

8079

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

AUG 14 1934

Acc. No.

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: Louisiana

DESCRIPTIVE REPORT

Topographic }
Hydrographic }

Sheet No. Letter D 6079

LOCALITY

Mississippi Delta

East of Bastian Pass and

Vicinity of Lake Grande Ecaille

1934

CHIEF OF PARTY

Thos. B. Reed

U. S. GOVERNMENT PRINTING OFFICE: 1923

6079

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 6079

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field ~~No.~~ Letter "D"

REGISTER NO. 6079

State Louisiana
General locality Mississippi Delta
Locality East of Bastian Pass and Vicinity of Lake Grande Ecaille
Scale 1:20,000 Date of survey April and May, 1934
Vessel Field Party No. 4.
Chief of party Thos. B. Reed
Surveyed by T. F. Squires
Inked by Thos. B. Reed
Heights in feet above ----- to ground to tops of trees
Contour, Approximate contour, Form line interval feet
Instructions dated October 27, 1933
Remarks: Plane table survey made in conjunction with photo-
topographic survey of entire area.

DESCRIPTIVE REPORT
to accompany

Topographic Sheet "D", East end of Shell Island to Long. 89° 31.5'
and vicinity of Lake Grande Ecaille.

Barataria Bay, Louisiana. Field Party No. 4.

Thos. B. Reed, Chief of Party.

DATE OF INSTRUCTIONS: October 27, 1933.

DATE OF SURVEY: April and May, 1934.

SOUTH SECTION OF SHEET

SURVEY METHODS:

This plane table survey was made in conjunction with a photo-topographic survey of the entire Barataria Bay area and consisted only in delineation of the outer shore line and location of hydrographic signals along the outer coast. The usual plane table methods were employed, except that distances in traverses were measured along the beach with a 100 meter wire.

A traverse was run along the beach from ISLAND 2 to SCOFIELD. This traverse closed 11 meters long and was adjusted. A traverse was then run from signal SUM to signal CUB and measured in both directions as a check.

CONTROL:

Control for this section of the sheet consisted of triangulation stations ISLAND 2, 1934 and SCOFIELD, 1922.

GENERAL DESCRIPTION OF COAST:

The coast line in this region is characterized by a fringe of low sandy beach backed by marsh. There are no land marks of any importance along this section of coast line. The tidal range in this region is only 1 foot and, except where shown there is little difference between the high and low water lines.

COMPARISON WITH PHOTO-TOPO SHEETS:

Considerable difference exists in various places on this sheet with the shore line as compiled from the photographs. This is due mainly to the instability of the outer shore line in this region and partly to the interpretation of the high water line from the photographs on a low sand beach such as this.

A small sand island has formed in the pass about 200 meters east of ISLAND 2 since the photographs were taken, and the island 700 meters S. E. of ISLAND 2 has changed completely in form. The shore line of Pelican Island has changed considerably, especially the point to the westward of Bayou Scofield which has built out over 300 meters. This area is very shoal and probably changes with every storm. Except for considerable washing away between signals POK and CUB, the shore line to the eastward from the mouth of Bayou Scofield has remained about the same.

The sand beach in this region is very low and the shore line unstable and changes in the outer shore line in the two years since the photographs were taken are to be expected.

NORTH SECTION OF SHEETSURVEY METHODS:

This section of the sheet was used to show changes around Lake Grande Ecaille since the photographs were taken. A canal has been dredged from the Mississippi River and a large Sulphur Plant established on the shore of Lake Grande Ecaille. The Freeport Sulphur Company has expended about twenty million dollars in this region and improvements are still in progress. The sulphur is obtained from wells and pumped to the docks at the Mississippi River. The Humble Oil Company also has a number of oil wells in the area south and south east of WASH.

A large print obtained from the Freeport Sulphur Company and showing the plant layout and Freeport Canal accompanies this sheet. The section of the Freeport Canal shown on the sheet and the plant layout and shore line by the plant were transferred from this print after being verified by the field party. The canal may be slightly in error in orientation at the north end. It was oriented by measurements taken by the photo-topo party at station RATTLESNAKE and the measurements did not check very well to various details on the print. In case a difference exists between the north section of the canal and that transferred by the air photo party to their sheets, it is recommended that their location be used. *See review for T5310, Air Photo sheet. This detail should be taken from T5310. Bgg.*

Topographic details in the vicinity of station WASH were transferred to the sheet from the air photo sheet and changes since the time of the photographs were rodded in by plane table. The enlargement of the air photo sheet from which the transfer was made was considerably out of scale and the details transferred may be slightly in error. The new canals south east of WASH were rodded in by plane table. These are small private canals to oil and sulphur wells in the vicinity and may be filled in when the wells are abandoned. The canal just west of WASH was dredged by the Humble Oil Company to oil wells south of WASH.

The canals to the north east of WASH have been entirely filled in by dredging as shown and the area to the northeastward of WASH is being filled in at present by a dredge as a part of the Sulphur Company's improvements. The section of shore line to the north east of WASH was rodded in by plane table to as far south as shown in ink. where the mud was so soft that it was not possible for the rodman to continue. The shore line extends approximately as shown by the dotted pencil line to a junction with the air photo shore line.

The only landmarks of any prominence on this sheet are the Freeport Water Tank (about 125 feet high) and the large building immediately to the northward.

CONTROL:

Control for this section of the sheet consisted of triangulation stations WASH, 1927; FREEPORT WATER TANK, 1934; AND, 1934; and RATTLESNAKE, 1934.

*No report on Geographic Names.
Names on this survey approved
except Pelican Island which
requires further investigation
H. Bacon*

Nov. 5, 1934

Respectfully submitted,

Thos B Reed

Thos. B. Reed,
Lieut., C. & G. Survey,
Chief of Field Party No. 4.