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GROUND-WATER RESOURCES DATA
OF
CHARLOTTE, DE SOTO, AND HARDEE
COUNTIES, FLORIDA

By
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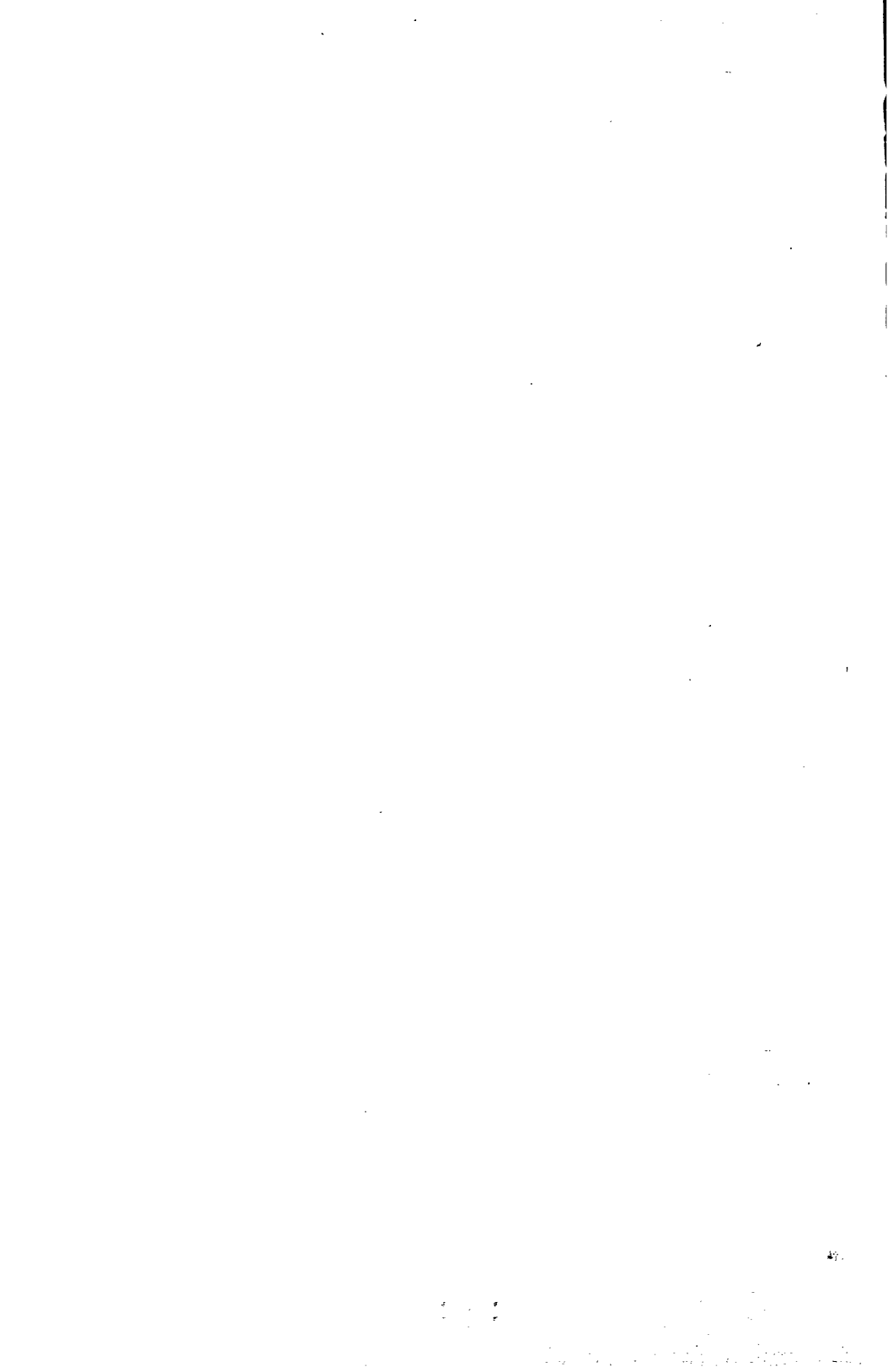
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INTRODUCTION

Charlotte, De Soto, and Hardee counties are east-southeast of Tampa in west-central peninsular Florida, figure 1. In order to plan the future water-resource development of the area, information about the water resources is needed. To meet this need, the Water Resources Division of the U.S. Geological Survey, in cooperation with the Peace River Basin Board of the Southwest Florida Water Management District as part of the statewide cooperative program with the Division of Geology, Florida Board of Conservation, began a continuing hydrologic data collection program in July, 1963, as an initial step in the investigation and evaluation of the ground-water resources of Hardee and De Soto counties. A similar hydrologic data program commenced in Charlotte County in July, 1964.

Previous work in Hardee and De Soto counties included a one year reconnaissance by the Division of Water Resources and Conservation, Florida Board of Conservation, which concluded in June, 1963, and resulted in a hydrologic report (Woodard, 1964). As an outgrowth of the hydrologic data program, a Map Series report portraying the chemical character of water in the Floridan aquifer in the southern Peace River basin was prepared in 1967 (Kaufman and Dion).

The data contained herein constitute the basis for the Map Series report. Additional selected data, including records of wells and chemical analyses, on the ground-water resources of the three county area are also included and are published to make the data available.

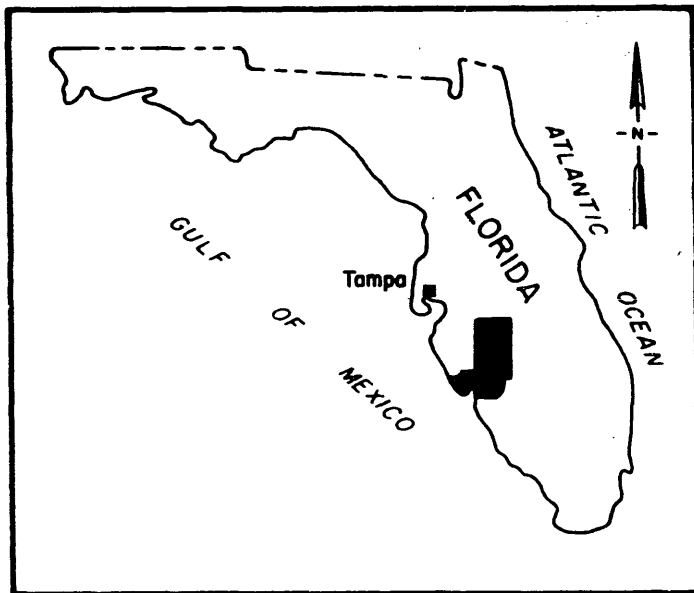


Figure 1. Location of area investigated.

ACKNOWLEDGMENTS

The authors wish to express their appreciation to Dr. J.I. Garcia-Bengochea of Black, Crow and Eidsness, Inc., of Gainesville, Florida, for kindly furnishing chemical analyses of waters from a number of wells in De Soto County, and to C.R. Sproul and H.J. Woodard of the Florida Board of Conservation, Division of Geology and Water Resources respectively, for making available records of wells.

Special thanks are extended to the following well drillers who graciously furnished well data from their files or otherwise aided the authors: George Dansby, Wauchula; J. Miller, Cleveland; V. W. "Bill" Athey, Wauchula; and J. May, Brandon.

The authors thank the many owners who allowed access to their wells for water-level measurements and water sampling.

The cooperation of all the above people is gratefully acknowledged.

WELL-NUMBERING SYSTEM

The well-numbering system used in this report is that of the Water Resources Division of the U.S. Geological Survey and is

based on a one-second grid of parallels of latitude and meridians of longitude, in that order.

The well number is a composite of two numbers separated by the letter N. The first part consists of six digits; the two digits of the degrees, the two digits of the minutes, and the two digits of the seconds of latitude. The N. refers to "north" latitude. The second part consists of seven digits; the three digits of the degrees, the two digits of the minutes, and the two digits of the seconds of longitude. If more than one well lies within a one-second grid, the wells are numbered consecutively; and this number is placed at the end of the well number following the decimal. Therefore, the well number defines the latitude and the longitude on the south and east sides of a one-second quadrangle in which the well is located.

Figure 2 is a diagram illustrating the well-numbering system. For example, the designation 275134N0815220.1 indicates that

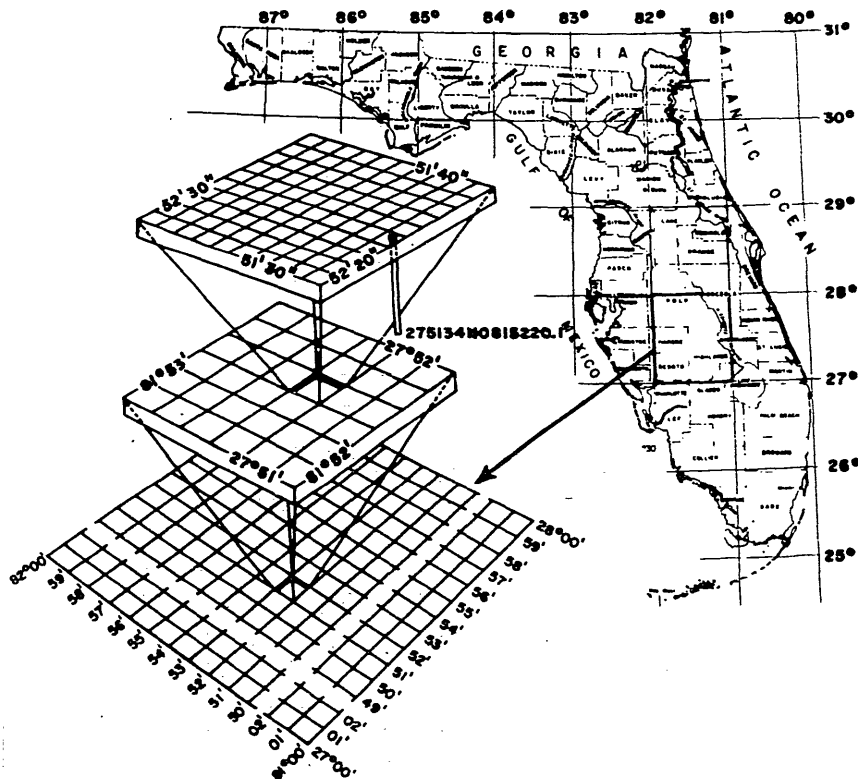


Figure 2. Diagram illustrating the well-numbering system.

this is the first well inventoried in the one-second grid bounded by latitude $27^{\circ}51'34''$ on the south and longitude $81^{\circ}52'20''$ on the east.

HYDROLOGIC DATA

The data contained herein consist of hydrologic records collected during the first two years of the investigation. The location of inventoried wells is shown on figure 3. The relation between

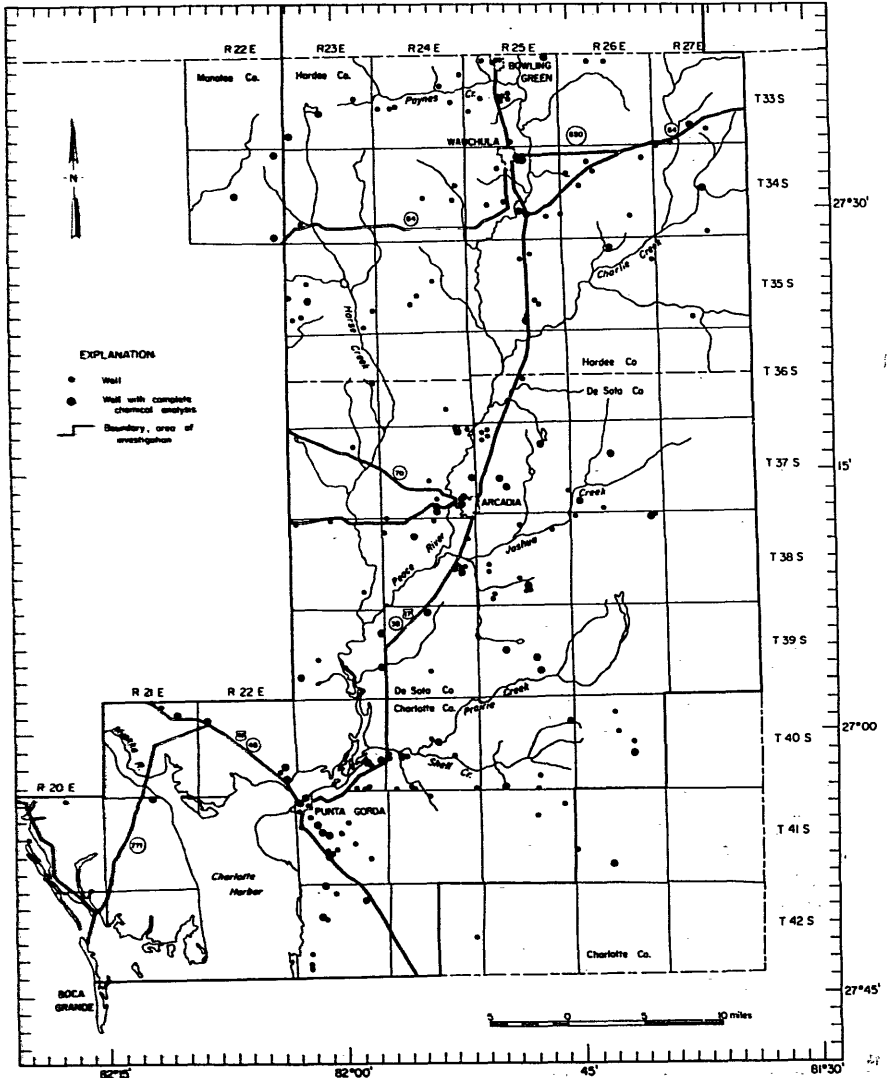


Figure 3. Location of wells in Charlotte, De Soto, and Hardee counties

specific conductance and total dissolved solids of water in the Floridan aquifer is shown by figure 4 and can be used to estimate the dissolved solids (mineral content) of water when only a specific conductance measurement is available. Records of wells are given by table 1, and chemical analyses and temperature of ground water are shown in table 2. In order to facilitate the location of wells by the user, a well number-well location key, which relates the latitude and longitude well number to the township and range grid system, is given in table 3. Table 4 shows the change in static water-level, yield, temperature, and sulfate content with depth of a well in southwestern De Soto County.

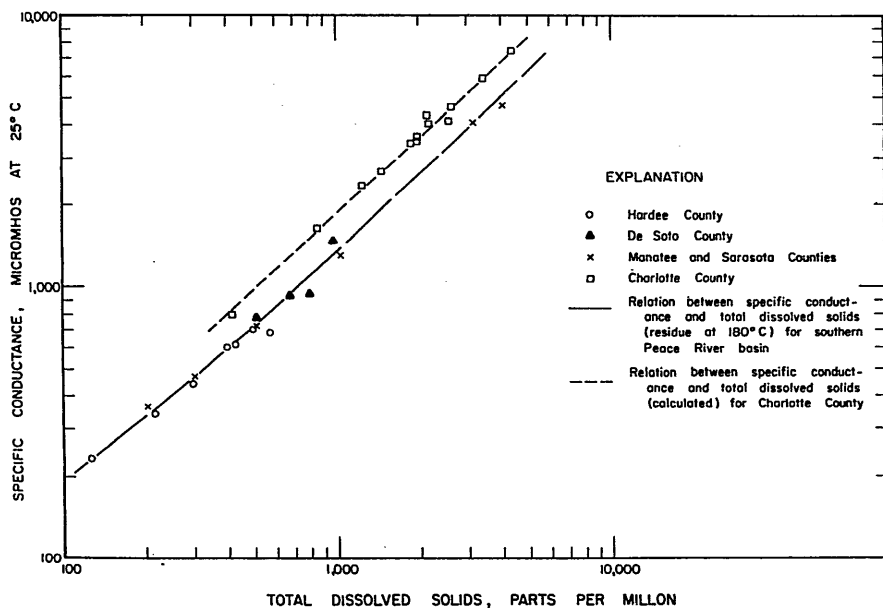
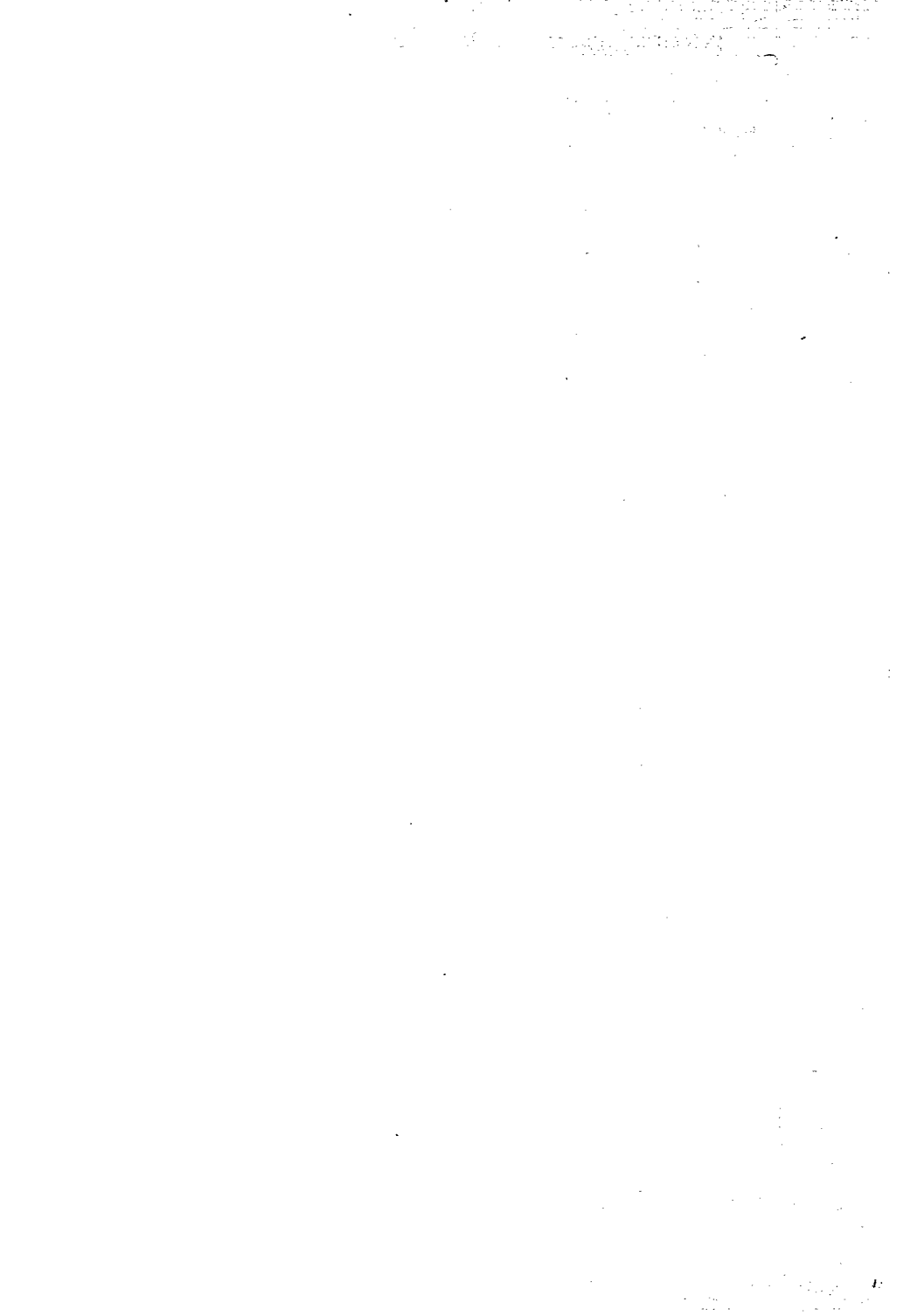


Figure 4. Relation between specific conductance and total dissolved solids of water in the Floridan aquifer.

This report was prepared under the direct supervision of J.W. Stewart, Hydrologist-in-Charge of the U.S. Geological Survey, Tampa field office, and under the general supervision of C.S. Conover, District Chief, Water Resources Division, U.S. Geological Survey, Tallahassee, Florida.



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Table 1.-- RECORDS OF WELLS IN CHARLOTTE, DE SOTO, HARDEE AND MANATEE COUNTIES

WELL NUMBER: See figure for explanation of well-numbering system.
 OWNERSHIP: F, Federal Government; M, city; N, company or corporation; P, private;
 S, State agency.
 DEPTH OF WELL: To nearest foot.
 WFLD FINISH: X, open hole in aquifer, cased to aquifer.
 METHOD DRILLED: C, cable-tool; H, hydraulic rotary.
 TYPE OF PUMP: C, centrifugal; N, none; T, turbine; Z, other.
 USE OF WATER: H, domestic; I, irrigation; S, stock; U, unused.
 AQUIFER: F, Florida.
 ALTITUDE OF LAND SURFACE: To nearest foot above mean sea level.
 WATER LEVEL: To nearest foot. Date of measurement includes month and year.

CHEMICAL ANALYSES AVAILABLE: C, complete; J, chloride and conductance; K, conductance; L, chloride.
 RANGE OF CHEMICAL CONSTITUENTS IN PARTS PER MILLION (ppm): Iron: 0, 0.00-0.08; 1, 0.08-0.1; 2, 0.11-0.30; 3, 0.31-0.50. Sulphate: 0, 0-10; 1, 11-25; 2, 26-50; 3, 51-100; 4, 101-150; 5, 151-200; 6, 201-250; 7, 251-500; 8, 501-1000; 9, more than 1000. Chloride: 0, 0-10; 1, 11-25; 2, 26-100; 3, 101-250; 4, 251-500; 5, 501-1000; 6, 1001-2000; 7, 2001-5000; 8, 5001-20000. Hardness: 3, 51-100; 4, 101-150; 5, 151-200; 6, 201-300; 7, 301-500; 8, 501-1000; 9, more than 1000. Specific conductance: 2, 151-300; 3, 301-500; 4, 501-1000; 5, 1001-2000; 6, 2001-5000; 7, 5001-10000; 8, 10001-20000; 9, more than 20000.

Well number	Owner-ship	Year com-ple-ted	Casing		Well finish	Meth-od drilled	Type of pump	Use of water	Aqui-fers	Altitude above mean sea level	Water level Above(+) or below(-) of mean surface level (feet)	Date of measurement	Yield (gal-ions per minute)	Draw-down (feet)	Period dis-charge (hours)	Chem-ical anal-yses avail-able	Iron (Fe) ppm	Sul-fate (SO ₄) ppm	Chlo-ride (Cl) ppm	Hard-ness	Spec-ific con-duct-ance (micro-mhos at 25°C)	Tem-per-ature (°F)
			Depth (feet)	Dia-eter (in-ches)																		
CHARLOTTE COUNTY																						
264626N0820218.1	P		930	6	X		N	I	1F	10	+31	8-57	270			J			5		6	85
264636N0820218.1	P		450	6	X		N	I	1F	10	+29	8-55	380			L					6	82
264718N0820218.1	P		730	6	X		N	I	1F	10	+20	11-56	240			L					6	80
264811N0815158.1	N	1963	620	199	8	X	N	U	1F	26			560			J			6		6	90
264918N0820118.1	P	1952		8	X		C	N	I	1F	17	+28	8-65	300		L					6	85
264923N0820137.1	P	1945	1900	648	20	X	H	N	U	1F	9	+33	10-57	2750		C	0	9	8	9	9	96
265020N0815851.1	P	1947	556	210	4	X		N	H	1F	23	+22	5-65	265		C	0	7	5	8	6	84
265050N0820044.1	N	1953	1200	200	6	X		N	I	1F	16	+23	8-57			L					6	86
265117N0820117.1	P	1944	1300		6	X		N	U	1F	7	+43	8-57	375		C	0	7	6	9	6	87
265227N0814510.1	N		860		6	X		N	U	1F	35					C	0	2	2	5	4	82
265247N0815828.1	P		455	4	X		N	I	1F	21	+25	8-65	375			L					6	85
265258N0820110.1	P		630	165	6	X		N	U	1F	10					L		7	6	8	6	85
265301N0820056.1	P	1937	500		4	X		H	1F	12	+29	10-57				L				6	6	78
265307N0814832.1	N	1946	620		6	X		Z	S	1F	40					L				5	6	84
265308N0820121.1	P	1923	600		6	X		H	1F	8	+35	8-49				L				6		
265313N0820044.1	P	1924	650		6	X		N	U	1F	7	+28	5-65	115		L				6	7	86
265343N0815925.1	P				6	X		N	I	1F	21	+23	5-65	440		L					6	84
265407N0820110.1	P	1945	640	180	4	X		N	I	1F	10	+32	5-65	250		C		7	6	8	6	84
265415N0830023.1	P		1100		6	X		N	I	1F	19	+25	8-57	600		L					6	85
265418N0820130.1	P	1925	850		6	X		H	1F	6						L	0	4	6	8	5	79
265438N0820257.1	P	1929	505	192	6	X		S	1F	6			60			L				6		
265448N0820148.1	P		240	240	4	X		S	1H	5	+6	10-49	1			L	0	1	3	4	4	79
265451N0815959.1	P	1943	705	218	6	X		N	U	1F	20					C						
265509N0820213.1	P		960		6	X		N	H	1F	6	+37	5-49			J					6	6
265513N0814758.1	P		835	170	4	X		N	S	1F	40	+10	5-65	135		L				5	6	85
265521N0815815.1	P		720		6	X		N	S	1F	26	+24	10-57	375		L				5	6	86
265534N0820251.1	M	1934	520		6	X		N	U	1F	6	+35	12-65	220		J				6	6	83
265532N0820223.1	P	1924	600		6	X		N	H	1F	7	+31	9-57	100		L				7	7	84
26558N0814508.1	P		605	158	6	X		N	S	1F	39	+9	4-49	118		L				4	5	84
265602N0820259.1	N		600		6	X		N	U	1F	5	+20	2-24	1200		C	1	8	6	9	7	82

Table 1. -- RECORDS OF WELLS IN CHARLOTTE, DE SOTO, HARDEE AND MANATEE COUNTIES -- Continued

Well number	Owner-ship	Year com-ple-ted	Casing			Well finish	Meth-od drill-ed	Type of pump	Use of water	Aqui-fers	Altitude land surface above mean sea level	Water level		Yield (gal-lons per min-ute)	Draw-down (feet)	Period of dis-charge (hours)	Chem-ical anal-yses avail-able	Iron (Fe) ppm	Sul-fate (SO ₄) ppm	Chlo-ride (Cl) ppm	Hard-ness	Spec-ific con-ductance (micro-mhos at 25°C)	Tem-per-a-ture (°F)
			Depth of well (feet)	Depth (feet)	Dia-meter (in-ches)							Above(+)	or be-low(-)										
RECORD OF WELLS IN CHARLOTTE COUNTY, CONTINUED																							
265613N0821745.1	P		238		4	X		N	S	1H	10			200			L			7		77	
265618N0815440.1	N		832		6	X		N	U	1F	27			300			C		5		84		
265621N0821212.1	P		1470	930	8	X		N	U	1F	4	+23	10-49	300			L	0	7	7	9	7	
265623N0820237.1	P		246	185	4	X		N	H	1H	4	+4	10-49				C	0	2	3	6	5	
265647N0815846.1	P	1951	951	200	6	X		N	I	1F	21	+30	7-87	200			L			5		84	
265648N0814752.1	P		527		6	X		N	S	1F	40	+9	12-56	25			J			4		5	
265648N0815147.1	P	1964	975	158	8	X		N	I	1F	32	+19	5-65	800			J			5		6	
265648N0815851.1	P	1952	1597	400	6	X		N	S	1F	23	+30	7-87	150			J			5		6	
265650N0815544.1	P	1955	870	180	6	X		N	S	1F	21	+29	7-87	40			J			5		5	
265650N0815838.1	P	1960	870	220	4	X		N	S	1F	21	+26	5-65	250			J			4		84	
265651N0815919.1	P	1952	560	200	6	X		N	I	1F	15	+37	7-87	300			L			6		82	
265657N0815551.1	P	1964	658	205	6	X		N	I	1F	20	+25	5-65	300			J			5		6	
265658N0814957.1	P		872	235	6	X		N	S	1F	35	+17	10-49	265			C	0	7	5	6	6	
265701N0820046.1	N	1925	830	60	6	X		N	U	1F	2	+46	5-65	600			J			6		6	
265724N0820347.1	P	1945	185	4	4	X		P	H	1H	4	+6	10-49				C	0	8	4	7	5	
265732N0814746.1	P	1949	1127	151	8	X		C	S	1F	38			300			L			5		87	
265744N0820411.1	P		500		4	X		N	H	1F	6	+7	2-65				J			6		78	
265803N0815822.1	P		700	240	4	X		N	I	1F	10	+40	4-49	265			J			6		6	
265805N0820308.1	P	1952	388	300	6	X		N	S	1F	6	+36	3-65	1100			C	0	8	6	9	7	
265814N0815389.1	P	1945	600	200	6	X		N	I	1F	7	+44	10-49	150			C	2	7	5	8	6	
265828N0815747.1	P	1947	158	184	2	X		N	H	1H	6	+23	10-49				C	0	2	4	7	5	
265828N0815722.1	P	1964	820	147	4	X		N	S	1F	12	+29	5-65	150			J			5		6	
265831N0815722.1	P	1950	800		6	X		N	I	1F	10	+36	7-87	150			L			5		88	
265833N0815302.1	P	1962	653	142	4	X		N	I	1F	18	+33	5-65	290			J			5		6	
265837N0815627.1	P		500	132	6	X			I	1F	15	+24	4-49	250			C		6	5	8	6	
265838N0815612.1	P	1961	770	192	4	X			I	1F	12	+33	5-65	250			J			5		6	
265842N0814148.1	N	1965	1310	715	16	X	C	T	I	1F	54	-3	5-65	3000	28		C	1	7	5	8	6	
265919N0815402.1	P	1934	400	100	6	X		N	H	1F	16	+16	10-49	100			C		5	5	7	6	
265922N0814148.1	N		740	94	8	X	C	N	U	1F	54	-3	1-66				J			5		80	
265932N0815432.1	P				6	X		N	I	1F	22	+27	5-65	580			J			5		6	
265955N0814247.1	N	1966	585	61	8	X	C		I	1F	49						J			5		6	
270031N0814839.1	P		350	100	4	X		N	S	1H	40	+12	10-49	130			C	0	1	2	6	4	
270048N0820847.1	P		326		6	X		N	S	1H	12						J	0	2	4	7	5	
270106N0821034.1	N		475		6	X		C	H	1F	12						C	0	6	6	8	6	
270107N0814258.1	P		590	45	4	X		N	I	1F	45	+7	12-63				J			5		80	
270138N0821145.1	N		108		2	X			S	1H	12	+11	2-65	50			J			6		78	

Table 1. -- RECORDS OF WELLS IN CHARLOTTE, DE SOTO, HARDER AND MANATEE COUNTIES -- Continued

Well number	Owner-ship	Year completed	Casing			Well finish	Method drilled	Type of pump	Use of water	Aquifers	Altitude land surface above mean sea level	Water level		Yield (gallons per minute)	Draw-down (feet)	Period of discharge (hours)	Chemical analyses available	Iron (Fe) ppm	Sulfate (SO ₄) ppm	Chloride (Cl) ppm	Hardness	Specific conductance (micro-mhos at 25°C)	Temperature (°F)	
			Depth (feet)	Dis-meter (inches)	Depth of well							Above (+) or below (-) land surface (feet)	Date of measurement											
DEBOTO COUNTY																								
270312N0820244.1	P	1957	616	97	6	X		N	S	1F	27	+17	10-82	350			C		6	4	7	5	80	
270330N0815429.1			610	151	5	X		N	S	1F	34	+17	12-57	80			L			3			82	
270332N0814733.1	P	1962	1211	985	12	X		T	I	1F	42	+13	10-82	1100			C		5	2	7	4	82	
270347N0815792.1	P	1910	468	189	6	X		N	S	1F	20	+28	5-85	12			C	2	1	3	5	4	80	
270411N0820136.1	P	1957	558	85	6	X		N	S	1F	31	+18	5-85	350			J			3			80	
270412N0814749.1	P		460	112	6	X		N	U	1F	47	+4	6-82	15			C	1	3	2	6	4	81	
270442N0814943.1	P		1189	640	12	X		T	I	1F	47		7-64	2500			C	1	4	3	7	4	86	
270540N0815737.1	N	1964	1000	75	10	X	C		I	1F	37	+15	8-64	1130			C	1	7	3	7	4	85	
270687N0815439.1	N	1964	1070	82	12	X	C	T	I	1F	45	-1	1-85	625			C	0	5	2	7	4	81	
270744N0815030.1	P	1953	317	69	4	X		N	I	1F	41	+12	11-57	98			L			2			80	
270759N0815024.1	P		418	77	6	X		N	I	1F	41	+2	12-57	75			L			2			79	
270803N0815845.1	P	1957	520		4	X			I	1F	17	+31	1-64	140			L			3			78	
270810N0814812.1	S	1960	565	70	12	X		T	H	1F	54			400			K					4	82	
270811N0814811.1	S	1942	508	156	8	X		C	H	1F	54			400			L			2				
270814N0814811.1	S	1941	595	187	6	X	C	C	H	1F	54	-5	8-65	280			C		5	2	7	4		
270848N0814848.1	N	1964	875	300	12	X		T	I	1F	53			1500			K			5				83
270811N0815229.1	N		800		6	X			I	1F	46	+3	11-57				C	2	6	2	7	5		
270912N0815040.1	P		595		8	X		T	I	1F	46	+2	10-57	7			L			2				80
270921N0815224.1	N		612	60	8	X		Z	I	1F	47	+2	11-57				L			2				78
270921N0815225.1	P	1961	1800	180	8	X		T	I	1F	46			600			C	1	7					87
270922N0815257.1	N		452		6	X		N	I	1F	46	-6	5-85	100			L			2				81
270928N0815237.1	N	1920	245	52	8	X		C	I	1F	45	+4	11-57	200			L			2				78
270932N0815040.1	P		804	80	8	X			I	1F	46	+6	9-57	250			L			3				81
271102N0815209.1	P		360	80	4	X		N	S	1F	45	+5	11-57	110			L			2				77
271113N0815821.1	N	1964	1107	123	12	X		T	I	1F	54	-2	6-64				C	2	7	2	8	4		
271128N0818712.1	P	1968	820	144	10	X	C	N	I	1F	45	+7	8-65	145			J			3				84
271145N0814648.1	P		433	428	12	X		C	I	1F	58	-7	8-62				L			2				78
271156N0814839.1	P		327	43	6	X		N	U	1F	57	-8	1-64				L							
271202N0815405.1	N	1964	1500		12	X		T	I	1F	51	-3	5-85				L							
271207N0815711.1	P	1965	1100	133	10	X	C		I	1F	45	+5	8-65	450			J			2		4		84

Table 1. -- RECORDS OF WELLS IN CHARLOTTE, DE SOTO, HARDEE AND MANATEE COUNTIES -- Continued

Well number	Owner-ship	Year com-ple-ted	Casing		Well fin-ish	Meth-od of drill-ed	Type of pump	Use of water	Acqui-ters	Altitude land surface above mean sea level	Water level		Yield (gal-lons per minute)	Draw-down (feet)	Period of dis-charge (hours)	Chem-ical anal-yses avail-able	Iron (Fe) ppm	Sul-fate (SO ₄) ppm	Chlo-ride (Cl) ppm	Hard-ness	Spe-cific con-ductance (micro-mhos at 25°C)	Tem-perature (°F)
			Depth (feet)	Dia-meter (in-ches)							Above(+) or be-low(-) of land surface (feet)	Date of meas-urement										
RECORD OF WELLS IN DESOTO COUNTY, CONTINUED																						
271208N0820253.1	P		390	4	X		S	1F		40	+2	6-57				L			2			74
271216N0820042.1	P		337	6	X		U	1F		45	+1	2-57	1			L			2			77
271217N0814017.1	S	1941	514	8	X		H	1F		75			500			C	1	7	2	7	4	80
271228N0814008.1	S		511	8	X		H			76			400			L			2			
271233N0814509.1	P	1929	258	2	X		H			67	-13	6-54				L			2			
271240N0815358.1	P	1945	480	8	X		I	1F		56			600			C	1	0	2	6	4	79
271246N0814322.1	P		1365	8	X		I	1F		72	-20	8-55										
271258N0815358.1	P	1948	525	6	X		I	1F		57	-8	6-54	350			C	0	1	2	6	4	
271307N0815226.1	M		200	4	X		P	1F		32	+10	6-52	10			J						77
271308N0815225.1	M	1964	250	83	10	X	P	1F		30	+6	1-55	125	100	7	C	1	4	2	7	4	
271308N0815228.1	M	1925	366	283	8	X	P	1F		32			170			C	1	5	2	7	4	78
271310N0815224.1	M	1930	390	327	12	X	P	1F		32	+23	7-42				C		7	2	8	4	80
271314N0814489.1	N	1962	1412	630	16	X	C	I	1F	68	-15	82	4200			C	0	7	2	7	4	89
271317N0815389.1	P	1957	1100	120	8	X	I	1F		51	-5	4-57	500									
271333N0815213.1	M		227	78	6	X	P	1F		43	-1	9-54				C	2	1	2	6	4	78
271356N0814532.1	P	1962	1418	470	12	X	C	I	1F	71												
271406N0814920.1	P	1964	1535	630	2	X	I	1F		66			2000			C	2	7	1	7	4	
271431N0815414.1	P		900	82	10	X	C	I	1F	52	+2	1-54	450			L			2			
271437N0814951.1	P		481	120	8	X	S	1F		65			750			C	0	3	2	6	4	79
271438N0815138.1	P		1410	900	8	X	I	1F		67			500			C	0	8	1	8	5	83
271550N0814282.1	P	1962	1488	432	12	X	T	I	1F	83						C	2	3	2	6	4	78
271551N0815905.1	P	1950	1260	71	8	X	N	I	1F	59	-9	11-55										
271528N0814712.1	P	1960	1500	460	12	X	T	I	1F	77			2500			C	2	7	1	7	4	84
271643N0815059.1	P	1957	265	48	6	X	I	1F		38	+16	8-57	60			L						78
271659N0815034.1	P	1957	319	63	6	X	N	I	1F	60	0	8-57				L			2			
271708N0815082.1	P		257	47	4	X	N	I	1F	29	+19	8-57	7			L			1			77
271717N0815226.1	N	1964	893	511	12	X	T	I	1F	62						C	1	8	1	8	5	
271718N0815032.1	P	1967	330	63	6	X	I	1F		52	+7	8-57	100			L						78
271723N0815156.1	N		1275	500	12	X	T	I	1F	58						L			1			
271724N0815227.1	P		1009	450	12	X	T	I	1F	62			1400			C	1	8	1	8	4	83
271834N0815304.1	P	1963	1280	83	12	X	T	I	1F	72	-22	6-53	2100			K						80
272012N0814823.1	P		471	137	6	X	N	U	1F	61	-18	8-55										77
272013N0815759.1	P	1967	1100	12	X		T	I	1F	73	-21	1-54				J			1			87

Table 1. -- RECORDS OF WELLS IN CHARLOTTE, DE SOTO, HARDEE AND MANATEE COUNTIES -- Continued

Well number	Owner-ship	Year com-ple-ted	Depth of well (feet)	Casing		Well finish	Meth-od drilled	Type of pump	Use of water	Aqui-fers	Altitude land surface above mean sea level	Water level Above (+) or below (-) land surface (feet)	Date of measurement	Yield (gal-ions per min-ute)	Draw-down (feet)	Period of dis-charge (hours)	Chem-ical anal-yses avail-able	Iron (Fe) ppm	Sul-fate (SO ₄) ppm	Chlo-ride (Cl) ppm	Hard-ness	Spec-ific con-duct-ance (micro-mhos at 25°C)	Tem-per-ature (°F)
				Depth (feet)	Dia-meter (in-ches)																		
HARDEE COUNTY																							
272308W0815808.1	P	1965	1241	96	12	X	C		I	1F	79			1600	36								
272335W0814785.1	P		780		8	X		N	I	1F	51	+5	12-62				C	1	8	1	7	4	80
272344W0815718.1	P	1956	1202	230	12	X	C	T	I	1F	91	-22	8-85				J			1		3	77
272347W0820247.1	P	1962	870	180	8	X		T	I	1F	90	-21	2-83										
272348W0814744.1	P	1964	1196	80	12	X		T	I	1F	54			1300			J			1		4	86
272358W0820215.1	P	1962	1234		10	X		T	I	1F	85												
272411W0815742.1	P					X		T	I	1F	87	-85	5-85	1170			K					4	76
272433W0815520.1	S	1954	781	150	10	X		T	I	1F	89	-33	1-64	600			J			1		4	81
272434W0814707.1	P	1957	1258	80	10	X		T	I	1F	75	-11	4-87	1400									
272441W0814726.1	P	1957	920	172	8	X		T	I	1F	76	-16	3-57	660									
272442W0820152.1	P		960		10	X		T	I	1F	78						C	0	4	1	7	4	78
272458W0820302.1	P	1955	754	120	10	X		T	I	1F	74	-25	55				L			1		4	78
272503W0815456.1	P	1962	824	198	12	X		T	I	1F	87	-34	8-82										
272551W0820156.1	P	1956	900	130	10	X		T	I	1F	81	-45	5-65				J			1		4	83
272557W0815352.1	M	1962	1080	385	12	X		T	I	1F	84	-14	8-82										
272701W0813949.1	P	1948	638	220	6	X		T	I	1F	90	-19	12-83				L			1			
272703W0814808.1	P		1134	126	10	X		T	I	1F	87	-8	12-83										
272724W0814739.1	M	1965	1176	89	12	X		T	I	1F	72	-12	12-83	1700	36	8	J			1		4	
272739W0814235.1	P	1962	1075	137	12	X		T	I	1F	65	+7	10-82	230			C		3	1	6	3	83
272841W0813617.1	P	1963	1308	165	12	X		T	I	1F	90	-14	10-63	1600	26	8	J			0		3	
272891W0820210.1	P	1956	1185	89	8	X		T	I	1F	96	-42	56				L			1			80
272932W0814633.1	P	1957	575	40	8	X		T	I	1F	80	+2	5-57				L			1			
272935W0814113.1	P	1962	723	127	8	X		T	I	1F	74						L			1			
272939W0814636.1	P	1956	672	42	6	X		T	I	1F	85	-27	56				L			1			
272942W0814749.1	M		640	180	4	X		C	P	1F	33			100			C		6	1	7	4	78
272952W0814816.1	P		629	21	6	X		N	S	1F	59	+7	1-64	12			C	0	5	1	7	4	77
273008W0815013.1	P	1956	837	100	8	X		T	I	1F	98			750			L			1			75
273020W0814910.1	P	1956	1100	6	8	X		T	I	1F	111			550			L			1			
273028W0815228.1	P	1956	1220	200	12	X		T	I	1F	108			2000									
273040W0815419.1	P		617	110	8	X		T	I	1F	109			250			J			1		3	82

Table 1. -- RECORDS OF WELLS IN CHARLOTTE, DE SOTO, HARDEE AND MANATEE COUNTIES -- Continued

Well number	Owner-ship	Year completed	Depth of well	Casing		Well finish	Method drilled	Type of pump	Use of water	Aquifers	Altitude land surface above mean sea level	Water level		Yield (gallons per minute)	Draw-down (feet)	Period of discharge (hours)	Chemical analysis available	Iron (Fe) ppm	Sulfate (SO ₄) ppm	Chloride (Cl) ppm	Hardness	Specific conductance (micro-mhos at 25°C)	Temperature (°F)
				Depth (feet)	Diameter (inches)							Above(+) or below(-) land surface (feet)	Date of measurement										
RECORD OF WELLS IN HARDEE COUNTY, CONTINUED																							
273103N0813637.1	P		849	66	6	X	C	N	S	1F	70	+11	11-65	60			C		1	0	4	2	78
273120N0815219.1	P	1957	1060	200	12	X		T	I	1F	107	-40	57	1800			L			1			
273122N0814425.1	P	1955	925	320	10	X		I	I	1F	100	-32	55				L			1			78
273156N0814514.1	P	1955	287	39	6	X		N	U	1F	100	-49	5-85										
273205N0814330.1	P		658	212	6	X		N	I	1F	102	-26	8-62										
273220N0814632.1	P		547	110	6	X		N	I	1F	97	-28	1-64										
273235N0814387.1	P		847	10	10	X		T	I	1F	118	-35	3-57				L			1			80
273250N0814805.1	M	1963	1103	404	18	X		T	P	1F	84	+6	7-63	1900	22	24	C	0	6	0	7	4	85
273282N0814028.1	P	1956	789	275	8	X		T	I	1F	122	-44	6-56	850			L			1			80
273283N0814805.1	M	1934	970	323	10	X		T	P	1F	73			800			K					4	80
273284N0814811.1	M		732	6	6	X		T	P	1F	76			300			C	0	5	0	6	4	78
273337N0813933.1	P		1119	178	10	X		T	I	1F	91	-10	1-64				L			1			77
273346N0813836.1	P	1947	580	78	10	X		T	I	1F	84	-3	12-56				L			0			80
273346N0814847.1	P	1952	1377	10	10	X		T	I	1F	117	-37	52	650			C						78
273411N0820250.1	P	1957	1062	82	12	X		N	U	1F	127	-80	5-65	2000	68	5	L	0	0	0	5	3	78
273421N0813614.1	P	1952	1172	128	12	X		C	I	1F	91	-8	6-63	1500			C	0	0	0			78
273434N0813719.1	P	1946	750	6	6	X		C	I	1F	77	+12	4-57				C	0	0	0	3	2	80
273530N0820083.1	P	1962	965	124	12	X		T	I	1F	122	-63	1-63	1760			C	1	1	1	3	3	77
273538N0815115.1	P	1951	1139	248	12	X		T	I	1F	125	-42	2-51	1000									
273543N0815702.1	M	1966	930	200	10	X		T	I	1F	122	-47	8-56				L			1			
273547N0815614.1	P		950	120	12	X		T	I	1F	111						J			1		3	76
273548N0815601.1	P		580	100	4	X		C	I	1F	110			50			L			1			74
273603N0815226.1	P	1957	985	239	12	X		T	I	1F	108	-35	2-57	1900									
273610N0814912.1	P	1957	570	119	10	X		T	I	1F	108	-32	8-67	660			L			1			78
273614N0814802.1	P	1951	536	87	8	X		T	I	1F	99	-25	8-56				L			1			78
273618N0815026.1	P	1946	335	100	8	X		T	I	1F	123	-50	4-57				L						76
273620N0815636.1	P		810	10	10	X		T	I	1F	125	-50	10-62										
273622N0814909.1	P	1957	580	100	10	X		T	I	1F	110	-38	1-57				L			1			80
273622N0814925.1	P	1956	648	6	6	X		T	I	1F	110	-28	5-56										
273628N0814844.1	P	1964	1082	278	12	X		I	I	1F	115	-36	2-64				L						78

Table 1. -- RECORDS OF WELLS IN CHARLOTTE, DE SOTO, HARDEE AND MANATEE COUNTIES -- Continued

Well number	Ownership	Year completed	Depth of well	Casing		Well finish	Method drilled	Type of pump	Use of water	Aquifers	Altitude surface above mean sea level	Water level		Yield (gallons per minute)	Draw-down (feet)	Period of discharge (hours)	Chemical analyses available	Iron (Fe) ppm	Sulfate (SO ₄) ppm	Chloride (Cl) ppm	Hardness	Specific conductance (microhms at 25°C)	Temperature (°F)
				Depth (feet)	Diameter (inches)							Above(+) or below(-) land surface (feet)	Date of measurement										
RECORD OF WELLS IN HARDEE COUNTY, CONTINUED																							
272703W0818310.1	P	1963	887	164	12	X	N	I	1P		104	-31	1-64	1700	10								
272737W0818188.1	P	1957	944	248	10	X	T	I	1P		121	-42	3-57				L			1			
272820W0814348.1	P	1962	1100		8	X	T	I	1P		124	-48	12-62				L			2			
272821W0814937.1	N	1962	1027	395	12	X	T	P	1P		118			1800			K					4	82
272822W0814240.1	P	1962	1010	135	10	X	T	I	1P		116	-28	8-62	1300									
272823W0814924.1	N		380	300	4	X	T	P	1P		122			200									
272823W0814925.1	N		690	300	6	X	T	P	1P			-58	6-64	480			K					3	78
272828W0815020.1	N	1955	354	90	8	X	T	I	1P		119			500			L			1			77
272834W0814647.1	P		850		8	X	T	I	1P		122	-46	1-63				C	0	5	1	7	4	82
MANATEE COUNTY																							
272830W0820348.1	P		1212	143	12	X	C		I	1P		-40	7-63	1800			C	1	5	1	7	4	77
272804W0820617.1	P	1961	1135	90	12	X	C		S	1P		-57	61	1800			C	0	0	1	5	3	77
272808W0820351.1	P	1959	1178	160	12	X			I	1P	115						C	3	3	1	6	3	79



Table 2.-Chemical Analyses and Temperature of Ground Water

(Note: Type-1, pumped; 4, Collected from Spigot; 9, Flowing well. Source-1, U.S. Geological Survey; 6, Private; 7, Educational)

Chemical analyses, in parts per million, except specific conductance, pH, and color

Well number	Date of collection	TYP	Specific conductance (micro-mhos at 25°C)	pH	Temperature (°F)	Chemical analyses, in parts per million, except specific conductance, pH, and color											Residue at 180°C	Hardness		S O U R C E			
						Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate Sulfate (CO ₃ , SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Iron (Fe)		Calculated	Calcium magnesium		Non-carbonate	Color	
CHARLOTTE COUNTY																							
Floridan Aquifer																							
264923W0820137.1	12-23-64	9	52100	7.8	96	8.2	638	1070	10400	385	131	0	2660	18700	1.4	89	.00	--	34000	6330	6220	5	1
265020W0815851.1	10-11-49	--	3370	7.5	84	--	70	94	505	--	144	--	265	895	1.0	.5	.00	--	1900	580	443	5	1
265117W0820117.1	10-14-49	--	4590	8.2	87	--	186	141	584	--	138	--	298	1340	.8	.2	.02	--	2620	1040	932	15	1
265227W0814310.1	10-18-49	--	784	7.6	82	--	22	34	96	--	298	--	31	87	1.8	0	.00	--	419	195	0	15	1
265258W0820110.1	-- 50	9	4050	7.8	85	--	187	114	600	--	116	--	312	1291	--	--	--	--	2560	935	841	--	7
265407W0820110.1	-- 50	9	4230	7.4	84	--	182	105	462	--	87	--	259	1099	--	--	--	--	2150	886	814	--	7
265418W0820130.1	10-14-49	--	1620	7.7	79	--	103	62	121	--	161	--	119	365	1.5	.2	.02	--	850	512	380	25	1
265602W0820259.1	02-21-24	--	16200	--	82	16	238	159	895	14	127	--	502	1800	--	--	.08	3900	3690	1250	1140	--	1
265621W0821212.1	10-17-49	--	7310	7.6	80	--	224	126	1230	--	46	--	412	2320	.7	.5	--	--	4340	1080	1040	10	1
265658W0814957.1	10-18-49	--	3410	7.3	87	--	138	102	428	--	121	--	292	918	.6	.2	--	--	1940	764	684	15	1
265805W0820356.1	04-05-65	9	5800	7.6	85	17	216	150	800	23	134	--	534	1600	1.2	0	.00	4040	3410	1160	1050	0	1
265814W0815838.1	10-17-49	--	3510	8.1	83	--	132	109	442	--	81	--	318	950	.6	.2	--	--	1980	778	711	5	1
265837W0815627.1	-- 50	9	12800	7.3	82	--	124	75	357	--	77	--	205	787	--	--	--	1975	1584	618	555	--	7
265842W0814148.1	05-05-66	1	3980	8.0	--	10	133	93	514	14	108	0	373	966	.6	.1	--	--	2160	714	626	5	1
265919W0815402.1	10-17-49	--	2310	7.6	78	--	66	76	285	--	130	--	198	555	.8	.2	.1	--	1245	477	370	15	1
270108W0821034.1	10-17-49	--	2630	8.2	77	--	114	91	303	--	185	--	218	662	1.8	.5	--	--	1480	659	507	5	1
Hawthorn Aquifer																							
265448W0820148.1	10-14-49	--	694	8.3	79	--	24	22	85	--	134	10	12	136	1.5	.5	.2	--	350	150	40	5	1
265623W0820237.1	10-12-49	--	1030	7.5	77	--	61	30	98	--	184	--	30	216	.6	.0	--	--	530	276	124	10	1
265724W0820347.1	10-11-49	--	1100	7.7	78	--	78	44	72	--	168	--	26	255	1.2	.0	--	--	557	370	233	5	1
265828W0818747.1	10-17-49	--	1480	7.4	78	--	77	51	129	--	119	--	38	385	1.1	.5	.02	--	740	402	224	5	1
270031W0814539.1	10-18-49	--	685	7.6	82	--	33	31	86	--	246	--	24	72	1.3	.5	.05	--	340	210	--	20	1
270048W0820847.1	10-17-49	4	1800	8.0	80	--	95	54	180	--	219	--	31	450	1.2	.5	--	--	920	459	280	5	1

A Approximate; computed from specific conductance - total dissolved solids relation curve (see figure 4).

Table 2.-Chemical Analyses and Temperature of Ground Water--Continued

(Note: Type-1, pumped; 4, Collected from Spigot; 9, Flowing well.
Source-1, U.S. Geological Survey; 3, Florida State Board
of Health; 6, Private; 7, Educational)

Chemical analyses, in parts per million, except specific conductance, pH, and color

Well number	Date of collection	T P E	Specific conduct- ance (micro- mhos at 25°C)	pH	Tem- per- ature (°F)	Silica (SiO ₂)	Cal- cium (Ca)	Mag- ne- sium (Mg)	Sodium (Na)	Pot- as- sium (K)	Bicar- bonate (HCO ₃)	Car- bon- ate (CO ₃)	Sulfate (SO ₄)	Chlo- ride (Cl)	Fluo- ride (F)	Nit- rate (NO ₃)	Iron (Fe)	Dissolved solids		Hardness		S O U R C E	
																		Residue at 180°C	Cal- cu- lated	Calcium, magne- sium	Non- car- bon- ate		Col- or
DESOTO COUNTY																							
Floridan Aquifer																							
270312N0820244.1	10-04-62	9	1480	7.5	80	--	--	--	--	--	182	0	206	292	--	--	--	980	--	475	342	5	1
270332N0814733.1	10-04-62	9	772	8.0	82	--	--	--	--	--	144	0	182	82	1.0	--	--	507	--	306	188	5	1
270347N0815732.1	01-30-63	9	A760	--	80	--	16	37	--	--	124	0	19	160	.8	--	.20	535	--	192	90	5	6
270412N0814749.1	06-19-62	9	805	7.8	81	--	--	--	--	--	194	0	56	60	--	--	--	A420	--	218	59	--	1
270442N0814943.1	04-29-63	9	981	8.1	88	--	69	34	--	--	188	0	148	108	--	--	.06	A710	--	314	172	6	6
270540N0815737.1	08-06-64	9	1000	7.7	85	--	90	45	--	--	183	0	257	117	1.6	--	.06	A720	--	406	256	3	6
270657N0815439.1	07-08-64	9	783	7.5	81	--	119	13	--	--	210	0	173	75	1.5	--	.05	A550	--	350	178	5	6
270814N0814811.1	01-20-64	9	A930	7.3	--	--	88	45	--	--	178	0	200	71	1.5	--	--	675	--	400	--	5	3
270911N0815229.1	01-30-63	9	A1300	7.6	--	--	108	55	--	--	188	0	201	85	1.7	--	.30	958	--	494	--	5	3
270992N0815228.1	07-01-64	9	1185	7.4	87	--	120	53	--	--	159	0	385	108	1.4	--	.10	A850	--	520	390	5	6
271113N0815521.1	05-27-64	9	900	7.5	--	--	123	55	--	--	185	0	390	56	1.8	--	.23	A640	--	534	382	5	6
271219N0814017.1	08-10-50	1	941	7.4	80	--	101	46	23	--	176	0	270	45	1.4	--	.08	800	574	442	--	5	3
271240N0815358.1	06-26-64	9	530	7.2	79	--	52	31	--	--	260	0	10	56	2.2	--	.08	A350	--	258	45	10	6
271258N0815358.1	06-26-64	9	590	7.5	--	--	57	30	--	--	295	0	11	47	2.0	--	.05	A400	--	268	24	15	6
271308N0815228.1	12-29-64	9	630	7.6	--	--	64	39	--	--	227	0	140	36	2.0	--	.10	A430	--	320	134	2	6
271308N0815228.1	10-12-64	9	690	7.5	78	--	76	41	--	--	220	0	195	34	1.8	--	.06	A480	--	366	186	5	6
271310N0815224.1	02-26-64	4	960	8.0	80	29	111	59	20	4.0	186	0	348	27	2.0	.1	--	692	520	368	5	1	
271314N0814459.1	07-09-64	1	871	7.6	89	--	98	44	--	--	159	0	325	34	1.2	--	.05	A620	--	428	298	5	6
271333N0815213.1	09-03-64	1	530	7.9	78	--	50	25	--	--	242	0	25	43	1.9	--	.18	A350	--	228	30	5	6
271406N0814820.1	05-19-64	1	700	7.3	--	--	106	49	--	--	178	0	353	20	--	--	.16	A490	--	468	322	5	6
271437N0814951.1	01-22-65	1	670	7.5	79	--	61	32	--	--	220	0	58	84	1.8	--	.05	A460	--	251	71	0	6
271438N0815138.1	07-09-64	1	1209	7.5	83	--	176	82	--	--	156	0	653	19	1.7	--	.05	A900	--	774	646	5	6
271550N0814282.1	01-30-63	1	700	7.6	78	--	58	29	--	--	190	0	71	49	1.1	--	.30	495	--	258	--	5	3
271626N0814712.1	06-26-64	1	875	7.5	84	--	84	48	--	--	190	0	285	20	1.5	--	.23	A460	--	404	248	5	6
271717N0815226.1	06-26-64	1	1230	7.4	--	--	188	87	--	--	156	0	615	19	1.8	--	.10	A910	--	830	702	5	6
271724N0815227.1	06-26-64	1	930	7.3	83	--	156	67	--	--	159	0	530	20	1.6	--	.08	670	--	668	536	5	6

A Approximate; computed from specific conductance - total dissolved solids relation curve (see figure 4).

Table 2.--Chemical Analyses and Temperature of Ground Water--Continued

(Note: Type-1, pumped; 4, Collected from Spigot; 9, Flowing well.
Source-1, U.S. Geological Survey; 3, Florida State Board
of Health; 6, Private; 7, Educational)

Chemical analyses, in parts per million, except specific conductance, pH, and color

Well number	Date of collection	TYP	Specific conductance (micro-mhos at 25°C)	pH	Temperature (°F)	Silica (SiO ₂)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Carbonate (CO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Iron (Fe)	Residue at 180°C	Dissolved solids		Hardness		S O U R C E	
																			Calcium	Non-carbonate	Calcium, carbonate	Non-carbonate		
HARDEE COUNTY																								
Floridan Aquifer																								
272335N0814755.1	01-29-63	1	A790	7.5	80	--	72	40	--	--	180	0	172	23	1.1	--	.10	561	--	346	--	5	2	
272442N0820152.1	01-30-63	1	A770	7.5	78	--	75	33	--	--	183	0	119	20	1.0	--	.01	546	--	326	--	5	3	
272799N0814235.1	10-04-62	--	445	7.7	83	15	55	20	7.2	1.5	142	0	98	18	.8	.0	--	297	282	220	103	8	1	
272942N0814749.1	08-30-51	1	653	7.3	78	--	86	46	--	--	158	0	242	18	1.4	--	--	555	--	404	--	5	3	
272952N0814815.1	10-04-62	9	619	8.0	77	15	78	29	10	2.0	105	0	172	13	.9	.0	--	429	402	314	183	5	1	
273103N0815537.1	10-04-62	9	258	7.7	78	12	25	10	4.7	1.2	105	0	20	7	.4	.0	--	128	132	104	18	5	1	
273250N0814806.1	07-30-63	1	700	7.8	85	18	87	37	11	--	148	--	247	10	.3	3.2	.04	498	485	368	247	10	6	
273254N0814811.1	06-10-62	1	600	7.9	76	18	66	29	8.3	2.0	152	0	155	10	.7	.0	.02	392	364	282	158	0	1	
273411N0820250.1	09-11-63	--	345	7.8	--	20	39	20	7.0	1.1	220	0	8	5	.7	.1	--	214	202	180	0	5	1	
273434N0813719.1	01-30-63	1	A265	7.9	80	--	20	11	--	--	85	0	10	10	.4	--	.00	157	--	98	--	5	3	
273550N0820053.1	01-30-63	1	A460	7.3	--	45	17	--	--	--	180	0	24	20	1.2	--	.00	309	--	184	--	5	3	
273834N0814647.1	01-29-63	1	A840	7.6	82	--	92	37	--	--	180	0	172	17	1.1	--	.05	600	--	382	--	5	3	
MANATEE COUNTY																								
Floridan Aquifer																								
272830N0820346.1	09-17-63	1	720	7.6	77	52	90	35	23	2.6	260	--	182	20	3.0	.1	.09	514	516	368	155	5	1	
275064N0820617.1	09-18-63	1	382	7.3	77	22	42	18	10	.9	226	--	0	11	.7	.1	.00	208	216	180	0	20	1	
275306N0820351.1	09-13-63	1	463	7.5	79	32	54	20	20	2.0	196	0	83	19	2.0	.1	.47	302	309	216	56	5	1	

* Approximate; computed from specific conductance - total dissolved solids relation curve (see figure 4).



Table 3, Well Number - Well Location Key

Well number	Location	Well number	Location	Well number	Location
	Township (South) Range (East) Section ‡ Section ‡, † Section		Township (South) Range (East) Section ‡ Section ‡, † Section		Township (South) Range (East) Section ‡ Section ‡, † Section
CHARLOTTE COUNTY					
264626N0820218.1	42 23 31 SE SE	265513N0814758.1	41 25 10 SE NW	265805N0820358.1	40 22 25 NW SE
264639N0820218.1	42 23 31 NE SE	265521N0815816.1	41 23 12 SW NW	265814N0815838.1	40 23 26 NE SE
264718N0820218.1	42 23 30 SE SE	265534N0820251.1	41 23 7 NW SE	265828N0815747.1	40 23 25 NE NE
264811N0815158.1	42 24 24 SE NW	265552N0820223.1	41 23 8 NW NW	265829N0815722.1	40 24 30 NW NW
264918N0820118.1	42 23 17 NE SE	265558N0814608.1	41 25 1 SE SW	265831N0815722.1	40 24 30 NW NW
264923N0820137.1	42 23 17 NE SW	265602N0820259.1	41 23 6 SW SE	265833N0815302.1	40 24 23 SW SE
265020N0815851.1	42 23 11 NE SW	265613N0821745.1	41 20 3 SE NW	265837N0815627.1	40 24 19 SE SE
265050N0820044.1	42 23 4 SE SW	265618N0815440.1	41 24 4 SE NE	265838N0815612.1	40 24 20 SW SE
265117N0820117.1	42 23 5 NE SE	265621N0821212.1	41 21 3 NW SW	265842N0814148.1	40 26 22 SE NE
265227N0814310.1	41 26 28 SW SE	265623N0820237.1	41 23 6 NE SW	265919N0815402.1	40 24 22 NW NE
265247N0815826.1	41 23 26 SE NE	265647N0815846.1	41 23 2 NE NW	265922N0814148.1	40 26 15 SE SE
265258N0820110.1	41 23 28 NW SW	265648N0814752.1	40 25 34 SE SE	265932N0815432.1	40 24 16 SE SE
265301N0820058.1	41 23 28 NW SE	265648N0815147.1	40 24 36 SE SE	265958N0814247.1	40 26 16 NE SE
265307N0814532.1	41 26 30 NW NW	265649N0815651.1	40 24 31 SE SW	270031N0814539.1	40 25 12 SE NE
265308N0820121.1	41 23 28 NW NW	265650N0815544.1	40 24 32 SE SW	270048N0820847.1	40 22 7 NE SW
265313N0820044.1	41 23 28 NE NW	265650N0815838.1	40 23 35 SE SE	270106N0821034.1	40 21 2 SE SE
265343N0815925.1	41 23 22 SE SE	265651N0815919.1	40 23 35 SW SE	270107N0814258.1	40 26 4 SE SE
265407N0820110.1	41 23 21 NW NW	265657N0815551.1	40 24 32 SE SW	270138N0821145.1	40 21 3 NE SW
265415N0820023.1	41 23 16 SE SE	265658N0814957.1	40 25 32 SE SW		
265418N0820130.1	41 23 17 SE SE	265701N0820046.1	40 23 33 SE SE		
265438N0820257.1	41 23 18 NW SE	265724N0820347.1	40 22 36 NE NW		
265448N0820148.1	41 23 17 NE NE	265732N0814746.1	40 25 33 NE NE		
265451N0815959.1	41 23 15 NW NE	265744N0820411.1	40-22 25 SW NW		
265509N0820213.1	41 23 8 SW SW	265803N0815822.1	40 23 25 SW NW		

Table 3. Well Number - Well Location Key--Continued

Well number	Location	Well number	Location	Well number	Location
	Township (South) Range (East) Section ¼ Section ¼, ½ Section		Township (South) Range (East) Section ¼ Section ¼, ½ Section		Township (South) Range (East) Section ¼ Section ¼, ½ Section
DESOTO COUNTY					
270312N0820244.1	39 23 30 SE NE	271113N0815521.1	38 24 9 SW NW	271437N0814951.1	37 25 20 SE NW
270330N0815429.1	39 24 27 NW SW	271126N0815712.1	38 24 7 NW SE	271438N0815138.1	37 24 24 NE SE
270332N0814733.1	39 25 26 NW SW	271145N0814648.1	38 25 2 SE SE	271550N0814252.1	37 26 16 NE NE
270347N0815732.1	39 23 25 NE NE	271156N0814839.1	38 25 4 SE NE	271618N0815905.1	37 23 11 NW SE
270411N0820136.1	39 23 20 NE SE	271202N0815405.1	38 24 3 NW SE	271626N0814712.1	37 25 11 SW NE
270412N0814749.1	39 25 22 SE NE	271207N0815711.1	38 24 6 NW SE	271643N0815059.1	37 25 7 NE NW
270442N0814943.1	39 25 17 SE SE	271208N0820253.1	38 23 6 NE SW	271659N0815034.1	37 25 6 SE SE
270540N0815737.1	39 23 12 SE SE	271216N0820042.1	38 23 4 NE NE	271708N0815052.1	37 25 6 SE NW
270657N0815439.1	39 24 4 NE SE	271219N0814017.1	38 26 1 NW NE	271717N0815226.1	37 24 1 NW SW
270744N0815030.1	38 25 32 NW SW	271228N0814008.1	38 26 1 NE NW	271718N0815032.1	37 25 6 SE NE
270759N0815024.1	38 25 32 NW NE	271233N0814509.1	37 26 31 SW SE	271723N0815156.1	37 24 1 NE NW
270803N0815842.1	38 23 26 SE SE	271240N0815358.1	37 24 34 SE NW	271724N0815227.1	37 24 1 NW NW
270810N0814812.1	38 25 27 SW SE	271246N0814322.1	37 26 33 SW NE	271834N0815304.1	36 24 26 SW SE
270811N0814811.1	38 25 27 SW SE	271258N0815358.1	37 24 34 NE SW	272012N0814823.1	36 25 22 NW NW
270814N0814811.1	38 25 27 SW SE	271307N0815226.1	37 24 36 NW NW	272013N0815759.1	36 23 24 NW NE
270848N0814845.1	38 25 28 NE NE	271308N0815225.1	37 24 36 NW NW		
270911N0815229.1	38 24 24 SW SW	271308N0815228.1	37 24 36 NW NW		
270912N0815040.1	38 25 19 SE SE	271310N0815224.1	37 24 36 NW NW		
270921N0815224.1	38 24 24 SW NW	271314N0814459.1	37 26 31 NE NW		
270921N0815228.1	38 24 24 SW NW	271317N0815359.1	37 24 27 SE SW		
270922N0815257.1	38 24 23 SE NW	271333N0815213.1	37 24 25 SW NE		
270928N0815237.1	38 24 23 NE SE	271356N0814532.1	37 26 30 NW SW		
270932N0815040.1	38 25 19 NE SE	271406N0814920.1	37 25 28 NW NW		
271102N0815208.1	38 24 12 SW NE	271431N0815414.1	37 24 22 NW SE		

Table J. Well Number - Well Location Key--Continued

Well number	Location				Well number	Location			
	Township (South)	Range (East)	Section	Section		Township (South)	Range (East)	Section	Section
HARDE COUNTY									
272309N0815608.1	J5	23	36	NE	273109N0813637.1	34	27	15	SW SW
272335N0814755.1	35	25	34	NE SW	273120N0815219.1	34	24	13	SW NW
272344N0813718.1	35	27	33	NW NW	273122N0814425.1	34	26	17	NW NW
272347N0820247.1	J5	23	31	NE NW	273156N0814514.1	34	26	7	SW SE
272349N0814744.1	35	25	34	NE NE	273205N0814331.1	34	26	9	SW NW
272355N0820215.1	35	23	29	SW SW	273220N0814932.1	34	25	9	NW SW
272412N0815742.1	35	23	25	NE SW	273215N0814177.1	34	26	8	NE NW
272433N0815520.1	J5	24	28	NW NW	273250N0814808.1	34	25	3	SW SE
272434N0814707.1	35	25	26	NW NE	273252N0814628.1	34	26	1	SW SE
272441N0814726.1	35	25	26	NW NW	273253N0814809.1	34	25	3	SW NE
272442N0820152.1	35	23	20	SW SE	273254N0814811.1	34	25	3	SW NE
272458N0820302.1	35	23	19	SW NE	273337N0813633.1	33	27	31	SW SW
272503N0815456.1	35	24	21	NE SW	273346N0813836.1	33	27	32	SW NW
272551N0820156.1	35	23	17	SW NE	273346N0814847.1	33	25	33	SE NE
272557N0815352.1	35	24	15	NE SW	273411N0820250.1	33	23	31	NW NE
272701N0813949.1	35	26	12	NE SE	273421N0813114.1	33	27	34	NE NW
272703N0814808.1	35	25	10	NW SE	273434N0813719.1	33	27	26	SW SE
272724N0814739.1	35	25	3	SE SE	273530N0820953.1	33	23	21	SW NE
MANATEE COUNTY									
272739N0814235.1	35	26	3	SW NW	273538N0815115.1	34	25	19	SW NE
272841N0813617.1	J4	27	34	SE NW	273545N0815702.1	33	24	19	NW SE
272917N0820210.1	34	23	29	SW SW	273547N0815514.1	33	24	20	NW SW
272932N0814533.1	34	25	25	SW NW	273548N0815601.1	33	24	20	NW SE
272935N0814113.1	34	26	26	SW NE	273603N0815224.1	33	24	24	NW NW
272939N0814535.1	34	26	30	NW SW	273610N0814912.1	33	25	16	SW SE
272942N0814749.1	34	25	27	NE SE	273614N0814852.1	33	25	16	SE SW
272952N0814816.1	34	25	27	NW NE	273618N0815028.1	33	25	17	SW SW
273008N0815013.1	34	25	20	SW SE	273620N0815838.1	33	23	14	SE NE
273020N0814910.1	34	25	21	SW NE	273622N0814909.1	33	25	16	SW NE
273028N0815228.1	34	24	24	NW SW	273622N0814925.1	33	25	16	SW NW
273060N0815419.1	34	24	22	NW NW	273638N0814844.1	33	26	13	NW SW
273703N0815310.1	33	24	11	SW SE	273703N0815310.1	33	24	11	SW SE
273737N0815158.1	33	24	12	NE SW	273737N0815158.1	33	24	12	NE SW
273820N0814348.1	33	26	5	NE SE	273820N0814348.1	33	26	5	NE SE
273821N0814937.1	33	25	5	NE SE	273821N0814937.1	33	25	5	NE SE
273823N0814240.1	33	26	3	NW SW	273823N0814240.1	33	26	3	NW SW
273823N0814924.1	33	25	4	NW SW	273823N0814924.1	33	25	4	NW SW
273823N0814925.1	33	25	4	NW SW	273823N0814925.1	33	25	4	NW SW
273828N0815020.1	33	25	5	NW SW	273828N0815020.1	33	25	5	NW SW
273834N0814647.1	33	25	2	NE NE	273834N0814647.1	33	25	2	NE NE
272829N0820353.1	34	22	36	SE -	272829N0820353.1	34	22	36	SE -
273054N0820617.1	34	22	10	SW SW	273054N0820617.1	34	22	10	SW SW
273306N0820351.1	34	22	1	NW SE	273306N0820351.1	34	22	1	NW SE

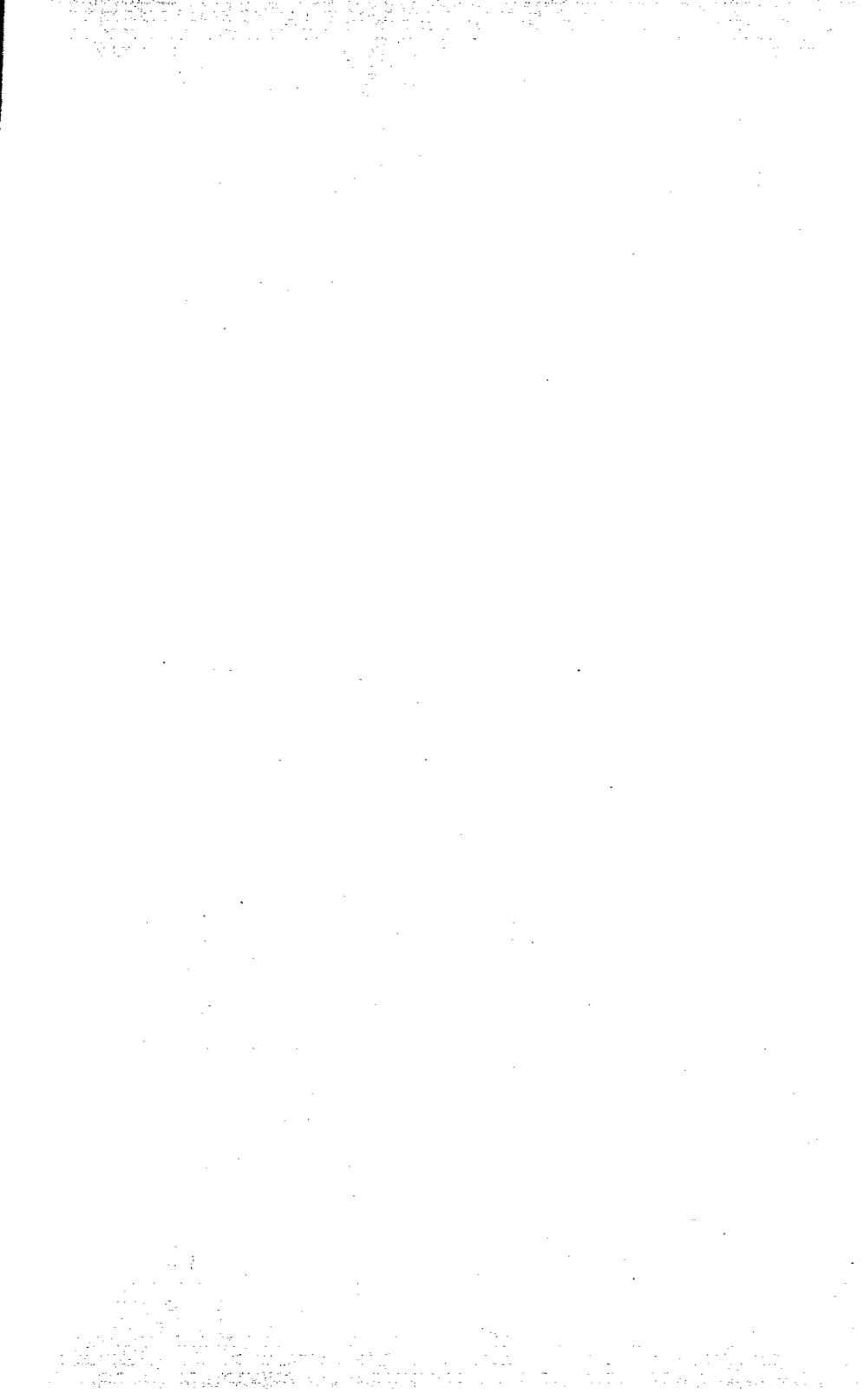


Table 4. Changes in Static Water Level, Yield, Temperature, and Sulfate Content with Well Depth in Southwestern DeSoto County.

<u>Drilling Depth (feet)</u>	<u>Static Water Level (feet)</u>	<u>Flowing Yield (gpm)</u>	<u>Water Temperature (°F)</u>	<u>Sulfate (ppm)</u>
235	-	-	-	65
290	+3.6	440	78	150
335	-	-	-	195
380	-	-	-	195
404	+8.0	550	79	195
510	+8.4	600	79.5	210
640	+12.4	-	79	230
825	-	830	-	255
925	+14.0	1,030	84.5	270
1,000	+14.6	1,130	85	258

WELL NUMBER: 270540N0815737.1

WELL LOCATION: T39S, R23E, Section 12, SE $\frac{1}{4}$ of the SE $\frac{1}{4}$.

Land Surface Altitude: 37 feet above mean sea level

Driller: V. W. "Bill" Athey, Wauchula, Florida

Well Depth: 1,000 feet

Well Casing: 75 feet of 10" casing

Well drilled during June - August, 1964

Drilling depths and static water levels are measured above (+) or below land surface.

Water levels, yields, and temperatures were measured by M. Kaufman during drilling.

Sulfate analyses were made by Black, Crow, and Eidsness, Inc., and furnished courtesy of Dr. J. I. Garcia-Bengochea.