FORM 304
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: CALIFORNIA

DESCRIPTIVE REPORT.

Topographic Sheet No. (1) 4022

LOCALITY:
San Pablo Bay. — South Shore.
Ft. San Pablo to Ft. Wilson.

1921, 22.

CHIEF OF PARTY:
E. S. Ingle, C. W. Swainson.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U.S. Coast and Geodetic Survey.

Register No. 4022

State CALIFORNIA

General locality SAN FRANCISCO BAY - South Shore

Locality Pt. San Pablo to Pt. Wilson

Chief of party R.E. Angle, O.H. Swinson

Surveyed by R.E.A. Studds, L.H. Mower

Date of survey Oct., Nov. 1921

Scale 1 to 10,000

Height's in feet above

Contour interval 40 feet


Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet Three accompanying prints.

Remarks: See accompanying chart.
To accompany topographic Sheet No. -

San Pablo Bay.


Revision under Instructions dated June 1, 1921.

This report is divided into two parts. Part I covers that portion of the sheet surveyed by R.P.L. Studds, Jr., H & G. Part II is for the remainder of the sheet, surveyed by L.L. Owen, Jr., H & G.

PART I.

Part I of this sheet extends from Pt. Wilson or Wilson to C Cutter Water Well, or Lat. 37° 59', Long. 122° 22', approximately.

The work was done by a party of 1 officer and three seamen, from Oct. 27 to Nov. 4, 1921. They were quartered ashore during that time, returning on Saturday to the ship at Vallejo by train, and returning to the working grounds on Monday by the ship's launch.

The work consisted of examining the chart of that vicinity, and running in on the topographic sheet any feature which was not shown. The bromide copy furnished of that locality was so old, and there was so much detail on it that it could not well be used. This applies especially to that portion of the sheet covered in Part II of this report.

On account of the large number of stations available, no traverses were run, the topographer checking each setup by two or more points.

A number of plane-table positions were established. These are given in an accompanying list.

Attention is called to the following changes:

On the latest edition of Chart 5533, the two pipe line docks that were formerly on the W. corner of Pt. Pinole, are removed. The piling for a portion of these docks, however, is still in, including the pile at the farthest extremity of the two docks. As the piling is a menace to navigation, it is suggested that they be shown by broken lines on the chart.

The town on "Nitro" as shown on the chart is no longer there, the whole of Pt. Pinole being owned and operated by the Giant Powderworks Co.
high fence line, enclosing their property, was surveyed and is shown on the topographic sheet. On the w. end of their property is a wa-
ter-pipe line, laid on pilings, which extends for about a mile to the south, 
terminating at three water wells, also owned by the Giant Powderworks Co.

About half a mile inshore from the last point is a new station on 
the A.T. & S.F. Ry., called "Rheem", which was probably created to 
accommodate employees of the Pacific Plumbing Fixtures Co., whose plant 
is shown nearby.

The highway which parallels the railroad at this point is shown by 
a dashed line on the chart. As this is a county road and well paved, 
it is suggested that it be shown as a first class road.

There is an excellent landmark at pt. Pinola, which is not at present 
on the chart. It is a high water tank, shown on the topographic sheet 
by the \[\text{Tank, pt. Pinola.}\] This tank can be seen almost anywhere in 
San Pablo Bay and from a portion of the northern part of San Francisco Bay.

Two prints accompany part I of this report. Print \[\text{A}\] gives the 
details of the Giant Powderworks Co's plant at pt. Pinola. Print \[\text{B}\] 
gives the layout of the Standard Oil Co's tank farm, about a mile inland 
from Giant. These numerous tanks are on hills and are quite prominent 
from San Pablo Bay.

\[\text{R.E. Studds, Jr., H & G Co.,}\] 
Topographer.

\[\text{C.J. Swainson,}\] 
Chief of Party.

\begin{center}
\text{PART II.}
\end{center}

Part II of this sheet begins at \text{9 Outer Water Well} and extends to 
the Standard Oil Plant at Richmond. It consisted almost entirely of 
work in Castro Slough.

The work was done by one officer and two men from Nov. 6 to Nov. 10. 
Quarters were secured at Richmond, the party returning to Vallejo Saturday.

The work is merely the finishing up of the sheet started by Mr. 
Studds, a description of same being appended.

The principal changes are the rapid advance of shore line of the 
marsh westward, the Standard Oil Slough, and the non-existence of \[\Delta 3\] 
Gable Warehouse. As I stated in my descriptive report of pt. Jison 
to Lone Tree Pt., the height seems to be filling in and the shoreline 
advancing westward. The Standard Oil Slough with a depth of 30 ft.
was not intended for navigational purposes, but merely to use the excavation for fill purposes. The 3 Gable Warehouse was formerly a characteristic landmark, but it has entirely disappeared.

I enclose one large tracing of the S.O. Co.'s plant at Richmond and also a part of the chart showing the change made by the Standard Oil Co. This was furnished me by Mr. A. L. Russell, Chief Engineer, S.O. Co., Richmond, Calif. It is respectfully suggested that he be furnished a copy of the new chart when it is issued as an acknowledgement of his many kindnesses.

Respectfully,

L. M. Moyle

O. W. Swainson,

H & G Eng'rs.,
Chief of Party.
### LIST OF PLAIN EARLY POSITIONS

To accompany Topographic Sheet No. 10.

**SAN PABLO BAY**

**Pt. San Pablo to Pt. Wilson.**

**Part I**

<table>
<thead>
<tr>
<th>Object &amp; Description</th>
<th>Latitude</th>
<th>D.L.</th>
<th>Longitude</th>
<th>D.P.</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Cupola on shack</td>
<td>38 00</td>
<td>211</td>
<td>122 20</td>
<td>97</td>
<td>Top</td>
</tr>
<tr>
<td>Windmill</td>
<td>38 00</td>
<td>335</td>
<td>122 20</td>
<td>1459</td>
<td>Center of wheel</td>
</tr>
<tr>
<td>S. Cable, wharf ho. Pinole Pt. 38 00</td>
<td>37 59</td>
<td>1730</td>
<td>122 21</td>
<td>1110</td>
<td>Top</td>
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<td>W. Cable, wharf ho. Pinole Pt. 38 00</td>
<td>37 59</td>
<td>1736</td>
<td>122 21</td>
<td>1154</td>
<td>Top</td>
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<tr>
<td>Tall black stack, pdr. whs.</td>
<td>37 59</td>
<td>1783</td>
<td>122 21</td>
<td>907</td>
<td>Center</td>
</tr>
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<td>Flag-pole, Giant pdr. whs.</td>
<td>37 59</td>
<td>1304</td>
<td>122 21</td>
<td>672</td>
<td></td>
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<tr>
<td>Sq. Wooden Tower J2</td>
<td>37 59</td>
<td>1806</td>
<td>122 20</td>
<td>1403</td>
<td>Center</td>
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<tr>
<td>S.O. Tank Farm</td>
<td>37 59</td>
<td>718</td>
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<td>593</td>
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<td>Sq. Wooden Tower J3</td>
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<td>493</td>
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<td>Center</td>
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<td>S.O. Tank Farm</td>
<td>37 59</td>
<td>1023</td>
<td>122 21</td>
<td>244</td>
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<tr>
<td>Tank, Pac. Plumbing Fixtures</td>
<td>37 59</td>
<td>1597</td>
<td>122 21</td>
<td>1400</td>
<td>Center</td>
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<tr>
<td>Outer Later Well</td>
<td>37 58</td>
<td>46</td>
<td>122 22</td>
<td>353</td>
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<tr>
<td>White Sign 1 (in water)</td>
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<td>122 22</td>
<td>660</td>
<td>Center</td>
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<td>White Sign 2</td>
<td>37 59</td>
<td>1076</td>
<td>122 22</td>
<td>825</td>
<td>Center</td>
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<td>White Sign 3</td>
<td>37 59</td>
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<td>122 22</td>
<td>906</td>
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<td>White Sign 4</td>
<td>37 59</td>
<td>673</td>
<td>122 24</td>
<td>876</td>
<td>Center</td>
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</table>

**Part II.**

| Flag-pole, S.O. Club house            | 37 57    | 673  | 122 24    | 876  | Center           |