

Special Publication SJ 88-SP7

ANNUAL REPORT ON
ABANDONED ARTESIAN WELLS

1988

By

Jeffrey B. Davis

Water Resources Department
St. Johns River Water Management District
Palatka, Florida

June 1989

Project Number 10 018 02

TABLE OF CONTENTS

	PAGE
INTRODUCTION.....	1
PURPOSE AND SCOPE.....	2
HISTORICAL REVIEW - LEGISLATION AND POLICIES.....	2
WELL PLUGGING PROGRAM	
INVENTORY.....	5
PRIORITY.....	9
PLUGGING METHODOLOGY.....	10
CURRENT STATUS.....	14
COSTS.....	16
DEFINITIONS.....	19
REFERENCES.....	21

LIST OF TABLES

TABLE		PAGE
1	Actual Plugging Costs	17
2	Actual Costs for Program Support.....	17
3	Projected Actual Plugging Costs to Plug All Wells by 1992	18
4	Projected Costs for Program Support until 1992.....	18
5	Total Projected Costs for Actual Plugging and Program Support Until 1992.....	18

LIST OF FIGURES

FIGURE		PAGE
1	Number of Free Flowing Wells in Each County (Healy 1978)	7
2	Abandoned Artesian Wells in the SJRWMD	8
3	QWIP Plug	13

LIST OF APPENDICES

APPENDIX		PAGE
A	Outline Provided by the Department of Environmental Regulation	23
B	Inventory of Free Flowing and Plugged Wells	27
C	Contractual and Cooperative Agreements	58
	Cooperative Agreement Between St. Johns River Water Management District and Brevard County	59
	Cooperative Agreement Between St. Johns River Water Management District and Seminole Soil and Water Conservation District	63
	Contractual Agreement Between St. Johns River Water Management District and Blount Water Systems	70
D	Abandoned Artesian Well Plugging Program Guidelines and Procedures	73

INTRODUCTION

Uncontrolled or improperly constructed artesian wells have a major effect on the quality and quantity of Florida's ground water resources. Thousands of wells have been drilled that do not meet current well construction standards and should be abandoned because of problems associated with these poor construction techniques. In addition to the poor construction, many of these wells were drilled some time ago and the poor water quality has caused corrosion of the casing and subsequent leaking. In some cases, the flow has reduced the potentiometric surface which has increased the potential for mineralized water to contaminate the potable water supplies.

In the St. Johns River Water Management District (SJRWMD), the Floridan aquifer is the source of artesian flow for these wells. This aquifer is composed of limestone units overlain by the confining clays of the Hawthorn Group.

The District has an inventory of 301 abandoned artesian wells that need to be controlled. Flows measured or estimated from 133 of these wells account for approximately 18.3 million gallons per day (MGD) of water that is wasted. An additional 29 MGD is estimated to flow from the remaining wells included in the inventory. This estimate is based on an average flow of .17 MGD per well for the 168 wells for which flows have not been measured. The .17 MGD flow per well is an arithmetic average of the flow from all measured wells. To date, the well plugging program has provided for the plugging or reconstruction of 233 wells, thereby saving a flow of 45 MGD.

PURPOSE AND SCOPE

This document was prepared in order to comply with the requirements of Part IV of the "Water Quality Act of 1983." This document is the sixth annual report to the Department of Environmental Regulation of the District's abandoned artesian well inventory and work plan for controlling or plugging inventoried wells. Appendix A shows the format provided by the Department of Environmental Regulation to be used for this report. This report was also prepared for public distribution to show the District's progress in pursuing the problems resulting from abandoned artesian wells and to provide effective planning for future work in this field.

HISTORICAL REVIEW-LEGISLATION AND POLICIES

In the early 1950s, severe drought conditions prompted regulations to be passed to prevent the waste of water from flowing wells. Sections 3703.051-.055, Florida Statutes (1953), required that working valves or caps be installed on all free flowing wells. In 1957, the Legislature adopted Sections 373.021-.061, F.S., which provided for the plugging of all artesian wells which were in violation of the law. Until 1972, the regulation and control of abandoned artesian wells was minimal. In 1972, the Florida Legislature established five water management districts. The rules covering abandoned artesian wells were then to be enforced by the districts through the Department of Environmental Regulation (DER).

In June 1983, the "Water Quality Assurance Act of 1983" was enacted. This act calls for all known abandoned artesian wells to be plugged by the water management districts by January 1, 1992. In addition, it requires that an initial inventory and work plan outlining the methods and costs for well plugging be submitted by the districts to DER by January 1, 1983. It further requires that in each succeeding year an annual report shall be sent until all the wells are plugged or until 1992.

The SJRWMD began well plugging activities in 1976. This began as a cooperative program with the Agricultural Stabilization and Conservation Services (ASCS) to improve water quality in irrigation wells. This program consisted of partially backfilling wells that had been drilled too deep. The District provided technical assistance while well owners shared plugging costs with the ASCS.

In 1981, the SJRWMD and Brevard County Board of County Commissioners developed an agreement which provided matching funds for plugging wells in Brevard County. This program has been renewed each year since and has resulted in 159 wells being plugged or reconstructed.

In 1986, the District initiated a cost share for wells outside of Brevard County (Appendix D). Under this policy, a well owner pays one-half of the cost of plugging a well up to a maximum of \$600. This policy is designed to promote cooperation with well owners by offering assistance and to use the regulatory authority of the District effectively.

In December 1988, the District and the Seminole Soil and Water Conservation District (SSWCD) signed a cooperative agreement for plugging or repairing wells in Seminole County (Appendix C). Funding for the SSWCD share is provided through a Soil and Water Action Project (SWAP) funded through the Florida Department of Agriculture and Consumer Services. This is similar to the program in Brevard County in that there is no cost to an individual well owner. To expedite the initial inventory, a consultant (Natural Systems Analyst) was hired for this. In less than three months, the consultant inventoried over 250 wells. These will be included on the 1989 inventory.

INVENTORY

Initially the Florida Geological Survey (Hendry & Lavender 1957) estimated 715 free-flowing wells within the District. The U.S. Geological Survey (Healy 1978) estimated approximately 5,000 abandoned artesian wells within the District (Figure 1). In 1980-1982 the SJRWMD compiled an inventory of 293 wells. The current 1988 inventory includes 534 wells of which 233 have been plugged and 301 need to be controlled (Figure 2). The inventory is an ongoing process and includes reports from other agencies, citizens, and routine field work. Though numbers may vary, all estimates indicate that the majority of the wells are located in the southern half of the District. This area of the District contains the largest area of artesian flow and the highest concentration of agricultural land.

A well is included on the inventory if it meets any of the conditions set forth in subsection 3, Section 373.203, F.S., as listed below:

373.203 Definitions

- (3) "Abandoned artesian well" is defined as an artesian well:
- (a) that does not have a properly functioning valve;
 - (b) the use of which has been permanently discontinued;
 - (c) that does not meet current well construction standards;
 - (d) that is discharging water containing greater than 500 mg/l chlorides into a drinking water aquifer;

- (e) that is in such a state of disrepair that it cannot be used for its intended purpose without having an adverse impact upon an aquifer which serves as a source of drinking water, or which is likely to be such a source in the future; or
- (f) that does not have a proper flow control on or below the land surface.

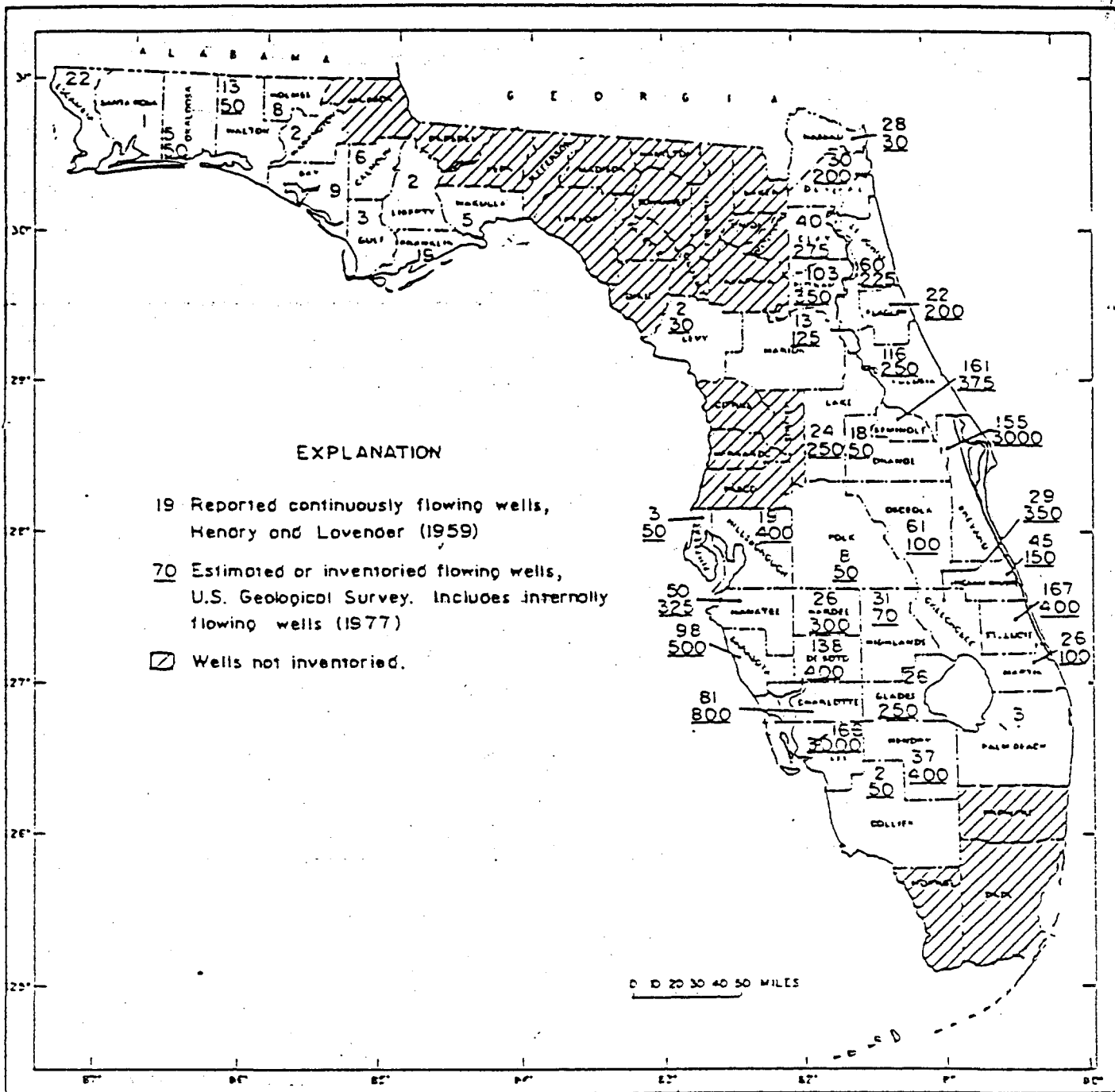


Figure 1 Number of Free Flowing Wells in Each County. (Healy 1978)

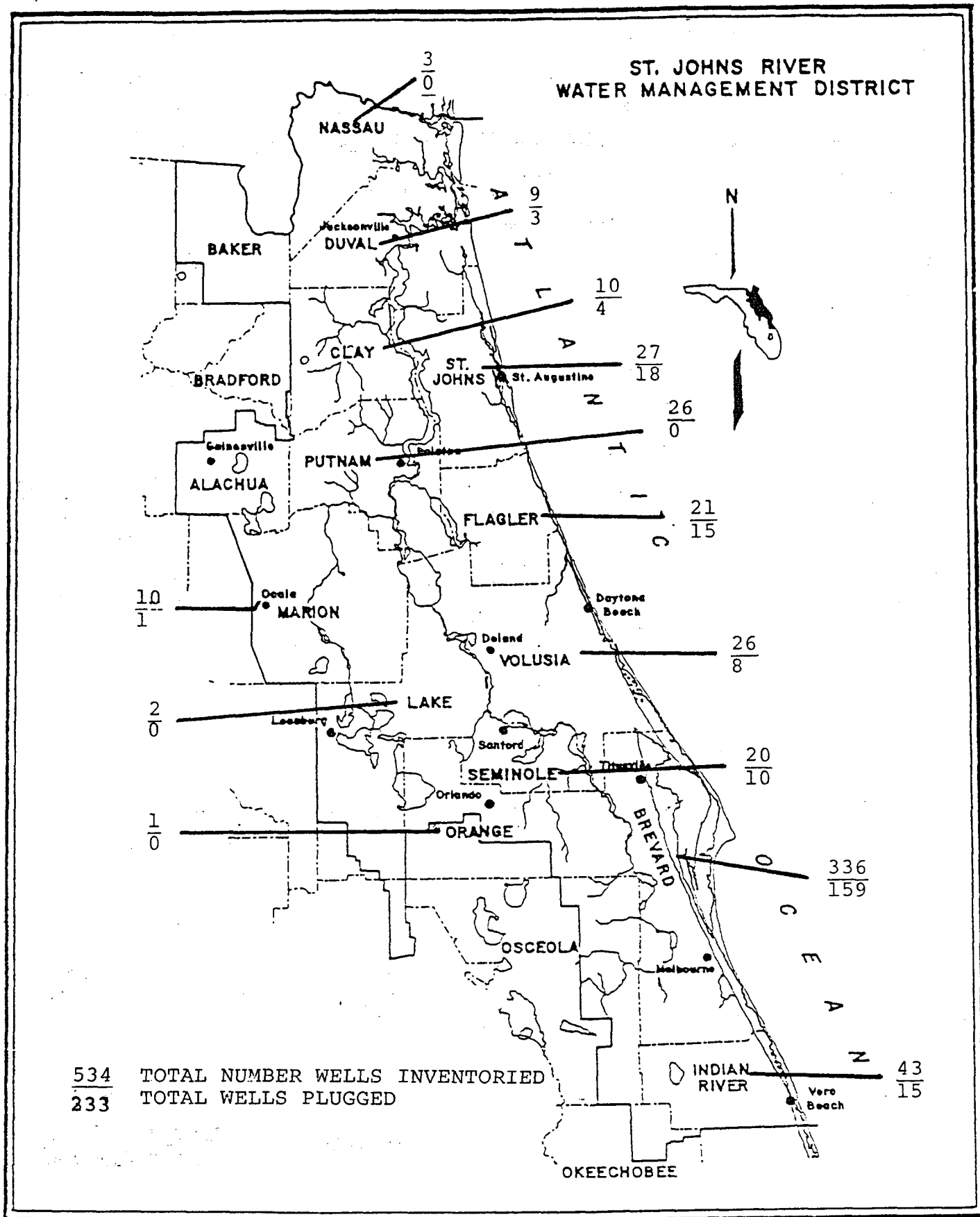


FIGURE 2

The inventory records of free-flowing wells are entered into the District's computer data base. There are currently 534 wells listed in this file. By using this system, information concerning location, construction details, water quality, owner's name, and general comments can be accessed and put in report form. A paper file is also kept for each well that includes a photograph and a detailed map to the site.

PRIORITY

A priority system has been established in the District's well plugging program to rank groups of wells according to the impact of the wells on the water resources of the area. The criteria considered when grouping wells include: the quality of water being discharged or involved in interaquifer flow; the quantity of the water; the well construction; and the physical condition of the well. When specific hydrogeologic information is evaluated for a particular well or group of wells, the wells are prioritized accordingly. The District has identified and ranked eight groups, with 1 being the highest priority and 8 being the lowest priority.

1. Good quality water in limited supply with no recharge (an isolated lens of fresh water).
2. Good quality water in large supply with no recharge.
3. Good quality water in limited supply with recharge.
4. Poor quality water contaminating fresh, shallow aquifers (areas dependent on shallow aquifers for potable water supply will have higher priority).

5. Poor quality water directly contaminating fresh surface water bodies (areas that exhibit rapidly increasing chloride levels will have higher priority).
6. Good quality water in large supply with recharge.
7. Poor quality water contaminating shallow aquifers exhibiting high chloride levels.
8. Poor quality water directly contaminating brackish or salt water surface water bodies.

PLUGGING METHODOLOGY

The various legal, technical, and financial aspects of the particular project are discussed with the owners to determine the best course of action. Options are considered based on available financing, the goals of the program, and opposition to the project. Contract documents, cooperative agreements, and permitting requirements are handled as needed (Appendix C).

Specifications for plugging the wells are developed based on current rules (SJRWMD Rules, Chapter 40C-3, Revised Edition) and the hydrogeologic setting of the well. This information is used to determine what type plug will be necessary. The evaluation includes the following:

1. The location of aquifers and confining units.
2. Construction details of the well, including cased depth and total depth.
3. Present condition of the well as determined from geophysical logs or by running drill rod or tremie pipe to the bottom of the well.
4. The ambient water quality.

From the analysis of the geophysical logs, one or a combination of the following plugging methods are generally used:

1. Valves or Caps - When the well does not present any water quality problems or transfer of water from one aquifer to another (interaquifer flow), the most efficient way to preserve the water resource is to install a workable valve or cap.
2. Backfilling - This is generally the best method to insure that a well is properly plugged. The method involves setting drill rod or tremie pipe to about 20 feet from the bottom of the well and pumping a cement slurry through it to fill the well from the bottom to land surface. This can be done in one large batch or in stages. Generally, by pumping several smaller batches and allowing time for the cement to set, problems of wasting cement can be avoided. If a well is taking much more cement than calculated, it may be necessary to install a plug or use gravel to bridge certain zones. Once the plug is installed, the well can be backfilled to the surface.
3. Plugs - There are many commercial plugs available to seal a well or hold cement in place until it sets. The Southwest Florida Water Management District has devised a form of cement plug (termed QWIP - from Quality of Water Improvement Program) to bridge zones of lost circulation or set casings (see Figure 3). This plug is generally fabricated on-site and attaches to 1-1/4 inch diameter PVC tremie pipe. A coarse left hand threaded coupling

and nipple is used to provide a positive disconnect system so the tremie pipe can be removed from the plug. A check valve is placed on the tremie to prevent the slurry from being forced out of the burlap "sock" by natural water pressure. A calculated volume of slurry is pumped into the sock and allowed to set before backfilling can be resumed. This plug can bridge the large cavities normally associated with the soft limestone and prevent interaquifer flow.

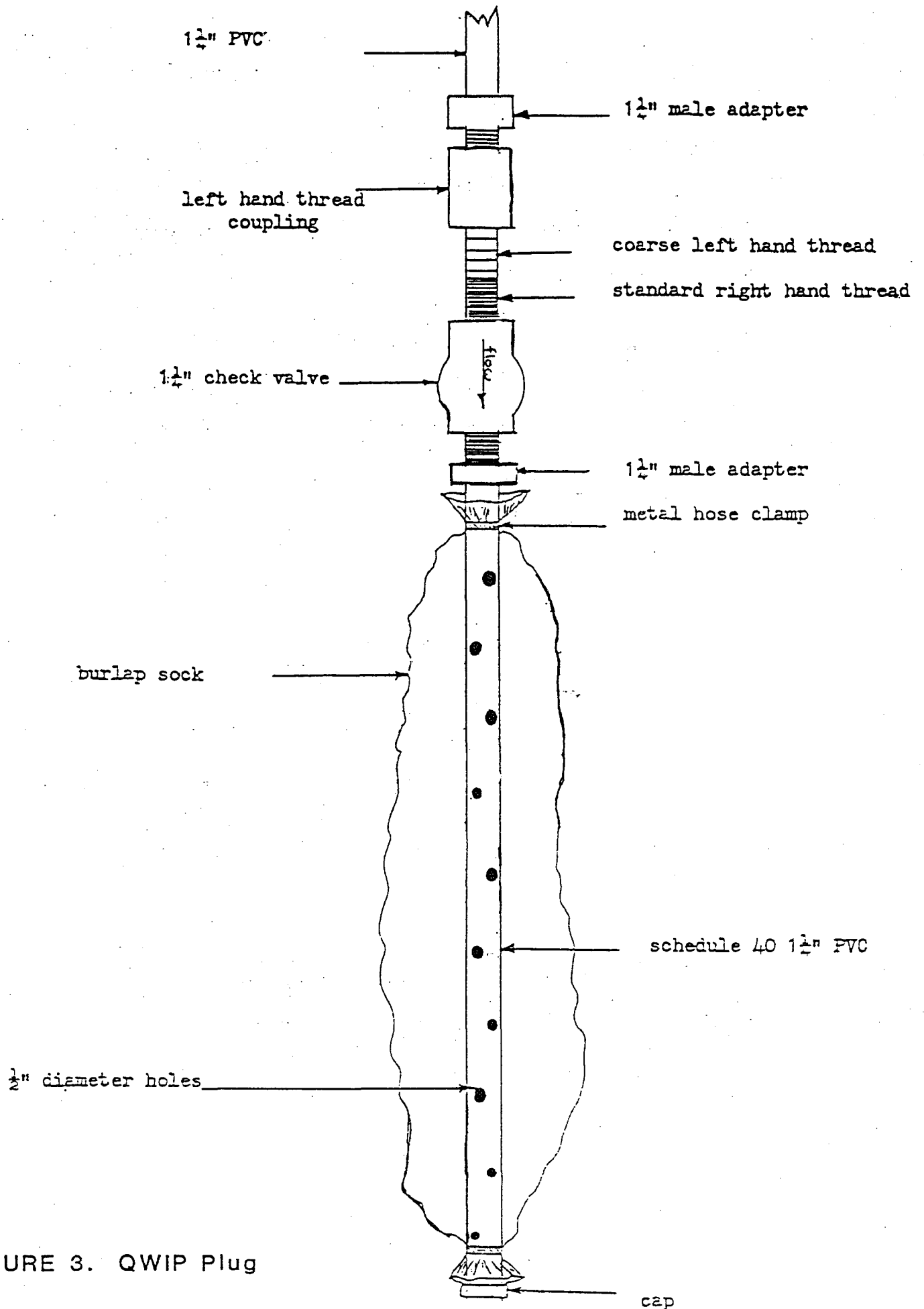


FIGURE 3. QWIP Plug

CURRENT STATUS
OF 1987/1988 PROJECTS

The 1987/1988 projects were located in Brevard, Clay, Volusia, and Orange counties. A total of 72 wells were plugged or reconstructed.

The majority of this work was done in Brevard County through a cooperative agreement with the Brevard County Board of County Commissioners. The staff of the Office of Natural Resources Management (ONRM) have primary responsibility to locate and obtain permission from well owners for the subsequent plugging. In Brevard County, 66 wells were plugged that had a combined flow of approximately 20.5 million gallons per day.

The project locations in Brevard County were centered in areas where increased development has strained the local ground water resources. Twenty-one wells were plugged on Merritt Island and seventeen were plugged in Palm Bay.

One of the projects in Brevard County involved plugging a well in the Sebastian Inlet. Since the well was about 15 feet under water, it was necessary to use divers from both the ONRM and the District to assist the contractor. Extreme tidal currents complicated the work and limited the amount of working time that was available. This was one example of the variety of site conditions that are encountered.

The inventory in Seminole County was substantially increased due to the cooperative agreement with the Seminole Soil and Water Conservation District. Though the wells are not included in this report, there are over 250 wells that will be included in the 1989

inventory. The majority of these are small diameter wells that were used for irrigation.

Five wells were plugged or repaired through the District's new cost share program (Appendix D). This program is available for counties that do not have a cooperative program with the District. Individual well owners can enter into an agreement with the District whereby they are liable for one-half the cost for materials and labor up to a maximum of \$600. For example, if the total cost of the job was \$1,200, the owner and the District would each pay \$600. If the total cost was \$1,900, the owner would pay \$600 and the District would pay the balance of \$1,300.

One well was plugged on District property in Osceola County. Plans are being made to determine the benefits of plugging or repairing eighteen wells located in the Fort Drum Marsh Conservation Area. These wells are located on District lands in southern Indian River County. Some of these wells may be useful for monitoring purposes or water supply for the users of the property.

COSTS

The following tables are provided to show actual costs for plugging and program support. In these tables, actual costs are the costs associated with contractual services and cement and related products. The program support costs include salaries, insurance, travel, supplies, purchased equipment, rental equipment, and other commodities. An administrative cost is added to show the estimated costs associated with bidding, invoicing, legal services, and other necessary administrative processes.

To date, the District has spent \$609,607 for this program. The total actual costs were \$282,542 or \$1,213 per well. The total support costs were \$327,065 or \$1,404 per well.

TABLE 1: Actual Plugging Costs

Plugging Costs for FY 1987/1988

Contractual Services, Cement, and Related Products	\$ 69,404.40
---	--------------

Average Cost FY 1987/1988 per Well (72 wells)	\$ 963.95
---	-----------

Plugging Costs to Date

Costs from FY 1980/1981 through FY 1986/1987	\$213,138.24
--	--------------

Costs from FY 1987/1988	<u>69,404.40</u>
-------------------------	------------------

TOTAL COSTS TO DATE	\$282,542.64
---------------------	--------------

AVERAGE COST TO DATE PER WELL (233 WELLS)	\$ 1,212.63
---	-------------

Table 2: Actual Costs for Program Support

Program Support Costs for FY 1987/1988

Support Costs	\$ 69,973.50
---------------	--------------

Administrative Costs (12%)	<u>8,396.82</u>
----------------------------	-----------------

TOTAL SUPPORT COSTS	\$ 78,370.32
---------------------	--------------

AVERAGE COST PER WELL	\$ 1,088.48
-----------------------	-------------

Program Support Costs to Date

Costs for FY 1987/1988	\$ 78,370.32
------------------------	--------------

Costs from FY 1980/1981 through FY 1986/1987	<u>248,695.06</u>
--	-------------------

TOTAL SUPPORT COSTS TO DATE	\$327,065.38
-----------------------------	--------------

AVERAGE SUPPORT COST PER WELL	\$ 1,403.71
-------------------------------	-------------

AVERAGE SUPPORT COST PER YEAR	\$ 40,883.17
-------------------------------	--------------

Table 3. Projected Actual Plugging Costs to Plug All Wells by 1992

Costs Per Year	
Estimated Number of Wells to Plug	600
Number of Wells to Plug Per Year	150
Average Cost Per Well	\$ 1,212.63
Average Cost Per Year	\$181,894.40
Projected Costs for Actual Plugging*	
FY 1988/1989	\$192,808.07
FY 1989/1990	204,376.55
FY 1990/1991	216,639.14
FY 1991/1992	<u>229,637.49</u>
TOTAL PROJECTED COSTS	\$843,461.26

*Based on 6% increase per year

Table 4. Projected Costs for Program Support Until 1992

Costs per year	
Number of Wells to Plug	600
Number of Wells to Plug per year	150
Average Cost Per Well	\$ 1,403.71
Average Cost Per Year	\$210,557.11
Projected Costs for Program Support	
FY 1988/1989	\$223,190.54
FY 1989/1990	236,581.97
FY 1990/1991	250,776.89
FY 1991/1992	<u>265,823.50</u>
TOTAL PROJECTED COSTS	\$976,372.90

Table 5. Total Projected Costs for Actual Plugging and Program Support Until 1992

Projected Actual Plugging Costs	\$ 843,461.26
Projected Program Support Costs	<u>976,372.90</u>
TOTAL PROJECTED COSTS	\$1,819,834.16

DEFINITIONS

Aquifer - A formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield economic quantities of water to wells and springs.

Artesian Well - A well deriving its water from a confined aquifer in which the water level stands above the aquifer.

Capping - Refers to stopping the water of an artesian well from flowing at the surface by some mechanical device. This includes valves, threaded caps, plumbers test plugs, or even cementing a section at the top of the well.

Free-flowing Well - An artesian well with or without a mechanism for controlling discharge that allows water to flow continuously at the land surface or into other aquifers through internal flow because of improper well construction or condition. Common names include "wild flowing well," "free flower," "uncontrolled artesian well," and "abandoned artesian well."

Head - Energy contained in a water mass produced by elevation, pressure, or velocity. The potentiometric surface is dependent on the head pressure of an aquifer.

Plugging - Includes any technique used to restore a well to the original hydrogeologic setting before it was drilled. This includes filling it with a cement slurry from bottom to land surface or setting plugs so that individual aquifers are totally isolated.

Potentiometric Surface - The surface defined by the height to which water from an aquifer will rise in a tightly cased well.

Tremie Pipe - Any relatively small diameter (<1-1/2" ID) pipe that is lowered into a well to a specific depth for the purpose of pumping a cement slurry through it for total or partial backfilling of a well.

REFERENCES

- Boggess, D. H., T. M. Missimer, and T. H. O'Donnell. 1977. Saline-water intrusion related to well construction in Lee County, Florida. Florida Geological Survey Information Circular 21. Tallahassee, Fla.
- Burns, W. S. 1983. Well plugging applications to the inter-aquifer migration of saline ground water in Lee County, Florida. South Florida Water Management District Technical Publication 83-8.
- Davis, J. B. 1985. Annual report on uncontrolled free-flowing artesian wells. St. Johns River Water Management District. Palatka, Fla.
- Driscoll, F. G. 1986. Groundwater and Wells, 2d ed. Johnson Division Publication. 317-332. St. Paul, Minnesota.
- Edwards, S. Jr. 1983. Report on uncontrolled free-flowing artesian wells. St. Johns River Water Management District Technical Publication SJ 84-3. Palatka, Fla.
- _____. 1985. Report on uncontrolled free-flowing artesian wells. St. Johns River Water Management District. Palatka, Fla.
- Healy, H. G. 1978. Appraisal of uncontrolled flowing artesian wells in Florida. U.S. Geological Survey Water Resources Investigations. 78-95. Washington, D.C.
- Hendry, C. W. Jr. and J. A. Lavender. 1959. Final report on an inventory of flowing artesian wells in Florida. Florida Geological Survey Information Circular 21. Tallahassee, Fla.
- Johnson, R. A. 1984. Stratigraphic analysis of geophysical logs from water wells in peninsular Florida. St. Johns River Water Management District Technical Publication SJ 84-16. Palatka, Fla.
- Keys, W. S. and L. M. MacCary. 1971. Application of borehole geophysics to water-resources investigations. Bk. 2, Ch. E1. U.S. Geological Survey Water Resources Investigations. Washington, D.C.
- Marella, R. L. 1986. Annual Water Use Survey 1985. St. Johns River Water Management District Technical Publication No. SJ 86-5. Palatka, Fla.
- McElhiney, W. A. 1955. Cementing Small Wells. Water Well Journal 9 (Jan.-Feb.): pgs 37-46.

Munch, D. A. 1978. Improvement of water quality through a cooperative well plugging program. St. Johns River Water Management District Technical Publication SJ 78-2. Palatka, Fla.

_____, Ripy, B. J. and R. A. Johnson 1979. Saline contamination of a limestone aquifer by connate intrusion in agricultural areas of St. Johns, Putnam, and Flagler counties, northeast Florida. St. Johns River Water Management District Technical Publication SJ 79-7. Palatka, Fla.

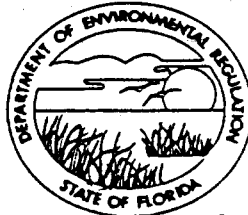
Timmons, W. R., Jr. 1982. Appraisal of uncontrolled artesian wells in Brevard County, Florida. Brevard County Office of Natural Resources Management.

APPENDIX A

OUTLINE PROVIDED BY THE
DEPARTMENT OF ENVIRONMENTAL REGULATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2500 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

October 12, 1983

Mr. Doug Munch
St. Johns River Water
Management District
Post Office Box 1429
Palatka, Florida 32077

RE: Artesian Well Plugging Workplan

Dear Mr. Munch:

Part IV of the Water Quality Assurance Act directs the five water management districts to prepare inventories and workplans outlining methods and costs of plugging all abandoned artesian wells in their district by January 1, 1992. The water management districts shall submit an initial workplan to the Secretary of DER by January 1, 1984.

Enclosed is a draft format for the workplan. Please review and let me know if you have any serious problems with the contents. The level of detail and length of each water management district workplan will be proportional to the number of wells and the existence of an active well plugging program. In those districts without a district-wide inventory, cost estimates may have to be given for both known and estimated number of wells.

Another topic we need to discuss is the use of the original inventory. I have the original well schedules (in pencil) complete with photographs, wellhead diagrams and hand drawn maps from which Information Circular No. 21 was prepared. These statewide records have remained intact since 1958, so I am reluctant to start mailing originals all over the state.

A meeting in Tallahassee with all water management districts can be arranged, if you feel there is a need. Suggested dates are November 8, 9, 15, or 16. Please let me know if you would prefer to meet or discuss any problems by telephone.

Sincerely,

Leslie Bell
Environmental Supervisor
Groundwater Section

LB/cs

Enclosures

cc: Rodney DeHan
Greg Parker
Howard Rhodes
John Wehle
Ed Mosier/SFWM

Format for Artesian Well Plugging Workplan

	DOCUMENT SUBHEADINGS	Page
I. Introduction		
A. Brief assessment of existing problem	'INTRODUCTION'.....	
B. Brief summary of any existing program	'CONCLUSION AND SUMMARY'....	
II. Inventory		
A. Results of 1983 Inventory presented in table form. The format in Table 1 and Table 3 from the Florida Geological Survey Information Circular No. 21 (examples attached) can be used as models.....		
B. Description of methodology used in obtaining initial inventory, including types of sources contacted, publicity, and field verification methods	'INVENTORY'.....	
C. Location and Owner of each abandoned well.....		
1. Present by county, alphabetically by owner and latitude/longitude		
2. If inventory is already on data base, existing format may be submitted		
D. Proposed Methodology for Updating Inventory	'Inventory , 'CONCLUSION AND SUMMARY..	
1. Location techniques		
2. Field verification		
3. Public notification techniques		
III. Well Plugging Priority Schedule		
A. Criteria to be used to develop schedule:	'Priority'.....	
1. Condition of casing		
2. Presence of operable valve		
3. Water quality in well and receiving aquifer		
4. Surface or subsurface flow from well		
5. Diameter of well and flow volume		
6. Surficial aquifer use in proximity to artesian well		
B. Proposed Schedule	'PROPOSED SCHEDULING'..	
1. Individual wells may be listed for the water management districts with smaller inventories. Types of wells with highest priority may be listed for water management districts with larger inventories.		

IV. Plugging Methodology	DOCUMENT SUBHEADINGS	Page
A.	Description of existing procedure, including all legal paperwork and contract processing	'Plugging Methodology'.....
B.	Type of plugs commonly used	'Type of Plugs'.....
C.	Description of any inspection or verification	'COSTS'.....
D.	Timetable for plugging completion, which incorporates priority schedule developed in III	'PROPOSED SCHEDULING'.....
V. Costs		
A.	Costs should be presented in two categories - water management district costs and actual plugging costs	'COSTS'.....
B.	Estimates for water management district costs should be given in 'per well' units, and should include:	'TABLE'.....
1.	Staff time for locating wells	
2.	Staff time for well assessment and placement in priority schedule	
3.	Staff time for resolving any legal difficulties	
4.	Staff time for preparing and awarding plugging contract	
5.	Staff time for inspection, updating of inventory	
6.	Total estimated cost	
1.	'Per well' cost times number of known or estimated wells in district	
C.	Actual Plugging Costs	'TABLE'.....
1.	Estimated average plugging cost per well. Wells may be classified into two or three depth groups	
2.	Total estimated plugging cost	
1.	'Per well' cost times number of known or estimated wells in district	
VI. Recommendations		
A.	Need for changes or expansion of existing programs	
B.	Other	

APPENDIX B

INVENTORY OF FREE FLOWING AND PLUGGED WELLS

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
REPORT ON
THE FREE FLOWING WELL INVENTORY
BREVARD COUNTY

WELL OWNER	WELL ID	FLOW SPR	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
TOLEDO TRUST CO	BR0016	-	-	282146	805109	-	-	2.00	
BREVARD CO. MC	BR0079	100.00	210.00	2752 4	802725	466	-	4.00	
BREVARD CO. MC	BR0084	-	220.00	2753 3	802315	-	-	4.00	
BREVARD CO. MC	BR0009	20.00	320.00	275500	802940	-	-	4.00	
BREVARD CO. MC	BR0089	-	661.00	275523	8032 8	-	-	4.00	
ATLANTIC RIDGE CORP	BR0090	-	570.00	275525	803035	-	-	4.00	
BREVARD CO. MC	BR0001	-	476.00	2755 2	803022	397	-	4.00	
BREVARD CO. MC	BR0294	-	515.00	275735	803048	-	-	4.00	
BREVARD CO. MC	BR0095	-	925.00	275858	803118	329	-	4.00	
BREVARD CO. MC	BR0007	-	351.00	275844	803121	346	-	4.00	
BOY SCOUTS-ORLANDO	BR0100	-	-	275719	803513	-	-	4.00	
BREVARD CO. DIST 3	BR0101	150.00	601.00	275710	803548	316	-	4.00	
DAVENPORT	BR0102	-	-	275810	8035 3	-	-	6.00	
UNDETERMINED	BR0120	-	728.00	282029	803623	-	-	2.00	
BREVARD COUNTY	BR0151	15.00	1653.00	282420	804135	-	-	4.00	
UNDETERMINED	BR0182	90.00	491.00	275823	8035 2	-	-	6.00	
BREVARD COUNTY	BR0199	100.00	1377.00	282213	804047	-	-	4.00	
UNDETERMINED	BR0200	15.00	1516.00	282213	804055	-	-	4.00	
LONE CABBAGE CAMP	BR0204	100.00	2071.00	2822 7	805218	-	-	2.00	
BREVARD CO. M. C.	BR0209	15.00	1919.00	282417	804135	-	-	2.00	
BREVARD CO. MC	BR0210	100.00	1377.00	282447	8041 5	-	-	4.00	CANNOT LOCATE
BREVARD CO. MC	BR0213	125.00	1070.00	282543	804122	-	-	4.00	
BREVARD CO. MC	BR0219	-	2376.00	282643	804315	-	-	4.00	
GEN. DEVELOP. CORP.	BR0225	50.00	747.00	275825	804210	-	-	4.00	
GEN. DEVELOP. CORP.	BR0226	20.00	714.00	275825	804219	266	-	4.00	
KEMPER	BR0228	20.00	323.00	28 443	805032	295	-	4.00	
KEMPER	BR0229	83.00	387.00	28 457	805019	-	-	4.00	
KEMPER	BR0230	25.00	360.00	28 530	804644	-	-	4.00	
DEERET RANCH	BR0231	1.00	361.00	28 536	804643	-	-	4.00	
JAMESTOWN CONDOS	BR0232	-	501.00	28 943	8035 4	-	-	4.00	
BREVARD CO. M.C.	BR0233	150.00	935.00	281732	804155	-	-	4.00	
HAPPED	BR0234	15.00	1015.00	282040	803951	-	-	0.00	
ROCKLEDGE GOLF COUR	BR0235	-	-	282013	804449	-	-	4.00	
ROCKLEDGE GOLF COUR	BR0236	-	-	2820 8	804442	-	-	4.00	
UNDETERMINED	BR0237	20.00	2117.00	282150	805115	-	-	2.00	
BREVARD CO. MC	BR0239	9.00	2922.00	282452	804323	-	-	3.00	
BREVARD CO. MC	BR0240	100.00	4309.00	282754	804310	-	-	3.00	
C. CRISAFULLI	BR0242	25.00	1987.00	282624	804246	-	-	4.00	
CHARLES CRISAFULLI	BR0243	-	2455.00	282623	804257	-	-	4.00	
UNDETERMINED	BR0244	1.25	1122.00	281957	803952	-	-	2.00	
ROCKLEDGE GOLF COUR	BR0245	-	1470.00	2820 2	8045 6	-	-	4.00	
CORRIGAN	BR0246	-	508.00	274932	803518	-	-	2.00	

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORINE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIA.	COMMENTS
DEER RUN	BR0247	10.00	725.00	275226	802920	-	-	2.00	CANNOT LOCATE
DEER RUN	BR0248	-	705.00	275253	802932	399	-	6.00	
DEER RUN	BR0249	-	735.00	275255	802950	305	-	6.00	
UNDETERMINED	BR0250	-	671.00	275257	802967	409	-	2.00	
BEIP GROVE	BR0251	-	705.00	275222	802920	-	-	4.00	
UNDETERMINED	BR0252	-	695.00	275221	802924	-	-	2.00	
UNDETERMINED	BR0254	-	732.00	275225	802916	-	-	2.00	
UNDETERMINED	BR0255	-	734.00	275251	8040 4	300	-	3.00	
UNDETERMINED	BR0256	-	715.00	275251	8040 4	-	-	2.00	
UNDETERMINED	BR0257	150.00	701.00	275416	8039 4	315	-	6.00	
GEN. DEVELOP. CORP.	BR0260	-	701.00	2755 2	804024	399	-	2.00	
GEN. DEVELOP. CORP.	BR0264	-	649.00	275654	804121	-	-	2.50	
CARLYLE PLATT	BR0266	29.00	769.00	275745	803928	-	-	3.00	
GEN. DEVELOP. CORP.	BR0267	-	753.00	275746	804116	299	-	3.00	
GEN. DEVELOP. CORP.	BR0268	-	691.00	275725	8041 4	-	-	4.00	
GDC-CARLYLE PLATT	BR0274	7.00	591.00	275812	804218	-	-	6.00	
GDC-CARLYLE PLATT	BR0275	4.50	481.00	275816	804234	-	-	4.00	
GEN. DEVELOP. CORP.	BR0276	-	725.00	275954	803920	-	-	0.00	
GEN. DEVELOP. CORP.	BR0277	-	719.00	275955	803940	-	-	4.00	
HAROLD PLATT	BR0279	-	534.00	2759 1	804320	364	-	4.00	
HAROLD PLATT	BR0280	-	414.00	275952	804512	377	-	0.00	
GEN. DEVELOP. CORP.	BR0281	-	679.00	28 041	804025	335	-	4.00	
BREVARD COUNTY	BR0300	300.00	1070.00	281659	8040 7	261	104	4.00	
GEN. DEVELOP. CORP.	BR0301	-	-	275616	8041 2	-	-	6.00	
PERRY ELISON	BR0323	-	2037.00	282232	804246	-	-	2.00	
CITY OF MELBOURNE	BR0351	-	641.00	28 759	802914	600	-	12.00	
MARCUS BOOKIE	BR0366	-	287.00	274921	805033	693	-	5.00	
WINDWARD APTS.	BR0368	7.00	695.00	28 214	803711	-	-	2.00	
GEN. DEV. CORP. LAWN	BR0369	-	561.00	28 132	803458	-	-	2.00	
GEN DEVELOP. CORP	BR0370	500.00	650.00	28 232	804327	369	-	5.00	
DRAWDY	BR0371	10.00	650.00	28 218	8041 7	-	-	4.00	
CECIL PLATT	BR0372	2.00	489.00	28 445	804233	-	-	3.00	
WATERWAY ESTATES	BR0373	-	-	281226	803626	-	-	6.00	
UNDETERMINED	BR0374	-	-	281230	803626	-	-	6.00	
UNDETERMINED	BR0375	-	-	281234	803629	-	-	6.00	
WATER WAY ESTATES	BR0376	-	-	281243	803629	-	-	2.00	
UNDETERMINED	BR0377	6.50	641.00	281018	802714	-	-	4.00	
UNDETERMINED	BR0378	-	649.00	281017	802713	-	-	4.00	
FLA. STATE MATHERS B	BR0379	-	-	28 857	803624	-	-	2.00	
PULLEN	BR0380	-	1042.00	281332	803854	-	-	2.00	
BOWERFIELD	BR0381	-	660.00	281341	8029 3	325	-	4.00	
KICKHAM PARK	BR0382	200.00	549.00	28 934	803946	600	105	4.00	

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
REPORT ON
THE FREE FLOWING WELL INVENTORY
BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
HICKMAN PARK	BR0380	275.00	625.00	28 951	803940	550	185	6.00	
UNDETERMINED	BR0384	-	1189.00	281538	8041 5	-	-	4.00	
RAY COBBE	BR0385	60.00	2884.00	2822 3	804228	420	80	6.00	
MOONEY	BR0387	120.00	935.00	282847	8041 7	400	-	4.00	
BREVARD CO. M.C.	BR0388	80.00	1353.00	282817	8041 6	-	-	4.00	
BREVARD CO. M.C.	BR0389	-	1400.00	281816	804024	-	-	6.00	
E. L. WEGERIF	BR0390	-	1282.00	281823	804054	-	-	2.00	
BREVARD COUNTY M. C.	BR0391	50.00	1090.00	281921	804058	-	-	4.00	
LA TURE	BR0392	42.00	1176.00	2816 5	804013	-	-	2.00	
A.L. READDY	BR0393	-	1822.00	281648	804022	248	126	4.00	
UNDETERMINED	BR0395	1.10	1882.00	2816 5	803955	-	-	2.00	
UNDETERMINED	BR0397	-	277.00	281548	804116	-	-	0.00	
UNDETERMINED	BR0400	220.00	1336.00	282845	804634	-	-	6.00	
TENDERFOOT RANCH	BR0403	20.00	1578.00	282224	8047 1	-	-	4.00	
NORRIS CATTLE CO.	BR0408	-	1725.00	283655	805750	-	-	1.00	
DE VINCI INC.	BR0411	-	588.00	275822	8031 2	-	-	2.00	
BREVARD CO. M.C.	BR0412	-	524.00	28 053	803214	-	-	3.00	
W. C. ROPER	BR0413	175.00	688.00	28 718	803732	-	-	6.00	
STEVE FANCZL	BR0414	-	889.00	281730	804039	-	-	3.00	
HARVEY RAY	BR0415	180.00	1082.00	281741	804158	-	-	3.00	
UNDETERMINED	BR0416	-	788.00	282849	803942	-	-	2.00	
UNDETERMINED	BR0417	20.00	1136.00	282337	803654	-	-	3.00	
UNDETERMINED	BR0418	-	1510.00	282359	804234	284	-	3.00	
PHYLIS TINSLEY	BR0419	150.00	2284.00	282543	804259	-	-	0.00	
QUARBURG	BR0420	5.20	241.00	274959	805029	-	-	6.00	
POTEET	BR0421	0.00	192.00	275045	804946	284	-	6.00	
UNDETERMINED	BR0424	-	-	275913	803820	-	-	1.50	
UNDETERMINED	BR0425	-	-	275953	804442	-	-	4.00	
UNDETERMINED	BR0426	0.20	578.00	281126	803748	-	-	2.00	
NEVINS	BR0428	10.00	988.00	281910	804450	-	-	4.00	
BREVARD CO. M.C.	BR0430	15.00	1447.00	282152	804117	152	82	4.00	
800-LOT FOR SALE	BR0431	10.00	721.00	28 030	803930	-	-	3.00	
GOUGH 504 4TH AVE	BR0434	-	646.00	28 354	803347	585	150	4.00	
LULP LEE 2924 MAIN	BR0435	-	-	28 344	803559	-	-	2.00	
COYLE 412 SUNSET BLV	BR0436	7.00	522.00	28 420	803340	-	-	2.00	
GENERAL DEVEL CORP.	BR0495	-	-	275642	804120	-	-	6.00	
J.T. SPESSLE	BR0523	-	-	281913	804242	-	-	2.00	
BREV. CITY PARK	BR0527	-	-	822620	804140	-	-	4.00	
TOLEDO TRUST CO	BR0528	-	2112.00	282151	805125	-	-	2.00	
WATSON	BR0529	-	-	2822 5	804153	600	-	4.00	
THOMAS	BR0539	-	-	281557	815040	-	-	3.00	
SCHRURGBRENN ZITA	BR0547	-	684.00	275955	804345	-	-	4.00	

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
CAVALIER GROVES	BR0555	-	775.00	275252	800949	690	-	6.00	CANNOT LOCATE
FORCHER	BR0556	-	9900.00	292915	8040 4	-	-	3.00	
CAVALIER GROVES	BR0558	-	-	275252	800748	690	-	8.00	
CREATIVE HORIZONS	BR0559	-	-	275022	800820	-	-	4.00	
CREATIVE HORIZONS	BR0560	-	-	275031	800824	-	-	4.00	
UNDETERMINED	BR0562	-	740.00	2752 7	804048	-	-	3.00	
CAVALIER GROVES	BR0563	1400.00	714.00	275212	800793	720	-	8.00	
UNDETERMINED	BR0568	102.00	488.00	275954	804417	-	-	4.00	
EDWARD D. EVANS	BR0569	-	1150.00	281655	804823	-	-	2.00	
UNDETERMINED	BR0570	-	880.00	2819 2	804299	-	-	8.00	
INDIAN BAY	BR0573	-	-	282637	804311	-	-	4.00	
CAPE CANAVERAL AFB	BR0596	-	-	282523	800611	898	898	4.00	
CAPE CANAVERAL AFB	BR0597	-	-	282621	800559	898	898	4.00	
CAPE CANAVERAL AFB	BR0599	-	-	282732	800550	898	898	4.00	
NASA	BR0605	-	1440.00	292737	804813	-	-	4.00	
NASA	BR0612	-	-	2930 1	804120	-	-	6.00	
NASA	BR0613	-	1410.00	293037	804827	-	-	3.00	
NASA	BR0615	-	-	293130	804833	-	-	3.00	
NASA	BR0616	-	1890.00	293135	804117	-	-	6.00	
NASA	BR0618	-	-	293238	804827	-	-	4.00	
NASA	BR0619	-	-	2834 4	800946	-	-	4.00	
BREVARD COUNTY	BR0640	-	-	281931	804448	-	-	6.00	
GDC	BR0647	-	580.00	275624	804219	-	-	6.00	
GDC	BR0649	-	653.00	275715	8042 4	-	-	6.00	
GDC	BR0650	-	648.00	275648	804150	-	-	6.00	
GDC	BR0651	-	622.00	2756 3	804157	-	-	6.00	
GDC	BR0653	-	538.00	275615	804232	-	-	6.00	
GDC	BR0654	-	1050.00	275636	804234	-	-	6.00	
UNDETERMINED	BR0659	75.00	486.00	28 8 0	804159	-	-	4.00	
PATRICK AFB	BR0670	210.00	1240.00	291121	800558	297	94	3.00	
PATRICK AFB	BR0671	388.00	1590.00	291117	800558	483	94	4.00	
PATRICK AFB	BR0672	191.00	1380.00	291119	8006 9	330	105	3.00	
PATRICK AFB	BR0673	358.00	1080.00	291116	8006 2	444	94	4.00	
PATRICK AFB	BR0674	358.00	1180.00	281102	8006 0	501	94	4.00	
PATRICK AFB	BR0675	316.00	920.00	291115	800551	444	95	4.00	
PATRICK AFB	BR0676	191.00	620.00	291117	800549	355	105	3.00	
MELBOURNE COUNTRY CL	BR0682	-	-	28 440	800742	120	-	0.00	
MELBOURNE COUNTRY CL	BR0683	-	-	28 440	800742	10	-	0.00	
MELBOURNE COUNTRY CL	BR0684	-	-	28 440	800742	898	898	2.00	
CITY OF MELBOURNE	BR0685	-	-	28 5 2	800653	35	-	2.00	
CITY OF MELBOURNE	BR0686	-	-	28 459	800653	480	90	6.00	
CITY OF EAU GALLIE	BR0688	-	-	28 712	800752	511	110	6.00	

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
CITY OF MELBOURNE	BR0690	-	-	28 750	803848	65	46	6.00	
CITY OF MELBOURNE	BR0691	-	-	28 744	803848	45	33	6.00	
CITY OF MELBOURNE	BR0692	-	-	28 810	803546	899	899	2.00	
CITY OF EAU GALLIE	BR0693	-	-	281013	802947	899	899	3.00	
NASA	BR0695	-	1362.00	282747	802947	57	898	3.00	
CANAVERAL AFB	BR0697	-	-	282654	802551	898	899	6.00	
LULP LEE 2924 MAIN	BR0705	4.00	762.00	28 349	803559	-	-	2.00	
E. L. WEGERIF	BR0711	250.00	1110.00	281820	804043	-	-	4.00	
E. L. WEGERIF	BR0712	-	-	281820	804058	-	-	6.00	
		177	7,895						

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 CLAY COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
L. J. IVEY	C-0001	-	3.70	30 048	814143	365	300	3.00	
DIV OF FORESTRY	C-0005	-	5.00	30 3 2	814227	-	-	3.00	
TEMPLIN	C-0012	5.00	7.00	30 021	814141	-	-	3.00	
UNDETERMINED	C-0019	-	36.00	2951 4	8137 1	-	-	3.00	
FLORIDA SOLITE CO.	C-0271	5.00	-	30 4 3	814544	-	-	0.00	
UNDETERMINED	C-0401	-	-	30 554	814528	-	-	0.00	
		6	10						

ST. JOHN RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 DUVAL COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
ROMEO	D-0435	35.00	15.00	301733	814317	-	-	10.00	
F.E.C. RAILWAY	D-0489	40.00	36.00	30 755	813057	-	-	3.00	
UNDERTIMED	D-0491	25.00	22.00	3023 5	813654	-	-	0.00	
S.A. MOON	D-0492	70.00	33.00	3021 9	812840	-	-	3.00	
HAROLD P. OMERANTE	D-0493	5.00	29.00	302437	8142 9	-	-	4.00	
CITY OF JACKSONVILLE	D-0494	-	-	301723	814251	-	-	4.00	
		6	225						

ST. JOHN RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 FLAGLER COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
HOLLAR GREEN	F-0026	-	-	292524	81253	-	-	0.00	
UNDETERMINED	F-0032	1.00	940.00	292522	812530	-	-	3.00	
UNDETERMINED	F-0033	1.00	-	292528	812549	-	-	3.00	
UNDETERMINED	F-0034	1.00	1410.00	292528	812553	-	-	4.00	
UNDETERMINED	F-0035	-	-	292521	812553	-	-	0.00	
PUBLIC DOMAIN	F-0239	-	-	292525	812530	-	-	2.00	
		6	3						

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
REPORT ON
THE FREE FLOWING WELL INVENTORY
INDIAN RIVER COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
J.V.D'ALBERA CO.	IR0223	75.00	620.00	274652	8025 9	-	-	8.00	
MARTIN, GREGORY-TRUB	IR0224	120.00	400.00	2746 3	802317	-	-	6.00	
KNIGHT, C. REED	IR0225	-	500.00	273949	802321	-	-	6.00	
KENNETH PRINCE	IR0311	-	662.00	273925	804513	-	-	6.00	
SURWMD	IR0314	-	589.00	273649	804527	-	-	8.00	
SURWMD	IR0315	-	362.00	273645	804525	-	-	8.00	
KENNETH PRINCE	IR0316	-	662.00	273615	804546	-	-	8.00	
SURWMD	IR0317	-	782.00	273626	804632	-	-	8.00	
SURWMD	IR0318	25.00	669.00	273733	804514	-	-	6.00	
JOHN MOOLE	IR0351	-	450.00	273901	802754	-	-	4.00	
SURWMD	IR0357	120.00	306.00	273632	8046 3	888	888	6.00	
SURWMD	IR0360	20.00	725.00	273714	804530	888	888	6.00	
SURWMD	IR0453	350.00	777.00	273343	8045 7	888	888	6.00	
SURWMD	IR0454	25.00	529.00	2734 1	804535	888	888	6.00	
SURWMD	IR0455	250.00	502.00	2734 8	804421	888	888	6.00	
SURWMD	IR0456	-	418.00	273424	804415	888	888	5.00	
SURWMD	IR0457	-	429.00	273449	804411	888	888	6.00	
SURWMD	IR0458	25.00	474.00	273435	804345	888	888	4.00	
SURWMD	IR0459	175.00	83.00	273424	804344	888	888	6.00	
SURWMD	IR0460	-	123.00	273450	804316	888	888	6.00	
SURWMD	IR0461	-	603.00	2734 1	804232	888	888	6.00	
SURWMD	IR0462	10.00	674.00	273357	804217	888	888	6.00	
SURWMD	IR0463	28.00	62.00	273356	804314	888	888	6.00	
SURWMD	IR0464	175.00	113.00	273343	804345	888	888	6.00	
TANEN	IR0467	-	-	273722	802248	-	-	4.00	
HABORA HENRY R.	IR0468	300.00	396.00	2745 1	802137	-	-	4.00	
ABC FRUIT CO.	IR0471	-	-	2738 3	802558	-	-	4.00	
MARIONNE STOUGH	IR0492	-	-	274513	802931	208	162	4.00	
		29	1,458						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 LAKE COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL COMMENTS DIAM
U.S. FOREST SERVICE	L-0010	-	210.00	29 031	810226	-	-	6.00
A.W. COLLINS, JR	L-0050	300.00	1360.00	291027	810211	-	-	10.00
		2	300					

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 MARION COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
VANCE, BILL	M-0002	60.00	15.00	292728	8155 7	-	-	4.00	
UNDETERMINED	M-0004	200.00	150.00	291749	813504	-	-	6.00	
HEINEMANN, G.C.	M-0005	75.00	180.00	291743	813515	-	-	4.00	
G.C. HEINEMANN	M-0008	150.00	-	291743	813515	-	-	6.00	
LARRY MOODY	M-0009	250.00	-	291738	813520	-	-	6.00	
CARL SHIELDS	N-0034	-	290.00	291730	8139 0	-	-	4.00	
MOODY LARRY	M-0035	-	-	291738	813520	100	-	6.00	
PONDEROSA SHORES, I	M-0066	200.00	-	291727	8135 4	156	102	6.00	
PONDEROSA SHORES, IN	M-0092	200.00	-	291717	8135 3	205	-	6.00	
		9	1,135						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 NASSAU COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL BERTH	CASE DEPTH	WELL DIAM	COMMENTS
STATE OF FLA-DNR	N-0000	-	-	302541	814951	-	-	2.00	
KATANZAS PACKING CO.	N-0002	-	25.00	302554	812120	-	-	0.00	
JOHNSON LAKE	N-2103	-	-	302549	813354	-	-	2.00	
		3	0						

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 ORANGE COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CAGE DEPTH	WELL COMMENTS DIAM
CITY RIGHT OF WAY	000013	15.00	396.00	283214	905234	-	-	2.00
	1	15						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 PUTNAM COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORINES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL COMMENTS DIAM	
UNDETERMINED	P-0017	50.00	8.00	292439	815242	-	-	3.00	
UNDETERMINED	P-0053	15.00	195.00	292531	813741	-	-	3.00	
UNDETERMINED	P-0055	20.00	205.00	294012	812651	-	-	4.00	
B.C.L. RAILROAD	P-0056	-	-	293545	814059	-	-	2.00	
RAFAEL PUG	P-0058	60.00	155.00	294516	812456	-	-	6.00	
UNDETERMINED	P-0061	0.00	355.00	294110	813533	-	-	4.00	
UNDETERMINED	P-0062	125.00	-	2926 7	813155	-	-	6.00	
UNDETERMINED	P-0064	10.00	110.00	294032	813729	-	-	4.00	
MEELEY REED	P-0065	40.00	1755.00	292138	813751	-	-	4.00	
GEORGIA PACIFIC	P-0068	5.00	175.00	294029	812937	-	-	2.00	
UNDETERMINED	P-0092	-	220.00	293759	813335	-	-	4.00	
UNDETERMINED	P-0093	-	-	293358	814339	-	-	4.00	
CORPS OF ENGINEERS	P-0306	5.00	8.00	2933 0	815039	109	105	8.00	
UNDETERMINED	P-0415	-	393.00	292634	812533	-	-	0.00	
RAVINES STATE GARDEN	P-0419	10.00	203.00	293759	813334	401	86	3.00	
TILTON	P-0452	-	671.00	294010	813429	-	-	4.00	
ROBERT REVEL	P-0453	-	540.00	293957	8134 6	-	-	4.00	
RAVINES STATE GARDEN	P-0454	-	150.00	293750	813353	898	899	4.00	
RAVINES STATE GARDEN	P-0455	-	160.00	293750	813351	898	899	4.00	
RAVINES STATE GARDEN	P-0456	-	140.00	293750	813350	898	899	4.00	
RAVINES STATE GARDEN	P-0457	-	22.00	293754	813346	898	899	2.00	
RAVINES STATE GARDEN	P-0458	-	20.00	2938 5	813352	898	899	2.00	
RAVINES STATE GARDEN	P-0459	-	20.00	2938 6	813353	898	899	2.00	
WHITEHEAD	P-0463	4.00	180.00	2937 7	813747	246	142	4.00	
UNDETERMINED	P-0568	50.00	196.00	293956	813543	-	-	3.00	
FLOYD U. D.	P-0569	-	-	294116	813515	-	-	6.00	
		26	394						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 ST. JOHN'S COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
ARNOLD JACK	SJ0008	-	-	295552	810317	999	999	4.00	WELL COST SHARE
UNDETERMINED	SJ0180	-	-	295459	811319	-	-	0.00	ASOS RECONSTRUCTED
DNR	SJ0507	150.00	190.00	30 354	812222	349	300	3.00	
UNDETERMINED	SJ0509	66.00	100.00	30 355	8123 9	-	-	4.00	
DRYSDALE	SJ0512	-	1600.00	294923	811623	-	-	6.00	
UNDETERMINED	SJ0519	-	70.00	295509	811744	999	999	6.00	
UNDETERMINED	SJ0520	-	70.00	295536	811743	999	999	4.00	
BEN ROBINSON	SJ0531	-	39.00	295114	812949	-	-	4.00	
TOMMY MILLER	SJ0597	-	1871.00	294050	812842	375	104	6.00	
		9	216						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 SEMINOLE COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL COMMENTS
SEMINOLE COUNTY	S-0000	-	-	284033	911633	-	-	0.00
MERLE PARKER	S-0001	-	-	2844 0	911624	-	-	0.00
LINDA BUTAY	S-0004	-	-	284153	911619	-	-	0.00
FLORIDA GAME COMM	S-0004	-	-	2843 2	911616	68	69	0.00
COUNTY RIGHT OF WAY	S-0009	20.00	2050.00	2844 4	911626	-	-	2.00
DUDA, A	S-0100	30.00	11.00	283958	911429	-	-	4.00
DUDA, A	S-0101	30.00	12.00	2839 1	911422	-	-	3.00
DUDA, A	S-0102	-	-	2839 2	911430	-	-	4.00
DUDA, A	S-0103	25.00	13.00	2839 5	911426	-	-	6.00
STATE RIGHT OF WAY	S-0113	-	-	2843 5	911620	-	-	3.00
		10	105					

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 THE FREE FLOWING WELL INVENTORY
 VOLUSIA COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDES PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
UNDETERMINED	V-0002	70.00	1070.00	295144	815221	-	-	8.00	
MURRY BAMB	V-0055	300.00	520.00	29 8 5	812153	-	-	12.00	
MURRY BAMB	V-0057	50.00	510.00	29 8 5	812154	-	-	9.00	
J.E. PEARSON	V-0059	1.00	30.00	295421	81 539	-	-	1.00	
J.E. PEARSON	V-0060	1.00	67.00	295421	81 539	-	-	2.00	
STONE IS. HOMEOWNERS	V-0061	40.00	650.00	295042	8114 8	-	-	9.00	
UNDETERMINED	V-0073	30.00	25.00	295213	811655	-	-	0.00	
W.L. TOMPKINS-LEASEE	V-0074	15.00	-	291015	812157	-	-	4.00	
STONE IS. HOMEOWNERS	V-0093	10.00	620.00	295044	8114 1	-	-	3.00	
UNDETERMINED	V-0158	-	967.00	29 030	812253	-	-	4.00	
JOHN FERRELL	V-0201	-	208.00	29 148	805728	-	-	6.00	REPAIRED 9/23/83
UNDETERMINED	V-0328	5.00	1490.00	205245	812143	-	-	3.00	
UNDETERMINED	V-0327	50.00	70.00	2915 3	81 719	-	-	4.00	
GRAY	V-0375	200.00	9770.00	295146	811843	340	22	6.00	
UNDETERMINED	V-0497	-	13.00	29 917	812222	-	-	4.00	
UNDETERMINED	V-0498	10.00	50.00	29 513	81 247	-	-	3.00	
DELTONA CORP	V-0499	-	-	2855 2	8113 2	-	-	10.00	
CITY OF NEW SMYRNA B	V-0508	-	9290.00	29 1 3	805519	998	130	12.00	RECONSTRUCTED 9/20/87
		18	792						
		301	12,738						

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
REPORT ON
WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
SULLIVAN GROVES	BR0011	235.00	-	292742	803955	230	-	4.00	PLUGGED 06/29/88
RAMSHUR	BR0012	125.00	-	292649	804320	210	-	3.00	PLUGGED 07/01/88
DEER RUN	BR0017	-	-	275235	803955	630	-	6.20	
30 BARNAVON	BR0024	-	-	291823	804482	180	120	2.00	PLUGGED 6/10/88
ALLEN, NORMAN	BR0049	175.00	1592.00	275828	80319	346	102	4.00	PLUGGED 3/27/87
BREVARD CO. XC	BR0078	170.00	227.00	27529	802717	449	102	4.00	
BREVARD CO. MC	BR0090	200.00	234.00	275227	80283	406	103	4.00	PLUGGED 9/15/82
BREVARD CO. MC	BR0081	10.00	229.00	275231	80297	203	103	4.00	
SEAGRAPE AVE	BR0082	220.00	344.00	27531	80284	393	100	4.00	PLUGGED 9/22/82
BREVARD COUNTY	BR0089	126.00	230.00	27535	80284	363	103	3.00	
BREVARD CO. MC	BR0085	290.00	267.00	275357	802817	-	-	4.00	
BREVARD CO. MC	BR0086	200.00	214.00	275425	802838	358	101	4.00	
BREVARD CO. MC	BR0087	50.00	260.00	275518	802936	496	-	4.00	
HONEST JOHN'S FISH CP	BR0091	5.00	320.00	27569	803824	363	103	4.00	PLUGGED 9/29/82
HONEST JOHN'S FISH CP	BR0093	100.00	357.00	275628	803832	403	0410	4.00	
BREVARD CO. MC	BR0098	200.00	1075.00	281829	804031	140	-	4.00	
WOLFMAN	BR0099	200.00	1043.00	281850	804038	141	104	4.00	
BEACHWOODS	BR0227	20.00	601.00	28 153	803231	-	-	1.50	
BREVARD CO. MC	BR0238	135.00	1340.00	282416	804046	261	105	4.00	PLUGGED 8/10/88
BREVARD CO. MC	BR0241	100.00	1440.00	28262	804145	172	-	4.00	PLUGGED 08/09/88
DEER RUN	BR0253	845.00	768.00	27527	803951	630	-	6.00	PLUGGED 06/01/88
GDC PORT MALABAR	BR0258	250.00	900.00	275459	804011	306	107	6.00	PLUGGED 1984
GDC PORT MALABAR	BR0259	360.00	445.00	275530	804050	305	124	6.00	PLUGGED 1984
GDC PORT MALABAR	BR0261	15.00	750.00	275548	804135	316	93	4.00	PLUGGED 4/24/86
GDC PORT MALABAR	BR0262	360.00	820.00	275546	804145	299	123	6.00	PLUGGED 1984
GEN. DEVELOP. CORP.	BR0263	250.00	728.00	275630	804121	378	82	2.00	
GEN DEVELOP CORP.	BR0265	350.00	660.00	275640	804221	314	74	4.00	PLUGGED 4/22/86
LESTER BUTLER	BR0270	5.00	3580.00	282441	804244	-	-	3.00	PLUGGED 08/08/88
GDC PORT MALABAR	BR0278	50.00	665.00	275826	804146	347	127	4.00	PLUGGED 7/11/84
GDC PORT MALABAR	BR0282	360.00	490.00	28 0 7	804337	349	87	6.00	PLUGGED 1984
JIM DIDATO	BR0359	-	499.00	28 447	804141	450	85	4.00	PLUGGED 3/17/87
NTDCD	BR0365	13.00	725.00	275512	804122	-	-	2.00	
KENNEDY SPACE CENTER	BR0367	200.00	1820.00	283414	803912	225	131	4.00	PLUGGED 1984
BREVARD CO.	BR0386	175.00	1060.00	282123	804017	223	100	4.00	
BREVARD CO. M. C.	BR0394	200.00	1162.00	281746	804027	290	-	4.00	
BREVARD CO. M.C.	BR0406	40.00	1680.00	282327	804034	260	-	4.00	
STATE OF FLORIDA	BR0409	165.00	207.00	275211	802722	448	102	4.00	
STATE OF FLORIDA	BR0410	190.00	200.00	275217	802721	377	81	3.00	
STATE OF FLORIDA	BR0422	-	-	275131	80274	-	-	0.00	
COUCH PUMPS	BR0423	450.00	-	275553	803138	798	71	12.00	
CITY OF ROCKLEDGE	BR0429	150.00	1062.00	28192	80447	230	-	4.00	
ENTERPRISE INTERNATI	BR0432	75.00	865.00	281830	804420	132	84	4.00	PLUGGED 6/5/85
MEYERS, JAMES	BR0433	77.00	968.00	281525	803950	220	-	4.00	PLUGGED 5/27/87
AQUARINA	BR0437	5.00	250.00	275520	802937	439	195	4.00	
AQUARINA #2	BR0438	0.00	-	275532	802921	378	123	4.00	

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
REPORT ON
WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
SURWMD	BR0486	-	623.00	275040	8045 2	300	-	3.00	
SURWMD	BR0487	-	331.00	275040	804529	295	114	3.00	
CURRY, T. BRADLEY	BR0488	-	700.00	291762	804823	221	104	4.00	PLUGGED 4/13/87
REDER ALBERT	BR0490	-	-	291739	804157	-	-	2.00	PLUGGED 3/12/87
GAUPP M.K.	BR0492	-	944.00	2919 8	804241	202	142	4.00	PLUGGED 3/24/87
BETHESDA RET HOME	BR0493	1400.00	455.00	29 135	803514	290	-	4.00	PLUGGED 4/29/87
SURWMD	BR0495	1400.00	455.00	2750 5	8045 8	290	-	3.00	PLUGGED 4/29/87
IBINGE HANK	BR0494	500.00	393.00	275314	803025	500	-	6.00	PLUGGED 4/3/87
BROWNING LYNN	BR0496	40.00	519.00	275751	803235	250	-	4.00	PLUGGED 3/31/87
M. BRUND	BR0497	102.00	540.00	29 139	803219	-	-	4.00	PLUGGED 06/03/88
WALDEN, F.E	BR0498	55.00	911.00	291842	804224	150	-	4.00	PLUGGED 3/13/87
THOMPSON, DEE	BR0500	-	-	292130	8045 4	340	200	4.00	PLUGGED 3/13/87
DAVIS	BR0502	75.00	-	291557	804017	261	908	4.00	
BROWNING LYNN	BR0503	30.00	475.00	275749	803240	250	-	2.00	PLUGGED 3/31/87
KUHL	BR0504	23.00	578.00	29 431	8036 2	505	300	2.00	RECONS. 6/2/87
JACK FAULL	BR0506	-	-	292024	804438	150	-	3.00	PLUGGED 4/16/87
BREVARD COUNTY	BR0507	100.00	-	2921 8	804642	150	-	4.00	PLUGGED 4/16/87
RADENCIC, W.	BR0508	100.00	550.00	275938	8033 1	250	-	3.00	PLUGGED 5/1/87
L.C. JUDD & CO.	BR0509	-	-	29 445	804140	194	83	6.00	PLUGGED/87
BREV. CO.	BR0511	-	-	29 8 4	804112	350	80	2.00	PLUGGED 3/30/87
JACKS BLADYS	BR0512	15.00	410.00	29 143	803511	405	190	2.00	PLUGGED/87
EMERSON RICHARD M	BR0513	15.00	571.00	29 711	803751	-	-	1.50	PLUGGED/87
BENT M.S.	BR0514	20.00	735.00	291019	803714	230	-	3.50	PLUGGED 5/28/87
ROME SIM	BR0515	-	-	292336	804225	180	-	2.00	PLUGGED/87
IRSLINGER JOHN	BR0516	20.00	1453.00	292625	804245	210	-	4.00	PLUGGED/87
CITY OF MELBOURNE	BR0517	90.00	755.00	29 447	803735	240	-	4.00	PLUGGED 5/28/87
JURGENSE RODNEY	BR0518	10.00	696.00	29 940	803513	220	-	2.00	PLUGGED 6/3/87
KROLL TED	BR0519	20.00	755.00	29 940	803514	220	-	2.00	PLUGGED/87
BREVARD COUNTY	BR0520	10.00	2070.00	2922 4	804214	220	-	2.00	PLUGGED 5/29/87
CRISAFULLI BUD	BR0521	85.00	1930.00	292625	804310	200	-	3.00	PLUGGED 6/12/88
CITY OF PALM BAY	BR0522	200.00	627.00	275957	803928	290	138	4.00	PLUGGED 05/31/88
MERRILL MILLIKEN	BR0524	50.00	1652.00	292521	8043 4	140	-	4.00	PLUGGED 06/30/88
GARY K. MORSE	BR0525	15.00	4177.00	292742	8043 0	150	-	3.00	PLUGGED 06/28/88
SAM ANDERSON	BR0530	605.00	704.00	2912 3	804019	494	102	6.00	PLUGGED 06/09/88
CRISAFULLI, B.	BR0532	75.00	1300.00	2928 3	804221	185	89	4.00	
GEORGE DEMASSEY	BR0543	5.00	-	2921 5	804137	-	-	2.00	PLUGGED 07/01/88
NABA	BR0544	550.00	2650.00	293227	804044	350	-	5.00	PLUGGED 06/22/88
JAMES LEWIS	BR0545	-	1100.00	292355	803959	120	-	2.00	PLUGGED
CAPE CANAVERAL AFB	BR0546	626.00	-	2925 0	803838	350	162	12.00	PLUGGED 05/14/88
PARRISH JESSIE J.	BR0548	50.00	770.00	284714	805134	150	84	4.00	PLUGGED 03/11/88
HANLON ED	BR0549	200.00	-	292514	8043 3	170	-	4.00	PLUGGED 03/29/88
CAPE CANAVERAL AFB	BR0550	50.00	-	292757	803139	374	109	3.00	PLUGGED 02/13/88
CAPE CANAVERAL AFB	BR0551	75.00	-	293026	8033 9	262	100	4.00	PLUGGED 06/21/88
DEER RUN	BR0561	550.00	-	2752 2	803853	480	-	6.00	PLUGGED 05/02/88
DEER RUN	BR0564	845.00	740.00	275218	802921	340	120	5.00	PLUGGED 05/01/88

ST. JOHN RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
SOUTH DADE FARMS	BR0565	845.00	760.00	275235	802955	490	-	6.00	
UNDETERMINED	BR0566	150.00	741.00	275248	804022	200	-	3.00	PLUGGED 08/03/88
LEE MARTINEZ	BR0571	-	-	282051	803951	125	-	2.00	PLUGGED 7/1/88
KISER/MARTIN	BR0572	150.00	1350.00	282421	804245	445	-	4.00	PLUGGED 08/04/88
CAPE CANAVERAL AFB	BR0574	100.00	-	282528	803646	310	-	8.00	PLUGGED 06/16/88
CAPE CANAVERAL AFB	BR0575	40.00	-	282510	803647	145	-	3.00	PLUGGED 06/16/88
CAPE CANAVERAL AFB	BR0576	50.00	-	282652	803456	250	-	4.00	PLUGGED 06/20/88
CAPE CANAVERAL	BR0577	200.00	-	282623	803425	360	-	4.00	PLUGGED 06/20/88
JOHN EDWARDS	BR0578	20.00	610.00	28335	802546	-	-	2.00	PLUGGED 06/07/88
NASA	BR0579	50.00	-	283130	803800	250	-	4.00	PLUGGED 06/22/88
FLA POWER & LIGHT	BR0588	1400.00	-	28457	803622	512	-	10.00	PLUGGED 06/05/88
NASA	BR0581	5.00	-	283612	80408	200	-	4.00	PLUGGED 06/23/88
NASA	BR0582	10.00	-	28365	80403	200	-	3.00	PLUGGED 06/23/88
NASA	BR0583	115.00	1550.00	283130	804035	150	-	3.00	PLUGGED 06/27/88
FED NATL WILD REFUGE	BR0597	25.00	7500.00	283944	804623	200	114	4.00	PLUGGED 1984
FEDERAL (KSC)	BR0589	50.00	1370.00	283134	80382	246	129	4.00	
NASA	BR0589	100.00	1180.00	282845	803935	183	81	4.00	
FOOSANER	BR0590	100.00	1840.00	282756	80419	202	84	3.00	PLUGGED 6/11/85
FOOSANER	BR0591	100.00	1660.00	282757	804117	183	86	4.00	PLUGGED 6/12/85
GEORGE BALL	BR0592	120.00	1900.00	281845	803636	260	66	4.00	
DEER RUN	BR0593	-	-	275213	803738	720	-	10.00	PLUGGED 06/02/88
FOOSANER	BR0594	75.00	1520.00	282755	80416	212	86	4.00	PLUGGED 6/11/85
NASA	BR0595	200.00	-	283343	804014	190	83	4.00	
CAPE CANAVERAL AFB	BR0600	75.00	-	282741	803529	330	100	4.00	PLUGGED 06/17/88
CAPE CANAVERAL AFB	BR0601	70.00	-	282944	803244	270	888	3.00	PLUGGED 06/21/88
JACK SIMPSON	BR0602	50.00	1541.00	282212	804643	371	112	4.00	PLUGGED 5/30/85
CAPE CANAVERAL AFB	BR0603	400.00	-	282523	80364	350	-	8.00	PLUGGED 06/15/88
NASA-KSC	BR0608	50.00	350.00	282921	804043	220	140	4.00	RECON. 1986
NASA-KSC	BR0609	195.00	3500.00	28297	80411	371	180	8.00	
NASA	BR0610	240.00	2550.00	282918	80410	366	113	6.00	
CAPE CANAVERAL AFB	BR0614	0.00	-	28314	804029	105	-	2.00	PLUGGED 06/24/88
BREVARD COUNTY	BR0622	20.00	-	282132	80471	85	-	2.50	PLUGGED 06/10/88
COUCH PUMPS	BR0623	623.00	88.00	275554	803138	623	159	6.00	PLUGGED 06/10/88
BAKER HARVERY L. JR.	BR0641	45.00	-	28225	804155	242	120	4.00	PLUGGED 6/4/87
RUFUS W. COTNEY	BR0642	30.00	2280.00	282432	804238	395	888	8.00	PLUGGED 06/29/88
GDC	BR0646	150.00	721.00	275552	804222	242	116	6.00	PLUGGED 4/23/86
GDC	BR0648	-	653.00	275657	80422	-	-	6.00	
GDC	BR0652	220.00	470.00	27567	804247	238	103	4.00	PLUGGED
GDC	BR0656	150.00	102.00	275652	804250	122	120	4.00	PLUGGED 4/24/86
FOOSANER	BR0661	100.00	-	282759	80418	220	-	4.00	PLUGGED 6/12/85
CITY OF COCOA BEACH	BR0662	150.00	-	282115	803620	330	888	4.00	6/9/85
PATRICK AFB	BR0663	311.00	-	28136	803624	249	102	6.00	PLUGGED 8/11/85
BREWER, GRAY	BR0664	50.00	4220.00	282622	804534	-	-	2.00	PLUGGED 6/14/85
PATRICK AFB	BR0665	400.00	840.00	281130	803617	283	92	4.00	PLUGGED 4/29/86
PATRICK AFB	BR0666	215.00	1240.00	281122	803614	278	93	3.50	PLUGGED 4/20/86

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 BREVARD COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL COMMENTS DIA
PATRICK AFB	BR0667	222.00	924.00	291127	803612	354	32	4.00 PLUGGED 7/14/86
PATRICK AFB	BR0668	294.00	756.00	291127	8036 4	492	93	4.00 PLUGGED 7/14/86
PATRICK AFB	BR0669	346.00	924.00	291124	8036 5	383	32	4.00 PLUGGED 7/15/86
PATRICK AFB	BR0677	329.00	1390.00	291145	8036 6	476	35	4.00 PLUGGED 7/16/86
PATRICK AFB	BR0678	222.00	829.00	291142	803612	383	34	4.00 PLUGGED 7/16/86
PATRICK AFB	BR0679	215.00	790.00	291139	803613	383	34	4.00 PLUGGED 7/17/86
PATRICK AFB	BR0680	412.00	944.00	291136	803614	497	32	3.50 PLUGGED 7/17/86
PATRICK AFB	BR0681	395.00	690.00	291133	803611	382	34	4.00 PLUGGED 7/18/86
BREVARD CO INC	BR0694	75.00	-	292420	804047	217	84	4.00
BREVARD COUNTY	BR0696	1400.00	232.00	275229	802954	743	134	12.00 PLUGGED 4/16/86
STEEL DAVE	BR0699	290.00	-	292350	804310	309	35	6.00 PLUGGED 7/9/86
KLUG PETER	BR0700	200.00	1470.00	2919 3	8041 9	240	888	6.00 PLUGGED 4/14/87
SPEARS	BR0701	2.00	-	275229	802959	200	868	2.00 PLUGGED 4/18/86
CITY OF COCOA BEACH	BR0702	250.00	900.00	291846	8038 9	265	233	6.00 PLUGGED 7/11/86
ARMSTRONG BILL	BR0703	-	-	29 820	803537	883	883	2.00 PLUGGED 5/87
SUNSHINE NURSERY	BR0707	130.00	496.00	275634	8031 7	302	-	2.00 PLUGGED 4/18/86
WEIGERIF E. L.	BR0709	50.00	1430.00	291916	8040 1	218	39	6.00 PLUGGED 7/10/86
JIM SARTORI	BR0710	120.00	564.00	275312	804147	235	-	3.00 PLUGGED 08/03/88
REN CRISAFULLI	BR0719	100.00	832.00	292747	804137	-	-	3.00 PLUGGED 08/08/88
GEORGE W LEWIS	BR0721	5.00	996.00	292113	804212	250	-	2.50 PLUGGED 03/05/88
CITY OF MELBOURNE	BR0722	5.00	548.00	29 832	803813	-	-	3.00 PLUGGED 02/02/88
BRAIN HAMILTON	BR0723	500.00	1120.00	291942	8041 4	-	-	6.00 PLUGGED 05/09/88
DALE WRIGHT	BR0724	100.00	1580.00	292445	804236	105	-	4.00 PLUGGED 08/05/88
JIM SARTORI	BR0737	25.00	-	275322	804049	140	-	3.00
		159	28,305					

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOCKING WELL PROGRAM
 CLAY COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	WELL COMMENTS
USGS	C-0009	-	-	33 43 12	82 24 6	259	204	4.00	
CHEROKEE BRICK/TILE	C-0013	150.00	5.00	30 02 0	81 40 0	-	-	6.00	PLUGGED 9/20/88
JIM HARGIS	C-0020	-	-	30 45 5	81 49 1	-	-	4.00	REPAIRED 9/26/88
SKINNER BRYANT	C-0129	-	4.00	30 4 9	81 51 52	999	999	6.00	REPAIRED 9/21/88
		4	150						

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 DUVAL COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	WELL COMMENTS
UNDERTIMED	D-0400	20.00	25.00	302018	810647	-	-	6.00	
UNDERTIMED	D-0400	-	31.00	302018	810019	406	344	4.00	PLUGGED 5/20/87
CITY OF JACKSONVILLE	D-2359	-	-	302744	814017	-	-	8.00	
		3	28						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 FLAGLER COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM.	WELL COMMENTS
PUBLIC DOMAIN	F-0020	250.00	7560.00	2934 1	811111	-	-	6.00	
WASHINGTON OAKS S.P.	F-0030	70.00	-	293758	811032	380	-	4.00	
UNDETERMINED	F-0031	1.00	1020.00	292523	812538	-	-	6.00	
UNDETERMINED	F-0134	-	1380.00	293338	8110 5	152	134	4.00	PLUGGED 1/30/85
UNDETERMINED	F-0213	25.00	-	292519	812553	-	-	0.00	PLUGGED 1/22/85
HAMMOCK BAPTIST CHUR	F-0220	30.00	-	292547	811147	-	-	4.00	PLUGGED 1/24/85
ARMOND FISHETTE	F-0221	20.00	-	2925 1	811149	888	888	6.00	PLUGGED 1985
ARMOND FISHETTE	F-0222	30.00	-	2925 4	811150	888	888	6.00	PLUGGED 1985
ITT PALM COAST	F-0223	10.00	1600.00	2925 0	811135	888	888	6.00	PLUGGED 1985
SHAEFFER	F-0224	5.00	-	292911	81 8 3	888	888	2.00	PLUGGED 2/7/85
HODGES	F-0237	10.00	-	292517	812542	-	-	2.00	PLUGGED 1/23/85
HODGES	F-0238	10.00	-	292517	812543	-	-	2.00	PLUGGED 1/23/85
IHLNFELDT	F-0253	40.00	-	293628	8112 3	153	147	4.00	PLUGGED 2/4/85
SHOK, GEARLDINE	F-0254	-	-	2927 9	811219	-	-	4.00	PLUGGED 1/31/85
WESTBROOK, J.H.	F-0255	10.00	-	293352	8111 1	133	87	2.00	PLUGGED 1/30/85
		15	541						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 INDIAN RIVER COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	WELL COMMENTS
SURAMD	IR0106	-	595.00	274658	8043 1	317	114	3.00	PLUGGED 4/20/87
GRAVES EROS. CO.	IR0288	-	-	274448	802618	888	888	808.00	
SURAMD	IR0306	-	805.00	274700	8043 1	300	-	3.00	PLUGGED 4/20/87
SURAMD	IR0307	-	434.00	274658	8044 1	300	-	3.00	PLUGGED 4/20/87
SURAMD	IR0308	-	554.00	274724	8044 4	275	-	3.00	PLUGGED 4/21/87
SURAMD	IR0309	-	-	274745	8044 4	275	-	3.00	PLUGGED 4/21/87
SURAMD	IR0310	-	-	274710	804234	300	-	3.00	PLUGGED 4/24/87
SURAMD	IR0347	-	-	274552	8043 1	-	-	3.00	
SURAMD	IR0348	-	-	274615	8044 4	-	-	3.00	
SURAMD	IR0349	-	-	274617	8043 1	300	-	3.00	PLUGGED 4/22/87
SURAMD	IR0387	150.00	400.00	274024	803847	400	-	2.50	PLUGGED 4/20/87
SURAMD	IR0396	-	-	274040	803847	400	-	4.20	PLUGGED 5/5/87
SURAMD	IR0399	-	-	274047	8028 2	50	-	2.00	PLUGGED 4/29/87
SURAMD	IR0400	-	-	274050	803829	50	-	2.00	PLUGGED 4/29/87
RYALL GROVES	IR0501	-	-	274421	802823	-	-	2.00	

 15 150

ST. JOHN RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 MARION COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
HASTINGS & GREEN	N-0040	-	-	292349	82 506	888	888	6.00	

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 ST. JOHN'S COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
MCCOOK MARY	SJ0024	120.00	147.00	295327	811929	250	888	4.00	PLUGGED 3/25/86
STONE JAMES	SJ0038	-	1400.00	294212	813023	510	122	6.00	ASCS
UNDETERMINED	SJ0505	60.00	3500.00	295751	812653	-	-	4.00	
UNDETERMINED	SJ0506	30.00	54.00	295646	812639	-	-	4.00	
PUBLIC DOMAIN	SJ0518	-	-	295144	811556	888	888	6.00	
WELATKA FRUIT CO.	SJ0522	310.00	2069.00	294137	812936	510	60	6.00	PLUGGED 5/29/86
WELATKA FRUIT CO	SJ0523	100.00	1740.00	294134	812936	524	51	6.00	PLUGGED 5/22/86
WELATKA FRUIT CO	SJ0524	125.00	5860.00	294136	812936	516	55	6.00	PLUGGED 5/21/86
WELATKA FRUIT CO	SJ0525	130.00	1960.00	294129	812936	502	60	6.00	PLUGGED 5/20/86
WELATKA FRUIT CO	SJ0526	130.00	1250.00	294126	812936	484	81	6.00	PLUGGED 6/9/86
WELATKA FRUIT CO.	SJ0527	130.00	-	294131	812943	-	-	6.00	PLUGGED 6/9/86
WELATKA FRUIT CO	SJ0528	-	-	294050	812944	-	-	6.00	PLUGGED
DOT	SJ0530	-	160.00	295410	811945	888	888	6.00	
BULLSHIT RANCH&FARM	SJ0561	250.00	641.00	294155	813015	240	888	3.00	BACK PLUGGED
BULLSHIT RANCH&FARM	SJ0562	1.00	-	2941 7	813048	120	888	3.00	PLUGGED 6/10/86
SINGLETON, JAMES	SJ0564	-	418.00	293928	812958	256	76	3.00	PLUGGED 6/4/86
JOHNS DANNY	SJ0600	-	-	294024	812957	406	110	4.00	RECONSTRUCTED
A.R.E.C.	SJ0682	-	-	294313	812942	-	-	0.00	
		18	1,396						

ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 SEMINOLE COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
FLORIDA GAME & FISH	S-0050	55.00	1950.00	2849 6	911019	102	62	4.00	PLUGGED 9/22/87
FLORIDA GAME & FISH	S-0051	10.00	1555.00	2843 6	911017	102	119	4.00	PLUGGED 9/23/87
FLORIDA GAME & FISH	S-0052	-	1650.00	2843 6	911015	102	898	4.00	PLUGGED 9/23/87
FLORIDA GAME & FISH	S-0053	-	1700.00	284310	911019	115	898	3.00	PLUGGED 9/22/87
FLORIDA GAME & FISH	S-0054	-	1625.00	284310	911017	123	109	4.00	PLUGGED 9/23/87
FLORIDA GAME & FISH	S-0055	10.00	1740.00	284310	911015	130	77	4.00	PLUGGED 9/22/87
PAT JO WALLS	S-0056	-	590.00	284853	911707	898	898	3.00	
FLORIDA GAME & FISH	S-0105	-	-	284310	911020	120	-	3.00	PLUGGED 9/23/87
PAT JO WALLS	S-0204	-	-	284854	911709	-	-	3.00	
PAT JO WALLS	S-0205	-	-	284847	911706	-	-	3.00	
		10	75						

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
 REPORT ON
 WELLS PLUGGED AND RECONSTRUCTED BY THE FREE FLOWING WELL PROGRAM
 VOLUSIA COUNTY

WELL OWNER	WELL ID	FLOW GPM	CHLORIDE PPM	LAT	LONG	WELL DEPTH	CASE DEPTH	WELL DIAM	COMMENTS
LAWRENCE FARMS, INC	V-0052	30.00	1040.00	29 748	8121 9	-	-	8.00	
LAWRENCE FARMS, INC	V-0053	30.00	1700.00	29 746	8121 9	-	-	8.00	PLUGGED 2/13/85
L. WOODRUFF WILDLIFE	V-0054	25.00	80.00	29 824	812222	-	-	3.00	PLUGGED 2/14/85
LAWRENCE FARMS, INC	V-0058	75.00	3780.00	29 752	8121 9	-	-	8.00	
UNION BAG	V-0154	25.00	3460.00	291543	8132 6	116	98	2.00	
A. RICH	V-0159	50.00	490.00	295645	803235	125	-	5.00	
BURKARD	V-0200	290.00	14590.00	291031	8059 4	140	98	4.00	RECONSTRUCT/86
BURKARD	V-0508	-	9230.00	29 1 3	805519	999	130	3.00	RECONSTRUCTED 9/20/87
		2	525						
		238	31,162						

APPENDIX C

CONTRACTUAL AND COOPERATIVE AGREEMENTS

APPENDIX C-1

COOPERATIVE AGREEMENT BETWEEN
SJRWMD AND BREVARD COUNTY

AGREEMENT BETWEEN THE
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
AND THE
BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS

THIS AGREEMENT is entered into on the 5th day of January, 1988, by and between the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, hereinafter the "DISTRICT", and the BREVARD COUNTY BOARD OF COUNTY COMMISSIONERS, hereinafter "BREVARD COUNTY".

WHEREAS, the waters of the State are among its basic resources and it has been declared to be the policy of the legislature to promote the conservation, development, and proper utilization of surface and ground water, and

WHEREAS, the Legislature has directed the water management districts of the State in Section 373.207 (8) (a), Florida Statutes, to locate all known abandoned artesian wells and insure that each such well is plugged on or before January 1, 1992, and

WHEREAS, proper management of artesian wells is necessary to protect the public health, safety and welfare and to extend the life of the ground water supplies, and

WHEREAS, BREVARD COUNTY, based on information from its "208" program and other water resources investigations, has declared the waste of ground water by uncontrolled free flowing wells to be a serious concern, and

WHEREAS, BREVARD COUNTY has requested the DISTRICT to participate in a cooperative water resource conservation and protection program, and

WHEREAS, the DISTRICT has been established to manage water resources within its geographical area, and

WHEREAS, BREVARD COUNTY and the DISTRICT desire to jointly fund the plugging of uncontrolled free flowing wells located in Brevard County in the amount of Fifty-Thousand Dollars (\$50,000), by each party hereto committing Twenty-Five Thousand Dollars (\$25,000); and

WHEREAS, BREVARD COUNTY and the DISTRICT intend to have the plugging of uncontrolled free flowing wells performed by qualified independent contractors.

NOW, THEREFORE, in consideration of the foregoing premises, which are part of the consideration herein, the parties hereto do mutually agree as follows.

1. The DISTRICT will:

A. Obligate for the purposes of this Agreement monies in the amount of Twenty-Five Thousand Dollars (\$25,000) for plugging uncontrolled free flowing wells in Brevard County. Said funds are budgeted in Fiscal Year 1987/1988 in Project No. 20 018 02.

B. Secure the services of a qualified water well contractor for the DISTRICT as follows:

- 1) develop bid specifications for each well to be plugged in conjunction with BREVARD COUNTY; and,
- 2) publish notice of solicitation of bids in a newspaper of general circulation in Brevard County as minimum written notice; and,
- 3) solicit bids and select a water well contractor that best qualifies to fulfill the specifications.

C. Enter into contracts with the water well contractors and then administer the contracts as follows:

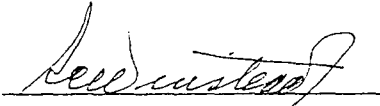
- 1) control sub-contracting of services by any contractor who is a party to a contract with the DISTRICT requiring that no subcontract can be entered into unless the DISTRICT first approves the subcontractor as being qualified;
- 2) notify BREVARD COUNTY upon execution of a contract that a contract has been entered into and invoice BREVARD COUNTY for payment of one-half (1/2) of the amount of money obligated by the contract;
- 3) do such other things as are necessary to administer the contracts.

- D. Provide the professional and technical support to water well contractors that enter into contracts with the DISTRICT that is necessary to properly address all aspects of the purposes of this Agreement;
 - E. Provide monthly progress reports to BREVARD COUNTY regarding the progress of work contracted.
2. BREVARD COUNTY will:
- A. Obligate for the purposes of this Agreement monies in the amount of Twenty-Five Thousand Dollars (\$25,000).
 - B. Be responsible for obtaining the consent of the owner of a well for the contractor to plug free flowing wells and licenses for performing the above mentioned work;
 - C. Provide in kind services in the form of a technician to assist in the administration of the well plugging program. For purposes of this Agreement these services are valued at Seven Thousand Dollars (\$7,000);
 - D. Pay the DISTRICT for work invoiced it by the DISTRICT, up to a maximum of Eighteen Thousand Dollars (\$18,000), for sharing expenses on a 50% basis with the DISTRICT, for the services of a water well contractor and materials needed by the contractor.
3. DISTRICT and BREVARD COUNTY shall prepare a final report.
4. This Agreement shall be effective upon the execution thereof and shall continue until September 30, 1988, except that performance under Paragraph 5 shall continue beyond that date. A contract between either of the parties hereto and a third party, called for by this Agreement, shall be governed by the terms of the contract entered into with the third party.

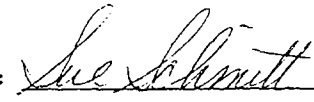
5. The DISTRICT agrees to indemnify and hold harmless BREVARD COUNTY for any tort liability that may be imposed on BREVARD COUNTY due to the action or inaction of DISTRICT while executing its responsibilities under this Agreement, and BREVARD COUNTY agrees to indemnify and hold DISTRICT harmless for any tort liability that may be imposed on DISTRICT due to the action or inaction of BREVARD COUNTY while executing its responsibilities under this AGREEMENT.
6. This contract shall be governed by the laws of the State of Florida.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement on the date and year ascribed above.

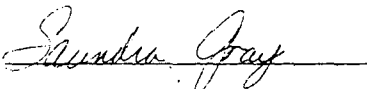
ATTEST:


R.C. Winstead, Jr. Clerk

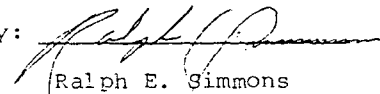
BOARD OF COUNTY COMMISSIONERS
OF BREVARD COUNTY, FLORIDA

By: 
Sue Schmitt, Chairman

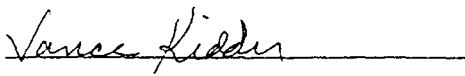
ATTEST:


Saundra Gray, Secretary

ST. JOHNS RIVER
WATER MANAGEMENT DISTRICT

By: 
Ralph E. Simmons
Chairman

APPROVED AS TO FORM AND LEGALITY:


VANCE KIDDER, GENERAL COUNSEL

APPENDIX C-2

COOPERATIVE AGREEMENT BETWEEN SJRWMD
AND SEMINOLE SOIL AND WATER CONSERVATION DISTRICT

AGREEMENT BETWEEN
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
AND
SEMINOLE SOIL AND WATER CONSERVATION DISTRICT
FOR THE CONTROLLING OF ABANDONED ARTESIAN WELLS
IN SEMINOLE COUNTY

THIS AGREEMENT is made and entered into this ____ day of _____, 1988, by and between the GOVERNING BOARD of the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (hereinafter the SJRWMD), and the SEMINOLE SOIL AND WATER CONSERVATION DISTRICT (hereinafter the SSWCD).

WITNESSETH:

WHEREAS, the waters of the State are among its basic resources, and the Florida Legislature has declared its policy to promote the conservation, development, and proper utilization of surface and ground waters; and

WHEREAS, pursuant to Chapter 373, F.S., SJRWMD has been established to manage water resources within its geographical area; and

WHEREAS, pursuant to Section 373.207 (8)(a), F.S., the Florida Legislature has directed the Water Management Districts of the State to locate all known abandoned artesian wells, and to insure that each such well is controlled on or before January 1, 1992; and

WHEREAS, proper management of artesian wells is necessary to protect the public health, safety, and welfare, and to extend the life of ground water supplies; and

WHEREAS, the SSWCD is a public body organized under Chapter 582 F.S., and empowered to enter into an agreement with SJRWMD for the purpose of conserving and protecting water resources in Seminole County; and

WHEREAS, SSWCD has declared the waste of ground water because of abandoned artesian wells to be a serious concern; and

WHEREAS, SSWCD has requested the SJRWMD to participate in a cooperative water resource conservation and protection program; and

WHEREAS, SSWCD and SJRWMD desire to jointly fund the costs incurred by a licensed water-well contractor in the controlling of abandoned artesian wells located in Seminole County in a total amount of Thirty Thousand Dollars (\$30,000).

NOW, THEREFORE, in consideration of the foregoing premises which are made part of this Agreement, and the mutual covenants, terms and conditions contained herein, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto, each intending to be legally bound, agree as follows:

ARTICLE I. - SCOPE OF WORK

The Scope of Work for this Agreement includes all work related to locating abandoned artesian wells in Seminole County, Florida, collecting and recording pertinent data on each well, and providing the services of a Licensed Water Well Contractor to properly control the wells.

ARTICLE II. - DURATION OF CONTRACT

This Agreement shall be effective upon the execution thereof and shall continue until September 30, 1989. SJRWMD and SSWCD may elect to renew the terms of this Agreement on an annual basis.

ARTICLE III. RESPONSIBILITIES OF THE SJRWMD

- A. SJRWMD shall administer the provisions of this Agreement.
- B. SJRWMD shall obligate for the purposes of this Agreement up to a maximum of Fifteen Thousand Dollars (\$15,000) for controlling abandoned artesian wells in Seminole County, Florida (said funds are budgeted in Fiscal Year 1988-89 under Project No. 10-018-02).
- C. SJRWMD shall obtain the services of a qualified water-well contractor through the following steps:
 - 1. develop general bid specifications for wells which shall be controlled in conjunction with SSWCD; and
 - 2. publish a notice of solicitation of bids in a newspaper of general circulation in Seminole County and other counties, as deemed necessary, as minimum written notice; and
 - 3. solicit bids, and select the lowest responsible bidder.
- D. SJRWMD shall award a contract to the lowest responsible bidder, and administer the contract in the following general manner:
 - 1. control the subcontracting of services by any contractor who is a party to the Agreement with SJRWMD by requiring that no sub-contract can be entered into by contractor without prior SJRWMD approval; and

2. notify SSWCD upon execution of the Agreement with the selected contractor; and
 3. invoice SSWCD for payment of one half (½) of the amount expended pursuant to the Agreement with the selected contractor on a quarterly basis; and
 4. do such other things as are necessary to administer the contracts.
- E. Provide professional and technical support necessary to address all aspects of the work to water-well contractors who enter into an Agreement with SJRWMD to carry out the project in Seminole County.
 - F. Provide monthly progress reports to SSWCD regarding the progress of work contracted.
 - G. Perform water quality analyses for water samples taken by SSWCD from the identified wells. At a minimum, preliminary field water quality analyses shall be provided in the monthly progress reports (III-F.).

ARTICLE IV. RESPONSIBILITIES OF THE SSWCD

- A. SSWCD shall obligate for the purposes of this Agreement up to a maximum of Fifteen Thousand Dollars (\$15,000) for the services of a licensed water-well contractor to control abandoned artesian wells in Seminole County, Florida.
- B. SSWCD shall pay SJRWMD up to Fifteen Thousand Dollars (\$15,000) for services of a water well contractor and materials needed by the contractor, as described in Article III above, upon receipt of quarterly invoices from SJRWMD.
- C. SSWCD shall be responsible for locating wells which are to be controlled, for collecting water samples to be tested for chlorides and sulfates, for providing a transfer location of the water samples to SJRWMD, and for completing and forwarding a Well-Header Form on each well to SJRWMD. The Well-Header Form shall be supplied by SJRWMD.
- D. SSWCD shall be responsible for obtaining the written consent of the well owners to have their wells controlled by the Contractor.

ARTICLE V. INDEMNITY AND INSURANCE

- A. Each party is responsible for all personal injury and property damage attributable to the negligent acts or omissions of that party and the officers, employees and agents thereof.

- B. The parties further agree that nothing contained herein shall be construed or interpreted as denying to any party any remedy or defense available to such parties under the laws of the State of Florida; the consent of the State of Florida or its agents and agencies to be sued by reason hereon; nor as a waiver of sovereign immunity of the State of Florida beyond the waiver provided for in Section 768.28, F.S.
- C. Each party shall acquire and maintain throughout the term of this Agreement such liability and automobile insurance as required by their current rules and regulations.

ARTICLE VI. TERMINATIONS

- A. Termination for Default: This Agreement may be terminated either partially or as a whole, by either party, if the other party substantially fails to fulfill its obligations under this Agreement through no fault of the terminating party. No termination may be effected unless the other party is given: (1) at least ten (10) calendar days written notice delivered by certified mail, return receipt requested, and (2) an opportunity for consultation with the other party prior to termination.
- B. Termination for Convenience: This Agreement may be terminated either in part or as a whole by the SJRWMD in writing provided that the SSWCD is given: (1) at least thirty (30) days written notice delivered by certified mail, return receipt requested, of intent to terminate, and (2) an opportunity for consultation with the SJRWMD prior to termination.
- C. If Termination for Default is effected by the SJRWMD, an equitable settlement of the amount of this Agreement shall be made, but (1) no amount shall be allowed for unperformed services, and (2) any payment due to SSWCD at the time of actual termination shall be offset by costs incurred by the SJRWMD because of the SSWCD'S default. If termination for the SJRWMD'S default is effected by the SSWCD, or if termination for convenience is effected by the SJRWMD, the SJRWMD shall pay for all services, materials, and costs reasonably incurred by SSWCD prior to termination.
- D. Upon receipt of a written termination notice under paragraphs A or B above, SSWCD shall: (1) immediately cease all affected work (unless the notice directs otherwise) and (2) return or otherwise make available to the SJRWMD all data, drawings, specifications, reports, estimates, summaries and any other information and materials (whether completed or in progress) as may have been given to the SSWCD to carry out the terms of this Agreement within 20 days of termination or as otherwise agreed to by both parties.
- E. Upon termination under paragraphs A or B above, the SJRWMD may elect to take over the work or may award a contract to complete the work to another party.

F. If the SJRWMD terminates the contract for Default because SSWCD failed to fulfill contractual obligations and it is subsequently determined that SSWCD had in fact substantially performed the requirements of the Agreement, the Termination will be deemed to have been for convenience. Compensation for completed portions of this contract will be made as provided in paragraph C, above.

ARTICLE VII. APPROVALS

The SJRWMD's Project Manager shall be the Executive Director or his designee. The SSWCD's Project Manager shall be the Chairman of the Board of Supervisors or his designee. All matters shall be coordinated with or directed to the project managers for action or disposition.

ARTICLE VIII. NOTICE

Any notice or other written communication between the parties shall be considered delivered when posted by United States Mail or delivered in person to the Project Managers.

ARTICLE IX. INTEREST

Unless otherwise declared in an addendum hereto, SSWCD warrants to the SJRWMD that no member, officer or employee of the SJRWMD has any material interest (as defined in Section 112.312(1), F.S.), either directly or indirectly, in the business of the SSWCD to be conducted hereunder, and that so such person shall have any such interest at any time during the term hereof.

ARTICLE X. GOVERNING LAW

This Agreement shall be governed by and interpreted according to the laws of Florida.


ARTICLE XI. ENTIRE AGREEMENT


It is expressly understood and agreed that this Agreement constitutes the entire Agreement of the parties, and that the parties are not bound by any stipulations, representation, agreements, or promises, oral or otherwise, not printed or inserted in this Agreement. The SSWCD agrees that no representations have been made by the SJRWMD in order to induce the SSWCD to enter into this Agreement, other than as expressly stated in this Agreement. This Agreement cannot be changed orally, nor by any means other than by written amendments expressly referencing this Agreement and signed by all parties.

IN WITNESS WHEREOF, the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT and the SEMINOLE SOIL AND WATER CONSERVATION DISTRICT have executed this Agreement on the day and year first above written.

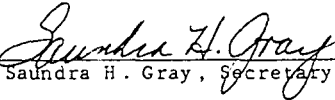
SEMINOLE SOIL AND WATER
CONSERVATION DISTRICT

ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT

By: 
Chairman

By: 
John L. Minton, Chairman

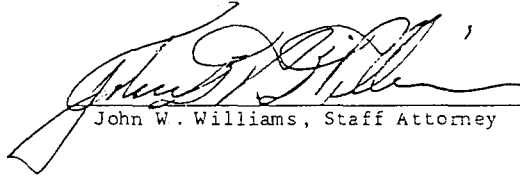
Attest: 
Secretary

Attest: 
Sandra H. Gray, Secretary

(CORPORATE SEAL)

(SEAL)

APPROVED AS TO FORM AND LEGALITY


John W. Williams, Staff Attorney

APPENDIX C-3

CONTRACTUAL AGREEMENT BETWEEN SJRWMD AND
BLOUNT WATER SYSTEMS

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into this 4th day of May, in the year 1988, by and between the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT as party of the First part, (hereinafter called the DISTRICT), and Blount's Water Systems, 2215 S. 39th St., Ft. Pierce, FL, 34947, party of the Second Part, (hereinafter called the CONTRACTOR).

WITNESSETH, that said Contractor, for and in consideration of the payments hereinafter specified and agreed to be made by the District, hereby covenants and agrees to furnish and deliver all materials, to do and perform all work and labor required to be furnished and delivered, done and performed for the plugging of uncontrolled, abandoned, and free-flowing artesian wells in the St. Johns River Water Management District, Florida, in accordance with the proposal herein, and to complete the work in entire conformity with the Drawings, Specifications and other Contract Documents on file at the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, which are duly approved and which said Drawings and Specifications and other Contract Documents are hereby made part of this Agreement as fully and with the same effect as if the same had been set forth at length in the body of this Agreement.

The Contractor shall complete the work as set forth in the Work Orders by September 30, 1988. Time is of the essence of this Contract Agreement.

The Contractor agrees to make payment of all proper charges for labor and materials required in the aforementioned work, and to defend, indemnify, save and hold harmless the District and all of its officers, agents, employees and servants, and each and every one of them, against and from all damages to which the District or any of their officers, agents, employees or servants may be put, by reason of injury to the persons or property of others resulting from the performance of said Work, or through the negligence of the Contractor, or through any improper or defective machinery, implements or appliances used by the Contractor in the aforesaid Work or through any act or omission on the part of the Contractor, his agents, employees, servants or any other person or entity for whom the Contractor is responsible.

If the Contractor shall fail to comply with any of the terms, conditions, provisions, or stipulations of this Contract, according to the true intent and meaning thereof, then the District may avail himself of any or all remedies provided in the Contract and shall have the right and power to proceed in accordance with the provisions thereof.

It is also agreed and understood that the acceptance of final payment by the Contractor shall be considered as a release in full of all claims against the District or any of its members, agents and employees arising out of, or by reason of, the work done and materials furnished under this Contract.

In consideration of the premises, the District shall pay to the Contractor for said Work, when fully completed, the Total Bid Price of \$ 75.00 per hour rig time, subject to such additions and deductions as may be provided for in the Contract Documents. Payment shall be made upon the terms set forth in the Contract Documents, Section V - General Conditions, Article 19, in a total amount not to exceed \$35,000.

Unless otherwise declared in an addendum hereto, Contractor warrants to the District that no member, officer or employee of the District has any material interest (as defined in Section 112.312(1), Florida Statutes), either directly or indirectly, in the business of the Contractor to be conducted hereunder, and that no such person shall have any such interest at any time during the term hereof.

IN WITNESS WHEREOF, the said ST. JOHNS RIVER WATER MANAGEMENT DISTRICT has caused this Contract to be executed in its name by its Chairman, attested by its Secretary, and has caused its seal to be hereto attached; and the Contractor has caused this Contract to be executed in its name by its duly authorized representatives, and, if appropriate, has caused the seal of the corporation to be hereunto attached, all on the day and year first above written.

Signed, sealed and delivered in the presence of:

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

By: [Signature]
John L. Minton, Chairman

(SEAL)

Attest: [Signature]
Saundra H. Gray, Secretary

(CORPORATE CONTRACTOR)

By: [Signature]
President

(CORPORATE SEAL)

Attest: _____
Secretary

(NON-CORPORATE CONTRACTOR)

[Signature] (SEAL)

[Signature]
Claude D. Sheppard
As to Party of the Second Part

(SEAL)

(SEAL)

(SEAL)

APPROVED AS TO FORM AND LEGALITY

[Signature]
John W. Williams, Staff Attorney

(2)

STATE OF FLORIDA SWORN TO AND SUBSCRIBED
COUNTY OF Putnam BEFORE ME ON Nov 4, 1992

MY COMMISSION EXPIRES

Notary Public, State of Florida
My Commission Expires May 23, 1992
Emp. by Troy Fair - Insurance Inc.

[Signature]
NOTARY PUBLIC

APPENDIX D

ABANDONED ARTESIAN WELL
PLUGGING PROGRAM
GUIDELINES AND PROCEDURES

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
ABANDONED ARTESIAN WELL PLUGGING PROGRAM
GUIDELINES AND PROCEDURES

1. When an abandoned artesian well is located by District personnel, pertinent information concerning the well (location, size, owner, etc.) is forwarded to the Abandoned Artesian Well Plugging Program project manager in the Water Resources Department.
2. The project manager will send a letter by certified mail, return receipt requested, to the owner advising him of:
 - 1) the apparent existence of an abandoned artesian well on his property.
 - 2) the statutory responsibilities concerning such wells.
 - 3) the District's cost-sharing well plugging program which will provide appropriate well plugging services at a cost to the owner of fifty percent (50%) of the total cost of plugging each well or \$600 per well, whichever is less. The owner's share of cost may be paid for in cash, materials and/or services or any combination of these. If state funding is received in an amount adequate to perform the annual plugging program as proposed to DER, then the District may elect to increase its share of the cost sharing percentage.
3. The letter referred to in No. 2 will be accompanied by an acknowledgement form to be returned to the District within 45 days. If this form is not returned, a second letter will be sent by the project manager. This letter will provide a 30 day response period. If no response is received, then the Resource Management Department will be notified by the project manager.
4. Upon such notification, the Resource Management Department will investigate the well to determine if it is an abandoned artesian well which should be plugged pursuant to the provisions of Chapter 373.206, .209 .213, and .316 F.S.
5. If it is determined that the well should be plugged pursuant to the provisions of Chapter 373.206, .209, 213 and .316 F.S., appropriate enforcement action will be taken.
6. If the owner notified as per No. 2 above indicates that he is unwilling to participate in the District sponsored project then notification will be forwarded to the Resource Management Department. The Resource Management Department will proceed as per Nos. 4 and 5.
7. If the owner indicates (on the form referred to in No. 3) a willingness to cooperate then his well will be added to the list of wells and no enforcement action will be taken against the owner at least as long as these guidelines and procedures are in effect.

8. Wells which are considered an imminent hazard to public health, safety and welfare will be placed first in the priority order of plugging. Prioritization of all other wells to be plugged will be based on relative harm to the water resources as per Chapter 373.206 F.S. and as outlined in the District's "Annual Report on Uncontrolled Free-Flowing Artesian Wells", 1985 (copy attached). Wells which pose a lesser threat to the water resources, i.e. only waste water, will be grouped in the lowest priority category, but may be moved up in priority during any fiscal year if other contractual well plugging is proceeding in the areas of these wells, making their plugging financially advantageous. The project manager will be responsible for keeping the prioritized list of wells to be plugged.
9. Arrangements for receipt of funds from the cooperative owner will be made pursuant to a written agreement to be entered into before any work is performed by the District on the well. The owner will be notified of the proposed plugging date at least three months prior to that date.
10. Owners of wells currently included on the District's Abandoned Artesian Well Plugging Program inventory and not scheduled for plugging during FY 86-87 will be notified of the change in the program and will be asked to complete and return the form described in No. 3. All provisions of these guidelines and procedures shall be applicable to them.
11. For those wells which are referred to the Resource Management Department as per Nos. 3 and 6, the Resource Management Department will notify the Water Resources Department project manager of information concerning final action. This information will be included in the program records.

AGREEMENT BETWEEN

THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

AND

THIS AGREEMENT is made and entered into this ____ day of _____ 19____, by and between the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, a public body created pursuant to Chapter 373, F.S., hereinafter referred to as the "DISTRICT", and _____ hereinafter referred to as the "OWNER".

WITNESSETH

WHEREAS, the waters of the State of Florida are among its basic resources and it has been declared to be the policy of the Legislature to promote the conservation, development, and proper utilization of surface and ground water; and

WHEREAS, pursuant to Chapter 373, Florida Statutes, the DISTRICT has been established to manage water resources within its geographical area; and

WHEREAS, pursuant to Section 373.207(8)(a), Florida Statutes, the Legislature has directed the water management districts of the state to locate all known abandoned artesian wells and insure that each such well is plugged on or before January 1, 1992; and

WHEREAS, proper management of artesian wells is necessary to protect the public health, safety and welfare and to extend the life of the ground water supplies; and

WHEREAS, an abandoned artesian well is located on the property of the OWNER; said property being identified in Exhibit "A" attached hereto and by reference made a part hereof; and

WHEREAS, the OWNER and the DISTRICT desire and intend to bring into compliance the aforementioned abandoned artesian well by utilizing DISTRICT staff and equipment and/or by obtaining the services of qualified independent contractors.

NOW, THEREFORE, for and in consideration of the foregoing premises, which are part of the consideration herein, the parties hereto do mutually agree as follows:

I. The DISTRICT shall:

- A. Undertake the plugging or reconstruction of the subject well(s) located on the property identified in Exhibit "A".
- B. As necessary, enter into a contract with a licensed water well contractor and administer the contract;
- C. Provide the professional and technical support necessary to properly address all aspects of the Agreement;
- D. Provide a report to the OWNER regarding the progress and completion of plugging the subject well.
- E. Obligate for the purposes of this agreement monies to cover the difference between the OWNER's contribution and the total cost, to complete the plugging or reconstruction of the well(s). The DISTRICT's obligation will be a minimum of 50% or a maximum of total cost minus six hundred dollars (\$600.00) for materials, site work and contractual services, per well.
- F. Pay the independent water well contractor (when applicable) for work performed and invoice the OWNER for his cost share.

II. The OWNER shall:

- A. Grant to the DISTRICT the right to plug the well(s) located on the OWNER's property, identified in Exhibit "A".
- B. Grant to the DISTRICT reasonable ingress and egress for access to and from the well site and the right to transport, place, and remove construction equipment and vehicles used in connection with the plugging of the subject well(s).
- C. Provide for the purposes of this Agreement, monies to cover 50% of costs for all materials, site work and independent contractual services, in an amount not to exceed six hundred dollars (\$600.00) per well for materials and services described above. The OWNER shall further have the option to pay all or part of his share through the provision of in-kind services and/or materials as approved by the DISTRICT'S Project Manager. The type and value of these services and materials will be mutually agreed to in writing prior to commencement of work.
- D. Pay to the DISTRICT, within 30 days of receipt of invoice, up to a maximum of six hundred dollars (\$600.00) for materials and services described above.
- E. Defend, indemnify, save and hold harmless the DISTRICT, its officers, agents, servants and employees, from suits, costs, claims, judgements for injury or damages to which the DISTRICT, or any of its officers, agents or servants, may be subjected by reason of injury to the OWNER(S) resulting from the performance of the repairing/plugging of well(s) or the omissions of the DISTRICT, its agents, servants, employees, and contractor or subcontractor, suppliers, materialmen or their employees.

F. The term of this Agreement will be from the date of its execution until all work has been completed and payment made.

PROPERTY OWNER

ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT

By: _____

By: _____
John L. Minton, Chairman

Attest: _____
Saundra H. Gray, Secretary

APPROVED AS TO FORM AND LEGALITY

John W. Williams, Staff Attorney