

5790

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 27 1935

Acc. No. _____

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 5
Hydrographic }

State Louisiana

LOCALITY

~~Wax Lake and a part of~~

Atchafalaya Bay

Central Part of Wax Lake

1934 and 35.

CHIEF OF PARTY

Thos. B. Reed

5790

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

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

Field No. 3

REGISTER NO. **5790**

State Louisiana

General locality Achafalaya Bay *(Land)*

Locality Central & Wax Lake
~~Wax Lake and a Part of Achafalaya Bay~~

Scale 1:20,000 Date of survey Dec. 4, 1934 to Feb 19, 1935

Vessel Field Party No. 4.

Chief of Party Thos. B. Reed

Surveyed by J. F. Mailwain

Protracted by T. F. Donlon

Soundings penciled by T. F. Donlon

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by ^{H.V.} Bennett Silverberg

Verified by M. Silverberg

Instructions dated June 26, September 15, 19 34

Remarks:

H5790

DESCRIPTIVE REPORT
to accompany

Hydrographic Sheet No. 3, Wax Lake and Part of Atchafalaya Bay.

Louisiana

Field Party No. 4.

Thos. B. Reed, Chief of Party

Project H.T. 156

DATE OF INSTRUCTIONS: June 26 and September 15, 1934; Telegram dated August 14, 1934; Letter dated December 24, 1934 No. 22-RS 1990 (4).

DATE OF SURVEY: December 4, 1934 to February 19, 1935.

SURVEY METHODS:

This survey was made by the usual launch hydrographic methods, using a standard lead line for the deeper soundings and a pole for soundings up to about 11 feet.

DISCREPANCIES:

Discrepancies in the records necessitating changes of objects or angles by the smooth plotter are noted in the sounding records. The sunken wreck located on positions 58 and 59w was salvaged on May 9, 1935 and the wreck symbol was removed from the sheet. (See notes on page 57 Vol. 9 and page 25, Vol. 10). Positions 110h to 118h (red) were transferred to this sheet from Sheet No. 4.

Not charted.
No further con-
sideration nec-
essary. W.M.M.

Cut-off Channel Beacon (shown on Chart No. 199 as Bn PS) and Beacon No. 5 have been destroyed and should be removed from the chart. All other beacons and lights existing in the area are shown on the sheet. Temporary water signals are shown by notes on the smooth sheet.

GENERAL DESCRIPTION:

This sheet includes Wax Lake, Wax Lake Pass and a part of Atchafalaya Bay. With the exception of Belle Isle and the northern end of the sheet near Station POSSUM there are no trees near the shore line of the area covered by this sheet. Except for the above two areas the entire region is marsh. Negro Hammock, shown on Chart No. 199, to the westward of Wax Lake Pass is gone. This area is now all marsh.

There are a considerable number of shoals and oyster reefs in the southwestern part of the sheet. Oyster reefs too shoal to be crossed by the sounding launch were sketched on the boat sheet by the hydrographer.

The line of soundings between positions 31b' and 38b' was run about 50 meters west of a line of brush stakes, marking the channel. This channel is very narrow, being only about 20 feet wide and has been dug out of the mud and kept open largely by propellor action of tug boats of a shell dredging company which makes almost daily trips between Morgan City and their dredging operations on Point au Fer Reef.

Also noted on H-5789.
Note placed on sheet.
W.M.M.

COMPARISON WITH PREVIOUS SURVEYS:

Copies of hydrographic sheets of the 1885 and 1909 surveys in this area are not available for making a comparison. A general comparison with Chart No. 199 shows considerable change since the old survey; especially in the shoal areas on the southern part of the sheet. *Comparison with actual surveys shows close agreement in many areas. For further details, see Review.*

JUNCTION WITH CONTEMPORARY SURVEYS:

This sheet joins on the east with Sheet No. 2, on the south with Sheet No. 4 and on the west with Sheet No. 5.

RECOMMENDATION FOR ADDITIONAL FIELD WORK:

On both sides of Wax Lake and included within the area of New Chart No. 1276 there are a large number of bayous, practically all of which are navigable. While the amount of navigation in them at present is small, they should be charted to make the new chart complete. It is recommended that after the air photo survey of the area is completed, these bayous be sounded.

GEOGRAPHIC NAMES:

Geographic names shown on this sheet which agree with those on Chart No. 199 were checked with local residents and are correct as shown. The two bayous entering East Bay are known locally as "Big Hog Bayou" and "Little Hog Bayou" and are named incorrectly on Chart No. 199. These names are shown correctly on the U. S. Engineers Belle Isle quadrangle.

TIDE REDUCERS:

Tide reductions are shown on the attached sheets.

Respectfully submitted,



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

Statistics for Sheet No. 3

| YEAR 1934-35 | DAY | VOL. | STATUTE MI. | NUMBER | NUMBER |
|-----------------|--------|---------|-------------|-----------|-----------|
| DATE | LETTER | No. | SDG. LINES | SOUNDINGS | POSITIONS |
| Dec. 4 | a | 1 | 23.3 | 795 | 96 |
| " 5 | b | 1 | 24.9 | 824 | 108 |
| " 7 | c | 1 & 2 | 25.6 | 780 | 120 |
| " 8 | d | 2 | 34.5 | 913 | 113 |
| " 9 | e | 2 & 3 | 36.0 | 921 | 126 |
| " 10 | f | 3 | 12.0 | 340 | 50 |
| " 12 | g | 3 & 4 | 43.7 | 1074 | 131 |
| " 20 | h | 4 | 44.0 | 1040 | 126 |
| " 30 | j | 4 | 4.2 | 106 | 13 |
| Jan. 3 | k | 4 & 5 | 30.3 | 739 | 85 |
| " 4 | l | 5 | 21.5 | 484 | 64 |
| " 5 | m | 5 | 36.3 | 854 | 98 |
| " 6 | n | 5 & 6 | 17.2 | 405 | 81 |
| " 7 | p | 6 | 53.7 | 1218 | 139 |
| " 8 | q | 6 & 7 | 34.5 | 703 | 99 |
| " 9 | r | 7 | 57.1 | 1333 | 158 |
| " 10 | s | 7 & 8 | 55.5 | 1288 | 158 |
| " 11 | t | 8 | 33.7 | 828 | 117 |
| " 12 | u | 9 | 47.0 | 1066 | 133 |
| " 13 | v | 9 & 10 | 36.3 | 876 | 122 |
| " 14 | w | 10 | 22.4 | 557 | 68 |
| " 15 | x | 10 | 22.2 | 516 | 63 |
| " 24 | y | 11 | 22.7 | 632 | 81 |
| " 25 | z | 11 | 21.9 | 515 | 68 |
| " 26 | a' | 11 & 12 | 44.7 | 1126 | 145 |
| " 28 | b' | 12 | 23.3 | 555 | 73 |
| " 29 | c' | 12 | 17.0 | 461 | 80 |
| " 30 | d' | 12 & 13 | 19.4 | 478 | 72 |
| Feb. 5 | e' | 13 | 9.0 | 230 | 33 |
| " 19 | f' | 13 | 1.8 | 63 | 15 |
| TOTAL ----- | | | 875.7 | 21,720 | 2,830 |

No. Sq. Miles, Area of Soundings --- 85.0

HYDROGRAPHIC SURVEY NO. H5790

Smooth Sheet 1

Boat Sheet 1

Sounding Records 13 Vols. _____

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567) ~~No~~ Yes

Statistics Yes

Approved by Chief of Party T. B. Reed

Recoverable Station Cards (Form 524) None

Special Chart for Lighthouse Service
(Circular Nov. 30, 1933) None

Remarks _____

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **..5790**

The following statistics will be submitted with the cartographer's report on the sheet:

| | |
|--|-----------------|
| Number of positions on sheet | 2830 |
| Number of positions checked | 43 |
| Number of positions revised | 0 |
| Number of soundings recorded | 21,720 |
| Number of soundings revised | 10 |
| Number of signals erroneously plotted or transferred | 0 |

Date: AUG 10, 1935

Inked by H.V. Bennett
Verification by M. Silverberg

Review by Harold W. Murray
Ver. Corrections ..

| | |
|-------|----------|
| Time | 26 hr. |
| Time: | 63 hr |
| | <hr/> |
| Time: | 89 hr. |
| | 10 1/2 " |
| | 54 " |

VERIFICATION REPORT H-5790 (1935)

1. CONFORMITY TO HYDROGRAPHIC MANUAL

The sounding records are neat and legible and conform to the requirements of the hydrographic manual. No datum was shown on the smooth sheet. All discrepancies necessitating changes by the smooth plotter are noted in the sounding records. See Rev. for
add'l remarks
X-44

2. DEPTH CURVES

The zero curve is found in only one spot. The six, twelve, eighteen and thirty foot curves are complete within the limits of this survey. The sixty foot curve is found in only one place.

3. FIELD PLOTTING

The field plotting was complete to the extent required for the soundings. The hydro signals in the water are of a temporary nature and therefore no description is shown. Authority for the line of piling for hyacinth barricade and the movable log boom is found in records P. 22 Vol. 2 opposite 111c-112c. (Lat. 29-38.8', Long. 91-23.6'). Agrees with
T-6178(1934)

Discrepancies:

Doubtful crossing- 5' falls outside 8' (Lat. 29-33.1', Long. 91-24.3') ✓

* 1 1/2' falls between 4' and 8' on line 66b'-67b' (Lat. 29-24.2', Long. ✓

91-28.8')

* Accepted. Sounding of 4' confirmed
by 4 m # 5824(1935)

4. OFFICE PLOTTING

File at (Lat. 29-28.2', Long. 91-20.6') see Pos 1z Vol. 11 ✓

File at (Lat. 29-27.6', Long. 91-21.2') see Pos 2z Vol. 11 ✓

The shoal reefs at (Lat. 29-25' Long. 91-29.5') were taken from the boat sheet. ✓

For location of sunken dredge (Lat. 29-24.7' Long. 91-29.5') see detached position P. 43, Vol. 12. ✓

Temporary hydro signal BUC was transferred from H-5824(1935) and the line 110h-118h (red) (Lat. 29-24.5' Long. 91-28') was plotted on this survey, since it fell off the other sheet. The fixes and soundings were transferred to Vol 13 and made a part of this survey. ✓

5. JUNCTIONS

Junction was made with H-5789(1935) to the west. The agreement was good but because the soundings varied a little around 6 ft. it was necessary to change the 6 ft. curve on both surveys somewhat. Junctions with H-5824(1935) to the south and with H-5852(1935) to the east could not be made since these surveys have not been verified to date. Curves which might be affected by these junctions were left in pencil. ✓

6. REMARKS

Since depths to the nearest 1/2 ft. were recorded and plotted in the field, they were carried forward in the office according to the rules prescribed in the Manual. The line of brush stakes marking the channel as noted under PP "General Description" of this report, were not plotted since no further information was available. Decision is left to the reviewer. The H.W.L. was compared with T-6300(1934). ~~No compilation is available or contemplated.~~ Note placed
on sheet.
X-44 See Rev. for other surveys.

Respectfully submitted,

August 10, 1935

M. Silverberg

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 11, 1935

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
13 volumes of sounding records for

HYDROGRAPHIC SHEET 5790

Locality Central Part and Wax Lake, Atchafalaya Bay, Coast of Louisiana

Chief of Party: Thos. B. Reed in 1934 - 1935

Plane of reference is mean low water reading

3.8 ft. on tide staff at Coal Boat Pass (Wax Lake Pass)

1.7 ft. below B.M. 1

3.7 ft. on tide staff at Junction of Wax Lake and Little Wax Bayou (Little
Wax Bayou Entrance)

2.0 ft. below B.M. 1

2.6 ft. on tide staff at Point Chevreuil

2.3 ft. below B.M. 1

1.4 ft. on tide staff at Eugene Island

4.2 ft. below B. M. 1

2.6 ft. on tide staff at Deer Island, Bayou Entrance

2.1 ft. below B. M. 1

2.6 ft. on tide staff at Blue Hammock Bayou, Atchafalaya Bay

2.3 ft. below B. M. 1

Height of mean high water above plane of reference is 1.2 ft. at Coal Boat Pass
(Wax Lake Pass); 1.1 ft. at Little Wax Bayou Entrance (Junction Wax Lake and

~~Condition of records satisfactory except as noted below~~

Little Wax Bayou); 1.1 ft. at Point Chevreuil; 1.3 ft. at Eugene Island; 1.1 ft.
at Deer Island, Bayou Entrance; 1.2 ft. at Blue Hammock Bayou, Atchafalaya Bay.

Condition of records satisfactory except as noted below:

Ham
Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5790 (1934-35) FIELD NO. 3

Central Part and Wax Lake, Atchafalaya Bay, La.
Surveyed in 1934-35
Instructions dated June 26, 1934 (T. B. Reed)

Hand Lead and Pole Soundings.

3 Point fixes on shore signals.

Chief of Party - Thos. B. Reed.
Surveyed by - J. F. McIlwain.
Protracted by - T. F. Donlon.
Soundings penciled by - T. F. Donlon.
Verified and inked by - H. V. Bennett and M. Silverberg.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. A number of piles and the low water line originating with contemporary topographic surveys were not shown on the smooth sheet. These were added in the office.
- b. The geographic reference datum was not indicated on the smooth sheet. This was added in the office.

The "Descriptive Report" is very clear and comprehensive and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Shoreline and Signals.

The shoreline on this sheet originates with Plane Table Surveys T-6178 (1934), T-6299b (1934) and T-6300 (1934). The topographic signals used originate with T-6299b (1934) and T-6300 (1934).

4. Sounding Line Crossings.

Sounding line crossings are satisfactory.

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn, except the low water curve which was transferred from the contemporary topographic surveys in the office.

6. Junctions with Contemporary Surveys.

- a. The junction on the east with H-5789 (1934-35) is satisfactory.
- b. The junction on the south with H-5824 (1935) and on the west with H-5852 (1935) will be considered in the reviews of those surveys.

7. Comparison with Prior Surveys.

| | |
|---------------|---------------|
| H-658 (1858) | H-2997 (1909) |
| H-1763 (1887) | H-2999 (1909) |

Soundings of the above surveys in the broad flat areas generally agree within 1 to 2 feet with those of the present survey. In the deeper areas, numerous changes have occurred with depths on the present survey being deeper in some cases and shallower in others. The numerous shoal areas and oyster reefs located on the old surveys are adequately developed on the present survey and should be superseded by that survey for charting purposes. The only exception is the 2-1/2 foot sounding (not charted) originating with H-658 (1858) in latitude 29° 25.2', longitude 91° 24.6', which was carried forward. This 2-1/2 is one of three similar soundings obtained on line and falls about 60 m. from two lines of 6 foot soundings on the present survey. The surrounding depths on both surveys are in excellent agreement.

8. Comparison with Chart No. 199 (Corrected to Jan. 26, 1934).

a. Hydrography.

- (1). Soundings shown on the chart within the limits of the present survey originate with surveys discussed in preceding paragraphs and need no further consideration in this review. In connection with previous chartings of the above soundings, it is noted that a number of soundings on some prior surveys are charted approximately 140 m. northward, whereas others on other surveys are charted 100 m. eastward of their correct geographic positions. These differences are probably due to either incorrect datum adjustments or to former obsolete charting methods. These differences, in turn, account for a portion of the apparent changes in positions and depths of numerous shoal spots noted by the field party and based on comparisons with the chart. (See D. R., page 2).
- (2). The charted hydrography in the small streams emptying into Wax Lake and Wax Lake Pass, and not covered by the present survey, originate with H-2997 (1909), H-2998 (1909), H-2998a (1909), and blue print 14578 (1913),

the latter being a private survey. In view of the general good agreement existing between these surveys and the present survey at the entrance to the various streams, they should be used for charting purposes in those areas which fall outside the limits of the present survey.

b. Fixed Aids to Navigation.

- (1). Beacons located on the present survey are in practically the same positions as charted. However, with Beacon "5" destroyed (see next par.), Beacons "3" and "9" do not adequately mark the channel across the extensive shoal area in the vicinity of latitude $29^{\circ} 26.0'$, longitude $91^{\circ} 24.8'$. Also, Beacons "9" and "11" do not mark the best water leading into the Atchafalaya River channel. These beacons mark the outoff channel across Atchafalaya Bay which according to the latest Coast Pilot is good for a draft of 6 feet. Such draft could be maintained by a change in location of some of the beacons marking this channel. (See also Beacon "4" on H-5852 to the westward and Beacon "13" on H-5789 to the eastward). This matter has been referred to the Lighthouse Bureau.
- (2). Charted Beacons "PS" (latitude $29^{\circ} 25.9'$, longitude $91^{\circ} 28.3'$) and "5" (latitude $29^{\circ} 26.1'$, longitude $91^{\circ} 24.7'$) have been destroyed according to the field party's notation in the Descriptive Report (page 1). However, this office has no record of these beacons having been permanently discontinued. These beacons should be retained on the chart pending further information from the Lighthouse Bureau.

c. Controlling Depth in Channels.

The charted controlling depth of 6 feet as of June 1933 is borne out by the present survey (vicinity of latitude $29^{\circ} 25.5'$, longitude $91^{\circ} 20.3'$) and is a safe depth to carry although several feet more can be carried in a narrow restricted channel.

9. Field Plotting.

Field protracting and plotting of soundings are excellent and conform to the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

This is an excellent survey and no additional field work is required. However, attention is directed to the Chief of Party's

recommendation in the Descriptive Report (page 2) regarding the desirability of surveying the navigable bayous on both sides of Wax Lake which were not covered by the present survey.

11. Note to Compiler.

Attention is directed to the continued use of prior surveys discussed in paragraph 8a (2) and to destroyed beacons discussed in paragraph 8b (2) of this review.

12. Superseding Previous Surveys.

Within the area covered, H-5790 (1934-35) with the indicated additions from prior surveys, supersedes the following surveys for charting purposes:

| | | |
|--------|--------|---------|
| H-658 | (1858) | in part |
| H-1763 | (1887) | " " |
| H-2997 | (1909) | " " |
| H-2999 | (1909) | " " |

13. Reviewed by - Harold W. Murray, October 5, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

K. T. Adams
Acting Chief, Division of Charts.

J. Borden
Chief, Section of Field Work.

G. Wade
Chief, Division of H. & T.

Applied to Chest 1050 May 1937 Chas R. Bush J
" " " 1276 Aug. 1937 J.A. G.
Applied to Chest 880 June 6, 1949 Helmer (Residence Pt. Bayview area)