

2736

Diag. Cht. No. 902

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2736
1905

Treasury Department,
U. S. COAST AND GEODETIC SURVEY.

O. H. Litzmann
Superintendent.

State: *P.R.*

U. S. C. & G. SURVEY,
LIBRARY AND ARCHIVES,

JUL 8 - 1905

Acc. No.

DESCRIPTIVE REPORT.

Hyd^c Sheet No *2736*

LOCALITY:

S. Coast of P.R.

1905

CHIEF OF PARTY:

"P. L. Jarvis, Asst."

2736

DESCRIPTIVE REPORT

PONCE HYDROGRAPHIC SHEET (1905.)

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The work contained on this sheet at the present date (June 1905) is a re-survey of the region covered by original hydrographic sheet No. 2420 with the exception of the deep sea soundings. Several shoal spots, not shown in the original survey, were found in the inland waters north of Berberia and Muertos Islands. There is 21 instead of 24 feet on the spot just south of the entrance to Cabullon Bight. This is important as this shoal is directly on the sailing line of vessels using the inside passage from Ponce to the eastward. The present survey does not show any shoaler water on the seven fathom spot off the south-west point of Muertos Island. A twelve fathom spot was found about three and one-half (3-1/2) miles to the south-west of Muertos Island, to the westward of which the water deepens to the hundred fathom curve very rapidly. The survey shown on this sheet shows the hundred fathom curve to be farther eastward (to the westward of Muertos Island) ~~than shown~~ than shown on our present maps of this region. Just to the southward of the entrance to Ponce harbor the hundred fathom curve is about a mile eastward of its present charted position. I do not believe that the 95 fathom sounding, now shown on our chart in this locality, exists. There is a shoal with 8-1/2 fathoms of water over it about 2-1/4 miles S.E. x S. of Ponce bell buoy. The water is steep to on the west and south sides of this shoal.

Owing to the uneven character of the bottom along the inside passage east of Ponce vessels of more than sixteen feet draught should not attempt to use it. In running sounding lines about the

west end of Muertos Island a current of about a knot an hour was observed setting to the north-westward. There is apparently no current between Berberia Island and the mainland. Comparatively smooth water and good bottom for anchorage can be found under the mainland northward of Berberia Island in four fathoms of water. There is a good anchorage in six fathoms of water, sandy bottom, under Muertos Island west of the light house. This is well sheltered from the prevailing winds, but the ocean swell is slightly felt here yet not nearly so much as in Ponce harbor.

A. L. Faris

Assistant C. & G. Survey,

June , 1905.

Position of Objects used as Hydrographic Signals

on South Coast of Porto Rico.

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Hydrographic Sheet # 2736.

U. S. C. & G. SURVEY,
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Object and Description.	Lat.	D.M.	Long.	D.P.	Remarks
Middle, stack of sugar mill	:17° 59'	: 1635	: 66° 37'	: 565	: 1.0 Miles North of Port Ponce
:Thick do.	:17 59	: 1563	: 66 32	: 830	: 1.6 " NE of Caballo Pt.
:Long, do.	:17 59	: 343	: 66 31	: 1361	: 1.7 " NE " Caballo Pt.
:Port, do.	:17 59	: 1329	: 66 30	: 136	: 2.3 " W of Jacaguas Ldg.
:Green, do.	:17 59	: 918	: 66 26	: 420	: 2.0 " NW of Cayito Pt.



Forwarded

R. L. Travis
 U. S. C. & G. Survey, Comd'g

Descriptive Report

Hydrographic Sheet No. 2736 (1906).

From Guanica lighthouse to St. Isabel Landing

The work on this sheet is supplemental to the survey of 1899, and a continuation of the survey of 1905. See previous descriptive reports.

The most important features of the present survey are the development of the 14 ft. spot 2 miles S.S.E. of Berberia Island. This shoal has an east and west trend, gradually shoaling up to 14 feet as the least depth over it. There is a channel of about 5 fathoms depth between this shoal and Berberia Island. This shoal is not a continuation of the south end of Berberia Island as the chart now shows. The 100 fathom curve is farther off shore to the southward of Berberia Island (about in latitude $17^{\circ} 49'$) than now shown on the published charts (see descriptive report for hyd. sheet No. 2737) The two soundings taken in 1905, of $\frac{0}{880}$ and $\frac{0}{590}$ fathoms, 4 and 5 miles to the southward and eastward of the entrance to Guayanilla harbor respectively, are erroneous and should be stricken from the sheet. Soundings in their locality this year with the Sigsbee machine proved conclusively that these two soundings taken last year with the "Cosmos" machine, are not correct.

R. L. F.

5-9-1906.

Shets 2736 & 2737

The field work seems to be well executed, and the records are all right. The lines cross well and the ground within the limits of the survey is well covered.

The pencil used on the sheet for drawing lines between positions, while the sheet was damp, was too hard, as it put into the paper, which made it difficult to plot & ink remaining curves,
F.C.D.

U. S. C. & G. SURVEY,
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ADDRESS ALL COMMUNICATIONS TO
SUPERINTENDENT, COAST AND GEODETIC SURVEY,
WASHINGTON, D. C.

VEC

Department of Commerce and Labor
COAST AND GEODETIC SURVEY
Washington

Hydrog. Div
107/16
DRAWING SECTION

2736

October 6, 1906.

Mr. Andrew Braid,
Assistant in charge of Office.

Sir:

In reply to a request of the 10th instant, from Mr. Geo. L. Flower, Acting Chief, Drawing and Engraving Division, I transmit herewith tide note for Hydrographic Sheet No. 2736, "Berberia Island to Guayanilla Harbor, South Coast of Porto Rico", by Assistant R. L. Faris in 1906.

Respectfully yours,

L. P. Shady

Chief of Tidal Division.

V.E.C.
Oct. 6, 1906.

HYDROGRAPHIC SHEET 2736.

Berberia Island to Guayanilla Harbor, South Coast
of Porto Rico, by Assistant R. L. Faris in 1906.

TIDES

	Ponce staff of 1905 ft.	Pence staff of 1906 ft.
Mean low water, or plane of reference on staff	1.25	0.46
Lowest tide observed " "	0.73	0.18
Highest " " " "	2.30	1.75
Mean rise and fall of tides	0.08	0.08
Mean rise and fall of tropic tides	0.85	0.85

Coast and Geodetic Survey
OCT 6 1906
TIDAL DIVISION.

1 9 0 6

S T A T I S T I C S

Hydrographic Sheet. No. 2736.

Date	Vol.	Let.	Miles	Sdgs.	Angles	Boat.
Jan. 24, 1906	1	A	12.8	185	100	"Explorer"
" 25, "	1	B	41.6	556	348	"
" 26, "	1&2	C	45.2	693	366	"
" 27, "	2	D	22.4	446	188	"
" 29, "	2	E	20.6	313	182	"
Mar. 12, "	2	J	7.5	9	18	"
" 13, "	2	K	12.2	10	20	"
Totals - - - - -			162.3	2212	1222	
Jan. 25, 1906	1	a	12.8	404	180	"Steam Launch"
" 26, "	1	b	15.0	558	182	"
Totals - - - - -			27.8	962	362	
Jan. 27, 1906.	1	a	5.9	339	112	"Whaleboat"
Grand totals -----			196.0	3513	1696	28 square miles

DEPARTMENT OF COMMERCE AND LABOR

Coast and Geodetic Survey

O. H. Tittmann, Supt.

Hydrographic Sheet No. 2736

South Coast, ^{of} Porto Rico.

~~From~~ Guayanilla to Berberia Island.

Guayanilla Harbor

Assistant. R. L. Faris, Chief of Party.

1905-06

Steamer "Explorer".

Begun: Jan. 24th.

Ended: Mar. 13th.

1906

Scale: 1:40,000

*Plotted and edited by F. C. Down
and A. L. Smith*

Observers

R.L. Faris, Assistant.
W.F. Glover, Watch Officer.
J.R. Hurley, Assist. Surgeon.
E.V. Miller, Capt's Clerk.
N.H. Heck, Aid.
H.M. Roy, Aid.

Recorders

Edward Treffz, Chief Writer.
A Hope, Writer 2nd. class.

Leadsmen

T.N. Janssen, Q.M. 1st. class.
A.M. Berggren, " 2nd. "
E.N. Larsen, " 2nd. "
H.W.L. Zall, " 2nd. "
H. Olsen, Seaman.

Tidal Observations at Ponce, P. R.

Tidal comparisons at Rincon Bay, P. R.

Sounding lines plotted by R.L.F. and E.V.M.

S T A T I S T I C S :

Date 1905		Number of			Miles	Vessel
		Vol.	Angles	Soundings		
April 27	A	2	30	15	10.0	Str. EXPLORER
" 28	B	2	16	8	8.2	Str. EXPLORER
" 29	C	2	30	15	10.5	Str. EXPLORER
May 1	D	2	66	296	10.4	Str. EXPLORER
" 2	E	2 & 3	132	357	19.7	Str. EXPLORER
" 3	F	2	34	28	12.0	Str. EXPLORER
" 4	G	2	146	170	35.0	Str. EXPLORER
" 5	H	2	248	145	38.0	Str. EXPLORER
" 6	J	4	154	193	17.2	Str. EXPLORER
" 17	K	4	344	915	39.5	Str. EXPLORER
" 18	L	4 & 5	348	698	39.3	Str. EXPLORER
" 19	M	5	372	735	39.7	Str. EXPLORER
" 20	N	5	178	131	19.2	Str. EXPLORER
" 22	O	5 & 6	388	554	38.3	Str. EXPLORER
" 23	P	6	134	190	13.3	Str. EXPLORER
" 24	Q	6	238	291	19.5	Str. EXPLORER
" 25	R	6 & 7	352	513	34.4	Str. EXPLORER
" 26	S	7	374	639	30.3	Str. EXPLORER
" 27	T	7	174	215	13.5	Str. EXPLORER
Total		7	3758	6105	448.0	
May 24	a	1	218	848	20.2	Steam Launch
" 26	b	1	64	265	6.2	Steam Launch
Total		1	282	1113	26.4	

R E C A P I T U L A T I O N :

Str. EXPLORER:	7	3758	6105	448.0
Stm. Launch	1	282	1113	26.4
Grand Total	8	4040	7218	474.4

The Soundings are expressed in feet

6 ft	curve is shown in	Green
12 "	" " " "	Red
18 "	" " " "	Blue
24 "	" " " "	Yellow
30 "	" " " "	Purple
60 "	" " " "	Brown
120 "	" " " "	Scarlet
600 "	" " " "	Purplish

Coast & Geodetic Survey,

O. H. TITTMANN, SUPT.

HYGROGRAPHY,

of the

South Coast of Porto Rico,

~~Between Pt. Guayanilla and Sta. Isabel~~ ^{Sancti} Isabel Landing ^{to} Pt. Guayanilla

by the

Party in charge of R. L. Paris, Assist.,

Str. EXPLORER,

Begun April 27, 1905,

Ended May 27, 1905,

Scale 1.40,000

OBSERVERS:

H. C. Graves, Nautical Expert, L. H. Westdahl, Assist.

W. F. Glover, Watch Officer, B. D. Barker, Aid, and N. H. Heck, Aid.

RECORDERS:

O. M. Straube, Chf. Writer, H. E. Klages, Writer; 2 cl.;

LEADSMEN:

J. Hansen, Qmr. 1 cl.; T. N. Janssen, Qmr. 2 cl.; F. N. Christensen,

Qmr. 2 cl.; A. M. Berggren, Qmr. 2 cl.; H. W. L. Zall, Seaman,

2736

U. S. C. & G. SURVEY,
LIBRARY AND ARCHIVES,

JUL 8 - 1905

Acc. No.