2119

Diag. Cht. No. 1240-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ..... Office No. 2119

LOCALITY

State South Carolina

General locality Beaufort

Locality River

1892

~~194~~

CHIEF OF PARTY

C. G. Vreeland

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DATE .....

1870 1 (1)++

2119

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U. S. COAST AND GEODETIC SURVEY.

T. C. Mendenhall, Superintendent.

State: South Carolina

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 2119

LOCALITY:

Beaufort River, S.C.
From Bay Point to
Battery Creek.

1893

CHIEF OF PARTY:

C. E. Ireland, Lieut. Asst. C.G.S.

Descriptive Report, Beaufort River, S.C.

1. Beaufort River, S.C. From Bay Point to Battery Creek. Sheet 1
(For Statistics see appended Form 11.)

2. Sheet 1 comprises Beaufort River from its mouth in Port Royal Sound to the mouth of Battery Creek, just below the town of Port Royal.

The harbor, being the river and all inside of the bar, is admirably protected from the sea. Much of the river bed is composed of phosphate rock, affording good holding grounds. This rock is apparently irregularly distributed, and the navigator should use the lead and carefully note the nature of the bottom before coming to. The shores lining the river are generally low and marshy, the ground back being slightly elevated and covered with clumps of trees.

The river is navigable for heavy-draught vessels up to Port Royal, and for medium

draught up to Beaufort. Above Beaufort vessels of light draught may pass through into the Coosaw River.

Both steam and sailing vessels are engaged in the carrying trade.

3. No new information under this head.

4. The least channel depth at low water is 21 feet.

There are no dangers in the channel and those near the channel are well marked by buoys.

Vessels may enter as far as the anchorage above the Naval Station without the assistance of a pilot. The pilot boats usually cruise in the vicinity of the mouth of the river or in Port Royal Sound.

Pilot fees are compulsory.

There is no regular towboat service, but the use of any of the boats belonging to the phosphate companies may be had on application. A days notice may be required, however.

5. The Channels seem to be of a permanent nature, the outlines and depths varying but little from those derived from the original survey.

Nowhere within the limits of the sheet are there any shifting bars lying across the Channel.

Good anchorage can be had in the river Channel, or in Port Royal Sound, or in Broad River. The usual anchorage for vessels awaiting their turn at the docks is the pocket a short distance above the Naval Station

No harbor improvements are in progress, but there is much local talk of improvements to be made at Port Royal in the near future.

6. The tides Ebb and flow in the direction of the channel.

The flood runs about ten minutes after high water, and the Ebb about twenty minutes after low water.

7. The general Characters of Channel and Shoals remain unchanged. The shore line around Bay Point and above

Station Cork has made out into the river in places. The sand spit at the mouth of Ballast Cork, near Quarantine Station, has grown: at low water it is dry and extends to within a short distance (about 50 metres) of the upper end of Moore Island. The upper end of Moore Island has been cut away correspondingly.

It is said that formerly vessels were in the habit of dumping ballast in this vicinity, which may account for the changes noted.

8. No new information obtained

9. No new information obtained

10. There are no life-saving Stations.

No hospitals. A naval hospital is contemplated at the Naval Station

11. The Quarantine Station is on the right bank of the river, about a mile below the Naval Station. Vessels usually anchor just below Quarantine to await "pratique". A pamphlet containing the quarantine regulations accompanied the report made by me at the close of the Oyster work in this vicinity - June, 1892.

12. The R. R. Co. at Port Royal will supply fresh water at their docks from an artesian well in the vicinity. There is also a water boat which will supply fresh water from a spring above Beaufort.
Provisions can be had in Port Royal or Beaufort on demand. Pickled beef or pork in large quantities will have to be ordered a week in advance.
Rope, hawsers, lubricating oil, small stuff, blocks, oars, &c, may be had from dealers in Beaufort.
Coal may be obtained from the R. R. Co after one weeks notice the kind supplied being Alabama soft coal at market price, about $3.75 per short ton. Coal may also be obtained from the phosphate companies in the vicinity, when they have it on hand.
Wood may be obtained from dealers in Beaufort.
At the works of Phosphate Mining

Co., Limited, situated on Battery creek about three (3) miles above Port Royal, are a blacksmith shop and a small machine shop consisting of two lathes and one drill press. The machine shop is adapted especially for making their own repairs, but may be used in case of emergency for making ordinary repairs to the machinery of vessels. They also have a small marine railway for vessels of about 30 tons.

There is a small machine shop at the Sea Island Chemical Works, situated on Beaufort river, about four (4) miles from Port Royal by water. The erection of extensive machine shops will probably follow the completion of the dry dock at the Naval Station.

13- The face of the Naval Station wharf fronting the river has a length of 1650 feet and a minimum depth alongside of 15 feet. The north side of the wharf will accomodate about

a 10-foot draught. It is probable that upon the completion of the dry dock the extent of the wharf and depth of water alongside will be greatly increased.

The railroad wharf at Port Royal will receive vessels of 20 feet draught. The several phosphate companies have extensive wharves, alongside of which a pocket is dredged out for deep-draught vessels (about 22 feet). The vessel is taken alongside at high water and remains in the pocket while loading, and when loaded is again moved at high tide.

14 Cautionary weather signals are displayed from a flag pole in Port Royal.

There is no time ball displayed, but the noon signal may be obtained at the telegraph station in Port Royal or Beaufort.

15. There is no branch hydrographic office in the vicinity. No information regarding the other items under this head was obtained.

16. A timber dry dock at the naval station is in course of construction and when completed will admit the largest vessels. A marine railway for vessels of about 80 tons is located at the work of the Phosphate Mining Co, on Battery Creek, about two (2) miles above Port Royal.

17. The only passenger steamers at present are the local steamers plying between Savannah, Ga. and Beaufort and between Charleston and Beaufort. The one railroad running to Port Royal connects with the north, south, and west. The Western Union Telegraph Co. has offices at Port Royal and Beaufort, where are also located the post offices.

18. The Custom-house is at Beaufort

19. —

20 and 21 call for no remarks.

Very respectfully,
C. E. Vreeland,
Lt. U.S.N. Asst C. & S. Survey

U. S. Coast and Geodetic Survey. [Form 11.—Statistics of Field Work.]

Statistics of Field Work executed by H. T. Blake

Date of beginning field work	March 3/92
Date of closing field work	May 4/92
RECONNAISSANCE:	
Area of, in square statute miles	
Lines of intervisibility determined as per sketch submitted	
Number of points selected for scheme	
BASE LINES:	
Primary, length of	
Secondary, length of	
Beach measurements, length of	
Number of days employed in measurements of base	
Number of days employed in re-measurements	
TRIANGULATION:	
Area of, in square statute miles	
Signal poles erected, number of	
Observing tripods and scaffolds built, number of	
Observing tripods and scaffolds built, heights of	
Days occupied in opening and verifying lines of sight, number of	
Stations occupied for horizontal measures, number of	
Stations occupied for vertical measures, number of	
Geographical positions determined, number of	
Elevations determined trigonometrically, number of	
GEODESIC LEVELING:	
Elevations determined by spirit-leveling of precision, number of	
Lines of geodesic leveling, length of	
LATITUDE, LONGITUDE, AND AZIMUTH WORK:	
Latitude stations occupied, number of	
Pairs of stars observed for latitude, number of	
Average number of observations on a pair	
Longitude stations, telegraphic, number of	
Longitude stations, telegraphic, number of nights on which signals were exchanged	
Longitude stations, chronometric, etc., number of	
Azimuth stations, number of	
Number of nights of observations for azimuth	
Number of stars observed for azimuth	

GRAVITY DETERMINATIONS:

Number of pendulum stations occupied

MAGNETIC WORK:

Stations occupied for observations of the magnetic declination, number of

Stations occupied for observations of the magnetic dip, number of

Stations occupied for observations of the magnetic intensity, number of

TOPOGRAPHY:

Area surveyed in square statute miles

Length of general coast-line in statute miles

Length of shore-line of rivers in statute miles

Length of shore-line of creeks in statute miles

Length of shore-line of ponds in statute miles

Length of roads in statute miles

Topographic sheets finished, number of

Topographic sheets, scales of

Topographic sheets, limits and localities of:

HYDROGRAPHY:

Area sounded in square geographical miles	10
Number of miles (geographical) run while sounding	222.3
Number of angles measured	2658
Number of soundings	24661
Number of tidal stations established	2
Number of specimens of bottom preserved	16
Current stations, number of	
Hydrographic sheets finished, number of	1
Hydrographic sheets, scales of #1	10.000

Hydrographic sheets, limits and localities of:

Lat 32° 16' 15" to 32° 22½ 30" N
Long 80° 36' 45" to 80° 41' 40" W
Beaufort River, S.C.

PHYSICAL HYDROGRAPHY:

Number of soundings on cross-sections	
Current stations, number of	
Deep-sea current stations, number of	
Deep-sea surface current observations, number of	
Deep-sea sub-surface current observations, number of	
Number of observations of density of water	
Number of observations of temperature of water	
Tidal stations established, number of	
Miles (geographical) run in deep-sea sounding	
Number of deep-sea soundings	
Number of specimens of bottom preserved	

Locality of work; results, how shown, etc.: