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Diag. Cht. No. 1251-2 & 1252-2

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S.H.S.
2873
1907

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. F. S. Mann
Superintendent.

State: *Florida*

U. S. C. & G. SURVEY,
LIBRARY AND ARCHIVES,
JUN 14 1907
Doc. No.

DESCRIPTIVE REPORT.

Hyd C Sheet No. *2873*

LOCALITY:

*Approaches to Key
West, Examination
with wire drag, West of
Main Ship Channel*

1907 & 1915

CHIEF OF PARTY:

N. H. Heck

2873

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

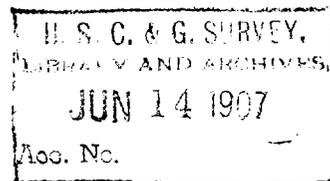
EXPRESS OFFICE:

DESCRIPTIVE REPORT.

Projection #8.

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

2873



The survey with drag of channel to westward of the Main Ship Channel, is only about 1/2 completed. Thus far it has resulted in the discovery of 15 uncharted shoals.

These are as follows. One with 30 1/2 ft. M.L.W. in 38 ft. in the deep water indicated off Whitehead Spit, one mile S-Southwest of Fort Taylor. One line of shoals on line of inner reef, lat. 24 30.3 with pinnacles having 18 to 20 1/2 ft. of water on them. These are part of the same system of shoals as the Triangle Shoals. The inner line of reefs has three other lines of shoals, one to the northward of that just mentioned and two to the southward. In all 8 uncharted shoals with from 18 to 28 ft. of water on them were found on this reef.

In lat. 24 29.2 a line of coral heads with 26 and 27 ft. of water was found. These are very small and rise out of soft bottom almost vertically.

On the outer bar two attempts were made to cross the bar and resulted in finding two uncharted 30 and 29 ft. shoals, apparently shelves rising 3 and 4 ft. above bottom. *see note below.*

All soundings taken on shoals are given in the records of the launch "Blanche". All soundings are the result of at least half an hour's work with launch and small boat sounding independently on the spot indicated by the drag. Also soundings taken from boat while taking up drag with wire caught on the shoal. These soundings are underlined with soft pencil on the sheet. This is not intended as final development, but it

has several advantages over the ordinary method of finding the least water, the position of the drag indicating the place to search for it. Only such shoals as are marked in red pencil in the Blanche record and in blue pencil in the Florida's record are uncharted shoals. In all other cases where drag grounded it was due to lack of sufficient depth for keeping it clear.

To complete the survey every shoal, charted or uncharted should be dragged with developing drag. This drag will be completed during the coming season in Maine so that such work can be done rapidly and efficiently.

The depth of drag while under way, the tidal reductions, the effective depth dragged to are given the records of the launch "Blanche" (red). The depth of drag while under way is obtained by experiment for a pull of 120 lbs. and was found to be 32 ft. for drag set at 37 ft. The depth of drag would be changed also to 36 and 35 ft. for use in critical depths for the greatest range of tide.

While the drag was aground on these shoals, soundings were taken from a small boat on a 27 ft. shoal, concerning which a note appeared on original sheet that this had probably been removed by the U. S. engineers. This sounding was taken preliminary to dragging over this shoal. a sounding of 27 ft. (not rounded) was taken, but not rounded as the position was approximate.

N. A. Hecks

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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Tittmann
Superintendent.

State: Fla.

DESCRIPTIVE REPORT.

HYD. Sheet Sheet No. 2873

LOCALITY:

Florida Reefs

Approaches to Key West

1915

CHIEF OF PARTY:

N. H. Heck, Assistant

11-4645

DESCRIPTIVE REPORT-HYD. SHEET 2873-1915

The unfinished areas on sheets 2875 and 2932 were transferred to this sheet, with the intention of covering as many as possible.

Owing to unfavorable weather only three days were spent on this work. Several areas in the south end of Key West Harbor were dragged.

At the western end of the sheet a number of small areas were dragged, and a shoal at the junction of West and Southwest Channels was found to extend further to the east than charted.

VEC
May 14, 1915.

L. P. S.

HYDROGRAPHIC SHEET 2873.

Florida Reefs, Florida, by
Assistant N. H. Heck in 1915.

TIDES.

	Key West ft.
Mean low water, or plane of reference on staff	4.1
Lowest tide observed " "	2.8
Highest " " " "	7.5
Mean range of tide	1.2

Hyd = 2873 (Work of 1915)

In verifying this sheet the following inaccuracies in plotting were observed:-

Sounding $\frac{1}{2}C$ plotted wrong.

Distance at $\frac{2}{3}B$ computed wrong.

Position $\frac{3}{4}C$ plotted wrong. To determine the ends of the drag $+60^\circ$ & $+45^\circ$ were used instead of -60° & -45° , as recorded.

J.B. Shklean

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

Sheet 2873

1915

Date	Letter	Vol.	Angles	Miles	Drag Length	Soundings	
						No.	Angles
2-13	A	1	123	1.2	2400	3	6
3-12	B		42	0.5	900	0	0
3-13	C		144	2.5	1200	3	6
Total			<u>309</u>	<u>4.2</u>		<u>6</u>	<u>12</u>