



3532 &
3533

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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: *Virginia*

DESCRIPTIVE REPORT.

Hyd. Sheet No. *3532*
3533

LOCALITY:

Elizabeth River
Eastern Branch
Norfolk to
Broad Creek

1913

CHIEF OF PARTY:

O. W. Ferguson

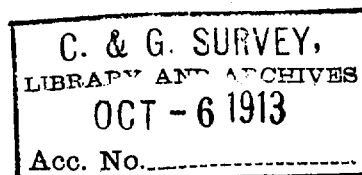
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3532-3

DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY.

O. H. TITTMANN - SUPERINTENDENT.



SURVEY OF THE EASTERN BRANCH OF THE ELIZABETH RIVER, VIRGINIA.

TITLE SHEET

FOR HYDROGRAPHIC SHEETS ~~H and I~~ 3532 + 3533.

EXTENDING FROM CAMPOSTELLA BRIDGE TO THE HEADWATERS OF BROAD CREEK

AND THE MAIN BRANCH

BETWEEN

LATITUDE 46 49' 00" and LATITUDE 46 52' 00"

LONGITUDE 76 11' 30" " LONGITUDE 76 16' 00"

SCALE - 1 : 5,000

FROM APRIL 26th, 1913 to SEPTEMBER 20th, 1913.

SCHOONER "MATCHLESS"

O. W. FERGUSON, ASSISTANT - C. & G. SURVEY, in COMMAND.

- OBSERVERS -

O. W. FERGUSON, ASSISTANT, JAMES E. MARSH - MATE,

DOUGLAS KARR - AID, H. W. GODSEY - C. W.

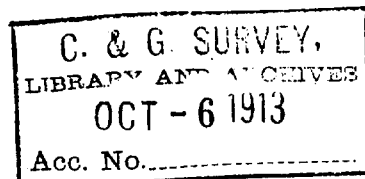
Sheet No. 1

Descriptive Report of Hydrographic Sheets H and I

Eastern Branch, Elizabeth River, Va.

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

O. H. TITTMANN - SUPERINTENDENT.



SURVEY OF THE EASTERN BRANCH OF THE ELIZABETH RIVER, VIRGINIA

DESCRIPTIVE REPORT

FOR HYDROGRAPHIC SHEETS H and I

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AND THE MAIN BRANCH

BETWEEN

LATITUDE 46 47' 00" and LATITUDE 46 52' 00"

Longitude 76 11' 30" " LONGITUDE 76 16' 00"

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DOUGLAS KARR - AID, H. W. GODSEY - C.W.

RECORDERS

H. W. GODSEY and C.V. RHEA.

LEADSMAN

W. H. BUCKMASTER

TIDE OBSERVERS

MEMBERS OF CREW

Descriptive Report of Hydrographic Sheets H and I

Eastern Branch, Elizabeth River, Va.

These sheets show the depths and widths from Campostella Bridge to the headwaters somewhat above navigation for anything but rowboats. Its chief significance is that being in the confines of Norfolk and furnishing a good deal of water front important development will take place on this tidal stream.

SHORES

The shores are usually low, of silt or sand and grassy or marshy. They are from but a few inches in elevation to ten feet in some places. Frequent dwellings occupy the land back from the shore and behind these the land is under cultivation or in woods.

CURRENTS

This is more of a tidal river than one of a draining nature but partakes of both characteristics. The currents range in velocity from zero to 1300 m. per hour and the range of tides two to three feet.

LANDMARKS

These consist of the drawbridges thru which navigation passes. No buoys are placed.

NAVIGATION

2532? ~~1000~~

The channel lies rather to the north side of the stream and eleven feet can be carried from Campostella Bridge to the mouth of Broad Creek. From there in a mile more, up either Broad Creek or the main branch, the low water depth drops to two feet.

Sheet No. 3

Descriptive Report of Hydrographic Sheets H and I
Eastern Branch of the Elizabeth River, Va.

BOTTOM

The bottom is usually soft with flats of shallow depths extending well out. Oyster bottoms for cultivation extend from Campostella Bridge to Broad Creek.

SHIPPING

The shipping consists mostly in small craft and oyster boats. There are also large vessels which carry away the logs and piling that are floated in both above and below Campostella bridge.

A large list of Geographic positions and a Statistical Sheet accompany this report.

O. W. Ferguson.

Assistant- Coast and Geodetic Survey.

SURVEY OF THE EASTERN BRANCH OF THE ELIZABETH RIVER - VA.

LIST OF GEOGRAPHIC POSITIONS
TO ACCOMPANY HYDROGRAPHIC SHEET

Object	Latitude	Longitude
Navy Yard Wireless Tower \odot	36 49 1620m	76 17 1061m
S.A.L. No. 11 (U.S.E.) \triangle	36 50 777	76 17 1151
Cannon (U.S.E.) \triangle	36 50 707	76 17 615
Feuerstein's Stack \odot	36 50 1134	76 17 589
Berkley \triangle	36 49 1517	76 16 1234
Norfolk Cathedral- point of Spire. \triangle	36 50 1538	76 16 1444
Harty \triangle	36 50 578.0	76 16 1252.9
Hardy \triangle	36 50 ⁵⁸⁰ 577	76 16 ¹²⁸⁹ 1249.6 1285
Norfolk & Western Grain Elev.-S.Gab. \odot	36 50 859	76 16 986
Norfolk & Western Drawbridges-Sly end \odot	36 50 660	76 16 751
Colonna \odot	36 50 437	76 16 726
South Chimney - Power House. \odot	36 50 866	76 16 675
Power \triangle	36 50 906	76 16 650
Belfry - Point of Spire \odot		
Semaphore \odot	36 50 775	76 15 1392
Oscar 2 \triangle	36 50 432	76 15 1294
Ohio \triangle	36 50 1097	76 15 1160
Sharp- Wly cupola spire on house of <i>Oscar Smith</i>	36 50 368	76 15 1189
Delphin \odot	36 50 649	76 15 1046
Pavilion - cupola \odot	36 50 903m	76 15 916
Campostella \triangle	36 50 350	76 15 612
Haynes \triangle	36 50 869	76 15 478
Shed - South Gable \odot	36 50 858	76 15 378

SURVEY OF THE EASTERN BRANCH OF THE ELIZABETH RIVER) VA.

LIST OF GEOGRAPHIC POSITIONS

TO ACCOMPANY HYDROGRAPHIC SHEET - H

Station or Object	Latitude	Longitude
Center of House ⊙	36 50 167m	76 15 297m
Isle △	36 50 770	76 15 190
Pinnel-in center of roof of barn ⊙	36 50 205	76 14 1481
Newton △	36 50 304	76 14 1448
Cedar △	36 50 550	76 14 922
Indian △	36 50 153	76 14 900
Stack - (tallest of the several ⊙	36 50 752	76 14 821
Mear △	36 50 285	76 14 269
House - Center of South Gable ⊙	36 50 744	76 14 250
Barton △	36 50 720	76 14 247
Shed ⊙	36 50 750	76 14 ³ 1364
Mound △	36 50 350	76 14 ³ 1317
Creek △	36 50 330	76 14 ³ 1146
Chimney ⊙	36 50 954	76 14 ³ 1087
Bungalow - South Gable ⊙	36 50 1464	76 14 ³ 968
Stub △	36 50 382	76 14 ³ 895
Watch Box-center of Cupoal ⊙	36 50 922	76 14 ³ 781
Broad △	36 50 727	76 14 ³ 757
Windmill ⊙		
Johnson △	36 50 271	76 14 ³ 565
C.S. (Channel Stake) ⊙	36 50 344	76 14 ³ 512
Park △	36 50 464	76 14 ³ 325

SURVEY OF THE EASTERN BRANCH OF THE ELIZABETH RIVER - VA.

LIST OF GEOGRAPHIC POSITIONS
TO ACCOMPANY HYDROGRAPHIC SHEET I

Station or Object	Latitude	Longitude
Creek \triangle	36 50 330m	76 14 ³ 1146m
Chimney \odot	36 50 954	76 14 ³ 1087
Bungalow - South Gable of \odot	36 50 1464	76 14 ³ 968
Stub \triangle	36 50 382	76 14 ³ 895
Watch Box - center of Cupola of \odot	36 50 922	76 14 ³ 781
Broad \triangle	36 50 727	76 14 ³ 757
Windmill \odot		
Johnson \triangle	36 50 271	76 14 ³ 565
C.S. (Channel Stake) \odot	36 50 344	76 14 ³ 512
Park \triangle	36 50 464	76 14 ³ 325
Chimney \odot	36 49 1745	76 14 ³ 348
Dow \triangle	36 49 1526	76 14 ² 1430
Big Chimney \odot	36 49 1459	76 12 1389
C.S. (Channel Stake) \odot	36 49 1667	76 12 1382
Sargent \triangle	36 49 1802	76 12 1368
Pine Tree \odot	36 49 1542	76 12 1123
Mill - South Gable of \odot	36 49 1831	76 12 1073
Murry \triangle	36 49 1629	76 12 1341
Lime \odot	36 49 1847	76 12 800
New Shed - West gable of \odot	36 49 1700	76 12 338
White Chimney \odot	36 49 1367	76 11 1394

Statistics Sheet I.

Date 1913		Letter	Vol	Positions	Soundings	Miles Statute	Vessels
June	3	a	I	40	381	5.75	Whaleboat
"	4	b	I	27	222	3.00	" "
"	4	a	I	40	333	6.25	Launch
"	5	b	I	42	410	7.80	"
"	5	c	I	43	346	5.00	Whaleboat
"	6	d	I	03	38	.30	" "
"	6	e	I	68	537	7.70	" "
"	9	c	I	45	398	6.50	Launch
September	18		I	44	388	6.25	"
Total		9		352	3053	49.05	

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MKQ
Oct. 10, 1913.

HYDROGRAPHIC SHEET 3532.

Eastern Branch, Elizabeth River, Va., by
Assistant O. W. Ferguson in 1913.

TIDES.

	Berkley
Mean low water, or plane of reference on staff	ft. 3.2
Lowest tide observed " "	1.4
Highest " " " "	7.8
Mean range of tide	2.7

MKQ
Oct. 10, 1913.

HYDROGRAPHIC SHEET 3533.

Eastern Branch, Elizabeth River, Va., by
Assistant O. W. Ferguson in 1913.

TIDES.

	Berkley
	ft.
Mean low water, or plane of reference on staff	3.2
Lowest tide observed " "	1.4
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Mean range of tide	2.7

Hyd. Sheets 3532 + 3533.
"Eastern Branch Elizabeth River, Va."

The positions on this sheet were projected by the Field Party and have been taken as correct but checked in a number of instances to insure correctness.

The soundings were also plotted, in pencil, by the Field Party. These have been verified and inked.

The work is generally good, lines and soundings sufficiently close to develop channels. If however Broad Creek, at its upper part, on sheet 3533 and Indian River sheet 3532 are important an additional line of soundings should have been taken midway between the two shores to properly develop the channels. Also a few cross lines should have been run in the main Branch in order to check the other lines.

Attention is invited to the fact that the shore lines on these sheets ~~do not coincide~~ ^{coincide} with Top. Sheets 3396 + 3397.

Soundings are in feet

John D. Torrey

H. 3532.

The soundings in the main river appear sufficient. If it were intended to develop the river or slue at the southeast corner of the sheet, additional lines should have been run. The two lines on each side do not give sufficient information. If additional work is shown on an adjoining sheet it should be so noted by suitable legend.

Sheet examined in Div.
of Hyd'y & Top'y.

H. 3533.

The hydrography appears sufficient for charting purposes, but the work is not considered a complete survey of the areas where soundings are shown.

Sheet examined in Div.
of Hyd'y & Top'y.