

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

GROUND-WATER LEVELS AND CHLORIDE-CONTENT DATA FOR
TOWNSHIPS OF RIVERHEAD AND SOUTHOLD, SUFFOLK COUNTY, N. Y.

By

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Prepared in cooperation with the
Suffolk County Water Authority
and the
Suffolk County Board of Supervisors

Jamaica, N. Y.

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On Long Island, farming is one of the principal occupations of its inhabitants. Each year substantial acreage is devoted to the raising of two chief crops, potatoes and cauliflower. Because of the mildness of the climate, the growing season is long enough for the planting and harvesting of both early and late potatoes and of cauliflower.

According to the Suffolk County Farm Bureau there were 60,264 acres of farm land under cultivation in Suffolk County in 1948, distributed as follows: potatoes, 50,400 acres; cauliflower, 4,735 acres; other vegetables, including lima beans, cucumbers, brussel sprouts, broccoli, and snap beans, 10,129 acres. The value of the potato crop is estimated at about 25 million dollars and the cauliflower crop at about $3\frac{1}{2}$ million dollars. The total value of all crops raised in the county in 1948 is estimated to be between 45 and 50 million dollars.

For a number of years irrigation of crops has been practiced as a means of attaining maximum crop growth and yields. In the eastern part of Long Island, particularly in Suffolk County, the use of ground water for irrigation has increased rapidly each year and a sizable increase in the number of new wells drilled for irrigation has occurred in the past year in the narrow section of land northeast of Riverhead between Long Island Sound and Peconic Bay, known as the North Fluke.

In 1945 the U. S. Geological Survey began detailed studies of ground-water conditions in the irrigated area adjacent to Riverhead in order to determine the effect of the resultant increase in ground-water withdrawals during irrigation periods. The regular program of investigation in operation since 1945 has consisted of monthly measurements of ground-water levels in water-table wells scattered throughout the area and the collection yearly of water samples from about 100 irrigation wells for the determination of the salinity (chloride content) of the ground water.

In 1948 the studies in the Riverhead area were enlarged to cover the eastern part of Riverhead Township and to include all of Southold Township. Additional water-table observation wells were placed in operation in the vicinity of Orient and about 175 water samples were collected. These included a substantial number of wells previously sampled and also many not previously sampled.

Throughout the entire area being studied ground water is obtained from shallow beds of coarse sand and gravel interbedded locally with layers and lenses of clay. Water is pumped by means of wells drilled to an average depth of about 100 feet in Riverhead Township and about 60 feet in Southold Township. The depth to the water table ranges from about 5 feet to 138 feet in different localities. Records of well logs and pumping tests indicate that the sands and gravels of the region are highly permeable and are capable of producing very large quantities of water.

The water studies being made in the irrigated sections of Riverhead and Southold Townships are part of the more comprehensive investigation of the ground-water resources of Suffolk County that has been carried on in cooperation with the Suffolk County Board of Supervisors and the Suffolk County Water Authority since 1932. Records gathered as a result of these cooperative studies are deposited at frequent intervals at the Long Island office of the U. S. Geological Survey and the cooperating agencies, where they may be consulted by the public upon request.

The 1948 release of data includes a hydrograph showing the fluctuation of ground-water levels at nine observation wells, tables listing the chloride content of the well water sampled in Riverhead and Southold Townships, and maps of Riverhead and Southold Townships showing the location of wells. Water-level measurements made in nine observation wells by the U. S. Geological Survey in the Riverhead area during 1945, 1946, 1947, and 1948 are shown on the hydrograph. Table 3 gives the water-level measurements made during 1948 at six newly established observation wells in the vicinity of Orient on the North Fluke. Two of the wells, S 4134 and S 4271, are equipped with automatic water-stage recorders. Beginning with January 1948, the fluctuations of

water levels at these two stations are plotted on the hydrograph on a weekly basis. Also shown on the hydrograph is the monthly precipitation as recorded at the Long Island Vegetable Research Farm at Baiting Hollow, for the period of the water-level records.

Table 1 gives the chloride content of well water for those wells in Riverhead Township that were sampled during 1945, 1946, 1947, and 1948. Errors have been found in the table of similar data and on the location map that accompanied the reports of 1945, 1946, and 1947, and these have been corrected in the tables and on the two location maps in the present report.

The chloride content of well water for wells in Southold Township for the 4-year period 1945-48, inclusive, is given in Table 2.

At the end of table 2 are given the data on chloride content of well water from four irrigation wells outside the area of investigation. These data give an idea of the general conditions where irrigation is not so intensive as in the main area.

In Riverhead Township, where the number of large-diameter irrigation wells, and consequently the withdrawal of ground water, have increased, there has been very little noticeable change in the ground water levels and the chloride content of the well water.

Extensive farming is done on the relatively low and narrow strip of land that lies between Long Island Sound and Peconic Bay from Mattituck east to Orient Point. Here recharge to the water table is limited to that area of the land surface between the above-mentioned salt-water bodies. At a number of places throughout the length of this area the salt-and-fresh-water bodies of the north shore line are separated from those of the south shore by only narrow strips of land. Therefore, the water table may be expected to be not very high above sea level and any great amount of pumping at localities near salt water may lower the fresh-water head sufficiently to induce salt-water encroachment and thus contamination of the fresh ground water used in irrigation.

In table 2 water of high chloride content is recorded for one locality in Orient Point. The exact cause of this condition has not been conclusively determined. However, it is reported that during the hurricanes of 1938 and 1944 this particular region was inundated by salt water from Peconic Bay which may have some bearing on the salinity of the waters sampled. Since the cessation of irrigation pumpage in November 1948, the water levels in the vicinity of Orient have recovered nearly 2 feet in the areas of irrigation pumpage and about a half a foot elsewhere, as shown in table 3. In this area irrigation water is also pumped from natural ponds and large-diameter pits dug to the watertable. At a few places irrigation lines have been connected to the water mains of local water companies and to private wells, from which sources water is purchased for irrigation purposes.

During 1948, according to the data on precipitation and the water-level graphs, ground-water conditions were favorable.

TABLE 1

CHLORIDE CONTENT (SALINITY) OF WELL WATER IN PARTS PER MILLION
IN RIVERHEAD TOWNSHIP, SUFFOLK COUNTY, NEW YORK

Well Number	Owner	Address	Chloride Content in p. p. m. *				PH (1948)
S 527	H. C. Hockett	Sound Ave. Riverhead	20 8/22/45	16 7/11/46	20 8/14/47	20 8/30/48	
S 552	Congregational Church	Baiting Hollow Riverhead	19 8/16/45	20 7/11/46		20 7/30/48	
S 620	Lloyd Corwin	Main Road Aquebogue	15 8/16/45	16 7/18/46	19 7/13/47	42 7/26/48	
S 638	Edward Drop	Rt. 25, E. of Riverhead, Aquebogue	15 8/16/45	16 7/15/46	16 8/13/47	17 9/1/48	
S 644	Jules B. Singer	Sound Ave. Riverhead	15 8/23/45		15 8/12/47	26 7/30/48	
S 716	J. Wesley Warner	Main Road Riverhead	37 8/22/45	40 7/17/46	50 8/13/47	54 8/4/48	
S 738	John Twomey	Route 25 Calverton		8 7/18/46	8 8/14/47	18 8/11/48	
S 932	Anna Tremski	$\frac{1}{4}$ mi. W. Edwards Ave. Calverton	23 8/13/45		20 8/14/47	26 8/4/48	
S 1029	J. Downs	Cedar Ave. & Main Road Aquebogue	24 8/23/45	28 7/15/46		20 7/27/48	
S 1097	Kenneth Pugsley	Roanoke Ave. Riverhead	51 8/18/45	40 7/17/46	35 8/13/47	32 7/27/48	
S 1100	Mrs. L.L. Terry	North Road Riverhead	32 8/17/45	20 7/11/46	30 8/12/47	26 8/4/48	
S 1128	Philip Burre	Oak Hills Riverhead	18 8/18/45	16 7/11/46	16 8/14/47	14 7/30/48	
S 1129	Albert Magee	Oak Hills Riverhead	14 8/17/45	18 7/11/46	20 8/14/47	16 7/30/48	
S 1215	State of New York, L.I. Re- search Farm	Sound Avenue Riverhead	19 8/17/45	22 7/11/46	19 8/12/47	22 7/27/48	
S 1232	Mrs. Chas. Trubisz	Sound Ave. $\frac{1}{4}$ m. E. of Pier Ave. Riverhead		24 7/10/46	20 8/12/47	24 8/21/48	

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Well Number	Owner	Address	Chloride content in p. p. m. *			pH** (1948)
S 1259	Alexander Anasky	Route 25 Calverton	18 7/17/46	19 8/14/47	24 8/11/48	
S 1424	John McKay & Sons	Main Road Aquebogue	20 7/15/46	25 8/13/47	25 7/26/48	5.94
S 1481	Reeves Park Beach Co.	Park Road Riverhead	18 8/22/45	14 7/11/46	18 8/12/47	21 7/27/48
S 1610	Leon Fanning	Sound Avenue Riverhead	30 7/10/46		38 7/28/48	5.42
S 1776	A. H. Warner	North Road Baiting Hollow Riverhead	32 8/17/45	14 7/11/46	16 8/12/47	10 7/28/48
S 1777	H. Z. Aldrich	Doctor's Path Riverhead	8 8/17/45	10 7/16/46	10 8/13/47	12 7/28/48
S 1790	R. J. Goodale	Main Road Aquebogue	30 8/16/45	26 7/15/46	20 8/13/47	20 7/26/48
S 1791	R. J. Goodale	Main Road Aquebogue	36 8/16/45	20 7/15/46	28 8/13/47	
S 1822	A. R. Thurm & Son	E. side Fresh Pond Ave. 6600 north of Main Rd., Calverton	10 8/16/45	12 7/17/46	10 8/14/47	16 8/9/48
S 1838	H. R. Palmage & Son	North Road Riverhead	14 8/16/45	20 7/11/46	20 8/12/47	22 8/30/48
S 1892	H. Meyjes	Riley Ave. Calverton	26 8/15/45	26 7/17/46	28 8/14/47	28 8/12/48
S 1912	Wm. Weckesser	Oak Hills Riverhead	17 8/18/45	15 7/11/46	18 8/14/47	23 8/31/48
S 1926	Sound Dredging Corp.	Riverhead	24 8/22/45	4 7/11/46	DISCONTINUED	
S 1929	John C. Nienstedt	North Road Baiting Hollow Riverhead	18 7/17/46	18 8/12/47	18 7/28/48	6.30
S 1930	John C. Nienstedt	North Road Baiting Hollow Riverhead	18 7/11/46	20 8/14/47	26 7/28/48	

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Well Number	Owner	Address	Chloride content in p. p. m. *			PH** (1948)
S 1931	John C. Nienstedt	North Road Baiting Hollow Riverhead	20 7/11/46	20 8/14/47	26 7/28/48	
S 2010	Edward C. Griffin & Son	Reeves Park Riverhead	10 8/23/45	22 7/11/46	22 7/27/48	
S 2017	Reeves Park Beach Co.	Reeves Park Riverhead	13 8/22/45	16 7/11/46	20 8/12/47	17 7/27/48
S 2018	Reeves Park Beach Co.	Reeves Park Riverhead	49 8/23/45	38 7/11/46	26 8/12/47	28 7/27/48
S 2099	George A. Barker	940 W. Main St. Riverhead	14 9/4/45	26 7/16/46	20 8/15/47	38 7/30/48
S 2331	Hiram Corwin	Main Rd. Rt. 25 Aquebogue	17 8/16/45	14 7/15/46	20 8/13/47	24 7/26/48
S 2365	E. G. Swanson	Maple St. Riverhead Estates Riverhead	8 9/4/45	16 7/17/46		14 8/12/48
S 2370	N. Barowitz	N. side Rt. 25 Aquebogue	15 8/23/45	16 7/16/46	18 8/13/47	22 7/30/48
S 2374	C. W. Guhns	Rt. 24, Flanders Rd., Flanders	12 8/21/45	12 7/17/46		
S 2534	Reeves Park Beach Co., Inc.	Treasure Rd. Reeves Park Riverhead	21 8/22/45	18 7/11/46	30 8/12/47	19 7/27/48
S 2586	Mrs. Arthur G. Meyers	North Road Baiting Hollow	11 8/16/45	12 7/11/46	12 8/12/47	16 8/30/48
S 2587	Mrs. Arthur G. Meyers	North Road Baiting Hollow	13 8/16/45	18 7/11/46	20 8/12/47	16 8/30/48
S 2588	Mrs. Arthur G. Meyers	North Road Baiting Hollow	14 7/11/46	15 8/12/47	18 8/30/48	
S 2645	Suffolk County Boy Scouts	Camp, N. of North Rd., Baiting Hollow Riverhead	12 7/11/46	10 8/12/47		

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Well Number	Owner	Address	Chloride content in p. p. m. *				pH ** (1948)
S 2654	I. M. Young	Roanoke Ave. between Sound & Reeves Ave. Riverhead	19 8/18/45	22 7/11/46	30 8/13/47	24 8/29/48	5.92
S 2778	Iselle H. Corwin	Route 25, Aquebogue	15 8/17/45	16 7/15/46	20 8/12/47		
S 2838	Herman H. Wells	Route 25, Aquebogue	33 8/16/45	24 7/16/46	24 8/13/47	20 8/16/48	
S 2840	W. S. Miller	Oak Hills Rd. N. of Sound Ave., Riverhead	14 8/17/45		15 8/14/47	15 8/31/48	
S 3002	Leonard Kobylenski	Route 25 Calverton	10 8/16/45	18 7/17/46	19 8/14/47	18 8/10/48	
S 3003	Reeves Park Beach Co., Inc.	Sound Ave. Riverhead	17 8/22/45	DISCONTINUED			
S 3046	Antone Yamburski	Church Lane Aquebogue	28 8/16/45	14 7/16/46	20 8/13/47	28 8/13/48	
S 3069	R. S. McDonald	Flanders Rd. Riverhead	16 8/21/45	14 7/17/46	10 8/14/47		
S 3090	Bruno Zaloga	Route 25 Aquebogue	17 8/18/45	20 7/18/46	21 8/13/47	24 7/30/48	
S 3277	F.P. & C. T. Reeve	Route 25 Aquebogue	23 8/18/45	34 7/15/46	25 8/13/47	28 7/30/48	
S 3278	Chas. Stepanitus	Route 25 Aquebogue	17 8/23/45	14 7/16/46	15 8/13/47	14 7/30/48	
S 3418	U. S. Army	Moriches Rd. Riverhead	10 8/21/45	DISCONTINUED			
S 3487	U. S. Army	Northville Outpost N. of Riverhead	23 8/21/45	DISCONTINUED			
S 3570	John Balnis	Reeves Ave. Riverhead	19 8/21/45	18 7/16/45	30 8/14/47	27 7/27/48	

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Well Number	Owner	Address	Chloride content in p. p. m. *				pH ** (1948)
S 3627	Leon Fanning	Union Ave. Riverhead	112 8/23/45	28 7/10/46	28 8/12/47	40 8/29/48	
S 3634	Leon Fanning	Union Ave. & Shore Rd. Riverhead	30 8/23/45	32 7/10/46	32 8/12/47	40 8/30/48	
S 3705	Geo. F. Naugles	Sound Ave. & Herrick Lane Riverhead				25 8/16/48	6.11
S 3716	Allison L. Young	Sound Avenue Riverhead		12 7/10/46	20 8/12/47	20 8/4/48	5.67
S 3720	Michael Balnis	Sound Avenue Riverhead	40 8/21/45	34 7/11/46	50 8/14/47	66 7/29/48	
S 3721	Walter Kobylenski	Middle Road Riverhead	24 8/23/45	18 7/16/46	20 8/13/47	30 8/10/48	5.64
S 3722	Frank Yousik	Middle Road Riverhead		18 7/16/46	20 8/13/47	20 8/3/48	6.85
S 3764	Raymond McKay	Union Ave. Aquebogue		28 7/18/46	40 8/13/47	28 7/26/48	5.76
S 3765	Clyde McBurnie	Middle Road Riverhead	18 8/21/45		19 8/13/47	28 8/4/48	
S 3766	Walter Smith	Peconic Bay Blvd, Riverhead	11 8/21/45	24 7/16/46			
S 3767	Edw. Koroleski	Reeves Ave. Riverhead	17 8/21/45	20 7/16/46	20 8/14/47	22 7/28/48	5.95
S 3779	Stanley Zaweski	Peconic Bay Blvd, Janssport				24 8/16/48	5.64
S 3789	Carl G. Young	57 Sound Ave. Riverhead		30 7/11/46			
S 3824	Leslie T. Wells	Penny's Rd. & Sound Ave. Riverhead	28 8/17/45	26 7/10/46	30 8/12/47	28 7/29/48	5.90
S 3845	Dan Donahue	Route 25 Calverton	18 8/15/45	20 7/17/46	25 8/14/47	29 8/11/48	5.98

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IN RIVERHEAD TOWNSHIP, SUFFOLK COUNTY, NEW YORK

Well Number:	Owner	Address	Chloride content in p. p. m. *				** pH (1948)
S 3876	Joseph Celic	Petonic Bay Blvd., Riverhead	20 8/21/45	26 7/16/46	24 8/14/47		
S 3878	John A. Danielowich	W. Middle Rd. Calverton		20 7/16/46	20 8/14/47	20 8/16/48	5.70
S 3941	A.J. Rychlinski	River Road Calverton	25 8/15/45	18 7/17/46	22 8/14/47	19 8/11/48	6.02
S 3958	Jacob Karlin	Riley Avenue Calverton	18 8/18/45	18 7/17/46	20 8/14/47	20 7/30/48	5.52
S 4025	George Naugles	145 Sound Ave. Riverhead	25 8/18/45	20 7/12/46	30 8/15/47	28 7/29/48	
S 4048	Otto DeFrest	Sound Ave. Baiting Hollow Riverhead		16 7/11/46		26 7/27/48	6.45
S 4066	Vincent Zilnicke	Roanoke Ave. Riverhead		26 7/16/46	25 8/13/47	30 8/3/48	
S 4067	Stanley Kozok	Roanoke Ave. Riverhead	23 8/21/45	24 7/16/46	20 8/14/47	26 7/27/48	
S 4068	James Kaelin	Roanoke Ave. Riverhead		30 7/16/46	30 8/13/47	30 8/3/48	
S 4077	Mrs. Adella Yakaboski	Route 25 Calverton	20 8/15/45	22 7/17/46		22 8/11/48	5.59
S 4078	S. Blasco	Young's Ave. Calverton	23 8/15/45	6 7/17/46		24 8/11/48	5.88
S 4079	Peter Zaweski	Sound Ave. Riverhead	25 8/18/45		25 8/15/47	26 7/30/48	
S 4080	Louis Adamczeski	River Rd. Calverton		22 7/17/46	20 8/14/47	12 8/11/48	6.93
S 4082	Frank Doroski	West Lane Aquebogue		22 7/16/46	25 8/13/47	26 8/16/48	5.90
S 4083	Mike Czigier	Main Road Calverton	9 8/15/45	18 7/17/46	20 8/14/47	18 8/12/48	6.11

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IN RIVERHEAD TOWNSHIP, SUFFOLK COUNTY, NEW YORK

Well Number:	Owner	Address	Chloride content in p. p. m. *				** PH (1948)
S 4084	Joseph Gatz	Sound Ave. Riverhead	10 7/11/46	30 8/15/47			
S 4086	Walter Koroleski	Reeves Ave. Riverhead	18 7/16/46	18 8/14/47	26 7/28/48		
S 4087	Edward Sujeski	Twomey Ave. Calverton	21 8/15/45	16 7/17/46	18 8/14/47	28 8/10/48	5.95
S 4088	P. M. Hogan	Twomey Ave. Calverton	20 8/15/45	24 7/17/46	28 8/14/47	30 8/10/48	
S 4089	Charles McKay	Middle Rd. Riverhead	19 8/21/45	24 7/17/46	25 8/13/47	22 8/9/48	6.07
S 4090	Anton Yousik	Reeves Ave. Riverhead	30 8/21/45	22 7/16/46	11 8/14/47	22 7/28/48	
S 4097	K. F. Terry	Sound Ave. Riverhead	18 8/21/45	18 7/11/46	18 8/12/47	23 8/4/48	
S 4116	E. Young	Sound Ave. Riverhead	26 8/17/45	24 7/10/46	26 8/12/47	30 9/1/48	5.98
S 4122	R. J. Goodale & Sons	Main Rd. Aquebogue		24 7/15/46		30 7/26/48	5.67
S 4123	Jos. Anderson	Jamesport	26 9/4/45	22 7/18/46	26 8/13/47	30 9/2/48	
S 4124	L. Romanowski (formerly W. Kobylenski)	Middle Rd. Calverton	13 8/15/45	16 7/16/46	18 8/14/47	20 8/10/48	
S 4125	Mike Bereany	Mill Road Riverhead	9 8/23/45	10 7/16/46	10 8/14/47	12 8/5/48	
S 4143	Stanley Zaweski	Main Road Jamesport		22 7/18/46	22 8/13/47	26 9/9/48	
S 4194	Halsey Reeve	Middle Rd. Riverhead				26 8/5/48	
S 4231	Jebb Weir, Inc.	Sound Rd. & Manor Lane Jamesport				17 9/2/48	6.09

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Well Number	Owner	Address	Chloride content in p. p. m. *				PH (1948)
S 4237	Maxim Bobinski	Main Road Manorville				10 9/ 2/48	6.13
S 4240	(Mitchell (Ziemacki	Manor Lane Jamesport	30 9/ 8/45	28 7/16/46	28 8/13/47	30 9/ 1/48	
S 4415	Mike Caygler	Main Road Calverton				21 8/11/48	
S 4416	Walter Waskowicz	Main Road Wading River			10 8/15/47	12 8/30/48	
S 4417	W. R. Linner	Osborne Ave. Riverhead				18 8/ 5/48	7.01
S 4421	Irving Hulse	$\frac{1}{2}$ m. W. Fresh Pond Rd., $\frac{1}{2}$ m. E. Hulse Ave. Baiting Hollow				18 8/30/48	6.00
S 4422	Fred Lewin	Sound Ave. Baiting Hollow				25 8/30/48	
S 4473	Peter J. Kujawski	Sound Ave. Jamesport				30 9/ 2/48	6.12
S 4511	Vernon P. Wells	Sound Ave. Riverhead				21 7/29/48	5.96
S 4512	Chas. Cichanowicz	Sound Ave. & Herrick Lane Jamesport				30 9/ 7/48	6.51
S 4513	John Cichanowicz	Northville Tpke. & Doc's Path Riverhead				20 8/ 5/48	
S 4514	L. Y. Robinson	Sound Ave. Riverhead				17 8/31/48	5.99
S 4543	Jos. Karpinski	N. of Sound Ave., W. of Osborne Ave. Baiting Hollow				25 8/31/48	

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Well Number:	Owner	Address	Chloride content in p. p. m. *	pH (1948)
S 4544	Anton Wanat	N. of Sound Ave., Baiting Hollow	34 8/30/48	
S 4547	John Shust	Herrick Lane Jamesport	28 9/12/48	5.90
S 4551	Halsey Reeve	Roanoke Ave. Riverhead	12 8/ 5/48	7.80
S 4566	Jos. Sieminski	Jamesport	25 9/ 2/48	5.82
S 4617	Max Sawicki	West Lane Aquebogue	28 8/13/48	
S 4620	Stanley Cichanowicz	Sound Ave. Riverhead	24 8/ 5/48	
S 4676	J. T. Luce	Sound Ave. & Church Lane Jamesport	24 9/ 2/48	6.67
S 4795	M. Zeimacki	Jamesport	25 8/30/48	5.91
S 4825	John F. Danielowich	Chichester Ave. Manorville	18 10/ 4/48	5.97
S 4944	Jos. Ruskowski	N. of Fresh Pond Road Calverton	19 8/12/48	5.62
S 5012	Walter Smith	Peconic Bay Blvd., Riverhead	65 8/14/47	16 8/19/48
S 5115	John Twomey	E. of Twomey Ave., Calverton	21 8/10/48	
S 5317	Walter Kobylenski	Middle Rd. & Deep Hole Rd. Riverhead	14 8/10/48	
5344	J. P. McCabe	Riverhead	30 8/13/48	5.97

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Well Number:	Owner	Address	Chloride content in p. p. m. *	pH ** (1948)
S 5166	A. F. Nienstedt	Riverhead	28 8/9/48	6.37
S 5508	F. J. Zaweski	Jamesport	34 9/8/48	5.90
S 5625	John F. Kruszeski	Main Road Aquebogue	28 8/13/48	5.75
S 5707	John Balnis	Reeves Ave. Riverhead	29 8/13/48	5.99
S 5708	William Tyska	Main Road Calverton	25 8/13/48	5.56
S 6028	Henry Hallock	Pier Ave. Riverhead	22 7/29/48	
S 6029	John Graseck	Twomey Ave. Calverton	23 8/12/48	
S 6901	Joseph Gatz	1 m. S. Sound Ave, Riverhead	12 7/29/48	
S 7269	J. P. Celic Duck Farm	Peconic Bay Blvd., S. Jamesport	29 8/21/48	

NOTES:

* Determinations made at field office of the U. S. Geological Survey using portable field equipment and methods similar to standard equipment and methods.

** Determinations made by Long Island Vegetable Research Farm in laboratory at Baiting Hollow, N.Y., using standard equipment and methods.

TABLE 2

CHLORIDE CONTENT (SALINITY) OF WELL WATER IN PARTS PER MILLION
IN SOUTHOLD TOWNSHIP, SUFFOLK COUNTY, N.Y.

Well Number	Owner	Address	Chloride content in p. p. m. *				pH** (1948)
S 1818	Nicholas Chudiak	North Rd. & Bergen Ave. Mattituck	25 8/21/45	24 7/17/46	30 8/13/47	30 8/16/48	
S 2676	Wm. A. Lindsay	Mattituck				22 9/7/48	6.13
S 3588	J.M. Lupton & Son, Wickham Farm	Cutchogue				26 9/14/48	6.00
S 3723	Isidore Krupski	Main Road Peconic				35 9/13/48	6.17
S 3966	Chester R. Koloski	Route 25 Laurel				23 9/3/48	5.99
S 4027	Stanley Sinachick	Alvah's Lane Cutchogue	38 9/4/45	28 7/17/46	30 8/15/47	28 8/16/48	
S 4081	Joseph Celic	Bergen Ave. Mattituck	27 8/22/45	28 7/17/46	30 8/13/47	36 8/16/48	
S 4091	Baron Hill	Young's Ave. Southold	24 9/5/45	30 7/12/46	30 8/13/47	37 9/13/48	6.10
S 4135	A. J. Dzenkowski	East Marion				26 9/14/48	6.23
S 4239	Steve Koroleski	Main Road Peconic	30 9/5/45	30 7/11/46	30 8/13/47	30 8/6/48	
S 4352	Edward Buchak	Between Middle Country Rd. & North Ave. Laurel				28 9/3/48	6.04
S 4413	Paul Kaloski	Alvah's Lane Cutchogue	30 9/4/45	20 7/17/46	20 8/13/47	21 8/6/48	
S 4474	John Pietrewicz	Main Road Cutchogue				30 9/9/48	5.57
S 4484	M. J. Shipuleski	Southold				35 9/14/48	5.67

TABLE 2

CHLORIDE CONTENT (SALINITY) OF WELL WATER IN PARTS PER MILLION
IN SOUTHOLD TOWNSHIP, SUFFOLK COUNTY, N.Y.

Well Number	Owner	Address	Chloride content in p. p. m. *	pH** (1948)
S 4565	Mike Muznic	Cutchogue	25 9/10/48	6.71
S 4576	Wm. Chudiak	Bergen Ave. Mattituck	32 9/ 8/48	6.06
S 4580	Mrs. M. Doroski	Main Road Cutchogue	45 9/10/48	6.31
S 4585	Joseph Cain	Laurel	24 9/ 3/48	6.00
S 4618	Leander Glover	Main Rd. at Cox Lane Cutchogue	36 9/10/48	5.90
S 4725	Alex Domaleski	North Road Mattituck	22 9/ 8/48	6.34
S 5189	Leander Glover	Cox Lane & Middle Road Cutchogue	32 9/ 8/48	
S 5208	John Bauer	Peconic	20 9/10/48	6.16
S 5475 S 5476	W. Vanston	Nassau Point	37 9/13/48	6.15
S 5602	Walter Bialeski	North Road Cutchogue	26 9/ 8/48	6.02
S 5665	John F. McNulty	Laurel	26 7/ 9/48	6.14
S 6038	Edward Zuhoski	Alvah's Lane Cutchogue	20 9/ 9/48	6.05
S 6059	Anton J. Kull	S. of Indian Neck Lane Peconic	493 9/10/48	6.10
S 6119	Wm. Wickham	Main Road Cutchogue	26 9/16/48	5.90
S 6148	P. Orlowski	Sterlings Lane Cutchogue	24 9/ 9/48	6.37

TABLE 2

CHLORIDE CONTENT (SALINITY) OF WELL WATER IN PARTS PER MILLION
IN SOUTHOLD TOWNSHIP, SUFFOLK COUNTY, N.Y.

Well Number	Owner	Address	Chloride content in p. p. m. *	pH** (1948)
S 6149	J. Pietrewicz	Cox Lane Cutchogue	33 9/ 8/48	5.80
S 6150	S. Slediaski	Breakwater Rd. Mattituck	20 9/ 7/48	6.10
S 6190	D. Cooper	Bergen Ave. Mattituck	27 9/ 7/48	6.44
S 6192	T. Bonkoski	Alvah's Lane Cutchogue	25 9/ 9/48	6.14
S 6193	S. Doroski	North Road Southold	25 9/13/48	6.20
S 6779	Martin Sidor	Middle Rd. Mattituck	30 9/ 8/48	5.80
S 6780	John Moisa	N. of Cox Neck; La., Mattituck	24 9/7/ 48	6.54
S 7168	Ed. King	Route 25 Orient	37 9/14/48 41 9/23/48 42 10/12/48	6.70
S 7169	R.W. Gillispie, Jr.	Rt. 25, $\frac{1}{2}$ m. E. of Platte Lane, Orient	62 9/23/48	5.91
S 7170	Stanley Koroleski	Main Road Orient Point	54 9/23/48 52 9/30/48 54 10/15/48	5.98
S 7171 S 7172	E. Kenneth Tabor	Main Rd, E. of Platte Lane Orient	40 9/24/48 43 9/30/48	5.93

TABLE 2

CHLORIDE CONTENT (SALINITY) OF WELL WATER IN PARTS PER MILLION
IN SOUTHOOLD TOWNSHIP, SUFFOLK COUNTY, N.Y.

Well Number	Owner	Address	Chloride content in p. p. m. *	pH ** (1948)
S 7173	Geo. W. Hallock	Platte Lane Orient	15 9/24/48	6.43
S 7175	Wm. Haberman	Main Road Orient	48 9/30/48	
S 7176	H. S. Duval	Orient Point	1000 9/30/48	
S 7179	E. Kenneth Tabor	Orchard St. Orient	66 9/30/48	
S 7180	D. M. Robertson	Main Road Orient	48 9/30/48	
S 7267	Southold Township (Town Dump well)	Oregon Rd. Cutchogue	20 9/ 9/48	6.09
P 1	Perry Douglas	Out of Demarest S. side of road Orient	18 9/24/48	6.74
P 2	H.M. Demarest & Sons	N. side of Main Rd. Orient	78 9/24/48 68 9/30/48 76 10/21/48	5.89
P 3	Irving Latham	North Pond Orient Point	14 9/24/48	6.53
P 4	Irving Latham	South Pond Orient Point	98 9/24/48 96 9/30/48 100 10/11/48	7.10
P 5	H. S. Duval	(Pit #1) Orient Point	56 9/30/48	
P 6	H. S. Duval	(Pit #2) Orient Point	5810 9/30/48	
P 7	Ed. King	E. Marion Pond East Marion	40 9/24/48	6.18

ADDENDA ***

Well Number :	Owner :	Address :	Chloride content in p. p. m. *				** pH (1948)
S 1277 :	T. J. Gerrity :	Old Country Rd. :	2 :	10 :	10 :	15 :	
		East Quogue :	8/23/45 :	7/10/46 :	8/14/47 :	9/ 1/48 :	
S 4195 :	William H. Glover :	Yaphank Ave. :			12 :	12 :	
		Yaphank :			8/15/47 :	7/28/48 :	
S 4537 :	Mike Stokojlo :	Lewis Road :			15 :	12 :	
		East Quogue :			8/15/47 :	9/ 1/48 :	
S 4666 :	Fred Hutton :	South St. :			25 :	24 :	
		South Manorville :			8/15/47 :	7/28/48 :	

NOTES:

* Determinations made at field office of the U.S. Geological Survey using portable field equipment and methods similar to standard equipment and methods.

** Determinations made by Long Island Vegetable Research Farm in laboratory at Baiting Hollow, N.Y. using standard equipment and methods.

*** These wells are listed for comparative purposes and are not shown on well location maps.

TABLE 3

DEPTH TO WATER MEASUREMENTS MADE BY U.S.G.S.
AT OBSERVATION WELLS IN ORIENT AND ORIENT POINT, SOUTHOID TOWNSHIP, N.Y.

Well Number	Owner	Address	Depth to water from top of well *			
			9/24/48	9/30/48	12/30/48	1/11/49
7174	George W. Hallock	Hallock's Road Orient	6.17	6.26	5.60	5.09
7177	H. S. Duvall	Farm south of Route 25 A Orient Point	-----	7.24	-----	7.21
7281	King Farms	Route 25 A Orient Point	-----	13.92	13.26	12.88
7282	H. S. Duvall	Home north of Route 25 A Orient Point	-----	10.65	9.70	8.75
7283	William B. Karcher	Route 25 A Orient	-----	-----	-----	20.65
7284	E. C. Petty	Orchard Street Orient	-----	-----	-----	15.93

* M. P. at each well is reference mark on inner side of rim around top of well, altitude of which has not been established by level line.