



3313

C. & G. SURVEY
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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State: *Virginia*

DESCRIPTIVE REPORT.

Hyd. Sheet No. *3313*

LOCALITY:

*Chesapeake Bay -
(off-shore) - Cherrypom Pt.
to Smith Pt. Lt.*

1907

CHIEF OF PARTY:

J. B. Boutelle

3313

H. 3313.

A very good sheet of large extent.
No scale lettered on the sheet.

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

3313

C. & G. SURVEY,
LIBRARY AND ARCHIVES
DEC 27 1911
Acc. No. _____

DESCRIPTIVE REPORT.

To accompany Hydrographic Sheet (3313).

CHESAPEAKE BAY.

Between latitudes $37^{\circ} 16'$ & $37^{\circ} 53'$

1910 - 1911.

C. & G. S. Str. "ENDEAVOR".

---o0o---

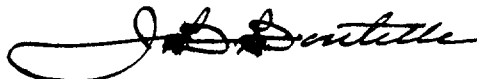
This sheet comprises a resurvey through areas in Chesapeake Bay as indicated in instructions dated August 23, 1910.

Very little change from the existing charts was noticed during the progress of the work.

TIDAL STATIONS were established at Cod Harbor at the southern end of Tangier Island and at Stingray Point Light House. A table of reductions for time for each minute of latitude was furnished by the Tidal Division of the office and used in the reduction of tides. Attached to this report is a tabular statement of records, a list of geographic positions of new stations established, a list of all names of stations used in the record and the station they apply to and a tabular statement of time reduction for tide for each minute of latitude.

Two boat sheets are sent with this sheet.

Respectfully submitted,



Asst. C. & G. S.,

Chief of Party.

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STATISTICS: HYDROGRAPHIC SHEET No. *3313*

CHESAPEAKE BAY

Date 1910	Letter	Vol.	Positions	Soundings	Miles Statute	Vessel
Sep. 22	A	1	26	216	6.5	ENDEAVOR
" 28	B		82	647	16.2	"
" 29	C		155	962	33.7	"
" 30	D	1	45	281	7.2	"
" 30	D	2	159	841	27.8	"
Oct. 1	E		102	621	17.7	"
" 3	F		40	223	8.0	"
" 3	F	3	113	611	25.2	"
" 4	G		136	753	33.0	"
" 10	H		64	350	16.5	"
" 11	I	4	173	1026	34.5	"
" 12	J		133	698	20.0	"
" 12	J	5	37	201	5.3	"
" 13	K		153	900	25.5	"
" 14	L		69	395	13.3	"
" 17	M	6	87	595	17.5	"
" 18	N		157	1082	35.9	"
" 24	O	7	57	338	9.1	"
" 25	P		94	411	16.5	"
Carried forward			1882 ^v	11,151 ^v	369.4 ^v	

Date	Let.	Vol.	Positions	Soundings	Miles, Stat.	Vessel
1910	Brought forward--		1882	11,151	369.4	
Oct. 26	Q	7	116	718	22.7	"Endeavor"
" "	Q	8	21	123	4.5	"
Nov. 7	R		83	469	15.0	"
" 8	S		149	819	33.7	"
" 11	T		24	140	3.5	"
" 11	T	9	45	357	9.5	"
" 14	U		69	399	13.5	"
" 16	V		157	985	32.4	"
" 21	W	10	142	1129	34.5	"
" 22	X		7	68	1.5	"
" 25	Y		25	187	4.5	"
1911						
June 5	Z		60	493	14.0	"
" 5	Z	11	28	189	6.0	"
" 6	A'		68	303	9.0	"
" 7	B'		79	336	15.5	"
" 8	C'		146	853	34.0	"
" 9	D'		81	468	18.0	"
" 9	D'	12	12	81	4.0	"
" 14	E'		135	849	29.5	"
" 15	F'		82	552	14.5	"
" 16	G'		68	419	13.5	"
" 17	H'	13	81	484	19.3	"
" 19	J'		162	1110	36.0	"
" 20	K'		97	627	20.5	"
	Carried forward--		3819	23309	778.5	

Date	Lat.	Vol.	Positions	Soundings	Miles, Stat.	Vessel
1911.						
	Brought forward		3819	23309	778.5	
June 20	K'	14	55	336	11.0	"Endeavor"
" 21	L'		172	1043	38.0	"
" 22	M'		117	898	26.0	"
" 22	M'	15	48	278	10.0	"
" 23	N'		144	1061	28.5	"
" 24	P'		22	220	6.0	"
" 26	Q'		35	253	7.5	"
" 27	R'		61	416	18.0	"
" 27	R'	16	99	770	22.0	"
" 28	S'		130	1336	39.5	"
" 30	T'	16	31	254	13.0	"
" 30	T'	17	67	615	17.0	" Area 125
July 1	U'		102	875	16.0	"
" 3	V'		55	476	13.0	"
" 5	W'		49	337	14.0	"
" 5	W'	18	30	231	10.0	"
" 6	X'		128	856	37.0	"
" 7	Y'		124	942	33.0	"
" 13	Z'		44	246	10.0	"
" 13	Z'	19	82	724	30.75	"
" 14	A"		46	391	16.25	"
" 15	B"		26	110	8.5	"
Carried forward			5486	35977	1203.5	"

4800

30789

1015.0

Date	Let.	Vol.	Positions	Soundings	Miles, Stat.	Vessel	
1911.							
Brought forward		5486	:	35977	:	1203.5	"Endeavor"
July	24	C"	19	25	180	7.0	"
"	25	D"		117	827	34.5	"
"	25	D"	20	13	99	4.25	"
"	26	E"		99	853	35.5	"
"	27	F"		111	950	40.5	"
"	28	G"		45	445	17.0	"
"	28	G"	21	57	495	19.0	"
"	29	H"		79	603	27.0	"
"	31	J"		126	949	40.0	"
Aug.	1	K"		50	263	9.0	"
"	1	K"	22	58	469	24.0	"
"	2	L"		112	943	43.5	"
"	3	M"		111	814	36.0	"
"	4	N"		12	100	4.0	"
"	4	N"	23	46	406	19.0	"
"	5	O"		31	234	8.5	"
"	7	P"		76	577	26.0	"
"	8	Q"		112	913	38.5	"
"	9	R"		17	144	6.0	"
"	9	R"	24	95	618	29.0	"
"	10	S"		136	888	42.5	"
"	11	T"		95	750	32.5	"
"	14	U"	25	34	224	10.0	"
Carried forward		7143	:	48821	:	1756.75	"

Date : Lat. : Vol. : Positions : Soundings : Miles, Stat. : Vessel

1911.												
Brought forward							7143					
							48821					
							1756.75					
							"Endeavor"					
Aug. 15	V"	25	98	710	30.5		"					
" 17	W"		100	770	35.0		"					
" 18	X"		58	465	20.0		"					
" 18	X"	26	67	471	21.0		"					
" 19	Y"		64	465	18.5		"					
" 22	Z"		103	791	33.0		"					
" 23	A"		78	581	20.8		"					
" 23	A"	27	37	274	18.0		"					
" 24	B"		33	191	7.0		"					
" 25	C"		39	234	10.0		"					
Totals-							78	27	7820	53773	1970.55	
Dec. 20	D"	27	37	139	6.00							
							<u>7857</u>		<u>53912</u>	<u>1976.55</u>		
							Area in Sq. St. miles 2.65					

MESSAGE

To Cdr Crosby

Date 5-21-50 19 3:20 ^{A.M.}_{P.M.}

WHILE YOU WERE OUT

Mr. Whitten

Address _____

Phone No. _____

Called to See You	<input type="checkbox"/>	Will Call Again	<input type="checkbox"/>
Telephoned	<input type="checkbox"/>	Please Call Him	<input type="checkbox"/>

Message Smokestack - U.S. Texas

Lat 37-43-09.73

Long 76-04-41.68

1927 Datum -

Taken by _____

M-1844-7 (1)

3313

GEOGRAPHIC

Locality Chesapeake Bay

Geographic positions of signals established Datum.
 in 1910-1911

11-676

STATIONS.	LATITUDE.	Seconds in Meters.	LONGITUDE.	Seconds in Meters.	
	° ' "	1849.7	° ' "	1273.8	
Bluff 2, 1910	37 41 41.219	1270.7	76 17 58.936	1443.9	
Ante 1910	37 37 58.182	1793.7	76 17 14.992	367.6	
Texas, smokestack 1911 (Wreck of battleship)	37 43 10.192 - .370 <u>09.822</u>	314.2 - 11.4 <u>302.8</u>	76 04 41.519 + .184 <u>41.703</u>	1016.8 + 4.5 <u>1021.3</u>	Computed rather than diff.
* Goose Tree 1910	37 52	148	76 00	340	
* Smoke (tall chimney) 1911	37 49	1716	76 16	1320	
† Matta No. 2 1911	37 22 50.540	1558.1	75 59 08.672	213.3	
* Tree (tall lone pine) 1911	37 18	1034	76 01	315	
Stack (tall iron stack at Cape Charles City, 1911)	37 16 02.486	76.6	76 00 21.385	526.9	
Jam 1911	37 30 23.615	728.1	75 57 25.761	632.8	
Tongue 2, 1911	37 26 18.258	562.9	75 58 45.162	1110.2	
* House	37 25	681	75 15	561	
Do not write in this margin.					
* Hydrographic Signals determined by sextant angles from ship positions.					
† Determined by measurement from Matta 1898, see description of station.					

POSITIONS.

State

AZIMUTH.

BACK AZIMUTH.

TO STATIONS.

DISTANCE.

LOGARITHM.

Meters.

Do not write in this margin.

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List of Names of Signals and Descriptions.

1. "Shank" - Shanks Hammock 2, 1898. Old station recovered.
2. "Goose" - New hydro. station; Goose Tree, 1910.
3. "Church" - Tangier Island Church Spire, 1898.
4. "Tang" - Tangier Sound Lt. Ho., 1898 - 1900.
5. "Sandy" 2 - Sandy Point 2, 1898.
6. "Jam" - New station, 1911.
7. "Tongue 2" - " " "
8. "Matta 2" - " " "
9. "Rose" - Station Rose of 1898.
10. "Tree" - Tall lone pine on Westcott Point, 1911.
11. "Stack" - Tall iron smokestack, Cape Charles City.
12. "Cherry" - Cherrystone Lt. Ho., 1887 - 1900.
13. "Smith" - Smith Point Lt. Ho., 1898 - 1901.
14. "Smoke" - Tall iron smokestack, north side of entrance to Wicomico River, 1911.
15. "Wico" - Great Wicomico Lt. Ho., 1898.
16. "Bluff 2" - New station of 1910, 9.62 W.x N. of Bluff, 1898.
17. "Ante" - New station of 1910.
18. "Wind" - Windmill Point Lt. Ho., 1898 - 1900.
19. "Sting" - Stingray Point Lt. Ho., 1900.
20. "Gwynn" - Station Gwynn of 1898.
21. " House" - Hydrographic signal of 1911.
22. "Wolf" - Wolf Trap Lt. Ho., 1898 - 1900.
23. "New" - New Point Comfort Lt. Ho., 1871.
24. "Texas" - Smokestack of wreck of battleship "Texas" (or San Marcos)

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POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Washington, November 4, 1910.

Mr. J. B. Boutelle,

Assistant, Coast and Geodetic Survey.

Sir:

In reply to your verbal request of the 2nd instant, I furnish herewith the following table of corrections to be applied to the observed tides at the southern end of Tangier Island, Chesapeake Bay, to obtain the tides for each minute of latitude, along the middle of the channel from Tangier Island to Cape Charles.

: Time : Height :	: Time : Height :
Latitude: Correction : Correction ::	Latitude : Correction : Correction :
North : h m : *factor ::	North : h m : *factor :
37°47' : -0 6 : :	37°25' : -2 26 : 1.1
46 : -0 12 : :	24 : -2 32 : 1.1
45 : -0 18 : :	23 : -2 38 : 1.1
44 : -0 25 : :	22 : -2 43 : 1.1
43 : -0 31 : :	21 : -2 48 : 1.1
42 : -0 37 : :	20 : -2 53 : 1.2
41 : -0 43 : :	19 : -2 58 : 1.2
40 : -0 50 : :	18 : -3 02 : 1.2
39 : -0 57 : :	17 : -3 05 : 1.3
38 : -1 04 : :	16 : -3 08 : 1.3
37 : -1 10 : :	15 : -3 11 : 1.3
36 : -1 17 : :	14 : -3 14 : 1.4
35 : -1 23 : :	13 : -3 16 : 1.4
34 : -1 30 : :	12 : -3 18 : 1.4
33 : -1 36 : :	11 : -3 20 : 1.5
32 : -1 42 : :	10 : -3 22 : 1.5
31 : -1 48 : :	9 : -3 24 : 1.5
30 : -1 55 : :	8 : -3 26 : 1.6
29 : -2 01 : :	7 : -3 28 : 1.6
28 : -2 07 : :	6 : -3 29 : 1.6
27 : -2 13 : :	: : :
26 : -2 20 : :	: : :

No correction

The time correction may either be subtracted from the time of tide at Tangier Island or added to the time of sounding.

*The Height at Tangier Island should be reduced to mean low water before being multiplied by the factor for correction.

Respectfully yours,

(Signed) O. H. TITTMANN,
 Superintendent

M.D.H.
Jan. 18, 1912.

D. G. Dr.
ASB
1/18/12

HYDROGRAPHIC SHEET 3313.

Cherrystone Light to Smith Point Light, Chesapeake Bay, Va.,

by Asst. J. B. Boutelle, in 1910 and 1911.

TIDES.

	Cod Harbor ft.	Stingray Point Light ft.
Mean low water or plane of reference on staff	4.1	3.7
Lowest tide observed	2.9	3.2
Highest " "	7.5	5.5
Mean range of tide	1.6	1.2

Coast and Geodetic Survey
JAN 18 1912
TIDAL MEASUREMENTS

March 22, 1912

Hydrographic Sheet # 3313.

This work is good throughout and the areas surveyed covered by closely run lines, there are however but a few cross lines but owing to the very close run of other lines cross lines does not appear necessary.

J. D. Torrey

Hyd^c 3313

Verified by H. Simmons

Applied to Chart 568, 6/18/53 JHE

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