

XVII.—REPORT OF OPERATIONS AT SAINT JEROME OYSTER-BREEDING STATION FOR THE YEAR 1886.

BY W. DE C. RAVENEL.

During the greater parts of the months January, February, and March the channel to station and the upper part of the creek was frozen over, stopping all oystering and communication by water. Records of the temperature and density of water in the ponds and bay were kept during that time when practicable.

It having been decided to continue the experiments in artificial propagation by means of artificially-impregnated spawn on a much larger scale than before and without confining it to ponds in which the water was filtered, and also to give Prof. John A. Ryder's system of spat collection a fair trial, 300 bushels of oysters were purchased in April and bedded in lower pond for the artificial propagation, and 75 bushels were put in pond 5 to furnish spawn for the Ryder experiment, the flume used to connect pond and channel having been taken out.

I was ordered to Battery Station on April 21 to assist in the shad-hatching operations and returned to Saint Jerome on May 26. During the month of June a zigzag canal 270 feet in length, 4 feet deep, and $3\frac{1}{2}$ feet wide, connecting pond 5 and main channel, was dug, sheathed up, and baskets made, which, soon after the 1st of July, were filled with clean shells and placed in canal.

The bank around the lower pond was wattled from the south end of piles to wharf on Deep Point; piles were driven around the mouth of terra-cotta pipe connecting bay and pond 4 and inclosed with wire netting to keep out sea-weed and trash. A large quantity of sea-weed having settled at wharf, the men were employed two days removing a part of it; the *Halcyon* arriving on 30th with the Assistant Commissioner, finished this work by means of her propeller.

The laborers employed in digging canal, handling baskets, and other general work were hired from the immediate vicinity at \$1.50 per day.

On June 23 ripe oysters were found in sufficient numbers to commence spawning regularly. The force, consisting of four men, was employed daily during the season in collecting ripe oysters, distributing the artificially-fertilized spawn in ponds 1, 2, 3, 4, and 5, and at other points, and putting out collectors of slate and tile, coated with mortar,

placed in frames of various designs, so as to be in horizontal and upright positions. Wire trays, covered with oysters and slate, resting on trestles about 8 inches high, were used in the ponds where artificially-fertilized spawn was distributed. In addition to these, plastering laths and shingles nailed to strips were made use of in the ponds and surrounding waters, fixed so that where some floated on the surface, others rested on the bottom or were anchored midway. Shells were also used as formerly, strung on galvanized wire.

The Steamer *Fish Hawk* arrived July 11 with dredge and two scows. Leaving them she proceeded to Battery Station, returning on the 16th with two launches and a large force of men to work the dredge and sink an artesian well under the direction of Mr. Grabill, superintendent Battery Station, who, immediately upon his arrival, commenced sinking the well at the north-east corner of wharf. After several attempts to get water near the surface, the pipe was driven down about 80 feet and then abandoned, in consequence of the pumps being out of order.

The dredge commenced work in front of wharf to dig out a basin 150 feet wide by 9 feet deep, and to continue deepening the channel leading to station. Very little progress was made, owing to the poor condition of machinery, the difficulty of getting fresh water, and the hardness of the soil. On the 24th the dipper-pole broke and was not replaced until the 28th, when work was resumed.

The Assistant Commissioner arrived on steamer *Haleyon* on 30th instant to inspect the general work of station.

During this month all the shells in the baskets were washed, as much sediment had collected on them; very few young oysters were found at that time on them.

In August spawning was pushed with energy, new collectors being put out daily until the 24th, when these operations ceased. The first appearance of spat was in pond 2 on July 29, when oysters one-eighth of an inch in diameter were found. Mr. Grabill left for Battery Station August 3, sending the dredge, scows, and a launch by the *Fish Hawk* to same point; leaving Launch No. 55 and crew to assist in spawning at this station.

On August 18 Machinist Glennan and a carpenter reported for duty with a pump borrowed from the Fort Washington Station and work was resumed on the well. After several ineffectual attempts to drive the pipe deeper it was given up and a new one commenced, which had been sunk to a depth of 94 feet when Passed Assistant Engineer Reeves arrived on *Fish Hawk* with a large force of men to take charge. The work was now pushed night and day until, on the 26th, when a depth of 203 feet had been obtained, the pipe wrung off 23 feet below the surface. It was then abandoned and the *Fish Hawk* left for Wood's Holl, Mass., taking with her the carpenters, the greater part of the engineer force, and the well-driving equipment. The rest of the men, except Coxswain Jones, were sent to Battery Station on the 31st.

During the months of September and October all collectors put out were taken up and overhauled. The set of spat was exceedingly poor on collectors from channel and lower ponds, though 183 oysters were found on one slate collector from Wrightson's Bar. About 500 were found on collectors in ponds 1, 2, 3, and 4. All those with spat were placed in ponds 1 and 2 on wire trays, resting on bottom.

On September 13, finding the oysters in pond 5 dying in great numbers from the effect of sand, I had them all taken up and put in lower pond. Upon thoroughly overhauling the baskets of shells and finding about 40 oysters to the basket, the shells were scattered in the channel and pond west of cottage.

Having observed a very heavy set of spat in parts of the outer creek, at the suggestion of the Assistant Commissioner, a careful examination of this, with Point Lookout and Smith's Creeks, was instituted. In the former the set of spat was phenomenally large for about one-half mile up both branches, while in the others the set was quite poor, though oysters were plentiful. It would therefore appear that Saint Jerome Creek had been advantageously affected by the large quantity of artificially-fertilized spawn distributed by the station.

The *Fish Hawk* arrived here on 3d of November, left well-tower and equipment, and taking Coxswain Jones and Launch 55, proceeded to Battery Station. The Herreshoff pump borrowed from the carp pond in Washington was returned November 8.

November 14 the *Halcyon* arrived with the Assistant Commissioner, who, after inspecting the station, instructed that it be closed and put in charge of a watchman and the superintendent report to Battery Station. All collectors with oysters attached were left in ponds 1, 2, and 3; about 350 oysters obtained from collectors placed in outer creek were put into three caissons and placed in pond 3. The station was turned over to the watchman, S. B. Wrightson, on 20th of November.

Appended is a table of weather variations and density and temperature, etc., of water at Saint Jerome Station.

HAVRE DE GRACE, October 28, 1887.

Table of temperatures, weather, and densities of water at Saint Jerome Station from January 1, 1886, to April 17, 1886, and from July 1, 1886, to November 7, 1886, inclusive.

NOTE.—Salinometer No. 5317 was in use during the following periods: January 17 to February 17; March 16 to April 3; April 5 to April 17; August 4 to September 28. Salinometer No. 5319 was in use during the following periods: January 1 to January 9; February 18 to February 26; March 1 to March 15; July 1 to August 3, and September 29 to November 7.

Date.	State of tide.	State of weather.	Direction of wind.	Water at wharf.		Water of oyster ponds.		Water at canal.		Water at lower pond.		Water at Deep Point.		Water in the bay.	
				Tem- pera- ture of air.	Tem- pera- ture. Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.
1886.				°	°	°	°	°	°	°	°	°	°	°	°
January 1, 10 a.m.	High	Clear	NW.	42	41	1.0114	41	1.0110	40	1.0110	41	1.0114	41	1.0114	41
January 1, 4 p.m.	Low	Clear	N.W.	50	45	1.0110	45	1.0110	45	1.0110	44	1.0112	44	1.0112	44
January 2, 11 a.m.	High	Clear	N.W.	43	42	1.0112	42	1.0112	42	1.0114	42	1.0110	42	1.0112	42
January 2, 5 p.m.	Low	Clear	NE.	45	44	1.0112	44	1.0112	44	1.0112	44	1.0112	44	1.0112	44
January 3, 12 m.	High	Cloudy	E.	55	47	1.0112	47	1.0112	47	1.0112	47	1.0110	47	1.0116	47
January 3, 6 p.m.	Low	Cloudy	E.	55	47	1.0112	47	1.0112	47	1.0112	47	1.0112	47	1.0112	47
January 4, 7 a.m.	Low	Rain	SE.	50	46	1.0110	46	1.0110	46	1.0110	46	1.0110	46	1.0110	46
January 4, 1 p.m.	High	Rain	S.	52	46	1.0110	48	1.0110	48	1.0110	46	1.0110	48	1.0110	48
January 5, 3.30 p.m.	Low	Clear	W.	45	46	1.0106	44	1.0106	44	1.0106	44	1.0106	44	1.0110	42
January 5, 2 p.m.	High	Clear	NW.	50	46	1.0104	46	1.0104	46	1.0106	45	1.0108	42	1.0112	42
January 6, 9.30 a.m.	Low	Clear	N.W.	38	41	1.0106	40	1.0108	40	1.0104	40	1.0110	40	1.0114	40
January 6, 3.30 p.m.	High	Cloudy	N.W.	44	45	1.0106	42	1.0106	42	1.0106	42	1.0110	42	1.0118	43
January 7, 10.15 a.m.	Low	Cloudy	N.W.	30	38	1.0114	37	1.0104	36	1.0100	38	1.0114	36	1.0114	37
January 7, 4.15 p.m.	High	Clear	N.W.	34	38	1.0114	38	1.0110	38	1.0110	38	1.0114	38	1.0114	38
January 8, 11 a.m.	Low	Cloudy	NE.	30	34	1.0110	34	1.0106	34	1.0106	34	1.0110	34	1.0110	34
January 8, 5 p.m.	High	Snow	NE.	30	34	1.0114	34	1.0106	34	1.0106	34	1.0114	34	1.0116	34
January 9, 12 m.	Low	Clear	N.W.	22	31	1.0100	31	1.0100	31	1.0102	32	1.0104	33	1.0110	33
January 9, 6 p.m.	High	Clear	N.W.	20	31	1.0100	31	1.0100	31	1.0102	31	1.0104	31	1.0106	31
January 17, 10 a.m.	High	Clear	N.W.	32	.....	.....	.....	.....	.....	.....	33	1.0106	34	1.0100	34
January 17, 4 p.m.	Low	Clear	N.W.	32	.....	.....	.....	.....	.....	.....	34	1.0100	34	1.0100	34
January 18, 11 a.m.	High	Clear	E.	38	.....	.....	.....	.....	.....	.....	35	1.0100	35	1.0100	35
January 18, 5 p.m.	Low	Clear	E.	35	.....	.....	.....	.....	.....	.....	36	1.0100	36	1.0100	36
January 19, 12 m.	High	Rain	SW.	38	.....	.....	.....	.....	.....	.....	38	1.0098	36	1.0098	36
January 19, 6 p.m.	Low	Rain	SW.	40	.....	.....	.....	.....	.....	.....	38	1.0098	38	1.0095	38
January 20, 7 a.m.	Low	Clear	NE.	32	.....	.....	.....	.....	.....	.....	36	1.0096	36	1.0094	36
January 20, 1 p.m.	High	Clear	NE.	37	1.0050	.....	.....	.....	.....	.....	35	1.0096	35	1.0096	35
January 21, 8.30 a.m.	Low	Rain	SE.	32	40	1.0070	.....	.....	.....	.....	40	1.0074	40	1.0074	40
January 21, 2.30 p.m.	High	Rain	SE.	40	40	1.0060	.....	.....	.....	.....	40	1.0070	40	1.0070	40
January 22, 10 a.m.	Low	Clear	NE.	35	38	1.0070	38	1.0070	38	1.0070	36	1.0076	36	1.0092	37
January 22, 4 p.m.	High	Clear	E.	45	40	1.0480	36	1.0070	36	1.0072	37	1.0078	37	1.0088	37
January 23, 11 a.m.	Low	Clear	NE.	32	36	1.0076	33	1.0070	33	1.0070	34	1.0086	33	1.0090	34
January 23, 5 p.m.	High	Clear	NE.	30	33	1.0070	33	1.0070	33	1.0070	33	1.0080	32	1.0092	32
January 27, 8 a.m.	High	Rain	NE.	38	35	1.0064	35	1.0074	34	1.0070	35	1.0088	35	1.0088	34

		Rain	NE	38	34	1.0060	34	1.0074	34	1.0070	36	1.0088	36	1.0088	36	1.0088
January 27, 2 p.m.	Low	Rain	N.	38	35	1.0020	35	1.0060	35	1.0060	36	1.0084	36	1.0088	40	1.0080
January 28, 9 a.m.	High	Rain	N.	38	35	1.0020	35	1.0060	35	1.0060	35	1.0070	35	1.0088	37	1.0090
January 28, 3 p.m.	Low	Rain	NE	38	35	1.0050	40	1.0050	40	1.0050	40	1.0080	39	1.0090	38	1.0082
January 29, 10 a.m.	High	Cloudy	NE	42	40	1.0050	40	1.0050	38	1.0060	40	1.0070	40	1.0080	40	1.0092
January 29, 3:30 p.m.	Low	Cloudy	NE	45	38	1.0050	38	1.0050	38	1.0060	37	1.0018	37	1.0088	35	1.0090
January 30, 11 a.m.	High	Snow	NE	32	37	1.0040	35	1.0050	35	1.0020	36	1.0080	37	1.0080	37	1.0090
January 30, 4:30 p.m.	Low	Snow	NW.	32	35	1.0040	35	1.0050	35	1.0070	33	1.0076	33	1.0090	33	1.0090
January 31, 12 m.	High	Clear	NW.	49	35	1.0050	35	1.0070	33	1.0078	35	1.0088	36	1.0090	36	1.0090
January 31, 5:30 p.m.	Low	Cloudy	SW.	37	35	1.0070	35	1.0070	35	1.0070	33	1.0090	33	1.0090	33	1.0090
February 1, 12:30 p.m.	High	Cloudy	N.	32	35	1.0034	34	1.0066	34	1.0042	35	1.0050	35	1.0193	35	1.0190
February 1, 6 p.m.	Low	Cloudy	N.	32	35	1.0040	35	1.0066	35	1.0040	35	1.0090	36	1.0090	36	1.0090
February 2, 6:30 a.m.	Low	Clear	SW.	28	31	1.0054	36	1.0074	33	1.0065	33	1.0080	33	1.0090	35	1.0093
February 3, 1 p.m.	High	Clear	SW.	36	34	1.0064	36	1.0070	33	1.0070	33	1.0090	33	1.0090	35	1.0093
February 13, 10 a.m.†	High	Rain	SW.	45	42	1.0010	42	1.0010	42	1.0010	42	1.0010	42	1.0040	45	1.0104
February 13, 4 p.m.	Low	Rain	SW.	45	43	1.0010	43	1.0010	43	1.0010	43	1.0010	43	1.0040	44	1.0094
February 14, 11 a.m.	High	Clear	SW.	57	44	1.0060	44	1.0040	42	1.0040	44	1.0070	44	1.0080	44	1.0092
February 14, 5 p.m.	Low	Clear	S.	52	45	1.0050	45	1.0040	45	1.0040	45	1.0060	45	1.0060	46	1.0092
February 15, 12 m.	High	Clear	S.	54	45	1.0092	44	1.0092	44	1.0092	46	1.0082	46	1.0091	46	1.0094
February 15, 6:30 p.m.	Low	Cloudy	SW.	53	44	1.0090	46	1.0090	46	1.0090	46	1.0088	46	1.0090	46	1.0103
February 16, 7 a.m.	Low	Clear	NW.	35	44	1.0094	43	1.0088	43	1.0088	43	1.0094	41	1.0098	41	1.0103
February 16, 1 p.m.	High	Clear	NW.	38	44	1.0094	44	1.0080	44	1.0080	44	1.0094	44	1.0098	45	1.0103
February 17, 8 a.m.	Low	Cloudy	NE	32	38	1.0098	35	1.0094	35	1.0094	35	1.0098	36	1.0104	36	1.0104
February 17, 2 p.m.	High	Show	NE	36	38	1.0104	35	1.0104	35	1.0104	34	1.0104	35	1.0104	35	1.0104
February 18, 9 a.m.	Low	Clear	S.	38	38	1.0112	38	1.0104	37	1.0100	36	1.0116	36	1.0116	40	1.0116
February 18, 3 p.m.	High	Clear	S.	45	37	1.0116	37	1.0110	37	1.0110	38	1.0110	37	1.0118	42	1.0116
February 19, 10 a.m.	Low	Clear	SW.	40	42	1.0112	42	1.0110	42	1.0110	42	1.0112	42	1.0112	46	1.0112
February 19, 4 p.m.	High	Clear	SW.	48	42	1.0112	42	1.0112	41	1.0112	41	1.0112	41	1.0112	48	1.0116
February 20, 10 a.m.	Low	Clear	NW.	45	36	1.0116	40	1.0094	39	1.0100	36	1.0116	39	1.0116	40	1.0116
February 20, 4:15 p.m.	High	Cloudy	NW.	30	40	1.0116	36	1.0106	36	1.0110	36	1.0110	36	1.0116	36	1.0116
February 21, 10:15 a.m.	Low	Clear	NW.	32	42	1.0112	42	1.0110	42	1.0110	42	1.0112	41	1.0112	46	1.0112
February 21, 4:30 p.m.	High	Clear	NW.	36	42	1.0112	40	1.0112	40	1.0110	41	1.0112	41	1.0112	42	1.0112
February 22, 11 a.m.	Low	Clear	NW.	40	42	1.0110	40	1.0108	42	1.0100	41	1.0110	40	1.0112	44	1.0114
February 22, 5 p.m.	High	Clear	SW.	42	42	1.0110	42	1.0110	41	1.0108	40	1.0112	42	1.0112	44	1.0114
February 23, 12 m.	Low	Clear	NE.	40	42	1.0118	42	1.0108	42	1.0112	42	1.0112	41	1.0112	42	1.0112
February 23, 6 p.m.	High	Clear	E.	40	42	1.0118	42	1.0108	42	1.0110	41	1.0112	44	1.0114	44	1.0114
February 24, 7 a.m.	High	Clear	W.	36	42	1.0114	40	1.0110	40	1.0110	40	1.0112	40	1.0112	42	1.0114
February 24, 1 p.m.	Low	Cloudy	SW.	45	41	1.0112	42	1.0110	42	1.0112	42	1.0112	44	1.0112	44	1.0114
February 25, 8 a.m.	High	Rain	S.	50	44	1.0114	44	1.0110	44	1.0112	44	1.0110	44	1.0112	46	1.0114
February 25, 2 p.m.	Low	Rain	SW.	56	44	1.0114	45	1.0110	46	1.0110	44	1.0112	46	1.0112	46	1.0116
February 26, 9 a.m.	High	Clear	N.	28	38	1.0110	38	1.0114	38	1.0110	38	1.0114	38	1.0114	38	1.0114
February 26, 3 p.m.	Low	Clear	N.	29	38	1.0110	36	1.0108	36	1.0108	36	1.0110	36	1.0110	38	1.0110
February 27, 9:30 a.m.	High	Clear	N.	28	46	1.0100	48	1.0112	48	1.0080	48	1.0110	46	1.0104	48	1.0104
February 27, 3:30 p.m.	Low	Clear	N.	34	44	1.0098	44	1.0110	42	1.0100	42	1.0104	42	1.0108	44	1.0108
February 28, 10 a.m.	High	Clear	N.	30	42	1.0098	42	1.0110	42	1.0104	42	1.0104	42	1.0104	44	1.0104
February 28, 4 p.m.	Low	Clear	NE.	30	42	1.0098	43	1.0098	45	1.0098	45	1.0104	42	1.0104	42	1.0110
March 1, 11 a.m.	High	Clear	NE.	30	46	1.0098	45	1.0110	48	1.0106	46	1.0110	48	1.0110	48	1.0112
March 1, 5 p.m.	Low	Clear	NW.	30	46	1.0100	46	1.0110	46	1.0112	48	1.0110	48	1.0112	38	1.0110
March 4, 12:30 p.m.†	High	Clear	NE.	40	38	1.0110	40	1.0108	40	1.0104	38	1.0110	38	1.0112	38	1.0110
March 4, 6:30 p.m.	Low	Clear	NE.	34	38	1.0110	38	1.0110	38	1.0110	38	1.0110	38	1.0112	38	1.0110

† Everything frozen up until 27th.

* Everything frozen up and no record kept until the 17th, when the bay and deep ponds became free of ice.
† Very heavy fall of snow and intensely cold weather; everything frozen up.

§ Creek and bay frozen on the 2d and 3d; no record kept.

Table of temperatures, weather, and densities of water at Saint Jerome Station from January 1, 1886, to November 7, 1886, inclusive—Continued.

Date.	State of tide.	State of weather.	Direction of wind.	Water at wharf.		Water of oyster ponds.		Water at canal.		Water at lower pond.		Water at Deep Point.		Water in the bay.		
				Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	Tempera-	
				ture of air.	Density.	ture.	Density.	ture.	Density.	ture.	Density.	ture.	Density.	ture.	Density.	
1886				°	°	°	°	°	°	°	°	°	°	°	°	
March 5, 7 a.m.	Low	Clear	N.E.	34	38	1.0110	40	1.0108	38	1.0110	38	1.0108	40	1.0108	40	1.0110
March 5, 1.30 p.m.	High	Clear	E.	44	40	1.0110	40	1.0110	40	1.0110	40	1.0112	40	1.0112	40	1.0112
March 6, 8 a.m.	Low	Clear	N.E.	38	44	1.0106	42	1.0106	42	1.0106	42	1.0106	42	1.0106	44	1.0106
March 6, 2.30 p.m.	High	Clear	N.E.	44	42	1.0108	42	1.0106	43	1.0106	43	1.0108	44	1.0108	44	1.0108
March 7, 8.30 a.m.	Low	Clear	N.E.	38	44	1.0106	42	1.0106	42	1.0106	42	1.0104	42	1.0104	44	1.0104
March 7, 3 p.m.	High	Clear	N.E.	48	44	1.0106	44	1.0106	44	1.0106	44	1.0106	44	1.0106	44	1.0106
March 8, 9.15 a.m.	Low	Snow	SW.	38	40	1.0106	38	1.0106	38	1.0106	38	1.0104	38	1.0104	42	1.0104
March 8, 3.45 p.m.	High	Clear	W.	38	49	1.0106	40	1.0106	40	1.0106	40	1.0106	40	1.0106	40	1.0106
March 9, 10 a.m.	Low	Clear	NE	42	46	1.0102	46	1.0102	46	1.0102	46	1.0100	46	1.0102	48	1.0102
March 9, 4 p.m.	High	Clear	N.	48	46	1.0102	46	1.0100	47	1.0100	48	1.0100	48	1.0102	48	1.0102
March 10, 10.30 a.m.	Low	Clear	N.E.	44	44	1.0100	44	1.0100	42	1.0100	44	1.0100	44	1.0100	44	1.0100
March 10, 5 p.m.	High	Clear	N.E.	44	41	1.0100	44	1.0100	44	1.0100	44	1.0100	44	1.0100	44	1.0100
March 11, 11.15 a.m.	Low	Clear	N.W.	50	38	1.0100	40	1.0100	38	1.0100	38	1.0100	38	1.0100	38	1.0100
March 11, 5.30 p.m.	High	Clear	N.W.	45	38	1.0100	38	1.0100	38	1.0100	38	1.0100	38	1.0100	38	1.0100
March 12, 12 m.	Low	Rain	W.	50	38	1.0100	42	1.0100	40	1.0100	40	1.0100	40	1.0100	40	1.0100
March 12, 6 p.m.	High	Rain	W.	42	40	1.0100	40	1.0100	40	1.0100	40	1.0100	40	1.0100	40	1.0100
March 13, 7 a.m.	High	Rain	W.	40	44	1.0100	44	1.0100	44	1.0100	44	1.0100	44	1.0100	44	1.0100
March 13, 1 p.m.	Low	Cloudy	W.	46	44	1.0100	44	1.0100	44	1.0100	44	1.0100	44	1.0100	44	1.0100
March 14, 8 a.m.	High	Clear	SW.	43	44	1.0100	44	1.0100	44	1.0100	42	1.0100	42	1.0100	42	1.0100
March 14, 2 p.m.	Low	Clear	SW.	50	44	1.0100	42	1.0100	42	1.0100	42	1.0100	42	1.0100	44	1.0102
March 15, 9 a.m.	High	Clear	W.	55	50	1.0100	48	1.0100	48	1.0100	48	1.0100	50	1.0100	50	1.0100
March 15, 3 p.m.	Low	Clear	W.	63	50	1.0100	50	1.0100	50	1.0100	50	1.0100	50	1.0100	50	1.0100
March 16, 9.30 a.m.	High	Clear	N.W.	69	54	1.0104	56	1.0094	53	1.0094	53	1.0102	52	1.0102	52	1.0102
March 16, 3.30 p.m.	Low	Clear	NE.	70	58	1.0100	58	1.0100	58	1.0098	58	1.0098	56	1.0100	56	1.0100
March 17, 10 a.m.	High	Clear	NE.	45	47	1.0104	47	1.0100	47	1.0100	45	1.0104	45	1.0104	44	1.0100
March 17, 4 p.m.	Low	Clear	NE.	65	52	1.0100	53	1.0100	52	1.0100	51	1.0100	51	1.0100	50	1.0100
March 18, 10.30 a.m.	High	Clear	SE.	49	48	1.0102	47	1.0102	47	1.0102	48	1.0102	48	1.0106	50	1.0102
March 18, 4.30 p.m.	Low	Clear	SE.	55	50	1.0100	50	1.0100	50	1.0100	50	1.0102	50	1.0102	50	1.0102
March 19, 11.30 a.m.	High	Cloudy	SE.	54	50	1.0100	50	1.0100	50	1.0100	50	1.0100	50	1.0100	52	1.0102
March 19, 5.30 p.m.	Low	Cloudy	SE.	50	50	1.0100	50	1.0100	50	1.0100	50	1.0100	50	1.0100	54	1.0100
March 20, 12.30 p.m.	High	Rain	SW.	54	52	1.0100	52	1.0100	52	1.0100	52	1.0100	52	1.0104	52	1.0106
March 20, 6.30 p.m.	Low	Rain	SE.	50	52	1.0100	53	1.0100	53	1.0100	53	1.0100	53	1.0100	54	1.0100
March 21, 7.30 a.m.	Low	Clear	W.	50	54	1.0100	54	1.0100	54	1.0100	54	1.0100	54	1.0100	54	1.0100
March 21, 1.30 p.m.	High	Clear	W.	58	54	1.0100	54	1.0100	55	1.0100	56	1.0100	56	1.0100	56	1.0102
March 22, 8.30 a.m.	Low	Clear	N.W.	48	50	1.0100	50	1.0100	50	1.0100	50	1.0100	50	1.0100	48	1.0104
March 22, 2.30 p.m.	High	Clear	W.	50	58	1.0100	56	1.0100	56	1.0104	58	1.0110	56	1.0110	56	1.0110
March 23, 9.30 a.m.	Low	Clear	N.W.	38	45	1.0104	44	1.0102	44	1.0102	44	1.0104	45	1.0104	45	1.0106
March 23, 3.30 p.m.	High	Clear	N.W.	40	44	1.0104	44	1.0104	44	1.0104	44	1.0104	44	1.0106	44	1.0106

* No record kept

Table of temperatures, weather, and densities of water at Saint Jerome Station from January 1, 1886, to November 7, 1886, inclusive—Continued.

Date.	State of tide.	State of weather.	Direction of wind.	Tempera- ture of air.	Water at wharf.		Water of oyster ponds.		Water at canal.		Water in the bay.	
					Tem- pera- ture.	Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.
1886.												
July 1, 7.30 a.m.	Low	Stormy...	E.	70	70	1.0080	70	1.0080	70	1.0780	72	1.0080
July 1, 1 p.m.	High	Stormy...	SE.	78	75	1.0080	76	1.0780	76	1.0600	76	1.0080
July 2, 8 a.m.	Low	Stormy...	SE.	72	72	1.0080	72	1.0080	72	1.0760	72	1.0080
July 2, 2 p.m.	High	Stormy...	SE.	82	78	1.0680	78	1.0680	78	1.0070	78	1.0070
July 3, 9 a.m.	Low	Clear...	N.W.	74	74	1.0080	74	1.0080	74	1.0760	74	1.0760
July 3, 3 p.m.	High	Clear...	N.W.	74	75	1.0080	75	1.0080	75	1.0780	75	1.0740
July 4, 10 a.m.	Low	Clear...	N.W.	75	74	1.0070	74	1.0070	74	1.0070	74	1.0070
July 4, 4 p.m.	High	Clear...	N.W.	78	74	1.0070	75	1.0070	75	1.0663	75	1.0066
July 5, 11 a.m.	Low	Clear...	SE.	74	76	1.0076	76	1.0076	76	1.0076	76	1.0076
July 5, 5 p.m.	High	Clear...	SE.	58	62	1.0064	62	1.0066	62	1.0066	62	1.0066
July 6, 12 a.m.	Low	Clear...	SE.	74	75	1.0074	75	1.0070	75	1.0072	75	1.0074
July 6, 6 p.m.	High	Clear...	SE.	80	82	1.0082	82	1.0060	82	1.0060	82	1.0060
July 7, 7 a.m.	High	Clear...	W.	82	80	1.0070	80	1.0064	80	1.0061	80	1.0068
July 7, 1 p.m.	Low	Clear...	SW.	87	82	1.0058	82	1.0058	82	1.0064	82	1.0062
July 8, 8 a.m.	High	Clear...	E.	80	89	1.0070	80	1.0070	80	1.0072	80	1.0070
July 8, 2 p.m.	Low	Clear...	E.	81	82	1.0050	82	1.0060	82	1.0064	82	1.0064
July 9, 9 a.m.	High	Clear...	N.W.	75	73	1.0074	75	1.0066	75	1.0076	75	1.0076
July 9, 3 p.m.	Low	Clear...	N.W.	80	85	1.0000	85	1.0060	85	1.0060	85	1.0060
July 10, 9.30 a.m.	High	Clear...	W.	79	89	1.0074	89	1.0070	89	1.0070	89	1.0064
July 10, 2.30 p.m.	Low	Clear...	W.	85	82	1.0060	82	1.0060	82	1.0060	82	1.0060
July 11, 10 a.m.	High	Clear...	SE.	78	81	1.0061	81	1.0060	81	1.0064	81	1.0064
July 11, 4 p.m.	Low	Clear...	E.	81	84	1.0052	84	1.0052	84	1.0058	84	1.0058
July 12, 10.30 a.m.	High	Clear...	E.	75	80	1.0070	80	1.0060	80	1.0064	80	1.0068
July 12, 4.30 p.m.	Low	Clear...	E.	79	82	1.0010	82	1.0068	82	1.0062	82	1.0062
July 13, 11 a.m.	High	Cloudy...	SW.	74	75	1.0008	75	1.0062	75	1.0054	75	1.0074
July 13, 5 p.m.	Low	Rain...	SW.	75	80	1.0060	80	1.0052	80	1.0048	80	1.0064
July 14, 11.30 a.m.	High	Stormy...	SW.	76	76	1.0062	76	1.0070	76	1.0062	76	1.0066
July 14, 5.30 p.m.	Low	Stormy...	SW.	72	76	1.0054	76	1.0062	76	1.0062	76	1.0064
July 15, 12.15 p.m.	High	Cloudy...	SE.	75	78	1.0072	78	1.0072	78	1.0074	78	1.0070
July 15, 6.15 p.m.	Low	Cloudy...	SE.	72	76	1.0062	76	1.0070	76	1.0050	76	1.0050
July 16, 7 a.m.	Low	Clear...	S.	70	74	1.0052	74	1.0064	74	1.0064	74	1.0084
July 16, 1 p.m.	High	Clear...	S.	78	78	1.0058	78	1.0070	78	1.0062	78	1.0080
July 17, 8 a.m.	Low	Clear...	W.	75	78	1.0064	78	1.0060	78	1.0060	78	1.0070
July 17, 12 p.m.	High	Clear...	W.	80	82	1.0060	82	1.0054	82	1.0060	82	1.0062
July 18, 9 a.m.	Low	Clear...	SW.	78	80	1.0060	80	1.0060	80	1.0060	80	1.0060
July 18, 3 p.m.	High	Clear...	SW.	82	84	1.0058	84	1.0058	84	1.0058	84	1.0062
July 18, 10 a.m.	Low	Clear...	NE.	77	75	1.0070	75	1.0070	75	1.0072	75	1.0070
July 19, 4 p.m.	High	Clear...	NE.	80	84	1.0064	84	1.0066	84	1.0074	84	1.0070

July 20, 11 a.m.	Low	Clear	SE	78	80	1.0034	80	1.0070	80	1.0084	80	1.0070
July 20, 5 p.m.	High	Clear	S.	82	82	1.0062	82	1.0060	82	1.0068	82	1.0068
July 21, 12 m.	Low	Clear	SW.	73	78	1.0072	78	1.0070	78	1.0074	78	1.0080
July 21, 6 p.m.	High	Clear	NW.	76	78	1.0070	78	1.0070	78	1.0070	78	1.0074
July 22, 7 a.m.	High	Clear	W.	74	77	1.0078	77	1.0072	77	1.0074	77	1.0076
July 22, 12.30 p.m.	Low	Clear	W.	82	84	1.0082	84	1.0060	84	1.0070	84	1.0064
July 23, 7.15 a.m.	High	Clear	SE.	75	76	1.0074	76	1.0074	76	1.0074	76	1.0074
July 23, 12.45 p.m.	Low	Cloudy	SE.	80	82	1.0061	82	1.0066	82	1.0065	82	1.0072
July 24, 7.30 a.m.	High	Clear	S.	75	76	1.0062	76	1.0078	76	1.0064	76	1.0082
July 24, 1 p.m.	Low	Clear	S.	76	84	1.0078	84	1.0070	84	1.0070	84	1.0072
July 25, 8 a.m.	High	Clear	S.	75	74	1.0080	74	1.0080	74	1.0082	74	1.0082
July 25, 1.30 p.m.	Low	Clear	S.	80	80	1.0070	80	1.0072	80	1.0070	80	1.0072
July 26, 9 a.m.	High	Clear	S.	80	80	1.0080	80	1.0080	80	1.0076	80	1.0076
July 26, 3 p.m.	Low	Cloudy	S.	82	84	1.0070	84	1.0070	84	1.0072	84	1.0072
July 27, 10 a.m.	High	Clear	S.	78	80	1.0072	80	1.0072	80	1.0070	80	1.0072
July 27, 4 p.m.	Low	Clear	S.	82	84	1.0072	84	1.0070	84	1.0072	84	1.0076
July 28, 10.30 a.m.	High	Clear	SE.	80	80	1.0074	80	1.0074	80	1.0072	80	1.0076
July 28, 4.30 p.m.	Low	Clear	SW.	86	86	1.0064	86	1.0064	86	1.0066	86	1.0068
July 29, 11 a.m.	High	Clear	SW.	82	80	1.0072	80	1.0074	80	1.0074	80	1.0072
July 29, 5 p.m.	Low	Clear	SW.	85	88	1.0061	88	1.0064	88	1.0064	88	1.0070
July 30, 12 m.	High	Clear	SW.	88	88	1.0063	88	1.0064	88	1.0072	88	1.0072
July 30, 6 p.m.	Low	Clear	SE.	82	82	1.0050	82	1.0050	82	1.0064	82	1.0060
July 31, 1 p.m.	High	Cloudy	SE.	89	89	1.0066	89	1.0066	89	1.0070	89	1.0070
July 31, 7 p.m.	Low	Cloudy	SW.	80	85	1.0040	85	1.0066	85	1.0066	85	1.0066
August 1, 8 a.m.	Low	Clear	SW.	77	77	1.0076	77	1.0076	77	1.0076	77	1.0076
August 1, 2 p.m.	High	Cloudy	SW.	82	81	1.0070	81	1.0070	81	1.0076	81	1.0078
August 2, 9 a.m.	Low	Clear	NW.	78	78	1.0072	78	1.0072	78	1.0072	78	1.0076
August 2, 3 p.m.	High	Clear	NW.	81	82	1.0070	82	1.0070	82	1.0070	82	1.0068
August 3, 10 a.m.	Low	Clear	NE.	77	78	1.0086	78	1.0082	78	1.0084	78	1.0078
August 3, 4 p.m.	High	Clear	SE.	73	78	1.0080	78	1.0076	78	1.0078	78	1.0090
August 4, 11 a.m.	Low	Clear	E.	77	73	1.0086	73	1.0086	73	1.0090	73	1.0086
August 4, 5 p.m.	High	Clear	SE.	70	80	1.0076	80	1.0076	80	1.0080	80	1.0078
August 5, 12 m.	Low	Clear	SW.	76	75	1.0084	75	1.0082	75	1.0082	75	1.0082
August 5, 6 p.m.	High	Cloudy	SW.	72	78	1.0074	78	1.0078	78	1.0080	78	1.0086
August 6, 7 a.m.	High	Rain	SW.	72	73	1.0082	73	1.0078	73	1.0080	73	1.0086
August 6, 12.30 p.m.	Low	Rain	SW.	73	76	1.0070	76	1.0069	76	1.0080	76	1.0080
August 7, 8 a.m.	High	Rain	NE.	72	74	1.0082	74	1.0080	74	1.0078	74	1.0080
August 7, 1 p.m.	Low	Cloudy	NE.	77	76	1.0070	76	1.0078	76	1.0068	76	1.0080
August 8, 8.30 a.m.	High	Clear	NW.	72	74	1.0082	74	1.0080	74	1.0078	74	1.0080
August 8, 2 p.m.	Low	Clear	NW.	76	82	1.0070	82	1.0070	82	1.0070	82	1.0070
August 9, 10 a.m.	High	Cloudy	SW.	74	75	1.0078	75	1.0078	75	1.0080	75	1.0078
August 9, 4 p.m.	Low	Clear	SW.	76	78	1.0070	78	1.0069	78	1.0078	78	1.0070
August 10, 11 a.m.	High	Rain	SW.	78	78	1.0074	78	1.0074	78	1.0070	78	1.0070
August 10, 5 p.m.	Low	Cloudy	SW.	80	80	1.0070	80	1.0072	80	1.0070	80	1.0066
August 11, 12 m.	High	Cloudy	W.	82	82	1.0070	82	1.0069	82	1.0062	82	1.0064
August 11, 6 p.m.	Low	Clear	W.	84	82	1.0060	82	1.0060	82	1.0062	82	1.0062
August 12, 7 a.m.	Low	Clear	E.	76	76	1.0070	76	1.0078	76	1.0084	76	1.0068
August 12, 1 p.m.	High	Clear	E.	85	86	1.0066	86	1.0060	86	1.0060	86	1.0066
August 13, 8 a.m.	Low	Clear	SE.	80	82	1.0076	82	1.0076	82	1.0072	82	1.0070
August 13, 2 p.m.	High	Clear	SE.	82	80	1.0072	80	1.0068	80	1.0070	80	1.0064
August 14, 9 a.m.	Low	Rain	W.	78	80	1.0076	80	1.0076	80	1.0078	80	1.0080
August 14, 3 p.m.	High	Clear	W.	82	80	1.0074	80	1.0070	80	1.0072	80	1.0074

Table of temperatures, weather, and densities of water at Saint Jerome Station from January 1, 1886, to November 7, 1886, inclusive—Continued.

Date.	State of tide.	State of weather.	Direction of wind.	Temperature of air.	Water at wharf.		Water of oyster ponds.		Water at canal.		Water in the bay.	
					Temp.	Density.	Temp.	Density.	Temp.	Density.	Temp.	Density.
1886.												
August 15, 10 a.m.	Low	Clear	SW.	76	78	1.0076	76	1.0076	76	1.0090	76	1.0086
August 15, 4 p.m.	High	Clear	W.	80	82	1.0074	76	1.0072	72	1.0070	72	1.0078
August 16, 10.15 a.m.	Low	Cloudy	W.	76	74	1.0074	76	1.0084	76	1.0074	76	1.0074
August 16, 4.15 p.m.	High	Cloudy	W.	80	82	1.0072	76	1.0070	72	1.0072	72	1.0070
August 17, 10.30 a.m.	Low	Clear	W.	83	84	1.0074	76	1.0070	72	1.0068	72	1.0078
August 17, 4.30 p.m.	High	Clear	W.	86	84	1.0064	72	1.0061	72	1.0062	72	1.0070
August 18, 11 a.m.	Low	Rain	SE.	72	76	1.0074	72	1.0074	72	1.0090	72	1.0082
August 18, 5 p.m.	High	Rain	E.	72	76	1.0078	72	1.0080	72	1.0092	72	1.0094
August 19, 11.45 a.m.	Low	Clear	NE.	76	77	1.0080	76	1.0080	76	1.0078	76	1.0080
August 19, 5.45 p.m.	High	Clear	NE.	74	75	1.0082	76	1.0084	76	1.0084	76	1.0086
August 20, 12.30 p.m.	Low	Clear	NE.	72	71	1.0090	72	1.0086	72	1.0086	72	1.0090
August 20, 7 p.m.	High	Clear	NE.	74	75	1.0062	72	1.0080	72	1.0082	72	1.0090
August 21, 8 a.m.	High	Clear	E.	72	72	1.0088	72	1.0090	72	1.0092	72	1.0092
August 21, 2 p.m.	Low	Clear	E.	78	80	1.0072	78	1.0084	78	1.0082	78	1.0089
August 22, 8.30 a.m.	High	Clear	NE.	68	70	1.0080	70	1.0080	70	1.0082	70	1.0080
August 22, 2.30 p.m.	Low	Clear	NE.	74	78	1.0084	74	1.0090	74	1.0090	74	1.0084
August 23, 9 a.m.	High	Cloudy	E.	80	82	1.0072	80	1.0074	80	1.0074	80	1.0074
August 23, 3 p.m.	Low	Cloudy	E.	84	85	1.0074	84	1.0068	84	1.0062	84	1.0072
August 24, 9.30 a.m.	High	Clear	E.	80	82	1.0070	80	1.0074	80	1.0074	80	1.0080
August 24, 3.30 p.m.	Low	Clear	E.	82	84	1.0070	82	1.0076	82	1.0074	82	1.0072
August 25, 10 a.m.	High	Clear	E.	82	84	1.0074	82	1.0070	82	1.0072	82	1.0076
August 25, 4 p.m.	Low	Clear	E.	84	84	1.0076	84	1.0074	84	1.0072	84	1.0076
August 25, 10.30 a.m.	High	Clear	SW.	88	86	1.0074	88	1.0074	88	1.0074	88	1.0076
August 26, 4.30 p.m.	Low	Clear	SW.	90	88	1.0074	88	1.0072	88	1.0072	88	1.0064
August 27, 11.26 a.m.	High	Clear	S.	84	86	1.0070	84	1.0074	84	1.0074	84	1.0068
August 27, 5 p.m.	Low	Clear	S.	86	84	1.0074	86	1.0074	86	1.0070	86	1.0068
August 28, 12 m.	High	Clear	SW.	84	86	1.0074	84	1.0074	84	1.0074	84	1.0072
August 28, 6 p.m.	Low	Clear	SW.	82	84	1.0074	82	1.0074	82	1.0074	82	1.0074
August 29, 7 a.m.	Low	Clear	SW.	82	84	1.0072	82	1.0072	82	1.0070	82	1.0070
August 29, 1 p.m.	High	Clear	SW.	86	86	1.0070	86	1.0074	86	1.0074	86	1.0074
August 30, 8 a.m.	Low	Clear	SW.	71	74	1.0084	74	1.0084	74	1.0081	74	1.0088
August 30, 2 p.m.	High	Cloudy	SW.	80	78	1.0078	78	1.0080	78	1.0078	78	1.0078
August 31, 8 a.m.	Low	Rain	NE.	76	76	1.0084	76	1.0072	76	1.0056	76	1.0080
August 31, 3 p.m.	High	Rain	NE.	76	78	1.0082	78	1.0082	78	1.0084	78	1.0070
September 1, 10 a.m.	Low	Clear	NE.	72	72	1.0084	72	1.0086	72	1.0098	72	1.0084
September 1, 4 p.m.	High	Clear	E.	74	74	1.0194	74	1.0082	74	1.0092	74	1.0094
September 2, 11 a.m.	Low	Clear	E.	74	72	1.0098	72	1.0098	72	1.0094	72	1.0093
September 2, 5 p.m.	High	Clear	NE.	72	72	1.0094	72	1.0090	72	1.0090	72	1.0082

September 3, 11.30 a.m.	Clear....	NE.	72	70	1.0088	72	1.0088	72	1.0090	72	1.0090	
September 3, 5.30 p.m.	High....	Clear....	E.	70	72	1.0090	72	1.0089	72	1.0092	72	1.0090
September 4, 12 m.	Low....	Clear....	E.	74	74	1.0084	74	1.0085	74	1.0088	74	1.0084
September 4, 6 p.m.	High....	Clear....	SE.	74	74	1.0090	76	1.0084	78	1.0088	76	1.0088
September 5, 1 a.m.	High....	Clear....	E.	72	72	1.0090	72	1.0092	70	1.0084	72	1.0092
September 5, 1 p.m.	Low....	Cloudy....	E.	78	74	1.0090	74	1.0096	74	1.0096	76	1.0092
September 5, 8 a.m.	High....	Cloudy....	NE.	72	72	1.0096	72	1.0086	72	1.0086	72	1.0090
September 6, 2 p.m.	Low....	Clear....	E.	80	80	1.0082	78	1.0080	78	1.0080	78	1.0082
September 7, 9 a.m.	High....	Clear....	E.	76	74	1.0098	74	1.0089	74	1.0090	74	1.0090
September 7, 3 p.m.	Low....	Clear....	E.	86	86	1.0078	82	1.0080	82	1.0076	84	1.0074
September 7, 10 a.m.	High....	Cloudy....	E.	78	78	1.0090	76	1.0082	78	1.0088	78	1.0084
September 8, 4 p.m.	Low....	Cloudy....	E.	80	78	1.0078	78	1.0080	78	1.0082	78	1.0078
September 9, 11 a.m.	High....	Rainy....	E.	78	78	1.0078	78	1.0078	78	1.0078	80	1.0060
September 9, 5 p.m.	Low....	Rainy....	E.	80	80	1.0072	80	1.0076	80	1.0078	80	1.0076
September 10, 12 p.m.	High....	Clear....	W.	80	78	1.0078	78	1.0078	78	1.0078	78	1.0078
September 10, 12 p.m.	Low....	Clear....	W.	78	78	1.0078	78	1.0078	78	1.0078	78	1.0074
September 11, 12.30 p.m.	High....	Clear....	NE.	80	78	1.0078	80	1.0072	78	1.0078	78	1.0076
September 11, 6.30 p.m.	Low....	Clear....	E.	78	80	1.0080	78	1.0082	80	1.0072	78	1.0084
September 12, 7.30 a.m.	Low....	Clear....	E.	76	76	1.0090	78	1.0082	78	1.0084	78	1.0084
September 12, 1.30 p.m.	High....	Clear....	SE.	82	78	1.0084	78	1.0084	78	1.0084	78	1.0086
September 13, 8.30 a.m.	Low....	Clear....	W.	72	72	1.0092	72	1.0090	72	1.0090	70	1.0096
September 13, 2.30 p.m.	High....	Cloudy....	W.	78	72	1.0088	71	1.0088	76	1.0086	76	1.0086
September 14, 9 a.m.	Low....	Clear....	W.	75	70	1.0090	70	1.0086	70	1.0086	70	1.0084
September 14, 3 p.m.	High....	Clear....	W.	89	79	1.0080	76	1.0080	74	1.0088	76	1.0084
September 15, 9.30 a.m.	Low....	Clear....	W.	75	72	1.0088	72	1.0088	72	1.0092	72	1.0090
September 15, 3.30 p.m.	High....	Clear....	W.	78	74	1.0088	74	1.0084	72	1.0086	74	1.0088
September 16, 10.15 a.m.	Low....	Clear....	W.	76	74	1.0088	74	1.0086	74	1.0086	74	1.0088
September 16, 4.20 p.m.	High....	Clear....	SW.	80	78	1.0090	78	1.0084	78	1.0082	78	1.0084
September 17, 11 a.m.	Low....	Clear....	SW.	84	82	1.0074	80	1.0080	82	1.0086	80	1.0086
September 17, 5 p.m.	High....	Clear....	N.	72	72	1.0088	74	1.0084	72	1.0086	74	1.0090
September 18, 12 m.	Low....	Clear....	NE.	78	78	1.0086	78	1.0080	76	1.0088	78	1.0090
September 18, 6 p.m.	High....	Clear....	E.	76	76	1.0080	76	1.0080	79	1.0084	76	1.0086
September 19, 12.30 p.m.	Low....	Cloudy....	SW.	78	74	1.0086	74	1.0066	73	1.0090	73	1.0086
September 19, 6.30 p.m.	High....	Cloudy....	SW.	72	72	1.0096	72	1.0096	73	1.0024	72	1.0096
September 20, 7.30 a.m.	High....	Clear....	N.	72	72	1.0088	74	1.0084	72	1.0100	72	1.0100
September 20, 1.30 p.m.	Low....	Clear....	N.	74	72	1.0086	72	1.0090	72	1.0086	74	1.0088
September 21, 8 a.m.	High....	Clear....	NE.	64	66	1.0104	66	1.0104	66	1.0104	68	1.0104
September 21, 2 p.m.	Low....	Clear....	NE.	72	70	1.0100	72	1.0100	70	1.0088	70	1.0106
September 22, 8.30 a.m.	High....	Clear....	SW.	66	68	1.0106	68	1.0100	68	1.0104	70	1.0100
September 22, 2.30 p.m.	Low....	Clear....	SW.	76	72	1.0102	72	1.0084	72	1.0100	74	1.0100
September 23, 9.30 a.m.	High....	Clear....	W.	70	68	1.0104	68	1.0106	68	1.0104	68	1.0102
September 23, 3.30 p.m.	Low....	Clear....	W.	76	74	1.0093	72	1.0094	74	1.0106	72	1.0106
September 24, 10.30 a.m.	High....	Clear....	NE.	70	68	1.0100	68	1.0100	68	1.0100	68	1.0100
September 24, 4.30 p.m.	Low....	Clear....	E.	74	74	1.0098	74	1.0096	74	1.0096	74	1.0096
September 25, 11.15 a.m.	High....	Clear....	W.	78	72	1.0090	74	1.0096	74	1.0092	78	1.0090
September 25, 5.15 p.m.	Low....	Clear....	W.	76	76	1.0090	78	1.0092	78	1.0090	78	1.0092
September 26, 12 m.	High....	Clear....	SW.	82	78	1.0092	78	1.0094	78	1.0090	78	1.0090
September 26, 6 p.m.	Low....	Clear....	SW.	78	76	1.0090	76	1.0088	78	1.0090	78	1.0100
September 27, 7 a.m.	High....	Clear....	SW.	82	78	1.0092	78	1.0092	78	1.0092	80	1.0090
September 27, 12.30 p.m.	Low....	Clear....	SW.	80	78	1.0094	76	1.0092	78	1.0094	78	1.0090
September 28, 7.30 a.m.	High....	Clear....	SW.	86	82	1.0090	82	1.0088	84	1.0082	80	1.0090
September 28, 1.30 p.m.	High....	Clear....	SW.	86	82	1.0090	82	1.0088	84	1.0082	80	1.0090

Table of temperatures, weather, and densities of water at Saint Jerome Station from January 1, 1886, to November 7, 1886, inclusive—Continued.

Date.	State of tide.	State of weather.	Direction of wind.	Temper- ature of air.	Water at wharf.		Water of oyster ponds.		Water at canal.		Water in the bay.	
					Tem- pera- ture.	Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.	Tem- pera- ture.	Density.
1886.												
September 23, 8.30 a.m.	Low	Cloudy	N.	65	68	1.0112	70	1.0100	68	1.0108	68	1.0112
September 23, 2.30 p.m.	High	Clear	N.	68	68	1.0110	70	1.0103	70	1.0110	70	1.0110
September 28, 9 a.m.	Low	Clear	E.	65	64	1.0110	64	1.0110	64	1.0110	68	1.0108
September 30, 3 p.m.	High	Clear	E.	78	70	1.0106	70	1.0104	68	1.0112	70	1.0110
October 1, 9.45 a.m.	Low	Clear	N.	65	70	1.0110	70	1.0106	70	1.0110	72	1.0108
October 1, 3.45 p.m.	High	Clear	N.	65	68	1.0110	68	1.0110	68	1.0110	68	1.0112
October 2, 10.30 a.m.	Low	Clear	N.	59	54	1.0120	54	1.0104	54	1.0120	56	1.0120
October 2, 4.30 p.m.	High	Clear	NE.	60	62	1.0110	52	1.0120	62	1.0110	62	1.0110
October 3, 11.30 a.m.	Low	Clear	SW.	70	64	1.0110	64	1.0110	64	1.0110	64	1.0110
October 3, 5.30 p.m.	High	Clear	SW.	60	64	1.0110	66	1.0108	68	1.0108	64	1.0110
October 4, 12.30 p.m.	Low	Clear	SW.	68	62	1.0114	62	1.0110	62	1.0112	62	1.0110
October 4, 6.30 p.m.	High	Clear	SW.	60	63	1.0110	68	1.0108	68	1.0108	68	1.0110
October 5, 1.30 a.m.	High	Clear	N.	60	62	1.0110	62	1.0108	62	1.0110	62	1.0110
October 5, 1.30 p.m.	Low	Clear	NE.	68	66	1.0108	68	1.0110	68	1.0112	68	1.0112
October 6, 8.30 a.m.	High	Cloudy	NE.	65	68	1.0108	68	1.0106	68	1.0110	70	1.0110
October 6, 2.30 p.m.	Low	Cloudy	NE.	68	65	1.0108	68	1.0112	68	1.0112	66	1.0112
October 7, 9.15 a.m.	High	Clear	NE.	64	62	1.0116	62	1.0114	62	1.0114	64	1.0112
October 7, 3.15 p.m.	Low	Clear	NE.	68	66	1.0110	68	1.0108	66	1.0110	66	1.0110
October 8, 10.30 a.m.	High	Clear	NE.	62	64	1.0110	64	1.0112	64	1.0110	64	1.0110
October 8, 4.50 p.m.	Low	Clear	E.	65	68	1.0108	68	1.0104	68	1.0108	70	1.0110
October 9, 12 m.	High	Clear	SW.	74	64	1.0112	64	1.0110	64	1.0110	66	1.0108
October 9, 6 p.m.	Low	Clear	SW.	68	68	1.0110	70	1.0104	68	1.0106	70	1.0110
October 10, 7 a.m.	Low	Clear	SW.	68	64	1.0110	64	1.0110	66	1.0108	66	1.0110
October 10, 1 p.m.	High	Clear	SW.	72	68	1.0110	68	1.0104	68	1.0106	70	1.0110
October 11, 7.30 a.m.	Low	Clear	NE.	65	68	1.0112	66	1.0106	68	1.0102	66	1.0103
October 11, 1.30 p.m.	High	Clear	E.	72	70	1.0104	70	1.0100	70	1.0109	70	1.0100
October 12, 8.30 a.m.	Low	Clear	W.	70	66	1.0110	66	1.0106	66	1.0112	66	1.0108
October 12, 2.30 p.m.	High	Clear	W.	74	72	1.0102	72	1.0100	72	1.0100	72	1.0100
October 13, 9 a.m.	Low	Clear	NE.	70	68	1.0106	68	1.0106	68	1.0104	68	1.0106
October 13, 3 p.m.	High	Clear	SE.	68	68	1.0110	66	1.0108	66	1.0108	68	1.0112
October 14, 9 a.m.	Low	Cloudy	SE.	68	68	1.0110	66	1.0108	68	1.0110	71	1.0112
October 14, 3 p.m.	High	Cloudy	SE.	74	70	1.0108	68	1.0106	68	1.0110	71	1.0108
October 15, 9.15 a.m.	Low	Clear	N.W.	70	70	1.0112	68	1.0108	68	1.0106	70	1.0108
October 15, 3.15 p.m.	High	Clear	N.	60	68	1.0110	68	1.0108	68	1.0110	68	1.0112
October 16, 10 a.m.	Low	Clear	N.	55	56	1.0122	58	1.0112	58	1.0120	58	1.0122
October 16, 4 p.m.	High	Clear	N.W.	65	62	1.0122	60	1.0114	60	1.0122	60	1.0124
October 17, 10.45 a.m.	Low	Clear	SW.	52	50	1.0120	54	1.0122	54	1.0122	54	1.0122
October 17, 5 p.m.	High	Clear	SE.	64	58	1.0122	60	1.0124	58	1.0124	60	1.0124

October 18, 11 a.m.	Low.....	Clear.....	W.	64	58	1.0124	58	1.0120	58	1.0120	60	1.0124
October 18, 6 p.m.	High.....	Clear.....	W.	60	60	1.0120	66	1.0114	66	1.0118	66	1.0118
October 19, 12 m.	Low.....	Clear.....	W.	70	60	1.0122	62	1.0112	62	1.0114	62	1.0118
October 19, 6.30 p.m.	High.....	Clear.....	W.	62	64	1.0120	64	1.0112	66	1.0114	66	1.0120
October 20, 7 a.m.	High.....	Clear.....	SE.	66	66	1.0118	66	1.0116	66	1.0118	66	1.0118
October 20, 1 p.m.	Low.....	Clear.....	SE.	68	66	1.0118	66	1.0118	66	1.0118	66	1.0118
October 21, 8 a.m.	High.....	Cloudy.....	SE.	60	64	1.0122	64	1.0116	64	1.0118	64	1.0120
October 21, 2 p.m.	Low.....	Cloudy.....	SE.	68	68	1.0120	68	1.0118	68	1.0120	68	1.0120
October 22, 9 a.m.	High.....	Clear.....	N.W.	58	60	1.0124	60	1.0122	58	1.0124	58	1.0123
October 22, 3 p.m.	Low.....	Clear.....	N.W.	62	64	1.0122	62	1.0112	64	1.0120	64	1.0120
October 23, 10 a.m.	High.....	Clear.....	N.W.	62	60	1.0122	60	1.0124	60	1.0124	60	1.0124
October 23, 4 p.m.	Low.....	Clear.....	NE.	68	64	1.0118	64	1.0118	64	1.0118	68	1.0120
October 24, 11 a.m.	High.....	Clear.....	E.	66	62	1.0120	62	1.0118	60	1.0118	60	1.0120
October 24, 5 p.m.	Low.....	Clear.....	E.	60	66	1.0120	64	1.0118	66	1.0118	66	1.0120
October 25, 6 a.m.	Low.....	Clear.....	N.W.	60	62	1.0124	60	1.0122	62	1.0124	62	1.0124
October 25, 12 m.	High.....	Clear.....	N.W.	64	64	1.0120	64	1.0118	64	1.0120	64	1.0118
October 26, 7 a.m.	Low.....	Cloudy.....	E.	64	64	1.0120	64	1.0118	64	1.0118	64	1.0120
October 26, 1 p.m.	High.....	Cloudy.....	E.	68	66	1.0118	66	1.0118	66	1.0118	66	1.0118
October 27, 8 a.m.	Low.....	Rain.....	NE.	64	64	1.0110	64	1.0112	64	1.0116	64	1.0116
October 27, 2 p.m.	High.....	Rain.....	NE.	66	66	1.0112	66	1.0112	66	1.0116	66	1.0116
October 28.....	Cloudy.....	NE.										
October 29.....	Cloudy.....	NE.										
October 29, 4 p.m.	Low.....	Rain.....	NE.	58	58	1.0120	58	1.0122	58	1.0128	58	1.0124
October 30, 11 a.m.	High.....	Rain.....	N.	68	58	1.0126	60	1.0116	60	1.0124	58	1.0124
October 30, 5 p.m.	Low.....	Cloudy.....	N.	52	52	1.0124	54	1.0120	52	1.0122	52	1.0124
October 31, 12.30 p.m.	High.....	Cloudy.....	N.	54	54	1.0120	54	1.0125	56	1.0120	56	1.0122
October 31, 7 p.m.	Low.....	Clear.....	N.	54	54	1.0124	54	1.0120	54	1.0120	54	1.0124
November 1, 7.30 a.m.	High.....	Cloudy.....	N.	62	62	1.0114	62	1.0114	62	1.0112	58	1.0116
November 1, 1.30 p.m.	High.....	Clear.....	N.W.	52	52	1.0126	52	1.0116	52	1.0126	52	1.0126
November 2, 8.30 a.m.	Low.....	Clear.....	N.W.	62	62	1.0114	62	1.0112	62	1.0114	62	1.0116
November 2, 2.30 p.m.	High.....	Clear.....	N.W.	54	56	1.0124	56	1.0124	56	1.0120	56	1.0124
November 3, 9 a.m.	Low.....	Clear.....	S.	60	60	1.0116	60	1.0118	60	1.0118	60	1.0118
November 3, 3 p.m.	High.....	Clear.....	SW.	64	62	1.0120	62	1.0120	62	1.0120	62	1.0120
November 4, 9.30 a.m.	Low.....	Clear.....	SW.	68	62	1.0120	64	1.0116	64	1.0116	66	1.0118
November 4, 3.30 p.m.	High.....	Clear.....	N.	62	58	1.0122	58	1.0120	58	1.0122	58	1.0124
November 5, 10 a.m.	Low.....	Clear.....	N.	66	60	1.0120	60	1.0118	60	1.0118	60	1.0120
November 5, 4 p.m.	High.....	Clear.....	S.	58	56	1.0126	56	1.0124	56	1.0124	54	1.0126
November 6, 10.30 a.m.	Low.....	Clear.....	S.	62	60	1.0120	62	1.0120	62	1.0120	60	1.0124
November 6, 4.30 p.m.	High.....	Cloudy.....	SW.	64	60	1.0122	58	1.0122	60	1.0122	60	1.0122
November 7, 11.30 a.m.	Low.....	Rain.....	SW.	62	60	1.0120	60	1.0120	60	1.0120	56	1.0122
November 7, 5.30 p.m.	High.....	Clear.....	N.W.	44	46	1.0126	46	1.0130	46	1.0126	48	1.0130
	Low.....	Clear.....	N.W.	40	48	1.0128	48	1.0128	48	1.0130	48	1.0130