2471

Diag. Cht. No. 1232-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... Office No. 2471

LOCALITY

State North Carolina

General locality Off Diamond

Locality Shoal. Cape Hatteras

1900

CHIEF OF PARTY

W. C. Hodgkins

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U. S. COAST AND GEODETIC SURVEY.

H. S. Pritchett, Superintendent.

State: N. C.

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 2471

LOCALITY:

Off Outer Diamond Shoal, Cape Hatteras.

1900.

CHIEF OF PARTY:

W. C. Hodgkins.

Descriptive Report

to accompany Hydrographic Sheet No 2471, scale 1:40000. Examination off Outer Diamond Shoal, Cape Hatteras, 1900.

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This survey was made at the request of the Light House Board to furnish information in regard to the best situation for mooring the new light vessel.

Although a resurvey this was rather an extension of the old work which was not sufficiently full. Wherever the two touch each other the agreement seems to be quite good. There is some evidence that the shoals are slowly working to the southward. As a rule the bottom is of hard sand, but there are occasional spots of mud as well as patches of gravel and broken shells.

The work began on August 17th and ended on August 30th, 1900. Soundings were made on 11 days. Number of soundings 1651; Number of angles and cuts 1722; Number of miles 309.2.

All of the work was done from the Blake and mostly with the "deepsea lead" in more than 15 fathoms.

The area covered by this survey lying immediately off the outer shoals and around the station of the light vessel is directly in the pathway of coast-wise commerce and a vast amount of shipping passes here annually.

The coast is only occasionally visible and is a low sand beach, with some timbered hills on Hatteras Island. The light house is often visible when nothing else can be seen. The light vessel should always be visible except in very thick weather and, next to the lead, is the best and most useful guide past the shoals.

Life Saving Stations Nos 21, 22, and 23 face on this sheet. They are very efficiently manned.

Although very useful, the light vessel cannot be seen far enough in hazy weather to make the approach (especially from the southward) safe in hazy weather unless very careful attention be paid to the lead.

Another lightvessel several miles to the westward of the present station would be very useful.

There is a station of the weather bureau at Hatteras Inlet and the Life Saving Stations are provided with the International Code Signals. They also have telephonic connection with the telegraph

station of the weather bureau.
During the summer, southwest winds prevail. Gales from any quarter are liable to occur. Northeast and southeast gales are most troublesome and the very worst storms are the tropical hurricanes which follow the course of the Gulf Stream along our coast.
During the month of August, 1900, dense smoke, almost as bad as fog, was nearly continuous. Wrecks usually occur in the case of vessels coming from the southward in thick weather, so far as the outer shoals are concerned.
Of course vessels are sometimes driven upon the beach by sheer stress of weather, but this should not happen with a steamer. The rather frequent wrecks of steamers on the outer shoals point clearly to neglect of the lead. The currents around these shoals are very strong and irregular and may very readily throw a ship several miles to the westward of her dead reckoning so that she will sight neither of the lights, in thick weather.
When approaching these shoals, under such conditions the speed should be reduced if necessary and the lead kept going at pre-

quent intervals until bottom is found, when care should be taken not to get into less than 20 fathoms, or preferably 30 fathoms.
The 10 fathom curve is here very irregular, having all sorts of loops and bends and running close up to the outer shoal, but the 20 and 30 fathom curves are quite regular in direction and by following them up the Lightvessel should be easily found.
A stranded vessel should usually hold together for some time and as a general rule it is safest for the crew to stay by the ship, if possible, until the Life Saving Crew can make an attempt to rescue them.
When a vessel is driven upon the beach the anchors should never be let-go or if already over they should be slipped as soon as she strikes in order that the ship may be carried as close in towards shore as possible. On the outer shoals it may sometimes be advisable to let-go the anchors to prevent the ship, if stove in, from beating over into a deep sea and sinking at once.

M. C. Hodgkins
Chief of Party