3029

Diag. Cht. No. 77-2&78-2

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Tittmann
Superintendent.

State: Va.

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 3029

LOCALITY:

Rappahannock River,
Carters Wharf to
Leedstown. Hyde + Jofa

1909

CHIEF OF PARTY:

O. M. Ferguson

DEPARTMENT OF COMMERCE AND LABOR.

COAST AND GEODETIC SURVEY.

O. H. TITTMANN, Superintendent.

Resurvey of the Chesapeake Bay, Virginia.

Revision of the Rappahannock River.

TITLE SHEET.

Descriptive Report of Topographic & Hydrographic

Sheet ~~516~~ 3029, Register Number.

Western Shore Chesapeake Bay, Between

Latitude 38° 02' to 38° 07' N.

Longitude 76° 54' to 76° 00' W.

SCALE 1:10000.

From October 6,1909 to October 15,1909.

SCHOONER "MATCHLESS".

O. W. Ferguson, Assistant, C.& G.S. In Command.

OBSERVERS.

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

E. E. Smith, Aid;John W.Clift,Chief Writer.

RECORDERS.

John W. Clift,C.W.; H. W. Godsey, W. 2cl.

LEADSMEN.

M.L.Tabor,S.M.M.; A.C.Pinder,Seaman.

TIDE OBSERVERS.

C.P.Holland,C.B.M.;N.E.Lusby,Sea.;

A.L.Williams,S.C.2cl.

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

Department of Commerce and Labor

COAST AND GEODETIC SURVEY

SCHOONER "MATCHLESS",

FREDERICKSBURG, VA., 12/8/1909.

DESCRIPTIVE REPORT OF THE TOPOGRAPHIC & HYDROGRAPHIC

SHEET ~~516~~ 3029 REGISTER NUMBER.

CONTROL.

No old stations were found on this sheet.

Stations Ben, Cliff, Honey, Bow were located from sextant triangulation carried from sheet 517. The topographic features, buildings, creeks and contours gave very good locations also the positions of Old pier at Carpenters Wharf, Laytons and Leedstown were identified.

The topography has changed but little and very little has been added. All new houses and wharves have been located and the old features not now in existence have been left off of the tracing.

From the few stations located and the topographical features ample lines were run to mark the channel and show the depths. Besides the cross lines averaging 500 ms. apart a channel line was run. The cross lines were run on range and bearing and soundings located by cadence.

The river averages quite narrow in width over this sheet being from 290 ms. to 1000 ms. wide. The depth of

channel is ample over this sheet.

LANDINGS.

The landings on this sheet are Carpenters on the east and Laytons on the west and Leedstown on the upper limits of this sheet. These are all very small places Leedstown being the largest with,Telephone,Post Office and two supply stores.

Both Carters and Laytons Wharves are nothing but shipping points.

SURFACE.

The surface is more broken and rises to greater heights as we advance up the river,the average heights along shore being from 10 to 20 feet and rising to over 100 at a few places where there are bluffs. Generally one side of the river is along a bank 6 feet or more high while the opposite shore is a marsh flat covered with wild growth of water plants.

LUMBER.

Considerable of wood ties and lumber are found here and shipped from Carters or Laytons or loaded by barges.

OCCUPATION.

Farming is the principle occupation,the land is held in large farms and rented out by the year on shares,but the occupation and cultivation of the ground seems to be haphazard and not thoroughly done. Lumbering furnishes an occupation for a few.

3. Desc.Rept. T. & H. Sheet ~~516.~~ 3029 O.W.F. 10/19/1909.

PRODUCTS.

The products shipped are, Corn, wheat, and some veals, cattle and sheep. Apples and peaches thrive quite well along here.

LIST OF PLANE TABLE POSITIONS AND SIGNAL

NAMES ON SHEET # ~~516.~~ 3029

Positions as given by the lines on old sheet, to agree with printed chart add 04" to φ and 18" to λ .

O.W.F.

Point	Latitude	Longitude	Point Located by	Lat.	Lon.
	o ' m	o ' m			
Old Home	38 02' 213	76 54 1375	Old Top'y.		
BEN (Flag in tree)	38 02 214	76 54 1183	New "		
HONEY A large Cherry tree	38 02 1438	76 55 83	Sextant		
HIGH Large house on bluff	38 04 258	76 54 1451	"		
CAR Center of end of Carters Ldg.	38 04 392	76 55 166	New Top'y.		
House	38 04 1504	76 58 81	Old "		
Home at Laytons Pier	38 05 375	76 59 220	" "		
Center outer end of Layton wharf	38 05 512	76 59 118	New "		
Old Home 2Mi. above Carter wharf	38 04 1824	76 56 1209	Old "		
	OBJECTS USED BUT OF TEMPORARY NATURE.				
SHORT	38 01 1420	76 54 946	Sextant		
LUM	38 01 1627	76 54 204	"		
CLIFF 1909	38 02 934	76 54 597	"		

21 3029

φ = 38 01 22
λ = 76 55 12

[redacted] Potomac

Examination of Creeks, Rappahannock River, Va.
January and March, 1910.
Descriptive Report - Occupacia Creek.

This creek enters the river at a big bight - in the west - bank 1½ miles above Blanfields Wharf.

It is 350 meters wide at its mouth and ¼ of a mile above, it forks, the eastern branch 1½ miles long drains a large swamp. It is crossed by a wagon bridge near its upper end where there is 8 feet of water and about three feet at low water could be found thence out of the creek.

The main branch was examined for 7½ miles. It runs through a good deal of swamp. Between these two branches there is a large area of cultivated ground.

Its width is from 50 to 150 meters. For the first four miles all of the country is quite low, places on the west side rising to about ten feet occasionally. At this place the creek turns southwest, away from the river, and the shores are frequently higher, ground rising to about ten and twenty feet.

Some of the banks of the lower shores are clothed with timber and on the upper portions the timber fringes are more constant and deep but in general the land is cultivated.

There is 5 feet of water across the bar at the mouth and 4 feet can be carried to the head of examination though 2½ feet is found in places. There are no special landings, though bugeyes and scows may make landings and load at many places. The timber and lumber industry is declining, but cargoes of grain are brought out.

O. W. Ferguson

POST-OFFICE ADDRESS: TAPPAHANNOCK, VA.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

-3029

ASSISTANT IN CHARGE:

Department of Commerce and Labor
COAST AND GEODETIC SURVEY
SCHOONER "MATCHLESS"

Insp'r of Hyd'y & Tom'y. S.

TAPPAHANNOCK, VA., 3/5/1910.

Assistant in Charge.

Mr. Frank Walley Perkins,

Acting Superintendent, C.& G. Survey,

Washington, D. C.

Sir:-

I have the honor to acknowledge the receipt this evening, of your letter of 3d. inst. conveying questions by the Drawing Division concerning some hydrographic work, specified.

Over this stretch in question, we have the high brushy and sloughing bluffs on one side, which however change the water line very slowly and a low marsh on the other side. It is a straight, fair piece of river with no difficulty to navigate- water enough everywhere for craft that passes controlling points above and below.

In this revision the spirit of the instructions of April 27th.'09, par. 4 (Calling for frequent locations) has been carried out, so far as possible. However in the case sighted, there is a failure to locate the middle positions of lines b 1 - 2, 3 - 4, 5 - 6, as Mr. Marsh in charge of that hydrographic party admits, stations being available. But he was so intent on securing uniform speed, etc, that he neglected these positions. Above Bow the stations shown were located by the topography.

It was, beginning, right here, that the river became so nar-

O.W.F. March 5,1910.

row and crooked,with no houses nor monuments along shore,and being unable to see out of the river bed,(as explained in my Descriptive Reports)topography and triangulation not to be run- that I located the normal lines by inspection from topographic features at one or both ends of the line,and run it on course and range with uniform speed taking soundings every 20 seconds. This ought to be about as accurate location of soundings from shore,as on a general line of hydrography;as the width of the river was generally less than the width between positions. In some cases where the shore is straight,with a sameness of appearance,the location of normals might be in error 40m.;but,also,in such places an error of that amount makes very little difference in the sounding of a river. If a signal could be located accurately it would be available but for a short distance.

These cross lines over this stretch,cited,were run half in one direction and half in the other;and seem to give a consistent account of the depths;they were run in good weather, while the longitudinal was run in a strong wind and dark weather.

As to the location of these normals.

1 b - 2 b was run on bearing from ⊙ Honey,

5 b - 6 b was run on bearing from ⊙ Bow,

9 b - 10 b was located by inspection from Carters wharf, while the two intermediates starting at 3 b and 7 b Mr. Marsh says were located from bearings to Honey and Bow.

If the points 9 d to 13 d plot where you give them, I did

not know that they had been moved to,apparently,make the crossings letter. Mr. Marsh plotted the cross lines and Mr. E. E. Smith,Aid,plotted the longitudinal one and he was not then so well experienced. He might however have taken a wrong object; he is most conscientious.

Position 9 d was poorly conditioned.

The longitudinal from 6d to 8d might plausibly go farther East nearer the bluffs. In such a narrow river the normal lines as run, have pretty good control.

To place 9d to 13d where you plot them would make

30 feet cross 36 feet on line 7b-8b,discrepancy 1 fth.,
24 " " 30 " " " 5b-6b, " 1 "
21 " " 26 " " " 3b-4b, " 5 feet,
20 " " 22 " " " 1b-2b, " 2 feet,
20 " " 20 " " " 1a-3a, no " .

There are no data not given in the Sounding Records only that furnished by the natural acquaintance with the locality.

I have a few creeks here to examine with the hydrography of Occupacia,near that place to do;and can,with very little loss of time,clear up the questions if you so direct.

Respectfully yours,

O. W. Ferguson.

Assistant,C.& G.Survey,

Commanding.

Hyd. Sheet 3029

The work on this sheet is very unreliable and the crossings poor. This is due mostly to poor control.

The records show that pos. 9d to 13d are the only points fixed by angles. In a few other cases the approximate distance of boat from shore object is given as at 6d, which is described in record as 110 metres from Bluff, but was plotted on sheet 260 metres from shoreline.

The cross lines should have had at least one intermediate position to control the spacing of soundings and the channel line should have been determined at intervals throughout by sextant angles.

By the advice of Asst. Ferguson, the channel line from 6d to 9d was moved closer to shore and the cross lines adjusted to agree, but from 9d to 13d it was impossible to make an adjustment although the old survey was studied. Therefor the cross lines were inked and the longitudinal left in pencil.

The supplemental work in Occupacia Creek is of much the same character.

R. L. Johnston
Draftsman.
7/28/10.

Department of Commerce and Labor

Statistics for Hyd. Sheet 3029

Date	Letter	Volume	Positions	Soundings	Miles	Vessel
October 6, 1909.	a	1	3	24	0.5	Whale boat
" 9, "	b	1	22	205	4.6	"
" 11, "	c	1	26	249	5.15	"
" 14, "	d	1	14	243	8.0	Steam Launch
March 8, 1910.	c	Supplemental Vol. 1	86	398	9.8	Whaleboat
Totals		2	151	1119	28.05	Totals

Soundings plotted in feet.

Positions plotted & protracted by Field Party.
Soundings plotted & inked by R. L. Johnston.
Verified by J. V. Torrey, 12/11

No. 205
Ed. 5-25-09—350,000

W.E.C.
Dec.18,1909.

D & Edw
Va 8
12/17/9

HYDROGRAPHIC SHEET NO. 3029.

Rappahannock River, Virginia, Latitude 38° 02' to 38° 07' N., by Asst. O. W. Ferguson in 1909.

TIDES.

	Tappahannock ft.	Leedstown ft.
Mean low water, or plane of reference on staff	3.1	2.6
Lowest tide observed " "	-0.1	1.8
Highest " " " "	6.3	4.7
Mean range of tide	1.6	1.5

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STATISTICS

Date 1910	Letter	Vols.	Positions	Soundings	Miles Statute	Vessel
February 3	a	1	67	370	5.9	Whaleboat
March 7	b	1	59	362	9.9	
8	c	1	85	398	9.8	
9	d	1	22	81	1.7	
17	e	1	67	380	6.2	
18	f	2	155	557	11.1	
19	g	2	58	384	7.8	
21	h	2	61	364	6.1	
25	i	2	3	19	0.4	
Total	9	2	558	2915	58.9	

C R E E K S

a Cat Point Creek, Sheet 3011a

b Cat Point Creek " 3011a

c Occupacia " " 3029

d Hoskins " " 3010

e Mount Landing Creek " 3011

f Piscataway Creek " 3010a

g Cat Pt. & Lewis Creeks 3011a & 3011

h Vicinity of Tappahannock &
Little Carters Creek 3010

i Slash Creek 3010.