

83
SHA
3670

3670

C. & G. SURVEY,
LIBRARY AND ARCHIVES
OCT 13 1914
Acc. No. _____

Diag. Cht. No. 1114

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. Tiltmann
Superintendent.

State: *Florida*

DESCRIPTIVE REPORT.

Hydrographic Sheet No. *3670*

LOCALITY:

Gulf of Mexico
100 miles northwest of Tampa

1914

CHIEF OF PARTY:

Charles Yates

11-4646

3670

DEPARTMENT OF COMMERCE

Notes for title Hyd. 3670

General locality: Gulf of Mexico - West Coast of Florida

Special locality: Ten fathom banks - 100 miles northwest of Tampa.

In charge of soundings: F. G. Engle, Asst. C. & G. Survey.
Thomas Jamieson, Mate, C. & G. Survey

T. M. Burnette: Mate, C. & G. Survey

H. R. Bartlett: Aid, C. & G. Survey

Chief of Party: Charles Yates Asst. C. & G. Survey

Name of Vessel: Bush

Dates of Work: April 21st to 24th and May 25th to 29th, 1914

Scale of Sheets: 1-200,000

Unit of soundings: Fathoms

Tide gauges: None

Statistics: 200 square miles covered
904 miles of soundings
121 lines of astronomical positions
950 soundings

Adjustment of sounding lines by field party.
Soundings plotted by field party and by R. L. Johnston
Tracing of combined work by R. L. J.

DESCRIPTIVE REPORT TO ACCOMPANY PRELIMINARY HYDROGRAPHIC SHEETS
OF TEN FATHOM BANKS REPORTED AS BEING LOCATED IN THE GULF
OF MEXICO ABOUT 100 MILES NORTHWEST OF TAMPA

o

o

U. S. C. & G. S. Ship Bache

April 21st to 24th and May 25 to 29, 1914

Chief of Party: Charles Yates, Asst. C. & G. S., Commanding

o

o

Explanation: On account of the work being located offshore, and because of its reconnoissance character no information is contained in this report of value for use for the Coast Pilot publications.

Object of Work: This work was involved in the voyage of the Bache, April 13th to 27th, from Key West to the working grounds connected with the survey of Sabine Bank off the Coast of Texas, and on her return trip from Galveston to Key West, May 25th to June 1st. The object of the work being the development of a ten fathom shoal situated about 100 miles northwest of Tampa reported by fishermen as being in a locality where the charts show depths of 25 to 35 fathoms.

Methods: The first part of the investigations occupied four nights and days of April 21st to 25th, the second part covering a similar period of May 25th to 29th.

During the first part of the search for this shoal, the ground was covered rapidly by going full speed with a submarine sentry set at 20 fathoms and by soundings taken every half hour. The location of the ship being entirely dependent on lines of position determined by astronomical observations with the sextant. No land fall being made during the survey. For three nights and days this

method gave no indications of the shoal, but on the last day the sentry struck bottom and a sounding of 17 fathoms was obtained where the chart showed more than 25 fathoms.

This first part of the work is plotted by itself on one of the sheets covered by this report, but not in its final form. Possibly the adopted positions of the lines of soundings on this sheet are as good as the character of the work makes necessary. If so they can be transferred to a final smooth sheet and the soundings interpolated and plotted from the log readings in the book of soundings covering this work.

During the second part of the examination of the shoal, the submarine sentry was not used, soundings being taken every five minutes, or as rapidly as practicable as the case demanded. The irregular depths obtained resulted in constant changes of course of the ship in hopes of locating the reported shoal. The plan being to anchor in case the 10 fathom bank was found and then locate the ship by repeated astronomical observations. But no depth was obtained less than 14 fathoms and lack of coal finally made it necessary to close the work.

This second part of the work is plotted by itself on one of the sheets covered by this report. As in the case of the first sheet, possibly the adopted positions of the lines of soundings on this sheet are sufficient. If so, they can be transferred to the same final sheet mentioned in connection with the first part of the work.

In this connection it is probable, that the plotted lines of soundings of both the first and second halves of the work which have been made on the published chart turned in with the two projections will be valuable as a guide in disentangling the actual lines of soundings from the mass of other data on the projections.

Results: The work developed the fact that the bottom is very rough and irregular, consecutive soundings frequently showing abrupt changes of 5 to 7 fathoms. And therefore, it seems likely that the 10 fathom depths reported by the fishermen may actually exist.

It is thought that enough soundings have been obtained to definitely fix the locality of the reported banks and to indicate their character.

Also, it seems quite evident that nothing but a systematic resurvey of this region controlled by a system of buoys will furnish the hydrographic information that it will be necessary ultimately to obtain for the purpose of constructing adequate charts of this section of the Gulf of Mexico.

The Records filed in the archives relating to these sheets are as follows:

- (a) 2 projections and one chart covered by this report giving the preliminary results of work.
- (b) 1 volume of soundings, log readings, ships' courses, engine revolutions, weather, etc. required for the plotting of the ship's position and of intermediate soundings in conjunction with record (c).
- (c) 2 folders of astronomical observations and computations

required for location of ship and soundings in conjunction with
record (b).

Respectfully submitted,

Charles Gates

Assistant, C. & G. Survey,
Washington, Oct. 8, 1914.

Hyd. Sheet No. 3670

As the adjustment of this work appeared to be carefully done by the field party, their lines were accepted and the soundings plotted on them. The two sheets sent in were combined on a piece of vellum, which will serve as the smooth sheet.

R. L. Johnston

Boat Shuts should be retained

STP:rr

H. 3670.

Vellum sheet and two boat sheets.---This hydrography shows the general depths on deadreckoning lines scattered over a large area 100 miles northwest of Tampa. The work is open and positions approximate, and is recommend for approval to complete the record.

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