

5139

Diag. Cht. No. 5530-4

Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. Patten., Director	
State: California	
DESCRIPTIVE REPORT	
Topographic Hydrographic	} Sheet No. 5139 # 5
LOCALITY	
South San Francisco Bay	
Vicinity of Calaveras Pt.	
1931	
CHIEF OF PARTY	
G. C. Jones	

5139

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
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HYDROGRAPHIC TITLE SHEET DEC 22 1931

Acc. No. _____

REG. NO. 5139

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. 5

REGISTER NO. 5139

State California

General locality South San Francisco Bay

Locality Vicinity of ~~the lagoon and Mowry Slough~~ and Calaveras Point

Scale 1 - 10,000 Date of survey July 21 to Sept. 11 1931

Vessel Project No. 70

Chief of Party G. C. Jones

Surveyed by G. C. Jones and L. P. Raynor

Protracted by H. G. Conerly and H. C. Applequist

Soundings penciled by H. G. Conerly

Soundings in ~~1000~~ feet

Plane of reference Mean Lower Low Water

Subdivision of wire dragged areas by

Inked by G. H. Streeter

Verified by G. H. S.

Instructions dated September 8, 1930

Remarks:

Descriptive Report to Accompany Hydrographic
Sheet, Field No. 5

Project #70.

Instructions Dated Sept. 8, 1930

Area Covered

South San Francisco Bay, vicinity of Charleston and Mowry Sloughs and Calaveras Point. The area south of Calaveras Point is of importance to the U.S.E.D. because of contemplated harbor development. The channel to the ^{North-west} south-east of that point is of importance for the same reason. No sloughs of importance fall on this sheet. Mowry Slough is large and 6 feet can be carried into it, but it is not used by any craft larger than sporting launches at present. Charleston Slough and its branch Mayfield Slough, may become of importance later if a harbor is developed for the City of Palo Alto, but has only 1 foot across the entrance bar at present.

Survey Methods and Sounding Checks

Fixes should be accurate as, with two exceptions, triangulation stations were used throughout.

Sounding checks are within $\frac{1}{2}$ foot, ^{except a very few cases of 1 ft and} except in the slough channels. In those cases the channel is so narrow, often a ditch only a few feet in width, that the soundings on the cross lines may miss the channel entirely and the channel lines indicate poor checks. Keeping that fact in mind the soundings check very well over the entire sheet.

New Place Names

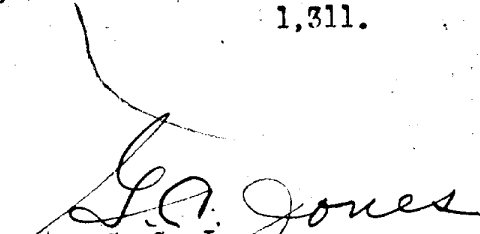
The branch of Charleston Slough extending west from the entrance is known as Mayfield Slough. That name should be placed on the chart as it is the name used by the City Engineering Department of Palo Alto and also by the local residents.

Statistics

Miles
144.1

Soundings.
10,989

Positions
1,311.


G. C. Jones,
Chief of Party.

Section of Field Work

Sheet No. H-5139

Chief of Party G. C. Jones

Surveyed by G. C. J. and L. P. Reynor

Protracted by H. G. Conroy and H. C. Affleck

Soundings plotted by H. G. C.

Verified and inked by G. H. Streeter

Topography inked by Field Party

1. The records conform to the requirements of the General Instructions, altho the colored check marks are too large and in many cases interfere with the records.
2. The usual depth curves can be drawn.
3. The field plotting was completed to the extent prescribed in the General Instructions.
4. With the exception of some penciled soundings the office draftsman did not have to do over any part of the field drafting.
5. The junction with adjacent sheets, H-5135 and 5140, is considered satisfactory.
6. The penciled soundings for the most part were from - some being illegible.
On the smooth sheet position "39 m" to "43 m" were numbered "l". This was corrected.
A discrepancy of one foot occurs in cross lines

on 70 to 71l (Long. $122^{\circ}05'50''$ - Lat. $37^{\circ}27'30''$), and
77 to 78l (Long. $122^{\circ}05'45''$ - Lat. $37^{\circ}27'45''$).

7. The quality of the field dropting is fair.

Respectfully submitted,

G. H. Streeter

March 8, 1932

TRIANGULATION SIGNALS USED ON HYDROGRAPHIC SHEET "5"

Nor Tall transmission tower North side Charleston Slough, 1931

Tow Taller of two transmission towers at bend in Line West of Mt. View Slough, 1931

West Taller transmission tower West Side Mt. View Slough, 1931

East Tall transmission tower East Side Whisman Slough, 1931.

Tall Tall transmission tower East side Whismans Slough, 1931

Top Tall pointed Top Transmission tower East Side Jage's Slough 1931

Cur Taller transmission tower At bend South side Guadalupe Slough 1931

Dol Taller transmission tower North side Guadalupe Slough, 1931

Ross Tall square top transmission tower Southernmost pair of four pair crossing Bay, No. 4 1931

Bay Tall square top transmission tower Northern pair of four pairs Crossing bay No.1 1931

Mall Mallard 1931

Cal Calaveras point Flashing Light 1931

Veras Veras 1931

Lar Larkin 1931

Ard Tank Arden Salt Co. 1931

View View 1925

Coo Mast South of Cooleys Landing 1925

Topographic Signals Used on the Same Sheet.

Yel Yellow Tank on house W. of Veras Dairy 1931

Turn Transmission tower in turn.

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5139
Vicinity of Calaveras Point, S. San Francisco Bay, Calif.
Surveyed in 1931
Instructions dated September 8, 1930, (C.G.Jones).

Chief of Party - G. C. Jones.
Surveyed by - G. C. Jones and L. P. Raynor
Protracted by - H. G. Conerly and H. C. Applequist.
Soundings plotted by - H. G. Conerly.
Verified and inked by - G. H. Streeter.

1. The survey conforms to the general regulations and to the special instructions covering this project. The records are clear and legible. The Descriptive Report calls special attention to the local use of the name "Mayfield Slough".

2. Sounding line crossings are satisfactory. The depths on the flats are plotted to $\frac{1}{2}$ foot to facilitate the study of the silting problem in this vicinity. Sounding on the flats were made with a sounding pole. There are no cross lines on the flats and in a few places the distance between sounding lines exceeds that prescribed in the instructions. Two shell banks separated by a deep channel, lie in approximate latitude $37^{\circ}28'$ longitude $122^{\circ}05'.9$. They are especially noticeable at low water.

Depth curves can be satisfactorily drawn except in some parts of the sloughs where the curves as drawn are only roughly approximate. In addition to the usual curves, a 3 foot curve has been drawn in a part of Mowry Slough.

3. Junction with adjacent contemporary sheets is satisfactory.

A comparison with H. 2413 and H. 2415 (surveys of 1898) shows many changes in details. In general there is a deepening of the water over the flats and a shoaling in the channels leading into the sloughs. South and east of Calaveras Point, the channels have shifted somewhat relative to the shore line. (See note below).

4. Recommendations.- This area is a changeable one. The surveys are deemed satisfactory for charting purposes. When a new chart is constructed or extensive changes are being made to existing charts, the status of contemplated improvements by the U. S. E. D. should be ascertained.

5. Reviewed by - R. J. Christman, March 1932.

NOTES BY A. L. SHALOWITZ.

There is a discrepancy between this sheet and H. 5140 at the entrance to Jagels Slough. The north and south line on H. 5140 differs with the soundings on H. 5139 and also differs with the crosslines on H. 5140. This north and south line indicates depths of 1 to 2 feet at M.L.L.W. whereas the other lines indicate the entrance to be bare at M.L.L.W. The old survey of 1898 (H. 2415) indicates a channel with 4 to 5 feet thru here and it is possible that the doubtful soundings on H. 5140 are the remains of the old channel in the form of small pools of water that were not picked up on the other cross

H- 5139.

lines. Inasmuch as no continuous channel is indicated here at M.L.L.W. and since the slough bares at M.L.L.W. a little further south, the discrepancy noted is of no great importance and it is recommended that these deep soundings be omitted from the chart.

2. Comparison with old survey.

A comparison with the survey of 1898 (H. 2415) shows that with the exception of ~~this~~^{the} area along the south shore from Guadalupe River to westward of Long Point (where a shoaling of 1 to 2 feet is indicated) the general depths over this flat has increased from $\frac{1}{2}$ to 2 feet. Inasmuch as tide gauges in the immediate vicinity of the work were used on both surveys and as far as can be ascertained, the determination of the datum plane on both surveys is unimpeachable, the suggestion is made of the possibility of the 1906 earthquake having caused a subsidence of the bottom in certain portions of the bay. However, since these surveys will be used for studying silting conditions in the bay, this matter will be gone into more fully at a later date.

Sheet Inspected by A. L. Shalowitz - March 1932.

See note in descriptive report for H. 5135 by A. M. S. and Descriptive Report H. 5129.

Approved: A. M. Sobieralski. *(signed)*

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5139

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

Number of positions on sheet	1,311
Number of positions checked	584
Number of positions revised	18
Number of soundings recorded	10,989
Number of soundings revised	29
Number of signals erroneously plotted or transferred	✓

Date: Mar. 7, 1932

Cartographer: Gaylord H. Streeter

January 7, 1932

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 5139

Locality South San Francisco Bay, Calif.

Chief of Party: G. C. Jones in 1931
Plane of reference is mean lower low water, reading
3.0 ft. on tide staff at Palo Alto
11.7 ft. below B. M. 1
5.0 ft. on tide staff at Alviso
10.6 ft. below B. M. 1

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Acting Chief, Division of Tides and Currents.