

3437

Diag. Cht. No. 78-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. Office No. H-3437

LOCALITY

State Virginia

General locality Elizabeth River

Locality Upper Portion of Southern Branch

1913

CHIEF OF PARTY

O.W. Ferguson

LIBRARY & ARCHIVES

DATE MAY 15, 1913

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DEPARTMENT OF COMMERCE AND LABOR.

COAST AND GEODETIC SURVEY.

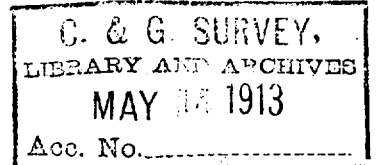
O.H.Tittmann, Superintendent.

Survey of the Southern Branch of the Elizabeth River Va.



TITLE SHEET

For Hydrographic Sheet B.



Extending from Navy Magazine to the Albemarle Lock.

between

Latitude $36^{\circ} 43' 20''$ and $36^{\circ} 47' 00''$

Longitude $76^{\circ} 15' 00''$ and $76^{\circ} 19' 00''$

Scale, 1 : 10000

From March 20th, to May 1st, 1913

SCHOONER "MATCHLESS".

O.W.Ferguson, Assistant; C.&G.S. in Command.

OBSERVERS.

O.W.Ferguson, Assistant; James E. Marsh, Mate,

James S.S. Jones, Aid & H.W. Godsey, C.W.

DEPARTMENT OF COMMERCE AND LABOR.

COAST AND GEODETIC SURVEY.

O.H.Tittmann Superintendent.

C. & G. SURVEY,
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RECORDERS.

H.W. Godsey, C.W. and C.V. Rhea, Writer 2 Cl.

LEADSMEN.

Johan Jacobsen, S.M.M. and W.H. Buckmaster, Q.M. 3 Cl.

COXSWAIN.

H.H. Thomas, C.B.M. and W.H. Buckmaster, Q.M. 3 CL.

2.

Descriptive Report for Hydrographic Sheet B.

This survey was ordered in instructions of Feby 5th, 1913 in order to have the Hydrography of the Southern Branch of the Elizabeth River Va. The Triangulation and Topography having been completed in 1912 by Assistant, J. B. Boutelle.

CONTROLL.

The controll of this work was excellent, being by the small system of triangulation made by Captain J. B. Boutelle in 1912, all stations of which were recovered, and further, by signals located by sextant angles.

COUNTRY.

This river is chiefly valuable for furnishing an important link in the inland waterway route down the coast and being the channel for the boats passing through the Chesapeake and Albemarle Canal also to the Drummond and Dismal Swamp Canal. The former is to be or has been sold to the Government and Major Willard, Corps Engineer, ^{U.S.A} has a party of surveyers measuring the presin of this canal by frequent crossections.

This river ~~traverses~~ a low belt of marshy, flat, piny country; upon its banks lower *down*, not shown here, is located the Norfolk Navy Yard and many Manufacturing plants which are extending on, far up the *river*, as Norfolk expands, and it is growing rapidly.

3c
DESCRIPTIVE REPORT HYDROGRAPHIC SHEET B.

SHORES.

The shores are low, mostly marshy and muddy but with about one third of the ground contiguous to the river of the nature of high ground, and there are small stretches of sandy shores.

WATER

The water of this river is salty or brackish for a long ways up.

TIDES.

The range of tides on this Southern Branch is 2.8 feet and the tidal currents are considerable but not strong.

INHABITANTS.

The shores are but slightly used for habitations, only for commerce and manufacturing.

NAVIGATION.

Every day, tows of barges and schooners, made up at Norfolk, or Elizabeth City on the Pasquotank River, are taken through the Drummond canal via Deep Creek; also small steamboats, power boats and yachts, and through the Chesapeake and Albemarle Canal go smaller boats with light drafts and small steam boats, and yachts.

The River from Norfolk to Deep Creek furnishes a depth, at Low Water, of 11 feet and from Deep Creek to the Chesapeake and Albemarle Canal a depth of 6 feet at low water, which, of course, if taken at high tide

DESCRIPTIVE REPORT HYDROGRAPHIC SHEET B.

Will be 9 feet.

COMMERCE.

The ships and barges reaching Norfolk are freighted with Lumber of various kinds, some Oysters and farm products in moderate quantities; and going from Norfolk they carry Coal, Fertilizers and a variety of merchandise.

Distances from Mouth of Southern Branch

To Navy Yard	1.3	Miles
To Deep Creek	7.	"
To Chesapeake & Albemarle Lock	12.	Miles.

Following is a list of the Signals used, giving the Latitude and Longitude of each, also a table of Statistics.

O. W. Ferguson,
Assistant.

HYDROGRAPHIC SURVEY

Of the Southern Branch of the Elizabeth River, Va.

From

Navy Magazine to Albemarle Lock

March and April

1913

Geographic Positions of Stations Used.

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*The Geog. Positions not being on board
All meters scaled off from the projection*

(Names.)						
Can. Δ	36	43	500.5	76	16	1453.0
Lock. Δ	36	43	910	76	15	155.5
Bon. ○	36	43	913	76	16	1282.0
Tree. ○	36	43	973	76	16	1198
Gem. ○	36	43	886	76	16	900
Bog. Δ	36	43	961	76	16	700
Chy. ○	36	43	625	76	16	527
Rich. Δ	36	43	747	76	16	470
On. ○	36	43	843	76	16	269
Stack. ○	36	43	853	76	16	145
Tank. ○	36	43	805	76	16	77
Heap. ○	36	43	1060	76	16	266
Pile. ○	36	43	1070	76	16	105
Shan. ○	36	43	1283	76	16	166
Poor. ○	36	43	1394	76	16	262
<i>C.S.</i> C.S. ○	36	43	1408	76	16	145
Up. ○	36	43	1534	76	17	1355
Out. ○	36	43	1767	76	17	1370
Sin Δ	36	43	1699	76	17	934
Bar Δ	36	43	1270	76	17	1000

Boat. O	36	43	1597	76	17	572.0
Toot. Δ	36	43	1531	76	17	202
Peg. Δ	36	43	1782	76	17	210
Duck. O	36	43	1750	76	18	1440
Paul. Δ	36	43	1744	76	18	1251
Rip. Δ	36	44	54	76	18	1336
Fem. Δ	36	44	198	76	18	732
High. Δ	36	43	1782	76	18	701
Trib. O	36	44	140	76	18	617
Lum. Δ	36	44	521	76	18	416
Corp Δ	36	44	536	76	18	177
Dock. O	36	44	654	76	18	200
Man. Δ	36	44	933	76	18	297
Nux. Δ	36	44	1100	76	18	30
Tyke. Δ	36	44	1422	76	18	21
Wall. Δ	36	44	1470	76	18	382
Tug. Δ	36	45	184	76	18	146
Vent. Δ	36	45	50	76	18	541
<i>as in channel state</i> C.S. O	36	45	336	76	18	423
War. O	36	45	474	76	18	545
Rot. Δ	36	45	915	76	18	431
Mutt. Δ	36	45	798	76	18	107
C.S. O	36	45	926	76	18	92
Deep Δ	36	45	1151	76	19	1410
pet. Δ	36	45	1282	76	18	198
Newt. Δ	36	45	1723	76	18	243
Pan. Δ	36	46	13	76	19	1456

Fill. 0	36	46	346	76	18	401.0
In. 0	36	46	477	76	18	149
Draw. Δ	36	46	946	76	18	526
Bridge. Δ	36	46	853	76	18	106
West. (U S E) Δ	36	46	863	76	18	136
Red. Δ	36	46	912	76	19	1263
Juniper. (U S E) Δ	36	46	1303	76	19	1402
Roper. (U S E) Δ	36	46	1065	76	19	883
Mill. Δ	36	46	1093	76	19	850
Wat. Δ	36	46	1465	76	19	945
Navy. Δ	36	46	1767	76	19	512
Mag. Δ	36	47	156	76	20	483
S. (U S E) Δ	36	47	118	76	20	839

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STATISTICS SHEET B.

Date	1913	Letter	Vol	Positions	Soundsings	Miles Statute	vessels.
March	20	a	1	* 64	394	7.35	Launch
"	21	a	1	62	439	6.25	Whaleboat
"	24	b	1	85	460	8.25	"
April	2	c	1	108	612	13.00	"
"	8	d	2	100	551	11.30	"
"	9	e	2	74	366	6.75	"
May	1	b	1	29	114	2.75	Launch
		7	3	522	2936	55.65	

July 29, 1913

U. S. Eng'g Report gives 10 fut as controlling depth. This survey gives 5 fut. G.P.

Department of Commerce and Labor

Hyd. Sheet # 3437 #

The positions on this sheet were plotted by the field party, and have been accepted as correct, although checked in numerous cases where errors were thought possible.

In a few instances, as at positions 36b & 39b the location of wrecks is given, but not plotted. Similarly, at pos. 2b an old wreck is recorded, but not plotted. The exact position is not given & the approximate shown in pencil.

At positions 2, 3 & 29b (red) signals recorded wrong. Given "Draw" to "On", should be "West" to "On".

The area was completely developed by lines run parallel to the shoreline; a few cross lines would furnish a valuable check on the accuracy of the work.

At pos. 9 & 44b, where the lines cross, the depths at the crossing do not agree very well. At 9b there is shown a depth of 24.7, while at 44b, there is recorded a depth of 7'.

On the whole the area is well developed and the work well executed.

J.P. Ingleton

For ~~Section #~~
The Inside Route Pilot states that 9 feet can be carried up Southern Branch. The survey has not developed that depth. G.P.