)	(UNITS)	(MG/L
					MHOS)	(MG/L)		AS
								HC03)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1120 (LAT 27 42 59 LONG 082 40 54.01)								
SEP . 1977								
21...	1000	920	1120	--	4490	--	--	--
21...	1500	920	1120	--	8200	--	--	--
22...	0730	920	1120	--	16800	--	--	--

48

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR-	TOTAL	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-
			SOLVED	SOLVED	SOLVED		SOLVED	
	BONATE	SUL-	CHLO-	SULFATE	FLUO-	CAL-	MAG-	SOLVED
	(C03)	FIDE	RIDE	(S04)	RIDE	CIUM	NE-	SODIUM
	(MG/L)	(S)	(CL)	(MG/L)	(F)	(CA)	(MG)	(NA)
		(MG/L)	(MG/L)		(MG/L)	(MG/L)	(MG/L)	(MG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)								
SEP . 1977								
21...	--	--	1300	--	--	--	--	--
21...	--	--	2600	--	--	--	--	--
22...	--	--	5800	--	--	--	--	--

49

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS-SOLVED PO-TAS- SIUM (K) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS-SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDED SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)								
SEP , 1977								
21...	--	--	--	--	--	8	3	--
21...	--	--	--	--	--	17	7	--
22...	--	--	--	--	--	30	9	--

50

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LINITY AS CAC03 (MG/L)	BICAR- BONATE (HC03) (MG/L)
WELL NUMBER B1 SW ST PETERSBURG MON 1286 (LAT 27 42 59 LONG 082 41 02.01)									
FEB , 1976									
02...	1234	1215	1286	28.8	55000	--	--	--	--
03...	1400	1215	1286	28.8	67600	--	6.9	167	203
24...	1110	1215	1286	--	--	0	--	--	--
JAN , 1977									
25...	1711	1215	1286	28.5	56000	--	--	--	--
MAY									
04...	1128	1215	1286	28.8	55000	--	--	--	--
13...	1200	1215	1286	28.8	54000	--	--	--	--
17...	1300	1215	1286	29.0	55000	--	--	--	--
JUN									
22...	0929	1215	1286	28.5	57000	--	--	--	--
22...	1500	1215	1286	--	--	--	--	--	--
22...	1831			29.0	56000	--	--	--	--
23...	1726	1215	1286	28.9	57000	--	--	--	--
24...	1714	1215	1286	28.9	57000	--	--	--	--
25...	1646	1215	1286	28.9	56000	--	--	--	--
26...	1123	1215	1286	28.9	56000	--	--	--	--
27...	1048	1215	1286	28.9	46000	--	--	--	--
JUL									
05...	1135	1215	1286	28.8	56000	--	--	--	--
11...	1026	1215	1286	28.8	56000	--	--	--	--
18...	1636	1215	1286	28.8	56000	--	--	--	--
25...	1501	1215	1286	28.7	56000	--	--	--	--
AUG									
01...	0958	1215	1286	28.7	56000	--	--	--	--
08...	1040	1215	1286	28.6	55000	--	6.8	--	--
15...	1040	1215	1286	29.0	56200	--	6.8	--	--
22...	1010	1215	1286	28.8	55100	--	6.9	--	--
29...	1520	1215	1286	28.9	56200	--	--	--	--
SEP									
06...	1230	1215	1286	28.8	--	--	6.8	168	205
12...	1240	1215	1286	28.8	55600	--	6.4	165	201
19...	1215	1215	1286	29.3	55600	--	--	--	--

51

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
WELL NUMBER R1 SW ST PETERSBURG MON 1286 (LAT 27 42 59 LONG 082 41 02.01)									
FEB , 1976									
02...	--	--	22000	--	--	--	--	--	--
03...	0	.3	22000	4400	1.1	110	800	1200	12000
24...	--	--	--	--	--	--	--	--	--
JAN , 1977									
25...	--	--	21000	--	--	--	--	--	--
MAY									
04...	--	--	22000	4000	--	--	--	--	--
13...	--	--	21000	4000	--	--	--	--	--
17...	--	--	21000	--	--	--	--	--	--
JUN									
22...	--	--	21000	4600	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	21000	4700	--	--	--	--	--
23...	--	--	21000	4700	--	--	--	--	--
24...	--	--	21000	4700	--	--	--	--	--
25...	--	--	21000	4700	--	--	--	--	--
26...	--	--	21000	4600	--	--	--	--	--
27...	--	--	21000	4600	--	--	--	--	--
JUL									
05...	--	--	21000	4400	--	--	--	--	--
11...	--	--	22000	4700	--	--	--	--	--
18...	--	--	21000	3900	--	--	--	--	--
25...	--	--	21000	4500	--	--	--	--	--
AUG									
01...	--	--	21000	4400	--	--	--	--	--
08...	--	--	22000	4400	--	--	--	--	--
15...	--	--	22000	3900	--	--	--	--	--
22...	--	--	21000	3900	--	--	--	--	--
29...	--	--	21000	4300	--	--	--	--	--
SEP									
06...	--	--	--	4300	--	--	--	--	--
12...	--	--	21000	4900	--	--	--	--	--
19...	--	--	22000	4300	--	--	--	--	--

52

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SUS- PENDED SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER B1 SW ST PETERSBURG MON 1286 (LAT 27 42 59 LONG 082 41 02.01)								
FEB , 1976								
02...	--	--	--	--	--	--	--	--
03...	400	9.2	--	42500	41100	50	--	--
24...	--	--	--	--	--	--	--	--
JAN , 1977								
25...	--	--	--	--	--	--	--	--
MAY								
04...	--	--	1.029	--	--	--	--	1.0
13...	--	--	1.029	--	--	--	--	1.0
17...	--	--	1.030	--	--	--	--	1.0
JUN								
22...	--	--	1.029	--	--	--	--	1.0
22...	--	--	--	--	--	--	--	--
22...	--	--	1.029	--	--	--	--	1.0
23...	--	--	1.029	--	--	--	--	1.0
24...	--	--	1.029	--	--	--	--	1.0
25...	--	--	1.029	--	--	--	--	1.0
26...	--	--	1.029	--	--	--	--	1.0
27...	--	--	1.029	--	--	--	--	1.0
JUL								
05...	--	--	1.029	--	--	--	--	1.0
11...	--	--	1.029	--	--	--	--	1.0
18...	--	--	1.029	--	--	--	--	1.0
25...	--	--	1.029	--	--	--	--	1.0
AUG								
01...	--	--	1.029	--	--	--	--	1.0
08...	--	--	1.029	--	--	--	--	2.0
15...	--	--	1.029	--	--	--	--	2.0
22...	--	--	1.029	--	--	--	--	2.0
29...	--	--	1.029	--	--	--	--	2.0
SEP								
06...	--	--	--	--	--	--	--	2.0
12...	--	--	1.029	--	--	--	--	2.0
19...	--	--	1.029	--	--	--	--	2.0

53

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)	RICAR- BONATE (HCO3) (MG/L)
WELL NUMBER B2 SW ST PETERSBURG MON 1120 (LAT 27 42 59 LONG 082 41 02.02)									
FEB , 1976									
03...	1440	941	1120	28.4	62000	--	--	156	190
24...	1140	941	1120	28.2	--	0	7.3	--	--
JAN , 1977									
25...	1618	941	1120	28.0	53000	--	--	--	--
MAY									
04...	1255	941	1120	28.4	52000	--	--	--	--
13...	1515	941	1120	28.5	50000	--	--	--	--
17...	1555	941	1120	28.5	52000	--	--	--	--
JUN									
22...	1015	941	1120	28.5	--	--	--	--	--
22...	1545	941	1120	28.5	53000	--	--	--	--
23...	1810	941	1120	28.6	53000	--	--	--	--
24...	1630	941	1120	28.6	53000	--	--	--	--
25...	1602	941	1120	28.6	52500	--	--	--	--
26...	1636	941	1120	28.6	52000	--	--	--	--
27...	1137	941	1120	28.7	53000	--	--	--	--
JUL									
05...	1706	941	1120	28.5	53000	--	--	--	--
11...	1705	941	1120	28.5	52000	--	--	--	--
18...	1545	941	1120	28.7	52000	--	--	--	--
25...	1415	941	1120	28.4	52000	--	--	--	--
AUG									
01...	1048	941	1120	28.3	50900	--	--	--	--
08...	1130	941	1120	28.5	50900	--	--	--	--
15...	1145	941	1120	28.5	51100	--	7.0	--	--
22...	1135	941	1120	28.5	51000	--	7.1	--	--
29...	1212	941	1120	28.5	51300	--	--	--	--
SEP									
06...	1345			--	8020	--	7.2	--	--
08...	1215	941	1120	28.2	52200	--	7.0	--	--
12...	1140	941	1120	28.5	52500	--	6.5	163	199
19...	1030	941	1120	28.4	53600	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
WELL NUMBER B2 SW ST PETERSBURG MON 1120 (LAT 27 42 59 LONG 082 41 02.02)									
FEB , 1976									
03...	0	--	22000	3000	1.1	100	490	1100	11000
24...	--	.6	--	--	--	--	--	--	--
JAN , 1977									
25...	--	--	20000	--	--	--	--	--	--
MAY									
04...	--	--	21000	3200	--	--	--	--	--
13...	--	--	20000	2900	--	--	--	--	--
17...	--	--	20000	3000	--	--	--	--	--
JUN									
22...	--	--	--	3200	--	--	--	--	--
22...	--	--	20000	3200	--	--	--	--	--
23...	--	--	20000	3000	--	--	--	--	--
24...	--	--	20000	3200	--	--	--	--	--
25...	--	--	20000	3000	--	--	--	--	--
26...	--	--	20000	3000	--	--	--	--	--
27...	--	--	20000	3000	--	--	--	--	--
JUL									
05...	--	--	20000	2800	--	--	--	--	--
11...	--	--	20000	2900	--	--	--	--	--
18...	--	--	20000	3000	--	--	--	--	--
25...	--	--	20000	3000	--	--	--	--	--
AUG									
01...	--	--	20000	2700	--	--	--	--	--
08...	--	--	20000	2900	--	--	--	--	--
15...	--	--	--	2800	--	--	--	--	--
22...	--	--	20000	2700	--	--	--	--	--
29...	--	--	20000	2700	--	--	--	--	--
SEP									
06...	--	--	--	--	--	--	--	--	--
08...	--	--	--	2900	--	--	--	--	--
12...	--	--	--	2800	--	--	--	--	--
19...	--	--	20000	2800	--	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS-SOLVED SOLIDS (RFSI- DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SUS- PENDED SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER B2 SW ST PETERSBURG MON 1120 (LAT 27 42 59 LONG 082 41 02.02)								
FEB , 1976								
03...	410	10	--	38200	38200	45	--	--
24...	--	--	--	--	--	--	--	--
JAN , 1977								
25...	--	--	--	--	--	--	--	--
MAY								
04...	--	--	1.026	--	--	--	--	1.0
13...	--	--	1.026	--	--	--	--	.00
17...	--	--	1.026	--	--	--	--	.00
JUN								
22...	--	--	1.026	--	--	--	--	.00
22...	--	--	--	--	--	--	--	.00
23...	--	--	1.026	--	--	--	--	.00
24...	--	--	1.026	--	--	--	--	.00
25...	--	--	1.026	--	--	--	--	.00
26...	--	--	1.026	--	--	--	--	.00
27...	--	--	1.026	--	--	--	--	.00
JUL								
05...	--	--	1.026	--	--	--	--	.00
11...	--	--	1.026	--	--	--	--	.00
18...	--	--	1.026	--	--	--	--	.00
25...	--	--	1.026	--	--	--	--	.00
AUG								
01...	--	--	1.026	--	--	--	--	.00
08...	--	--	1.026	--	--	--	--	.00
15...	--	--	1.026	--	--	--	--	1.0
22...	--	--	1.026	--	--	--	--	1.0
29...	--	--	1.026	--	--	--	--	1.0
SEP								
06...	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	1.0
12...	--	--	--	--	--	--	--	1.0
19...	--	--	1.026	--	--	--	--	1.0

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	BICAR- BONATE (HC03) (MG/L)
WELL NUMBER B3 SW ST PETERSBURG MON 851 (LAT 27 42 59 LONG 082 41 02.03)									
FEB , 1976									
03...	1520	730	851	28.0	60000	--	--	151	184
24...	1207	730	851	--	--	0	7.2	--	--
JAN , 1977									
25...	1522	730	851	27.7	52000	--	--	--	--
MAY									
04...	1445	730	851	27.8	51000	--	--	--	--
13...	1420	730	851	27.9	49000	--	--	--	--
17...	1500	730	851	28.0	50000	--	--	--	--
21...	2113	730	851	--	--	--	--	--	--
JUN									
21...	2113	730	851	27.5	41500	--	--	--	--
22...	1413	730	851	--	--	--	--	--	--
22...	1415	730	851	--	--	--	--	--	--
23...	1538	730	851	28.1	41000	--	--	--	--
24...	1426	730	851	28.1	41000	--	--	--	--
25...	1035			--	--	--	--	--	--
25...	1405	730	851	28.1	40000	--	--	--	--
26...	1442	730	851	28.1	40000	--	--	--	--
27...	1455	730	851	28.1	38000	--	--	--	--
JUL									
05...	1501	730	851	27.9	29500	--	--	--	--
11...	1200	730	851	28.0	26500	--	--	--	--
12...	1425	730	851	--	--	140	--	--	--
18...	1405	730	851	27.9	24000	--	--	--	--
25...	1035	730	851	27.8	22000	--	--	--	--
AUG									
01...	1458	730	851	27.8	19600	--	7.0	--	--
08...	1515	730	851	28.0	18400	--	7.4	--	--
16...	1150	730	851	28.2	17500	130	7.2	120	150
22...	1640	730	851	27.5	17700	--	7.3	--	--
29...	2145	730	851	28.0	15900	--	7.3	--	--
SEP									
07...	1410	730	851	30.3	16500	--	7.1	--	--
12...	1725	730	851	27.0	16800	--	6.8	157	191
19...	1358	730	851	28.3	16500	92	7.2	160	190

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
WELL NUMBER B3 SW ST PETERSBURG MON 851 (LAT 27 42 59 LONG 082 41 02.03)									
FEB , 1976									
03...	0	--	21000	2800	1.4	84	530	1000	11000
24...	--	.0	--	--	--	--	--	--	--
JAN , 1977									
25...	--	--	20000	--	--	--	--	--	--
MAY									
04...	--	--	20000	3300	--	--	--	--	--
13...	--	--	19000	2800	--	--	--	--	--
17...	--	--	19000	4000	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
JUN									
21...	--	--	15000	2200	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
23...	--	--	15000	2600	--	--	--	--	--
24...	--	--	15000	2400	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	--	--	15000	2300	--	--	--	--	--
26...	--	--	14000	2300	--	--	--	--	--
27...	--	--	14000	2200	--	--	--	--	--
JUL									
05...	--	--	10000	1400	--	--	--	--	--
11...	--	--	9200	1400	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
18...	--	--	8200	1200	--	--	--	--	--
25...	--	--	7300	1100	--	--	--	--	--
AUG									
01...	--	--	6500	1000	--	--	--	--	--
08...	--	--	6100	980	--	--	--	--	--
16...	0	--	6900	910	.6	--	370	320	3400
22...	--	--	5800	930	--	--	--	--	--
29...	--	--	5600	930	--	--	--	--	--
SEP									
07...	--	--	5800	830	--	--	--	--	--
12...	--	--	5400	830	--	--	--	--	--
19...	0	--	5400	845	.6	--	340	300	3400

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDE SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER B3 SW ST PETERSBURG MON 851 (LAT 27 42 59 LONG 082 41 02.03)								
FEB , 1976								
03...	370	11	--	37100	36900	49	--	--
24...	--	--	--	--	--	--	--	--
JAN , 1977								
25...	--	--	--	--	--	--	--	--
MAY								
04...	--	--	1.026	--	--	--	--	.00
13...	--	--	1.025	--	--	--	--	.00
17...	--	--	1.025	--	--	--	--	.00
21...	--	--	--	--	--	--	--	--
JUN								
21...	--	--	1.019	--	--	--	--	.00
22...	--	--	--	--	--	--	--	.00
22...	--	--	--	--	--	--	--	.00
23...	--	--	1.019	--	--	--	--	.00
24...	--	--	1.019	--	--	--	--	--
25...	--	--	--	--	--	--	--	1.0
25...	--	--	1.019	--	--	--	--	1.0
26...	--	--	1.018	--	--	--	--	2.0
27...	--	--	1.018	--	--	--	--	--
JUL								
05...	--	--	1.013	--	--	--	--	30
11...	--	--	1.011	--	--	12	--	52
12...	--	--	--	--	--	--	--	--
18...	--	--	1.010	--	--	--	--	97
25...	--	--	1.008	--	--	--	--	120
AUG								
01...	--	--	1.008	--	--	--	--	135
08...	--	--	1.007	--	--	--	--	165
16...	140	16	1.007	11300	12100	71	--	255
22...	--	--	1.007	--	--	--	--	285
29...	--	--	1.006	--	--	--	--	270
SEP								
07...	--	--	--	--	--	--	--	375
12...	--	--	1.006	--	--	--	--	290
19...	100	16	1.006	10400	11100	62	--	300

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	BICAR- BONATE (HC03) (MG/L)
WELL NUMBER B4 SW ST PETERSBURG MON 566 (LAT 27 42 59 LONG 082 41 02.04)									
FEB , 1976									
03...	1544	520	566	27.0	42200	--	--	75	91
25...	1025	520	566	--	--	20	8.2	--	--
JAN , 1977									
24...	1556	520	566	26.0	36900	--	--	--	--
MAY									
12...	1413	520	566	26.5	35300	--	--	--	--
16...	1420	520	566	26.9	35000	--	--	--	--
18...	1235	520	566	26.9	35000	--	--	--	--
JUN									
22...	1122	520	566	27.0	37000	--	--	--	--
22...	1643	520	566	--	--	--	--	--	--
22...	1646			27.0	36000	--	--	--	--
23...	1644	520	566	27.1	35900	--	--	--	--
24...	1545	520	566	27.1	37000	--	--	--	--
25...	1511	520	566	27.2	36500	--	--	--	--
26...	1549	520	566	27.1	36000	--	--	--	--
27...	1603	520	566	27.2	36000	--	--	--	--
JUL									
05...	1617	520	566	27.0	36000	--	--	--	--
13...	1010	520	566	26.9	36500	--	--	--	--
18...	1505	520	566	27.0	37500	--	--	--	--
25...	1330	520	566	26.7	37500	--	--	--	--
AUG									
01...	1150	520	566	26.6	36500	--	--	--	--
08...	1430	520	566	26.7	36600	--	6.8	--	--
15...	1530	520	566	27.5	36500	--	6.9	--	--
22...	1305	520	566	27.2	36500	--	7.0	--	--
29...	1330	520	566	26.5	37100	--	--	--	--
SEP									
06...	2150	520	566	27.0	37200	--	7.0	171	209
12...	1415	520	566	27.0	37000	--	6.3	--	--
19...	1538	520	566	28.5	37100	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR- BONATE (C03) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
WELL NUMBER B4 SW ST PETERSBURG MON 566 (LAT 27 42 59 LONG 082 41 02.04)									
FEB , 1976									
03...	0	--	14000	2400	.6	70	1500	550	7200
25...	--	.1	--	--	--	--	--	--	--
JAN , 1977									
24...	--	--	13000	--	--	--	--	--	--
MAY									
12...	--	--	13000	3000	--	--	--	--	--
16...	--	--	13000	--	--	--	--	--	--
18...	--	--	13000	2900	--	--	--	--	--
JUN									
22...	--	--	13000	2700	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	13000	2600	--	--	--	--	--
23...	--	--	13000	2800	--	--	--	--	--
24...	--	--	13000	2600	--	--	--	--	--
25...	--	--	13000	2500	--	--	--	--	--
26...	--	--	13000	2600	--	--	--	--	--
27...	--	--	13000	2600	--	--	--	--	--
JUL									
05...	--	--	13000	2700	--	--	--	--	--
13...	--	--	13000	2700	--	--	--	--	--
18...	--	--	14000	2500	--	--	--	--	--
25...	--	--	13000	2700	--	--	--	--	--
AUG									
01...	--	--	13000	2600	--	--	--	--	--
08...	--	--	13000	2800	--	--	--	--	--
15...	--	--	13000	2500	--	--	--	--	--
22...	--	--	13000	2500	--	--	--	--	--
29...	--	--	13000	2600	--	--	--	--	--
SEP									
06...	--	--	13000	2700	--	--	--	--	--
12...	--	--	13000	--	--	--	--	--	--
19...	--	--	13000	2600	--	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDED SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER B4 SW ST PETERSBURG MON 566 (LAT 27 42 59 LONG 082 41 02.04)								
FEB , 1976								
03...	210	11	--	26700	26000	26	--	--
25...	--	--	--	--	--	--	--	--
JAN , 1977								
24...	--	--	--	--	--	--	--	--
MAY								
12...	--	--	1.018	--	--	--	--	1.0
16...	--	--	1.018	--	--	--	--	2.0
18...	--	--	1.018	--	--	--	--	2.0
JUN								
22...	--	--	1.018	--	--	--	--	2.0
22...	--	--	--	--	--	--	--	2.0
22...	--	--	1.018	--	--	--	--	--
23...	--	--	1.018	--	--	--	--	2.0
24...	--	--	1.018	--	--	--	--	1.0
25...	--	--	1.018	--	--	--	--	2.0
26...	--	--	1.018	--	--	--	--	2.0
27...	--	--	1.018	--	--	--	--	2.0
JUL								
05...	--	--	1.018	--	--	--	--	2.0
13...	--	--	1.018	--	--	--	--	2.0
18...	--	--	1.018	--	--	--	--	2.0
25...	--	--	1.018	--	--	--	--	2.0
AUG								
01...	--	--	1.018	--	--	--	--	2.0
08...	--	--	1.018	--	--	--	--	2.0
15...	--	--	1.018	--	--	--	--	2.0
22...	--	--	1.018	--	--	--	--	2.0
29...	--	--	1.018	--	--	--	--	2.0
SEP								
06...	--	--	1.018	--	--	--	--	2.0
12...	--	--	1.005	--	--	--	--	2.0
19...	--	--	1.018	--	--	--	--	2.0

62

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)	BICAR- BONATE (HC03) (MG/L)
WELL NUMBER R5 SW ST PETERSBURG MON 396 (LAT 27 42 59 LONG 082 41 02.05)									
FEB , 1976								73	89
03...	1230	257	396	25.3	8640	--	--	--	--
25...	1054	257	396	--	--	130	7.9	--	--
JAN , 1977									
25...	1326	257	396	25.0	7600	--	--	--	--
MAY									
12...	1245	257	396	25.1	7400	--	--	--	--
16...	1235	257	396	25.4	7500	--	--	--	--
18...	1400	257	396	25.4	7500	--	--	--	--
JUN									
21...	1923	257	396	25.0	7600	--	--	--	--
22...	1310	257	396	25.4	7450	--	--	--	--
22...	1923	257	396	--	--	--	--	--	--
23...	1401	257	396	25.4	7600	--	--	--	--
24...	1303	257	396	25.5	7700	--	--	--	--
25...	1241	257	396	25.4	7600	--	--	--	--
26...	1313	257	396	25.5	7600	--	--	--	--
27...	1327	257	396	25.5	7600	--	--	--	--
JUL									
05...	1324	257	396	25.3	7500	--	--	--	--
11...	1613	257	396	25.3	7700	--	--	--	--
18...	1245	257	396	25.3	7800	--	--	--	--
25...	1225	257	396	25.3	7800	--	--	--	--
AUG									
01...	1333	257	396	25.2	8000	--	--	--	--
08...	1312	257	396	25.3	7650	--	7.1	--	--
15...	1330	257	396	25.5	8000	--	7.1	--	--
22...	1505	257	396	25.4	7800	--	7.1	--	--
29...	1855	257	396	25.0	8940	--	--	--	--
SEP									
06...	1345	257	396	25.0	8020	--	7.2	162	198
12...	1540	257	396	25.0	8000	--	6.7	165	201
19...	1128	257	396	25.4	8450	--	--	--	--

63

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
------	-----------------------------------	--	---	--	--	---------------------------	--	---	--

WELL NUMBER B5 SW ST PETERSBURG MON 396 (LAT 27 42 59 LONG 082 41 02.05)

FEB , 1976									
03...	0	.5	2600	620	.4	14	510	110	1200
25...	--	--	--	--	--	--	--	--	--
JAN , 1977									
25...	--	--	2200	--	--	--	--	--	--
MAY									
12...	--	--	2200	3100	--	--	--	--	--
16...	--	--	2200	640	--	--	--	--	--
18...	--	--	2100	3400	--	--	--	--	--
JUN									
21...	--	--	2200	540	--	--	--	--	--
22...	--	--	2200	540	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
23...	--	--	2200	550	--	--	--	--	--
24...	--	--	2200	540	--	--	--	--	--
25...	--	--	2200	500	--	--	--	--	--
26...	--	--	2200	490	--	--	--	--	--
27...	--	--	2200	500	--	--	--	--	--
JUL									
05...	--	--	2200	530	--	--	--	--	--
11...	--	--	2300	560	--	--	--	--	--
18...	--	--	2300	580	--	--	--	--	--
25...	--	--	2300	590	--	--	--	--	--
AUG									
01...	--	--	2200	530	--	--	--	--	--
08...	--	--	2300	630	--	--	--	--	--
15...	--	--	2300	120	--	--	--	--	--
22...	--	--	2300	--	--	--	--	--	--
29...	--	--	2400	500	--	--	--	--	--
SEP									
06...	--	--	--	550	--	--	--	--	--
12...	--	--	2400	560	--	--	--	--	--
19...	--	--	2500	590	--	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDE SOLIDS (MG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RHODA- MINE WT (UG/L)
------	--	--	----------------------------------	--	---	-----------------------------------	---------------------------------------	--------------------------------------

WELL NUMBER B5 SW ST PETERSBURG MON 396 (LAT 27 42 59 LONG 082 41 02.05)

FEB , 1976								
03...	27	17	--	5530	5160	13	--	--
25...	--	--	--	--	--	--	--	--
JAN , 1977								
25...	--	--	--	--	--	--	--	--
MAY								
12...	--	--	1.002	--	--	--	--	1.0
16...	--	--	1.002	--	--	--	--	1.0
18...	--	--	1.002	--	--	--	--	1.0
JUN								
21...	--	--	1.002	--	--	--	--	1.0
22...	--	--	1.002	--	--	--	--	1.0
22...	--	--	--	--	--	--	--	1.0
23...	--	--	1.002	--	--	--	--	1.0
24...	--	--	1.002	--	--	--	--	1.0
25...	--	--	1.002	--	--	--	--	1.0
26...	--	--	1.002	--	--	--	--	1.0
27...	--	--	1.002	--	--	--	--	1.0
JUL								
05...	--	--	1.002	--	--	--	--	1.0
11...	--	--	1.002	--	--	--	--	1.0
18...	--	--	1.002	--	--	--	--	1.0
25...	--	--	1.002	--	--	--	--	1.0
AUG								
01...	--	--	1.002	--	--	--	--	1.0
08...	--	--	1.002	--	--	--	--	1.0
15...	--	--	1.002	--	--	--	--	2.0
22...	--	--	1.002	--	--	--	--	2.0
29...	--	--	1.002	--	--	--	--	2.0
SEP								
06...	--	--	--	--	--	--	--	1.0
12...	--	--	1.002	--	--	--	--	1.0
19...	--	--	1.002	--	--	--	--	1.0

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)
WELL NUMBER B6 SW ST PETERSBURG INJ MON 850 (LAT 27 42 59 LONG 082 40 54.02)								
FEB , 1976								
11...	1430	720	850	27.5	51700	--	7.3	130
MAY , 1977								
12...	1435	720	850	27.6	49000	--	--	--
16...	1511	720	850	26.9	48900	--	--	--
18...	1545	720	850	27.1	49000	--	--	--
JUN								
21...	1550	720	850	27.0	37300	--	--	--
22...	1855	720	850	27.5	37500	--	--	--
23...	1010	720	850	27.9	34500	--	--	--
24...	0940	720	850	27.3	28500	--	--	--
25...	0930	720	850	27.3	22500	--	--	--
26...	0903	720	850	27.4	19500	--	--	--
27...	0835	720	850	28.5	19000	--	--	--
JUL								
05...	1015	720	850	26.9	18500	--	--	--
12...	1445	720	850	27.1	8400	100	--	--
19...	1215	720	850	27.1	7900	--	--	--
26...	1200	720	850	27.2	7200	--	--	--
AUG								
01...	1635	720	850	26.1	6450	--	7.5	--
09...	1030	720	850	26.7	5850	--	7.6	--
16...	1000	720	850	27.3	--	67	7.5	120
23...	1345	720	850	26.5	5670	--	7.5	--
29...	1640	720	850	25.4	5880	--	7.4	--
SEP								
06...	1735	720	850	26.8	6310	--	7.6	146
12...	1940	720	850	26.0	6390	--	7.0	--
19...	1725	720	850	27.2	6390	58	7.6	160

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
WELL NUMBER B6 SW ST PETERSBURG INJ MON 850 (LAT 27 42 59 LONG 082 40 54.02)									
FEB , 1976									
11...	159	0	.2	19000	3100	1.3	92	1200	990
MAY , 1977									
12...	--	--	--	19000		--	--	--	--
16...	--	--	--	19000	3500	--	--	--	--
18...	--	--	--	19000	3200	--	--	--	--
JUN									
21...	--	--	--	14000	2500	--	--	--	--
22...	--	--	--	13000	1900	--	--	--	--
23...	--	--	--	12000	1700	--	--	--	--
24...	--	--	--	9700	1500	--	--	--	--
25...	--	--	--	7500	1100	--	--	--	--
26...	--	--	--	3200	1100	--	--	--	--
27...	--	--	--	6100	870	--	--	--	--
JUL									
05...	--	--	--	6000	870	--	--	--	--
12...	--	--	--	2800	470	--	--	--	--
19...	--	--	--	2400	400	--	--	--	--
26...	--	--	--	2100	350	--	--	--	--
AUG									
01...	--	--	--	1900	320	--	--	--	--
09...	--	--	--	1800	300	--	--	--	--
16...	150	0	--	1700	--	.5	--	130	100
23...	--	--	--	1600	--	--	--	--	--
29...	--	--	--	1700	--	--	--	--	--
SEP									
06...	178	--	--	2000	300	--	--	--	--
12...	--	--	--	1800	330	--	--	--	--
19...	190	0	--	1800	310	.5	--	140	110

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDE SOLIDS (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER B6 SW ST PETERSBURG INJ MON 850 (LAT 27 42 59 LONG 082 40 54.02)								
FEB . 1976								
11... 11000		370	11	--	37000	35900	34	--
MAY , 1977								
12...	--	--	--	1.026	--	--	--	.00
16...	--	--	--	1.025	--	--	--	.00
18...	--	--	--	1.025	--	--	--	.00
JUN								
21...	--	--	--	1.019	--	--	--	1.0
22...	--	--	--	1.017	--	--	--	8.0
23...	--	--	--	1.015	--	--	--	27
24...	--	--	--	1.012	--	--	--	52
25...	--	--	--	1.009	--	--	--	85
26...	--	--	--	1.007	--	--	--	115
27...	--	--	--	1.007	--	--	--	156
JUL								
05...	--	--	--	1.007	--	--	--	123
12...	--	--	--	--	--	--	10	410
19...	--	--	--	1.002	--	--	--	535
26...	--	--	--	1.002	--	--	--	480
AUG								
01...	--	--	--	1.001	--	--	--	480
09...	--	--	--	1.001	--	--	--	500
16... 1000		45	16	1.001	3370	--	11	--
23...	--	--	--	1.001	--	--	--	615
29...	--	--	--	1.001	--	--	--	720
SEP								
06...	--	--	--	1.001	--	--	--	750
12...	--	--	--	1.001	--	--	--	745
19... 1200		49	15	1.001	3680	3920	14	735

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CAC03 (MG/L)
WELL NUMBER B7 SW ST PETERSBURG INJ MON 632 (LAT 27 42 59 LONG 082 40 54.03)								
FEB , 1976								
12... 1525		551	632	--	44400	--	7.1	173
JAN , 1977								
25... 1336		551	632	26.0	44100	--	--	--
MAY								
12... 1555		551	632	26.4	42900	--	--	--
16... 1355		551	632	26.2	43000	--	--	--
18... 1505		551	632	26.5	43000	--	--	--
JUN								
21... 1900		551	632	27.2	36500	--	--	--
22... 1810		551	632	--	36000	--	--	--
23... 1045		551	632	27.2	37600	--	--	--
24... 1013		551	632	27.1	36500	--	--	--
25... 0958		551	632	26.6	36000	--	--	--
26... 0942		551	632	27.3	34500	--	--	--
27... 0850		551	632	27.4	34000	--	--	--
JUL								
05... 0920		551	632	27.4	25000	--	--	--
11... 1750		551	632	27.2	20000	--	--	--
18... 1035		551	632	26.9	16500	--	--	--
25... 0845		551	632	25.8	15200	--	--	--
AUG								
01... 1645		551	632	25.1	14400	--	7.6	--
08... 1525		551	632	--	12400	--	7.5	--
16... 0915		551	632	26.0	--	100	8.3	150
22... 2005		551	632	25.6	11300	--	7.5	--
29... 1245		551	632	25.5	11800	--	--	--
SEP								
06... 1950				28.0	10800	--	7.3	163
12... 1920		551	632	28.0	11100	--	7.0	171
19... 1755		551	632	28.4	11100	80	7.3	160
29... 1245		551	632	25.5	11800	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)
WELL NUMBER B7 SW ST PETERSBURG INJ MON 632 (LAT 27 42 59 LONG 082 40 54.03)									
FEB , 1976									
12...	211	0	.6	17000	3200	.9	60	1800	800
JAN , 1977									
25...	--	--	--	14000	--	--	--	--	--
MAY									
12...	--	--	--	16000	--	--	--	--	--
16...	--	--	--	16000	2700	--	--	--	--
18...	--	--	--	17000	3500	--	--	--	--
JUN									
21...	--	--	--	13000	2100	--	--	--	--
22...	--	--	--	13000	2000	--	--	--	--
23...	--	--	--	13000	2100	--	--	--	--
24...	--	--	--	13000	2000	--	--	--	--
25...	--	--	--	13000	2000	--	--	--	--
26...	--	--	--	12000	1900	--	--	--	--
27...	--	--	--	12000	1900	--	--	--	--
JUL									
05...	--	--	--	8600	1300	--	--	--	--
11...	--	--	--	6600	1100	--	--	--	--
18...	--	--	--	5400	940	--	--	--	--
25...	--	--	--	5200	830	--	--	--	--
AUG									
01...	--	--	--	4700	780	--	--	--	--
08...	--	--	--	3900	680	--	--	--	--
16...	180	0	--	4000	630	.6	--	310	200
22...	--	--	--	3600	--	--	--	--	--
29...	--	--	--	3600	--	--	--	--	--
SEP									
06...	199	--	--	3200	--	--	--	--	--
12...	209	--	--	3400	640	--	--	--	--
19...	200	0	--	3400	630	.5	--	300	190
29...	--	--	--	3600	--	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDE SOLIDS (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER B7 SW ST PETERSBURG INJ MON 632 (LAT 27 42 59 LONG 082 40 54.03)								
FEB , 1976								
12...	8800	200	19	--	32200	32000	56	--
JAN , 1977								
25...	--	--	--	--	--	--	--	--
MAY								
12...	--	--	--	1.022	--	--	--	1.0
16...	--	--	--	1.022	--	--	--	1.0
18...	--	--	--	1.022	--	--	--	1.0
JUN								
21...	--	--	--	1.017	--	--	--	1.0
22...	--	--	--	1.017	--	--	--	1.0
23...	--	--	--	1.017	--	--	--	1.0
24...	--	--	--	1.017	--	--	--	1.0
25...	--	--	--	1.016	--	--	--	2.0
26...	--	--	--	1.016	--	--	--	4.0
27...	--	--	--	1.015	--	--	--	7.0
JUL								
05...	--	--	--	1.010	--	--	--	49
11...	--	--	--	1.008	--	--	23	110
18...	--	--	--	1.006	--	--	--	130
25...	--	--	--	1.006	--	--	--	250
AUG								
01...	--	--	--	1.005	--	--	--	235
08...	--	--	--	1.004	--	--	--	342
16...	2200	7.4	12	1.004	7540	7460	35	350
22...	--	--	--	1.004	--	--	--	445
29...	--	--	--	1.004	--	--	--	340
SEP								
06...	--	--	--	1.003	--	--	--	465
12...	--	--	--	1.003	--	--	--	420
19...	2200	72	16	1.003	6780	6810	17	420
29...	--	--	--	1.004	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)								
FEB , 1976								
11...	1327	250	400	--	12000	--	7.3	167
JAN , 1977								
25...	1404	250	400	25.1	12500	--	--	--
MAR								
14...	1200	250	400	25.8	--	--	7.3	160
29...	0001	250	400	25.2	--	--	7.0	160
29...	0345	250	400	25.5	12000	--	--	--
29...	0815	250	400	25.0	11500	--	--	--
29...	1135	250	400	25.0	11600	--	--	--
29...	1525	250	400	25.5	11700	--	--	--
29...	1955	250	400	25.0	11600	--	--	--
29...	2345	250	400	25.2	11500	--	--	--
30...	0345	250	400	25.0	11500	--	--	--
30...	0740	250	400	25.0	11600	--	--	--
30...	1130	250	400	25.0	11700	--	--	--
30...	1540	250	400	25.5	11700	--	--	--
30...	2000	250	400	25.0	11600	--	--	--
30...	2350	250	400	25.5	11500	--	--	--
31...	0350	250	400	25.5	11500	--	--	--
31...	0745	250	400	25.0	11500	--	--	--
31...	1150	250	400	25.5	11500	--	--	--
31...	1200	250	400	25.4	--	--	6.9	160
31...	1540	250	400	25.5	11500	--	--	--
31...	1940	250	400	25.0	11500	--	--	--
31...	2400	250	400	25.0	11500	--	--	--
APP								
01...	0400	--	--	25.0	11500	--	--	--
01...	0805	250	400	25.0	11400	--	--	--
MAY								
13...	1400	250	400	25.0	11400	--	--	--
17...	1420	250	400	25.3	11500	--	--	--
18...	1215	250	400	25.2	11400	--	--	--
JUN								
21...	1937	250	400	24.6	9300	--	--	--
21...	1950	250	400	25.2	11900	--	--	--

72

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)									
FEB , 1976									
11...	203	0	3.1	3700	620	.5	21	600	270
JAN , 1977									
25...	--	--	--	3900	--	--	--	--	--
MAR									
14...	193	0	4.6	4000	680	.3	6.0	700	300
29...	190	0	5.0	4100	690	.2	21	650	290
29...	--	--	--	3800	650	--	--	--	--
29...	--	--	--	3900	600	--	--	--	--
29...	--	--	--	3800	600	--	--	--	--
29...	--	--	--	3800	600	--	--	--	--
29...	--	--	--	3800	600	--	--	--	--
29...	--	--	--	3800	600	--	--	--	--
30...	--	--	--	3800	600	--	--	--	--
30...	--	--	--	3800	600	--	--	--	--
30...	--	--	--	3800	600	--	--	--	--
30...	--	--	--	3800	590	--	--	--	--
30...	--	--	--	3800	590	--	--	--	--
30...	--	--	--	3800	600	--	--	--	--
30...	--	--	--	3800	590	--	--	--	--
30...	--	--	--	3800	590	--	--	--	--
31...	--	--	--	3800	590	--	--	--	--
31...	--	--	--	3800	590	--	--	--	--
31...	--	--	--	3800	600	--	--	--	--
31...	200	0	5.1	4000	680	.2	15	670	280
31...	--	--	--	3800	590	--	--	--	--
31...	--	--	--	3800	600	--	--	--	--
31...	--	--	--	3800	590	--	--	--	--
APR									
01...	--	--	--	3700	590	--	--	--	--
01...	--	--	--	3800	600	--	--	--	--
MAY									
13...	--	--	--	3700	720	--	--	--	--
17...	--	--	--	3700	--	--	--	--	--
18...	--	--	--	3700	--	--	--	--	--
JUN									
21...	--	--	--	2900	480	--	--	--	--
21...	--	--	--	3700	640	--	--	--	--

73

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS- SIUM (K) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	SUS-PENDED SOLIDS (MG/L)	TOTAL RHODA-MINE WT (UG/L)
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)								
FER , 1976								
11...	1700	20	29	--	7720	7080	15	--
JAN , 1977								
25...	--	--	--	--	--	--	--	--
MAR								
14...	1700	24	29	--	7780	7550	8	--
29...	1700	25	29	1.004	7390	7620	9	--
29...	--	--	--	1.004	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	1.004	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
30...	--	--	--	1.004	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	1.004	--	--	--	--
30...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
31...	--	--	--	1.004	--	--	--	--
31...	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--
31...	1700	25	30	1.004	7290	7510	3	--
31...	--	--	--	1.004	--	--	--	--
31...	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--
APR								
01...	--	--	--	1.004	--	--	--	--
01...	--	--	--	--	--	--	--	--
MAY								
13...	--	--	--	1.004	--	--	--	2.0
17...	--	--	--	1.004	--	--	--	2.0
18...	--	--	--	1.004	--	--	--	1.0
JUN								
21...	--	--	--	1.003	--	--	--	--
21...	--	--	--	1.004	--	--	--	2.0

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	CHEM-ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA-LINITY AS CAC03 (MG/L)
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)								
JUN , 1977								
22...	1720	250	400	--	11700	--	--	--
22...	1735	250	400	25.3	11600	--	--	--
23...	1105	250	400	24.5	11600	--	--	--
23...	1115	250	400	25.2	11400	--	--	--
24...	1030	250	400	24.8	11500	--	--	--
24...	1040	250	400	--	11800	--	--	--
25...	1015	250	400	24.8	11900	--	--	--
25...	1025	250	400	25.3	11900	--	--	--
26...	1000	250	400	24.9	11500	--	--	--
26...	1010	250	400	25.4	11800	--	--	--
27...	0920	250	400	24.9	11800	--	--	--
27...	0930	250	400	25.3	11800	--	--	--
JUL								
05...	0947	250	400	24.7	10800	--	--	--
05...	0957	250	400	25.3	12000	--	--	--
11...	0900	250	400	24.8	11500	--	--	--
11...	0910	250	400	25.3	12000	--	--	--
18...	0905	250	400	24.6	12000	--	--	--
18...	0915	250	400	25.2	--	--	--	--
25...	1600	250	400	24.5	11900	--	--	--
25...	1610	250	400	25.2	11800	--	--	--
AUG								
01...	1725	250	400	25.1	11800	--	--	--
08...	1615	250	400	25.1	11900	--	7.2	--
15...	1655	250	400	25.5	12100	--	--	--
22...	1905	250	400	25.2	12300	--	7.2	--
30...	1057	250	400	26.0	12300	--	--	--
SEP								
08...	1015	250	400	24.7	11600	--	7.4	--
12...	1955	250	400	24.8	12400	--	6.7	184
19...	1715	250	400	25.3	12500	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)									
JUN , 1977									
22...	--	--	--	3800	650	--	--	--	--
22...	--	--	--	3700	630	--	--	--	--
23...	--	--	--	3700	590	--	--	--	--
23...	--	--	--	3700	570	--	--	--	--
24...	--	--	--	3700	600	--	--	--	--
24...	--	--	--	3800	600	--	--	--	--
25...	--	--	--	3700	610	--	--	--	--
25...	--	--	--	3700	630	--	--	--	--
26...	--	--	--	3700	620	--	--	--	--
26...	--	--	--	3700	610	--	--	--	--
27...	--	--	--	3800	610	--	--	--	--
27...	--	--	--	3800	560	--	--	--	--
JUL									
05...	--	--	--	3400	600	--	--	--	--
05...	--	--	--	3800	580	--	--	--	--
11...	--	--	--	3800	620	--	--	--	--
11...	--	--	--	3800	650	--	--	--	--
18...	--	--	--	3800	530	--	--	--	--
18...	--	--	--	3000	640	--	--	--	--
25...	--	--	--	3800	620	--	--	--	--
25...	--	--	--	3800	660	--	--	--	--
AUG									
01...	--	--	--	3800	630	--	--	--	--
08...	--	--	--	4000	630	--	--	--	--
15...	--	--	--	4000	540	--	--	--	--
22...	--	--	--	3700	530	--	--	--	--
30...	--	--	--	3900	--	--	--	--	--
SEP									
08...	--	--	--	3700	660	--	--	--	--
12...	224	--	--	3900	640	--	--	--	--
19...	--	--	--	4000	660	--	--	--	--

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SUS- PENDED SOLIDS (MG/L)	TOTAL RHODA- MINE WT (UG/L)
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)								
JUN , 1977								
22...	--	--	--	1.004	--	--	--	--
22...	--	--	--	1.004	--	--	--	2.0
23...	--	--	--	1.004	--	--	--	--
23...	--	--	--	1.004	--	--	--	2.0
24...	--	--	--	1.004	--	--	--	--
24...	--	--	--	1.004	--	--	--	2.0
25...	--	--	--	1.004	--	--	--	--
25...	--	--	--	1.004	--	--	--	2.0
26...	--	--	--	1.004	--	--	--	--
26...	--	--	--	1.004	--	--	--	2.0
27...	--	--	--	1.004	--	--	--	--
27...	--	--	--	1.004	--	--	--	1.0
JUL								
05...	--	--	--	1.004	--	--	--	--
05...	--	--	--	1.004	--	--	--	2.0
11...	--	--	--	1.004	--	--	--	--
11...	--	--	--	1.004	--	--	--	1.0
18...	--	--	--	1.004	--	--	--	--
18...	--	--	--	1.003	--	--	--	2.0
25...	--	--	--	1.004	--	--	--	--
25...	--	--	--	1.004	--	--	--	1.0
AUG								
01...	--	--	--	1.005	--	--	--	2.0
08...	--	--	--	1.004	--	--	--	2.0
15...	--	--	--	1.004	--	--	--	2.0
22...	--	--	--	1.004	--	--	--	2.0
30...	--	--	--	1.004	--	--	--	2.0
SEP								
08...	--	--	--	1.004	--	--	--	2.0
12...	--	--	--	1.004	--	--	--	3.0
19...	--	--	--	1.004	--	--	--	2.0

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	PH (UNITS)	ALKA- LITY AS CACO3 (MG/L)
WELL NUMBER B9 SW ST PETERSBURG INJ MON 180 (LAT 27 42 59 LONG 082 40 55.01)								
JUL , 1977								
18...	1655	190	198	26.4	2750	--	--	--
19...	1500	190	198	--	--	--	--	--
20...	0900	190	198	--	--	--	--	--
25...	1650	190	198	28.3	2770	--	--	--
AUG								
03...	0915	190	198	25.2	2880	53	--	170
09...	1150	190	198	26.8	2750	--	7.8	--
15...	1800	190	198	26.2	2920	--	7.7	--
22...	1340	190	198	25.5	2970	--	--	--
30...	1125	190	198	27.7	3040	--	--	--
SEP								
06...	1850	190	198	27.8	3100	--	7.7	208
12...	1630	190	198	26.9	3190	--	7.5	194
19...	1730	190	198	27.0	3180	--	--	--

78

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	TOTAL SUL- FIDE (S) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
WELL NUMBER B9 SW ST PETERSBURG INJ MON 180 (LAT 27 42 59 LONG 082 40 55.01)									
JUL , 1977									
18...	--	--	--	720	120	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
25...	--	--	--	730	130	--	--	--	--
AUG									
03...	210	0	--	750	110	.2	--	410	40
09...	--	--	--	740	--	--	--	--	--
15...	--	--	--	780	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
30...	--	--	--	790	120	--	--	--	--
SEP									
06...	254	--	--	820	130	--	--	--	--
12...	236	--	--	820	120	--	--	--	--
19...	--	--	--	850	130	--	--	--	--

79

Table 23.--Chemical and Rhodamine WT analyses of water from selected wells at the test site - continued

DATE	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	SUS-PENDED SOLIDS (MG/L)	TOTAL RHODA-MINE WT (UG/L)
WELL NUMBER B9 SW ST PETERSBURG INJ MON 180 (LAT 27 42 59 LONG 082 40 55.01)								
JUL . 1977								
18...	--	--	--	1.000	--	--	--	3.0
19...	--	--	--	--	--	--	--	2.0
20...	--	--	--	--	--	--	--	2.0
25...	--	--	--	1.000	--	--	--	2.0
AUG								
03...	80	10	50	1.000	2300	1560	11	2.0
09...	--	--	--	1.000	--	--	--	2.0
15...	--	--	--	1.000	--	--	--	2.0
22...	--	--	--	1.000	--	--	--	2.0
30...	--	--	--	1.000	--	--	--	2.0
SEP								
06...	--	--	--	1.000	--	--	--	2.0
12...	--	--	--	1.000	--	--	--	2.0
19...	--	--	--	1.000	--	--	--	3.0

Table 24.--Concentrations of trace elements in water from selected wells at the test site

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	HEXA-VALENT CHRO-MIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)											
APR . 1977											
13...	0130	920	1120	0	1700	0	0	0	0	0	300
19...	1740	920	1120	0	4000	0	3	0	0	0	120
22...	1345	920	1120	0	3900	0	6	0	0	0	120
JUL											
18...	1725	920	1120	1	340	0	3	0	0	4	50
AUG											
16...	1200	920	1120	1	--	0	2	0	0	7	--
SEP											
19...	1845	920	1120	1	--	0	0	0	1	26	60
19...	2030	920	1120	1	--	0	0	0	3	15	40
WELL NUMBER B1 SW ST PETERSBURG MON 1286 (LAT 27 42 59 LONG 082 41 02.01)											
FEB . 1976											
03...	1400	1215	1286	1	2800	0	3	0	0	0	2500
WELL NUMBER B2 SW ST PETERSBURG MON 1120 (LAT 27 42 59 LONG 082 41 02.02)											
FEB . 1976											
03...	1440	941	1120	0	2700	1	0	0	0	0	440

Table 24.--Concentrations of trace elements in water from selected wells at the test site - continued

DATE	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MOLYBDENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED VANADIUM (V) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)										
APR . 1977										
13...	2	50	0	0	20000	95	30	110	160	.0
19...	0	50	0	0	17000	10	30	10	170	.4
22...	0	50	0	0	16000	220	30	10	170	.4
JUL										
18...	0	20	2	6	330	--	20	10	0	.0
AUG										
16...	5	20	0	4	300	7.0	30	0	10	.0
SEP										
19...	5	20	4	2	200	5.7	20	30	0	.0
19...	5	20	4	3	190	7.0	50	10	0	.0
WELL NUMBER B1 SW ST PETERSBURG MON 1286 (LAT 27 42 59 LONG 082 41 02.01)										
FEB . 1976										
03...	5	160	2	4	28000	470	20	10	180	.0
WELL NUMBER B2 SW ST PETERSBURG MON 1120 (LAT 27 42 59 LONG 082 41 02.02)										
FEB . 1976										
03...	11	50	0	0	37000	500	20	10	170	.1

Table 24.--Concentrations of trace elements in water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	HEXA-VALENT CHROMIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
WELL NUMBER B3 SW ST PETERSBURG MON 851 (LAT 27 42 59 LONG 082 41 02.03)											
FEB . 1976											
03...	1520	730	851	2	2100	0	5	0	0	0	1500
JUL . 1977											
11...	1200	730	851	6	1500	0	0	0	0	2	50
AUG											
16...	1150	730	851	3	--	0	--	--	0	0	--
SEP											
19...	1358	730	851	1	--	0	0	0	2	1	220
WELL NUMBER B4 SW ST PETERSBURG MON 566 (LAT 27 42 59 LONG 082 41 02.04)											
FEB . 1976											
03...	1544	520	566	1	710	0	0	0	0	0	160
WELL NUMBER B5 SW ST PETERSBURG MON 396 (LAT 27 42 59 LONG 082 41 02.05)											
FEB . 1976											
03...	1230	257	396	1	90	1	10	0	0	0	130

Table 24.--Concentrations of trace elements in water from selected wells at the test site - continued

DATE	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MOLYBDENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED VANADIUM (V) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
WELL NUMBER B3 SW ST PETERSBURG MON 851 (LAT 27 42 59 LONG 082 41 02.03)										
FEB , 1976 03...	4	140	15	0	31000	460	20	20	170	.1
JUL , 1977 11...	5	30	32	5	--	--	30	10	80	.0
AUG 16...	4	20	16	5	7000	--	20	0	50	.0
SEP 19...	4	20	7	2	8700	--	10	0	50	.0
WELL NUMBER B4 SW ST PETERSBURG MON 566 (LAT 27 42 59 LONG 082 41 02.04)										
FEB , 1976 03...	5	100	30	0	40000	350	30	10	140	1.0
WELL NUMBER B5 SW ST PETERSBURG MON 396 (LAT 27 42 59 LONG 082 41 02.05)										
FEB , 1976 03...	0	40	5	0	15000	27	10	20	20	.2

Table 24.--Concentrations of trace elements in water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	HEXA-VALENT CHROMIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
WELL NUMBER B6 SW ST PETERSBURG INJ MON 850 (LAT 27 42 59 LONG 082 40 54.02)											
FEB , 1976 11...	1430	720	850	0	2200	0	6	0	0	0	330
JUL , 1977 12...	1445	720	850	12	930	0	1	0	0	1	1200
AUG 16...	1000	720	850	2	--	0	0	0	0	0	--
SEP 19...	1725	720	850	1	--	0	2	0	2	0	570
WELL NUMBER B7 SW ST PETERSBURG INJ MON 632 (LAT 27 42 59 LONG 082 40 54.03)											
FEB , 1976 12...	1525	551	632	1	410	1	5	0	0	0	1100
JUL , 1977 11...	1750	551	632	8	1100	0	1	0	0	4	0
AUG 16...	0915	551	632	1	--	0	0	0	0	0	--
SEP 19...	1755	551	632	1	--	0	0	0	3	0	830
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)											
FEB , 1976 11...	1327	250	400	0	80	0	0	0	0	0	220
MAR , 1977 14...	1200	250	400	1	70	0	6	0	0	0	210
29...	0001	250	400	0	80	0	0	0	0	0	250
31...	1200	250	400	0	80	0	0	0	0	0	100
WELL NUMBER B9 SW ST PETERSBURG INJ MON 180 (LAT 27 42 59 LONG 082 40 55.01)											
AUG , 1977 03...	0915	190	198	3	70	0	2	0	0	0	90

Table 24.--Concentrations of trace elements in water from selected wells at the test site - continued

DATE	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MOLYBDENUM (MO) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED VANADIUM (V) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)
WELL NUMBER B6 SW ST PETERSBURG INJ MON 850 (LAT 27 42 59 LONG 082 40 54.02)										
FEB . 1976										
11...	0	50	2	0	33000	440	20	10	160	.3
JUL . 1977										
12...	0	60	33	10	--	--	10	10	30	.0
AUG										
16...	4	40	12	2	3200	--	10	0	20	.0
SEP										
19...	10	40	4	4	3000	--	10	10	20	.0
WELL NUMBER B7 SW ST PETERSBURG INJ MON 632 (LAT 27 42 59 LONG 082 40 54.03)										
FEB . 1976										
12...	0	70	12	0	40000	390	20	10	130	.4
JUL . 1977										
11...	4	40	36	6	--	--	10	40	70	.0
AUG										
16...	4	140	15	2	6900	--	10	0	40	.0
SEP										
19...	3	20	6	0	6300	--	20	10	40	.0
WELL NUMBER B8 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)										
FEB . 1976										
11...	0	10	0	0	18000	51	10	20	40	.0
MAR . 1977										
14...	2	30	3	2	17000	850	20	20	40	.0
29...	0	30	0	0	16000	95	40	110	30	.0
31...	0	30	0	0	15000	96	10	120	40	.0
WELL NUMBER B9 SW ST PETERSBURG INJ MON 180 (LAT 27 42 59 LONG 082 40 55.01)										
AUG . 1977										
03...	5	20	12	3	2700	--	0	20	10	.0

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site

DATE	TIME	DEPTH TO TOP OF SAMPLE INTERVAL (FT)	DEPTH TO BOTTOM OF SAMPLE INTERVAL (FT)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL NITROGEN (MG/L)	TOTAL ORGANIC NITROGEN (MG/L)	TOTAL AMMONIA NITROGEN (MG/L)	TOTAL NITRITE (MG/L)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)								
APR . 1977								
13...	0130	920	1120	--	--	.03	.46	.00
19...	1740	920	1120	--	--	.11	.45	.00
22...	1345	920	1120	--	--	.07	.45	.00
JUL								
18...	1725	920	1120	2.2	12	.40	11	.78
AUG								
01...	1735	920	1120	--	11	.42	7.8	2.4
01...	1800	920	1120	--	11	.97	8.4	1.8
08...	1630	920	1120	--	9.0	3.9	3.7	.70
08...	1730	920	1120	--	11	1.9	8.0	1.0
16...	1100	920	1120	--	4.6	1.3	2.4	.52
16...	1200	920	1120	.1	4.5	1.3	1.7	1.0
22...	1900	920	1120	--	9.8	1.5	2.7	3.5
22...	1930	920	1120	--	8.8	1.6	2.6	2.6
29...	1600	920	1120	--	7.6	1.0	4.0	1.6
29...	1630	920	1120	--	7.2	.70	4.2	1.6
SEP								
06...	1835	920	1120	--	--	.50	4.8	.87
06...	2045	920	1120	--	--	.80	4.2	.66
12...	1520	920	1120	--	--	.80	5.6	1.8
13...	1130	920	1120	--	7.8	.87	5.6	.90
19...	1845	920	1120	.4	7.3	.73	5.8	.60
19...	2030	920	1120	--	7.1	1.0	5.4	.55

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	CON- FIRMED COLI- FORM (MPN)	FECAL COLI- FORM (EC BROTH) (MPN)	FECAL STREP- TOCOCCI (MPN)
WELL NUMBER A3 SW ST PETERSBURG INJ WELL 1110 (LAT 27 42 59 LONG 082 40 54.01)							
APR . 1977							
13...	.00	--	.06	.05	--	--	--
19...	.00	--	--	.07	--	--	--
22...	.00	--	.10	.08	--	--	--
JUL							
18...	.15	11	3.5	3.3	1100000	460000	4600
AUG							
01...	1.0	8.2	4.8	4.4	--	--	--
01...	.80	9.3	5.0	4.6	--	--	--
08...	.70	7.6	4.1	3.4	--	--	--
08...	.40	9.9	4.6	4.5	--	--	--
16...	.39	3.7	2.3	2.3	--	--	--
16...	.50	3.0	2.1	2.1	<3	<3	<3
22...	2.1	4.2	6.2	6.1	--	--	--
22...	2.0	4.2	6.8	6.2	--	--	--
29...	1.0	5.0	2.9	2.7	--	--	--
29...	.70	4.9	3.0	2.8	--	--	--
SEP							
06...	.31	--	2.5	2.4	--	--	--
06...	.16	--	3.0	3.0	--	--	--
12...	1.8	--	2.1	2.1	--	--	--
13...	.50	6.4	2.0	2.0	--	--	--
19...	.19	6.5	2.4	2.4	<3	<3	<3
19...	.18	6.4	2.6	2.6	--	--	--

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)
WELL NUMBER B1 SW ST PETERSBURG MON 1286 (LAT 27 42 59 LONG 082 41 02.01)									
FEB . 1976									
24...	1110	1215	1286	1.0	--	.16	.92	.00	.00
WELL NUMBER B2 SW ST PETERSBURG MON 1120 (LAT 27 42 59 LONG 082 41 02.02)									
FEB . 1976									
24...	1140	941	1120	1.8	--	.30	.49	.01	.01
WELL NUMBER B3 SW ST PETERSBURG MON 851 (LAT 27 42 59 LONG 082 41 02.03)									
FEB . 1976									
24...	1207	730	851	.6	--	.08	.58	.00	.00
JUL . 1977									
12...	1425	730	851	.3	4.8	.40	4.4	.00	.01
AUG									
01...	1458	730	851	--	4.8	.00	4.8	.00	.00
08...	1515	730	851	--	5.4	1.1	4.3	.00	.00
16...	1150	730	851	.1	4.5	.04	4.5	.00	.00
22...	1640	730	851	--	4.7	.53	4.2	.00	.00
29...	2145	730	851	--	3.8	.26	3.6	.00	.00
SEP									
07...	1410	730	851	--	--	.00	3.6	.00	.00
12...	1725	730	851	--	--	.10	3.7	.01	.00
19...	1358	730	851	.7	4.3	.41	3.9	.01	.00
WELL NUMBER B4 SW ST PETERSBURG MON 566 (LAT 27 42 59 LONG 082 41 02.04)									
FEB . 1976									
25...	1025	520	566	--	--	.32	1.1	.00	.12

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TOTAL KJFL- DAHL- NITRO- GEN (M) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHOPHOS- PHOS- (P) (MG/L)	IMME- DIATE COLI- FORM (COL. REP 100 ML)	CON- FIRMED COLI- FORM (MPN)	FECAL COLI- FORM (EC BROTH) (MPN)	FECAL COLI- FORM (COL. PER 100 ML)	FECAL STREP- TOCOCCHI (MPN)
WELL NUMBER R1 SW ST PETERSBURG MON 1286 (LAT 27 42 59 LONG 082 41 02.01)								
FEB . 1976 24...	--	.15	.15	<1	--	--	<1	--
WELL NUMBER R2 SW ST PETERSBURG MON 1120 (LAT 27 42 59 LONG 082 41 02.02)								
FEB . 1976 24...	--	.07	.06	<1	--	--	<1	--
WELL NUMBER R3 SW ST PETERSBURG MON 851 (LAT 27 42 59 LONG 082 41 02.03)								
FEB . 1976 24...	--	.08	.08	<6	--	--	<1	--
MAR . 1977 12...	4.8	--	--	--	23	<3	--	<3
APR . 1977 01...	4.8	1.5	1.4	--	--	--	--	--
02...	5.4	1.8	1.7	--	--	--	--	--
16...	4.5	2.6	1.8	--	<3	<3	--	<3
22...	4.7	1.8	1.8	--	--	--	--	--
29...	3.8	1.7	1.7	--	--	--	--	--
SEP 07...	--	1.7	1.7	--	--	--	--	--
12...	--	1.8	1.7	--	--	--	--	--
19...	4.3	1.7	1.7	--	<3	<3	--	<3
WELL NUMBER R4 SW ST PETERSBURG MON 566 (LAT 27 42 59 LONG 082 41 02.04)								
FEB . 1976 25...	--	.04	.01	<1	--	--	<1	--

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)
WELL NUMBER R5 SW ST PETERSBURG MON 396 (LAT 27 42 59 LONG 082 41 02.05)									
FEB . 1976 25...	1054	257	396	1.2	--	.21	.91	.00	.01

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TOTAL KJFL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	CON- FIRMED COLI- FORM (MPN)	FECAL COLI- FORM (EC BROTH) (MPN)	FECAL COLI- FORM (COL. PER 100 ML)	FECAL STREP- TOCOCCI (MPN)
WELL NUMBER B5 SW ST PETERSBURG MON 396 (LAT 27 42 59 LONG 082 41 02.05)								
FEB , 1976 25...	--	.10	.08	B3	--	--	<1	--

92

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
WELL NUMBER B6 SW ST PETERSBURG INJ MON 850 (LAT 27 42 59 LONG 082 40 54.02)								
JUL , 1977 12...	1445	720	850	.3	4.2	.20	4.0	.01
AUG 01...	1635	720	850	--	9.1	2.1	7.0	.00
09...	1030	720	850	--	6.4	.88	5.6	.00
16...	1000	720	850	.4	5.6	.34	5.3	.01
23...	1345	720	850	--	4.7	.72	4.0	.00
29...	1640	720	850	--	3.7	.42	3.3	.00
SEP 06...	1735	720	850	--	--	.40	3.9	.01
12...	1940	720	850	--	--	.30	5.0	.01
19...	1725	720	850	.6	5.5	.29	5.3	.01

WELL NUMBER B7 SW ST PETERSBURG INJ MON 632 (LAT 27 42 59 LONG 082 40 54.03)

JUL , 1977 11...	1750	551	632	--	4.8	.05	4.8	.00
12...	1510			.6	--	--	--	--
AUG 01...	1645	551	632	--	5.3	.84	4.5	.00
08...	1525	551	632	--	5.6	.54	5.1	.01
16...	0915	551	632	.1	5.5	.36	5.2	.00
22...	2005	551	632	--	5.2	.50	4.7	.00
29...	1245	551	632	--	5.1	.50	4.6	.00
SEP 06...	1950			--	--	.00	.39	.00
12...	1920	551	632	--	--	.20	4.0	.01
19...	1755	551	632	.8	4.6	.43	4.2	.01

93

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	CON- FIRMED COLI- FORM (MPN)	FECAL COLI- FORM (EC BROTH) (MPN)	FECAL STREP- TOCOCCI (MPN)
WELL NUMBER 86 SW ST PETERSBURG INJ MON 850 (LAT 27 42 59 LONG 082 40 54.02)							
JUL . 1977							
12...	.00	4.2	1.7	1.6	43	43	4
AUG							
01...	.00	9.1	2.0	1.8	--	--	--
09...	.00	4.4	3.1	2.8	--	--	--
16...	.00	5.6	2.4	2.4	4	<3	<3
23...	.00	4.7	2.7	2.7	--	--	--
29...	.00	3.7	2.4	2.3	--	--	--
SEP							
06...	.00	--	2.4	2.4	--	--	--
12...	.00	--	2.6	2.5	--	--	--
19...	.00	5.5	2.5	2.5	4	4	4

WELL NUMBER 87 SW ST PETERSBURG INJ MON 632 (LAT 27 42 59 LONG 082 40 54.03)

JUL . 1977							
11...	.00	4.8	.63	.20	--	--	--
12...	--	--	--	--	4	<3	<3
AUG							
01...	.00	5.3	.40	.05	--	--	--
08...	.00	5.6	1.1	.93	--	--	--
16...	.01	5.5	.26	.24	<3	<3	<3
22...	.01	5.2	1.2	1.0	--	--	--
29...	.00	5.1	.87	.28	--	--	--
SEP							
06...	.00	--	1.0	1.0	--	--	--
12...	.00	--	1.0	.96	--	--	--
19...	.00	4.6	1.0	1.0	<3	<3	<3

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TIME	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)
WELL NUMBER 88 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)								
MAR . 1977								
14...	1200	250	400	--	--	.25	1.2	.00
29...	0001	250	400	--	--	.18	1.2	.00
31...	1200	250	400	--	--	.21	1.2	.00
WELL NUMBER 89 SW ST PETERSBURG INJ MON 180 (LAT 27 42 59 LONG 082 40 55.01)								
AUG . 1977								
03...	0915	190	198	4.6	.87	.20	.67	.00

Table 25.--Concentrations of nitrogen, phosphorus, coliform and streptococci in water from selected wells at the test site - continued

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORTHO PHOS- PHORUS (P) (MG/L)	CON- FIRMED COLI- FORM (MPN)	FECAL COLI- FORM (EC PROTH) (MPN)	FECAL STREP- TOCOCCI (MPN)
WELL NUMBER 88 SW ST PETERSBURG INJ MON 400 (LAT 27 42 59 LONG 082 40 54.04)							
MAR . 1977							
14...	.00	--	.05	.05	--	--	--
29...	.00	--	.02	.01	--	--	--
31...	.00	--	.04	.04	--	--	--
WELL NUMBER 89 SW ST. PETERSBURG INJ MON 180 (LAT 27 42 59 LONG 082 40 55.01)							
AUG . 1977							
03...	.00	.87	.07	.02	<3	<3	<3

Table 26.--Record of selected wells near the Southwest St. Petersburg injection test site

Well number	Latitude Longitude	Well name	Land surface altitude (ft above mean sea level)	Reported total depth (ft below land surface)	Reported open interval (ft below land surface)	Casing diameter (in)	Distance from injection well A3 (ft)
S1	274218082404401	Sheraton Bel Air	5	-	-	4	4350
S2	274218082404402	Sheraton Bel Air	5	-	-	-	4350
S3	274227082404001	Carlton Arms Apartments	5	150	-	4	3500
S4	274247082410901	Eckerd College	5.87	325	200-325	6	1800
S5	274250082403501	Bent Pine Apartments	5	-	-	1-1/4	2100
S6	274252082403501	Maximo Presbyterian Church	5	-	-	-	1800
S7	274257082404401	South Gate Towers	5	-	-	2	925
S8	274259082403401	White Hall Convalescent Hall	6	-	-	1-1/4	1875
S9	274311082411801	Turecki	5	20	-	-	2400
S10	274311082412201	Baumgardner	5	65	-	-	2750
S11	274311082412501	Smick	5	35	-	-	3050

Table 27.--Chemical analyses of water from selected wells near the test site

[illegible]

Table 27.--Chemical analyses of water from selected wells near the test site - continued

[illegible]

Table 27.--Chemical analyses of water from selected wells near the test site - continued

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SUSPENDED SOLIDS (MG/L)
WELL NUMBER S1 SHERATON BEL AIR (LAT 27 42 18 LONG 082 40 44.01)											
SEP , 1975 03...	.0	.0	43	2.7	5.9	1.4	6.8	.999	171	146	5
- WELL NUMBER S2 SHERATON BEL AIR (LAT 27 42 18 LONG 082 40 44.02)											
SEP , 1975 19...	--	--	35	160	480	--	--	1.000	--	--	--
WELL NUMBER S3 CARLTON ARMS APTS (LAT 27 42 27 LONG 082 40 40.01)											
AUG , 1975 19...	--	--	--	--	470	--	--	0.999	--	--	--
WELL NUMBER S4 ECKERD COLLEGE (LAT 27 42 47 LONG 082 41 09.01)											
AUG , 1975 13...	.3	3.9	360	130	560	17	29	--	4140	3040	7
SEP 13...	--	--	--	--	--	--	--	--	--	--	--
SEP 18...	--	--	370	130	5500	--	--	1.000	--	--	--
WELL NUMBER S5 BENT PINES APTS (LAT 27 42 50 LONG 082 40 35.01)											
AUG , 1975 19...	--	--	--	--	35	--	--	0.998	--	--	--

Table 27.--Chemical analyses of water from selected wells near the test site - continued

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	BROMIDE (BR) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DENSITY (GM/ML AT 20 C)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SUSPENDED SOLIDS (MG/L)
WELL NUMBER S6 MAXIMO PRESBYTERIAN CHURCH (LAT 27 42 52 LONG 082 40 35.01)											
SEP , 1975 03...	.0	.3	130	2.7	22	.7	9.9	0.998	427	399	5
WELL NUMBER S7 SOUTH GATE TOWERS (LAT 27 42 57 LONG 082 40 44.01)											
AUG , 1975 19...	--	--	--	--	500	--	--	0.999	--	--	--
SEP 24...	.5	5.0	330	120	480	15	33	1.000	3290	2690	17
WELL NUMBER S8 WHITE HALL CONVALESCENT HOME (LAT 27 42 59 LONG 082 40 34.01)											
AUG , 1975 19...	--	--	--	--	19	--	--	0.999	--	--	--
WELL NUMBER S9 TURECKI (LAT 27 43 11 LONG 082 41 18.01)											
SEP , 1975 03...	.0	.2	7.6	5.1	16	6.5	8.1	0.998	120	111	7
WELL NUMBER S10 BAUMGARDNER (LAT 27 43 11 LONG 082 41 22.01)											
SEP , 1975 03...	--	--	--	--	15	--	--	0.996	--	--	--

Table 28.--Concentrations of nitrogen, phosphorus, and coliform in water from selected wells near the test site

DATE	TIME	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	TOTAL ORGANIC NITROGEN (MG/L)	TOTAL AMMONIA NITROGEN (MG/L)	TOTAL NITRITE (MG/L)	TOTAL NITRATE (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORTHO PHOSPHORUS (P) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
WELL NUMBER S1 SHERATON BEL AIR (LAT 27 42 18 LONG 082 40 44.01)										
SEP , 1975										
03...	0920	1.6	.11	.16	.00	.00	.04	.02	100	7
WELL NUMBER S6 MAXIMO PRESBYTERIAN CHURCH (LAT 27 42 52 LONG 082 40 35.01)										
SEP , 1975										
03...	1120	1.0	.27	.49	.00	.00	.53	.53	<1	<1
WELL NUMBER S7 SOUTH GATE TOWERS (LAT 27 42 57 LONG 082 40 44.01)										
SEP , 1975										
24...	1000	1.7	.15	.87	.00	.00	.04	.03	<1	<1
WELL NUMBER S9 TURECKI (LAT 27 43 11 LONG 082 41 18.01)										
SEP , 1975										
03...	1030	2.5	.22	.88	.00	.00	.05	.03	<1	<1

Table 29.--Concentrations of trace elements in water from selected wells near the test site

DATE	TIME	TOTAL DEPTH OF WELL (FT)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	HEXA-VALENT CHROMIUM (CR6) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
WELL NUMBER S1 SHERATON BEL AIR (LAT 27 42 18 LONG 082 40 44.01)										
SEP , 1975										
03...	0920	--	0	30	0	0	0	0	2	0
WELL NUMBER S4 ECKERD COLLEGE (LAT 27 42 47 LONG 082 41 09.01)										
AUG , 1975										
13...	1015	325	0	70	0	1	0	0	0	600
WELL NUMBER S6 MAXIMO PRESBYTERIAN CHURCH (LAT 27 42 52 LONG 082 40 35.01)										
SEP , 1975										
03...	1120	--	0	80	0	0	0	0	0	70
WELL NUMBER S7 SOUTH GATE TOWERS (LAT 27 42 57 LONG 082 40 44.01)										
SEP , 1975										
24...	1000	--	0	80	0	0	0	0	0	750
WELL NUMBER S9 TURECKI (LAT 27 43 11 LONG 082 41 18.01)										
SEP , 1975										
03...	1030	20	2	70	0	0	0	0	3	560

Table 29.--Concentrations of trace elements in water from selected wells near the test site - continued

DATE	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MOLYB- DENUM (MO) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED VANA- DIUM (V) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)
WELL NUMBER S1 SHERATON BEL AIR (LAT 27 42 18 LONG 082 40 44.01)										
SEP , 1975 03...	0	10	6	0	120	.0	10	10	0	.0
WELL NUMBER S4 ECKERD COLLEGE (LAT 27 42 47 LONG 082 41 09.01)										
AUG , 1975 13...	0	80	0	0	13000	36	10	0	20	.0
WELL NUMBER S6 MAXIMO PRESBYTERIAN CHURCH (LAT 27 42 52 LONG 082 40 35.01)										
SEP , 1975 03...	0	0	7	0	850	2.7	70	10	0	.0
WELL NUMBER S7 SOUTH GATE TOWERS (LAT 27 42 57 LONG 082 40 44.01)										
SEP , 1975 24...	0	10	1	0	10000	32	0	10	20	.0
WELL NUMBER S9 TURECKI (LAT 27 43 11 LONG 082 41 18.01)										
SEP , 1975 03...	2	0	7	0	80	7.0	110	420	0	.0

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
325 John Knox Rd--Suite F240
Tallahassee, Florida 32303

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT. 413



FIRST CLASS

C. W. "Bud" Hendry
Chief, Bureau of Geology
Fla Dept of Nat Resources
903 W. Tennessee St.
Tallahassee, FL 32304