

6013

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

DESCRIPTIVE REPORT

~~16653107100~~ } Sheet No. Y (T-5000)
Hydrographic } 6013

State CALIFORNIA

LOCALITY

LOWER SACRAMENTO RIVER

MAYBERRY SLOUGH TO BRANNAN ISLAND

1934

CHIEF OF PARTY

L. P. RAYNOR

6013

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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SEP 4 1934
Acc. No.

HYDROGRAPHIC TITLE SHEET

REG. NO. 6013

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. Y (T-5000)

REGISTER NO. 6013

State CALIFORNIA

General locality LOWER SACRAMENTO RIVER

Locality MAYBERRY SLOUGH TO BRANNAN ISLAND

Scale 1:10,000 ✓ Date of survey July 17, 18, 1934 ✓

Vessel HELEN F (Leased launch)

Chief of Party L. P. RAYNOR ✓

Surveyed by L. P. RAYNOR & E. M. BUCKINGHAM ✓

Protracted by T. M. MEANS

Soundings penciled by T. M. MEANS

Soundings in ~~XXXXXX~~ feet ✓

Plane of reference M.L.L.W. ✓

Subdivision of wire dragged areas by

Inked by R. B. Krum

Verified by R. B. Krum

Instructions dated SEPTEMBER 2, 1933, et.al, 19

Remarks:

HYDROGRAPHIC TITLE SHEET

Field No. Y (T-5000)

State: CALIFORNIA

General locality: SACRAMENTO*SAN JOAQUIN RIVER DELTA

Locality: THREE MILE SLOUGH

Scale: 1:10,000 Date of survey: JULY 17, 18, 1934

Vessel: HELEN F (Leased launch)

Chief of Party: L. P. RAYNOR

Surveyed by: L. P. RAYNOR & E. M. BUCKINGHAM

Protracted by: T. M. MEANS

Soundings penciled by: T. M. MEANS

Soundings in FEET

Plane of reference: M.L.L.W.

Instructions dated: SEPTEMBER 2, 1933, et.al.

DESCRIPTIVE REPORT
of
HYDROGRAPHIC SHEET Y (T-5000)

AUTHORITY, LIMITS, DATES:

The instructions for this work are contained in the following:

1. 22 LE 1990 March 17, 1933
2. 22 AHH 1990 August 12, 1933
3. SUPPLEMENTAL INSTRUCTIONS
PROJECT 98 HT Sept. 2, 1933
4. 26 RS 1990 Nov. 9, 1933
5. 22 AHH 1990 Nov. 16, 1933
6. 22 MEN 1990 Dec. 2, 1933

This work is in that part of Three Mile Slough between the Sacramento River and the junction of Seven Mile Slough with Three Mile Slough, in which work had not been done by the U. S. Engineers. The work was done ~~by~~ under supervision of the Chief of Party on July 17 and by E. M. Buckingham on July 18.

SURVEY METHODS:

Hydrographic signals were located by planetable by party of E. M. Buckingham, Surveyor, using photo lithographic print of the photo compilation. See descriptive report submitted with topographic sheet.

Boat positions were obtained by usual sextant three-point fix or by use of range finder with compass bearings. ✓

GENERAL NOTES:

Three Mile Slough within the limits of this survey is comparatively deep throughout. It is used extensively by vessels bound from the upper Sacramento River for the San Joaquin River above its junction with Three Mile Slough. Some little difficulty is often experienced by the larger river steamers in passing through the drawbridge when entering from the Sacramento River side with a stiff northwest breeze blowing. Such steamers have rather high deck housing on which the wind has a strong affect. This information was furnished me by Captain Malone of the River Lines, who has had some thirty year's experience handling steamers in the Delta Region. It is often necessary to take the steamers clear down the Sacramento River to Broad Slough and back up the San Joaquin on very windy days. ✓

TIDAL DATA:

A tide staff, thought to be a U. S. Engineers staff, was found nailed to the north fender piling of the bridge and was read during the time when soundings were being taken. Levels were run from the tide staff to bench marks previously established near the bridge by this bureau. M.L.L.W. on the staff used was found to be 1.13 ft. This amount was subtracted from the tide staff readings to obtain the tide reducers for the work. There is considerable tidal current in this part of Three-Mile Slough which undoubtedly accounts for the comparatively deep water found. ✓

According to the Bulletin H 27 of the Department of Public Works, State of California, on a rising tide the current flows into the San Joaquin River and with falling tide flows into the Sacramento River. The time of slack current in each case occurs after the time of high or low tide. ✓

CHANGES:

Two piles shown northeast of pile at north end of Decker Island have been removed since the photo compilation and have been expunged from the smooth sheet. The first transmission tower north of triangulation station, "Three Mile Slough North Transmission Tower," is not now in existence and has been deleted from the smooth sheet.

COMPARISON WITH U. S. ENGINEERS SURVEY:

Work of the U. S. Engineers in the Sacramento River was plotted on the smooth sheet and a satisfactory junction with it obtained. The work of the U. S. Engineers in the rest of Three Mile Slough and in Seven Mile Slough could not be obtained from them.

This junction is not now shown on the sheet - 11/4/34

LANDMARKS, GEOGRAPHIC NAMES:

List of Landmarks and Geographic Names have been sent in previous reports.

CLEARANCES--BRIDGE AND POWER LINES:

Horizontal clearances of both spans of the highway swing bridge over Three Mile Slough are 147 feet while the vertical clearances are 11 feet at M.H.W. The vertical clearance of the overhead power line carried by the triangulation stations "Three Mile Slough North & South Towers" is 120 feet at M.H.W. The clearance of the power line was measured with range finder.

L. P. Raynor
L. P. Raynor,
Chief of Party.
T.

STATISTICS

DATE	VOL.	DAY	MILES	SOUNDINGS	POSITIONS
July 17	1	A	7.0	476	74
July 18	1	B	<u>2.5</u>	<u>173</u>	<u>43</u>
TOTALS			9.5	649	117

HYDROGRAPHIC SIGNALS: 21

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. .6013

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

Number of positions on sheet	.117..
Number of positions checked	.2....
Number of positions revised	none.....
Number of soundings recorded	.649..
Number of soundings revised	none..
Number of signals erroneously plotted or transferred	none.....

Date:.....October 3, 1934.....

Cartographer:.....R. B. Krum.....

Verification of plotting	by R. B. Krum	Time: 1 hr.
Verification & linking of rocks and shoals		
Verification of linking by	R. B. Krum	Time: 8 hrs.
Review by	Harold W. Munnay	Time: 4 1/2 "

Mr. Ellis

Rae

September 22, 1934.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
1 volume of sounding records for

HYDROGRAPHIC SHEET 6013

Locality Mayberry Slough to Brannan Island, San Joaquin Delta, Calif.

Chief of Party: L. P. Raynor in 1934

Plane of reference is mean lower low water, reading

1.1 ft. on tide staff at Three Mile Slough

19.1 ft. below B. M. 1

Height of mean higher high water above plane of reference is 4.5 ft.

Condition of records satisfactory except as noted below:

Paul Whitney

Chief, Division of Tides and Currents

Verification Report H. 6013.

Records.

The records are neat and legible. They conform to the requirements of the Hydrographic Manual *as noted in the review.*

Protracting.

The protracting was well done. Comparison with the boat sheet showed good agreement.

Drafting.

The field drafting was well done.

Crossings.

The crossings are in good agreement.

Curves.

The usual depth curves could be drawn.

Junctions.

There is no adjoining hydrography at present.

Comparison with other Data.

The shoreline on this sheet adjacent to the hydrography had been changed in the field. It agrees with the shoreline on plane table sheet No. 58 in the files of the Air-Photo Section.

Submitted by - R. B. Krum,
Oct. 3, 1934.

Section of Field Records.

REVIEW OF HYDROGRAPHIC SURVEY NO. 6013 (1934)

Lower Sacramento River, California-Mayberry Slough to Brannan Island.
Instructions dated Sept. 2, 1933 (L.P.Raynor)
Surveyed, July 17-18, 1934.

Hand Lead Soundings-----Three Point Control on Shore Signals.

Chief of Party-L.P.Raynor
Surveyed by- L.P.Raynor and E.M.Buckingham
Protracted by- T.M.Means
Soundings penciled by-T.M.Means

1. Condition of Records.

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

- (a) No list of signals used was noted in the records (Par. 139).
- (b) No information could be found as to the nature of the objects on which the offshore signals 3M1 and 3M2 in Sacramento River are on.

2. Compliance with Instructions for the Project.

The plans, character and extent of the survey satisfy the instructions for the Project.

3. Sounding Line Crossings.

Sounding line crossings are satisfactory.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn.

5. Junctions with Surveys.

Instructions for the project specify a junction with U.S. Engineers Surveys on the west and the junction of this survey with B.P.26289(1932) is generally satisfactory, however, the new survey (made 2 years later) shows shoaling in the vicinity of the 18 foot curve in Lat.38°6'.4, Long.121°42'.1.

The eastern limits of this survey represent the limits of the field work at this time. H 6005(1934) which joins this sheet on the east, contains no hydrography in this vicinity.

6. Comparison with Prior Surveys.

There are no prior surveys in the area covered by the present survey.

7. Comparison with Chart No. 5527.

There is no published chart covering the area of this sheet.

8. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

Within the limits covered this survey is complete and no additional work is required.

10. Superseding Previous Surveys.

There are no previous surveys to be superseded in this area.

11. Reviewed by-Harold W. Murray October 5, 1934.

Inspected by- A. L. Shalowitz.

Examined and approved:

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

F. S. Borden
Chief, Section of Field Work.

L. O. Lobbut
Chief, Division of Charts.

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

Applied to drawing of Chart 5527
Jan 9, 1935 - J.V.W.