

5457

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
JUN 6 1934
Acc. No. _____

5457

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

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. D
Hydrographic }

State LOUISIANA

LOCALITY 5457

Gulf of Mexico

Calcasieu Lake

Southern Part

1933
1934

CHIEF OF PARTY
J. C. Bose

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST AND GEODETIC SURVEY
LIBRARY AND ARCHIVES
JUN 6 1934
Acc. No. _____

REG. NO. 5457

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. "D"

REGISTER NO. 5457

State Louisiana

5457

General locality Gulf of Mexico

Locality Calcasieu Lake, ^{large} Southern Part

Scale 1:20,000 Date of survey Sept., 1933-Mar., 1934

Vessel Party No. 6, Project HT-138

Chief of Party J.C. Bose

Surveyed by J.C. Bose and F. Houston

Protracted by H.R. Burfford

Soundings penciled by H.R. Burfford

Soundings in fathoms feet

Plane of reference 0.5 Ft. below mean water level

Subdivision of wire dragged areas by

Inked by E. R. Behn

Verified by E. R. Behn + L.S. Straw

Instructions dated September 8, 1933, 19

Remarks:

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET (Field) No. D

Instructions. The survey was made in accordance with Instructions dated September 8, 1933.

Limits. The area covered by sheet D is the southern half of Calcasieu Lake, from latitude 29 54.6' to latitude 29 50'.

Survey Methods. The survey was made by launches in accordance with the usual methods of launch hydrography. Positions were determined by sextant fixes. Soundings were taken with a sounding pole, graduated in feet and tenths. The pole had a wooden disk at its lower end to prevent it from sinking into the mud. However, at the northern end of Calcasieu Pass, near Δ LAKE, where the water is deep, the soundings were taken with a leadline.

General Description. As in the northern half, (Sheet C), the lake is very shallow and the bottom quite flat. The only boats seen on the lake were those of trappers, hunters, and fishermen; also a few small tugs with barges. Oil wells are drilled in the lake from time to time (as at \odot Well). The usual draft of boats using the lake is between 3 and 5 feet.

While a few boats use the lake in traveling between Calcasieu Pass and Calcasieu River, the western part of the lake, (west of \odot Pan), has no importance. This part of Calcasieu Lake is called West Cove. It is very shallow and, as there is no settlement on its marshy shore, only a few fishermen, trappers, and hunters use it.

Channels. A dredged channel leads from the northern end of Calcasieu Pass into the lake. This channel is marked by piles and the channel passes 70 feet east of the piles. The controlling depth of the channel is 4 $\frac{1}{2}$ feet, which is less than the depth that can be carried northward through the lake. See Volume 4, Pp. 45-48, for the channel line. The launch was steered by the launch operator, who knows Calcasieu Lake and Calcasieu Pass well.

+ Controlling depth is 4 feet (4.3)
Pos. 9-102 (blue)
H. J. ...

Shortly after the channel line of soundings was run, a small tug, towing some barges, was seen to go aground in mid-channel and slowly work its way through. The bottom is quite soft and vessels drawing somewhat more than the least sounding can get through. Boats should keep about 100 meters west of the west end of the stone jetty and follow along the line of piles. The course is 30° true.

On the last day of the survey, a dredge was seen at the northern end of Calcasieu Pass and the chief of party was informed that a contractor, by the name of W. T. Burton, was doing the dredging for the purpose of obtaining oyster shells for construction purposes. Many bargeloads of shell were seen being towed north. While the purpose of the dredging operations is the obtaining of shell, rather than the deepening of the channel; it is likely that, as a result, navigation through the pass may be made more easy by the removal of oyster reefs.

J. C. Bose
J. C. Bose,
Chief of Party.

Note of Inspection.

Due to the fact that the chief of party was transferred to the ship OCEANOGRAPHER before the plotting of the sheet was completed, the inspection was not a very thorough one. Several scattered positions and soundings were checked. ✓

J. C. Bose

STATISTICS TO ACCOMPANY HYDROGRAPHIC SHEET FIELD NO.D

Calcasieu Lake, La.
(Southern Half)

Statute miles of sounding lines ----- 259

Number of soundings ----- 10723

Number of positions ----- 1484

LAC
82

June 11, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 5457

Locality Calcasieu Lake, Southern Part, La.

Chief of Party: J. C. Rose in 1933-34

- * Plane of reference is mean low water reading
0.5 ft. on tide staff at Tri. Sta. LAKE at No. 1 position.
2.4 ft. ~~below B.M. 1~~ on tide staff at Tri. Sta. LAKE at No. 3 position.
1.9 ft. below B.M. 1

*Since there is practically no periodic tide, the plane of reference was taken as 0.5 foot below mean water level.

Condition of records satisfactory except as noted below:

J. A. Manner
Chief, Division of Tides and Currents

Inspection of H. 5457

by Leo S. Straw

Calcasieu Lake (Southern Part) - Surveyed in
1933 - 34
by J. C. Bose.

1. Records.

The records conform to the requirements of the Hydrographic Manual. ✓

2. Character of the Work.

The Plan and Character and extent fulfill the requirements of the Hydrographic Manual. ✓

3. Protracting and Plotting.

(a) The protracting is satisfactory (see J. C. Bose note in Descriptive Report in regard to inspection of this sheet.) ✓

(b) The Assistant Chief of Field Records Section has directed that: ✓

1. All halves be omitted from the soundings except the 6½ foot soundings which are to be plotted on the sheet as indicated in lead pencil, to more accurately delineate the six foot (1 fathom) curve. ✓

2. Where soundings are too close and of practically a constant depth - ink every other one. ✓

3. Use the symbol "Cl" instead of the word clay for the designation of clay bottom. ✓

4. Remarks.

(a) Piles are used as channel markers throughout Calcasieu Lake (see paragraph 5 of Descriptive Report T. 6041). The location of piles were checked against the Topographic sheet and also the tabulated Dms and Dp's in Descriptive Report T. 6041 by the undersigned and found to be correct. ✓


(b) Cross lines are adequate and are in good agreement with sounding lines normal to them. ✓

(c) No reference triangulation station was given on the sheet. Triangulation station Lake (1924-1932) Lat. 29°50' ± 653.4m, Long. 93°-19' ± 1114.4 m. (office computations) should be inked on the sheet. ✓

(d) This sheet joins H. 5458 on the north and H. 5334 on the south. ✓

(e) There are no previous surveys of Calcasieu Lake by this Bureau. Further surveying is not required at this time. ✓

July - 1934.

Submitted by -  L. S. Straw.

Section of Field Records

Report on H. 5457. Surveyed in - Sept. 1933 - Mar. 1934.
Chief of Party - J. C. Bose. Surveyed by - J. C. Bose and F. Houston.
Protracted by - H. R. Burfford. Soundings plotted by - H. R. Burfford.
Verified and inked by - E. R. Behn.

The records conform to the requirements of the Hydrographic Manual. ✓

The usual depth curves were completely drawn. In order to show the six foot curve more accurately the 6½ foot soundings were inked, all other halves being omitted from the soundings. ✓

The field plotting was complete, ~~however in the southwest portion of the lake, in the vicinity of Rabbit Island, bottom characteristics could have been recorded more frequently so as to give a complete picture of the character of the bottom in this part of the lake.~~ Bottom characteristics were frequently shown where there was no record in the sounding volumes and also in many places indications of "Clay" were shown on the sheet where the records show "hrd". There was no record in the Sounding Volumes, Descriptive Report or Boat or topographic sheets of the oyster reef just south of Rabbit Island and the oyster bed west of Calcasieu Pass and which were shown in pencil on the smooth sheet. Note has accordingly been removed from sheet. ✓

Junction with H. 5458 ✓ on the north is satisfactory. Junction with H. 5334 on the south is probably questionable in the channel leading from Calcasieu Pass. The soundings in question being from position red 2f to 3f where shoal soundings fall between deeper soundings of the overlap. The protracting of these positions was checked from the boat sheet and sounding volumes. *Discrepancy accounted for by dredging operations* ✓

Several geographic names were indicated in pencil on the sheet and were obtained from topo. Sheet T. 6041. ~~All names inked in were obtained from Chart 1116.~~ ^{The names were inked in} other ✓

The quality of the field drafting was good, no part of it being revised. ✓

Submitted by -

E. R. Behn,
Sept. 19, 1934.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. H 5457.

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

Number of positions on sheet	.1484
Number of positions checked1
Number of positions revised1
Number of soundings recorded	.10723
Number of soundings revised	...777
Number of signals erroneously plotted or transferred	...777

Date:... September 19, 1934.....

Cartographer:.....

Verification of protracting	by L. S. Straw	Time: 1 4/7 da.
Verification of inking of rocks and shoals		
and		
Verification of inking by	E. R. Behn	Time: 3 6/7 da.
Review by	Harold W. Murray	Time: 4 hrs.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5457 (1933-34)

Calcasieu Lake, Southern Part, Gulf of Mexico, Louisiana.

Surveyed Sept. 1933 - Mar. 1934.

Instructions dated September 8, 1933 (J. C. Bose).

Lead Line and Pole Soundings - 3-Point Control on Shore Signals.

Chief of Party - J. C. Bose.

Surveyed by- J. C. B.; F. Houston.

Protracted by - H. R. Burfford.

Soundings penciled by - H. R. Burfford.

Verified and inked by - L. S. Straw; E. R. Behn.

1. Condition of Records.

The records are neat, legible and conform to the requirements of the Hydrographic Manual with the exception that no reference station was shown on the sheet. This was added in the office.

2. Compliance with Instructions for the Project.

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

3. Sounding Line Crossings.

No cross lines were required by the instructions for the project. Those which were run, however, are in excellent agreement with the main system of lines.

4. Depth Curves.

All depth curves may be satisfactorily drawn within the limits of the hydrography.

5. Junctions with Contemporary Surveys.

The junction on the north with H. 5458 (1933-34) is satisfactory.

The junction on the south with H. 5334 (1933) is satisfactory with the exception of a single line of deeper soundings on H. 5334 (1933) which falls inshore of shoaler soundings on H. 5457 (1933-34). They may be accounted for by dredging operations for oyster shells (see Descriptive Report, bottom of page 1).

6. Comparison with Prior Surveys.

No prior surveys have been made in this vicinity.

7. Comparison with Chart No. 1279.

No hydrography in this area is shown on this chart.

8. Field Plotting.

Field protracting and plotting of soundings were accurate and conform to the requirements of the Hydrographic Manual with the exception that the word "clay" was frequently plotted where the records showed a bottom characteristic of "hard".

9. Additional Field Work Recommended.

This survey is complete, no additional field work is required.

10. Superseding Old Surveys.

There are no previous surveys in the vicinity of this survey.

11. Reviewed by - Harold W. Murray - Sept. 21, 1934.

Inspected by - A. L. Shalowitz.

K. T. Adams
K. T. Adams,
Chief, Section of Field Records.

Examined and approved:

L. O. Pollock
Chief, Division of Charts.

F. Braden
Chief, Section of Field Work.

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

*Applied to chart 1279
12/27-35 g.H.S.*