

C. & G. SURVEY,  
 LIBRARY AND ARCHIVES  
 JAN - 6 1916  
 Acc. No.

ON DIV  
 61019-110  
 LIBRARY AND ARCHIVES  
 C. & G. SURVEY

3779

Diag. Cht. No. 369-4

Form 504  
 DEPARTMENT OF COMMERCE  
 U. S. COAST AND GEODETIC SURVEY

State: *New Jersey*  
*New York*

11-5613

DESCRIPTIVE REPORT.

Hydrographic Chart No. *3779*

LOCALITY:  
*Newark Bay*  
*Kill van Kull*  
*Vicinity of*  
*Bergen Point*

1915

CHIEF OF PARTY:  
*J. H. Hawley*

6228  
 3779

3779

*Hydro. 3779*





The finished hydrographic sheet is to be accompanied by the following form, properly filled in, when the sheet is turned in to the office.

U. S. COAST AND GEODESIC SURVEY  
Register No. 3779

STATE NEW JERSEY  
GENERAL LOCALITY Newark Bay, *Kill Van Kull*  
LOCALITY ~~Kill Van Kull.~~ *Vicinity of Bergen Pt*  
Surveyed by R. L. Schoppe, Aid,  
Chief of Party J. H. Hawley, Assistant,  
Date Nov. 3-4-5, 1915.,  
Scale 1 - 5,000

SOUNDINGS IN FEET  
At Mean Low Water

Projected by R. L. Schoppe,  
Soundings plotted by R. L. Schoppe,  
Inked by  
Verified by

The 6 foot curve is shown thus   
" 12 " " " " "   
" 18 " " " " "   
" 30 " " " " " 

DESCRIPTIVE REPORT

to accompany

Hydrographic Sheet No. 3729

This sheet covers an area about one mile long and one-half mile wide in the entrance to Newark Bay; west of Bergen Point and between Bergen Point L.H. and the bridge of the Central Railroad of New Jersey.

Bergen Point is occupied by the distributing station of the Texas Oil Company. At present, extensive improvements are being made at this plant which include the erection of numerous additional oil tanks, extension of the bulkhead and fill to include all the southwest end of the point and the dredging of a channel on both sides of their long dock to a depth of 25 feet on the west end and 12 feet at the east end. Bergen Point L.H. is located 350 meters off-shore on the southwest edge of a rocky shoal that extends out from Bergen Point. Westward of the entrance to Newark Bay lies Shooters Island which is entirely covered by a ship yard. The tide gauge for the work was located on the south side of this island at a point previously used by Assistant Forney. It was connected to bench marks established by Assistant Vinal.

The tidal currents flowing to and from Newark Bay set fair with the channel. Close to Bergen Point L.H. a slight tendency to cut inside the light was noted, but this is not felt a hundred yards away.

Shoals, not noted on chart No. 544, were found north of the lighthouse. At extreme low water boulders were seen bare or awash at several points on the shoal between the lighthouse and Bergen Point. Possibly a 3-foot channel exists about 100 meters from shore, but with the boats available it was impossible to prove this. Certainly local knowledge is necessary to pass inside the lighthouse.

On the middle ground northwest from the lighthouse, not less than 16 feet was found. Numerous barges and mud scows were anchored here and it was therefore impossible to cover this area closely.

Northwest from spar buoy No. 1 is an extensive rocky shoal. After passing a few lines over it, it was considered unsafe to make further development with the launch "Pilot". A dinghy with one officer and one hand sounded out the area and found not less than 3 feet, rocky bottom.

A 1-foot spot is shown on sheet No. 2545a, 440 meters west of Nucoa Butter Company stack. Close examination of this locality failed to show any trace of this rock. The least depth that could be found was 5 feet, hard bottom. No rocks were found and I do not believe that the 1-foot spot exists. Five feet was found in several places on this shoal which extends northeast and southwest along the east side of the channel for 350 yards.

The area east of the channel and south of the Texas Oil Company's dock, for 400 yards, is shoal but not rocky.

The dredged channel to the dock is filling slightly according to information obtained from a local foreman. Nineteen feet can be taken to the north side at present and slightly less to the south side. Plans have been made for dredging a deeper channel and a survey has been made for this purpose. At the time of this survey several barges were lying on both sides of the dock, preventing an examination close in by the "Pilot".

In general this survey was made with north and south lines spaced about 50 meters. Cross lines were run at about double this interval. Between Bergen Point and the light it was not safe to run with the "Pilot". Strong currents and a fresh breeze made her difficult to handle especially as the extent of the shoals were not known. This area was examined with the dinghy manned by two officers and one hand.

Two lines were run in Kill van Kull, eastward from the lighthouse, to ascertain if any changes had occurred in this locality. Rocky bottom, with depths as found by previous surveys, was found in practically all of this area and no further work was deemed necessary.

Respectfully submitted,

*Ray G. Schoppe.*

Aid, C. & G. Survey.

Approved:

*James Hawley*

Chief of Party, C. & G. Survey.

STATISTICS, SHEET NO. 3779

Date, 1915	Letter	Vol	Positions	Soundings	Miles stat.	Vessel
Nov. 3		1	13	45	1.0	Launch "PILOT"
" 4		1	144	714	12.2	" "
" 5		1	38	184	3.0	" "
" 3		2	4	4	---	Dinghy
" 4		2	10	48	0.3	"
" 5		2	10	414	2.5	"
Total			219	1409	19.0	

Tide Gauge at Shooters Island.

Plane of reference            4.2 ft. on gauge  
 Lowest tide observed        3.4 ft. on gauge  
 Highest tide observed       7.3 ft. on gauge

REC  
22, 1917

15  
S. B. J.  
H. C. J.

3779

HYDROGRAPHIC SHEET ~~3379~~.

Newark Bay, Kill van Kull, New York, by party of  
Assistant Jean H. Hawley in 1915.

TIDES.

	Shooters Island Feet.
Mean low water, or plane of reference on staff	4.2
Mean range of tide	4.6