

4084

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: *Virginia*

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. *4084*

LOCALITY:

*Hampton Roads, from  
Nansemond River to  
Elizabeth River and  
Tammes Creek*

1919

CHIEF OF PARTY:

*Potter, L. A.*

4084

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEET No. 4084.

1. This sheet covers the south side of Hampton Roads, from Nansemond River to Elizabeth River, and Tanners Creek for a distance of about one mile. The Hydrography was done between July 9 and Sept. 18, 1919, and in accordance with orders dated March 8, 1919.

2. Tides,- Tides were read on an Automatic Gauge at Old Point Comfort, and also on staff gauges at Craney Island Lighthouse, at Nansemond River Lighthouse, and at Miles Watch House. A temporary tide station was also established at the draw of the first bridge crossing Tanners Creek. The tide observer was changed without my knowledge, and the tide readings, except for the first day, were unreliable. A comparison of the tide readings at this station with the readings at Craney Island Lighthouse, shows practically no difference, and the tides at Craney Island Lighthouse were used for the work in Tanners Creek. The tide staff at Miles Watch House was the same one as used on the main hydrographic sheet of Hampton Roads, forwarded earlier in the season.

3. Naval Base,- Extensive dredging has been done in the vicinity of the Naval Base and work is still in progress. A tracing, showing the conditions on July 7, is forwarded as a part of the records. This tracing was compiled by me, from information obtained in personal interviews with the engineers at the Naval Base, and reference to their field sheets. Dredging is being done practically continuously in the vicinity of the Naval Base. The following is an extract from a letter from the engineers in charge of dredging at the Naval Base.

"The sub-surface conditions in the vicinity of the Naval Operating Base are constantly changing, even at the present time, on account of dredging operations which are deepening channels, and also on account of leakage through the bulkheads, which is tending to silt the channels."

4. Army Base,- A large Army Supply Base has been built on the east side of Hampton Roads 1/2 mile southward of the Naval Base. The area around the wharves, and the approach from the ship channel, have been dredged to 35 feet, with additional areas north and south, dredged to 20 feet. A blueprint showing the limits of the dredging, is submitted. The depths found by our survey differed slightly from those indicated in the blueprint. Vessels of the deepest draft load and discharge at the wharves.

5. Tanners Creek,- The business in Tanners creek is carried on mostly in motor boats and small vessels engaged in fishing, and the transportation of some farm produce. A channel has been dredged to a depth of 12 feet, to the head of the northern branch of Tanners Creek just inside the entrance. It leads to a small wharf

Desc. Rep. Shts. #

at the Army Base at the head, but there is little business by the water. This is the only wharf in Tanners Creek, except for small craft. A blueprint showing the limits of the dredging, is submitted. The channel was unmarked in 1919. A spit, bare at low water, extends about 200 meters eastward from the south end of the point on the north side of Tanners Creek-entrance.

6. Creek south of Craney Island,- This creek is used by small vessels at high water for a distance of about 1 mile, engaged in the transportation of farm produce. There are several small landings.

7. Craney Island,- This island is being developed as a United States Quarantine Station. The area inside the bulkhead is being filled by dredging outside the bulkhead, and the depths in the vicinity will undergo considerable change by the time the work is completed. A wharf has been built near the middle of the south side of the island. A water tank is prominent.

8. Main Ship Channel,- Dredging was in progress in the main ship channel while the sounding was in progress. For this reason it was not possible to develop the channel. The U. S. Engineers, Norfolk, Va., can furnish information concerning this channel.

9. Prominent Objects,- This area is highly developed, and prominent objects are numerous. In a report dated June 14, with accompanying "Landmarks for Charts," all objects recommended to be shown on the chart were listed.

*L. A. Potter.*

L. A. Potter, Jr. H. & G. Engineer,  
Chief of Party.

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

STATISTICS SHEET No. -----

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Date 1919	Letter	Volume	Positions	Soundings	Miles Statute	Vessel
July 9	a	1	157	1200	26.5	Navy Launch
" 11	b	1	104	800	19.0	" "
" 14	c	2	164	990	25.5	" "
" 15	d	2	127	950	19.5	" "
" 16	e	2&3	137	975	26.5	" "
" 22	f	3	61	476	12.5	" "
" 24	g	3	148	1221	29.7	" "
" 25	h	4	117	852	24.8	" "
" 28	i	4	124	992	25.5	" "
" 30	k	4&5	111	890	20.0	" "
" 31	l	5	109	785	17.0	" "
Aug. 4	m	5	133	931	23.0	" "
" 5	n	5&6	62	540	12.0	" "
" 7	p	6	161	909	18.0	" & Launch # 56.
" 8	q	6	65	370	10.0	" "
" 11	r	6&7	91	720	15.5	" "
" 12	s	7	86	846	11.0	" "
" 15	t	7	111	883	12.0	Navy Launch & Skiff.
" 18	u	8	65	650	10.5	Motor Dory.
" 19	v	8	91	653	12.0	" "
" 20	w	8	67	531	8.0	" "
Sept. 5	x	9	115	690	13.2	Navy Launch.
" 8	y	9	111	783	16.3	" "
" 18	z	9	104	629	7.0	" "
24	24	9	2621	19268	415.0	

AND REFER TO NO. 41-EMK

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON

December 9, 1919.

*Field Work*  
*Charts.*

Division of Hydrography and Topography;

Division of Charts;

Tidal reductions are approved in  
9 volumes of sounding records for

HYDROGRAPHIC SHEET 4084

South Shore, Hampton Roads, Va.  
L. A. Potter in 1919.

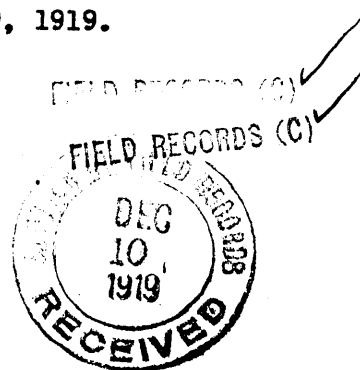
Plane of reference is  
Mean Low water, reading

3.1 ft.	on	tide	staff	at	Craney	Island	L.H.
2.6 ft.	"	"	"	"	Miles	Watch	House, Craney I. Flats.
3.9 ft.	"	"	"	"	Nansemond	River	L.H.
3.9 ft.	"	"	"	"	Old	Point	Comfort*

\*Allowance made for difference in tide at place  
of sounding.

Attention is called to the fact that Buoy #9A  
on Lamberts Pt. Flats is apparently plotted in wrong  
position on sheet.

Condition of records, very satisfactory.



Library (FR)

*G. W. Tude*

Chief, Section of Tides  
and Currents.

Hydrographic Sheet 4084

Elizabeth R. Hampton Roads

Surveyed in 1919 by L. A. Potter

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The positions of signals should be accentuated by light dot to assist plotting.

The position numbers are generally too close to the positions. Also each position is not numbered as directed by paragraphs 327 to 330 of General Instructions.

The zigzag lines of soundings which comprise about 7 miles of the inshore hydrography of this sheet are contrary to par. 222 of Gen. Insts.

The available depth is undetermined in the dredged waterway of Tanner Cr. just northeast of Tanner Pt., although it is stated in the descriptive report that 12 feet is available.

The sounding records are well kept, except for the paucity of notes. This is especially true

(2)

of the recording done by W. F. Malnate, who in no case recorded the positions of the beginning and ending of lines.

The crossings of the sounding lines are good and the field and office work is up to the C. G. S. standard.

The survey is in accordance with the instructions and should be approved.

March 31, 1920

E. P. Ellis

The boat sheets should be destroyed.

Boat sheets destroyed

Mar. 24, 1930 EPE

E.P.E.

Hydrographic Sheet No. 4084

Hampton Roads. - Virginia

Sheet protracted and pencil platted by field party. Errors were found in both protracting and plating but this work was generally good.

The survey appears sufficient to develop conditions as to shoals and channels; The area covered being closely sounded.

Crossing are generally good a foot different being about the maximum and this difference is probably due to the reduction of fractions.

Position numbers are generally too large and too close to the position. And a greater number should have been marked. This especially where closely run and where the lines cross on an angle.

Sounding were taken at beginning and ending of lines before the first position and after the last. These soundings are of but little use as the location can only be approximate.

There are numerous buoys on the sheet which have all been located by angles but it would <sup>aid</sup> in checking a line and the buoy had they been mentioned in passing. This was done only occasionally.

Nothing unusual developed in verifying this sheet but there appears to be considerable dredging being done which may change conditions in certain locations. This particularly in the main Channel near buoy 12 A.

J. D. Torrey  
3/10/22.



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4084

State . . . **Virginia** . . . . .

General locality **Hampton Roads** . . . . .

Locality **South Shore, Hampton Roads & Entrance to Tanners Creek** . . . . .

Chief of party **L. A. Potter, Jr. H. & G. Engineer** . . . . .

Surveyed by **H. P. Odessey, L. A. Potter** . . . . .

Date of survey . **July-September, 1919** . . . . .

Scale . **1:10000** . . . . .

Soundings in **Feet** . . . . .

Plane of reference **Mean Low Water** . . . . .

Protracted by **W.F.M., H.P.O.** Soundings in pencil by **W.F.M., J.W.C., H.P.O., Benjamin Rigg** . . . . .

Inked by . . . . . Verified by . . . . .

Records accompanying sheet (check those forwarded):

Des. report, 5 Tide books, 2 Marigrams, 2 Boat sheets,

9 Sounding books, \_\_\_\_\_ Wire-drag books, \_\_\_\_\_ Photographs.

Data from other sources affecting sheet; **1 Blueprint of Dredged & Filled Areas, Army Supply Base, 1 Tracing-Shewing Condition Of Dredging Around U. S. Naval Base. (See letter 320-1919 - Chart Div. Files)**

Remarks:

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