

4517

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: California

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No.

B

4517

LOCALITY

Drakes Bay

Vicinity of Drakes Estero

1929

CHIEF OF PARTY

O. W. Swainson

D E S C R I P T I V E R E P O R T

To Accompany Topographic Sheet No. B 4517

California Coast Vicinity of Drakes Estero

O.W.Swainson, H. & G. Eng. Chief of Party

1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4517

TOPOGRAPHIC TITLE SHEET

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

Field No. B *neg 5502*

REGISTER NO. 4517

State California.

General locality Drake's Bay ✓

Locality Vicinity of Drake's Estero. ✓

Scale 1:10,000 Date of survey June, 192 9

Vessel U.S.C. & G.S.S. PIONEER

Chief of Party O. W. Swainson, H. & G. Engr.

Surveyed by John A. Bond, H. & G. Engr.

Inked by John A. Bond, H. & G. Engr.

Heights in feet above M.H.W. to ground to tops of-trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated April 9, 1929, 192

Remarks: For later description of coast see descriptive report for control sheet accompanying H-6250 (1937) WD.

DESCRIPTIVE REPORT

To Accompany Topographic Sheet B

Instructions

The topography on this sheet was executed under instructions to the Commanding Officer, Steamer PIONEER, dated April 9, 1929.

Limits and Scale

The topography included on the sheet, surveyed on a scale of 1 to 10,000, covers the outer shoreline of Drakes Bay between longitudes $122^{\circ}54'$ and $122^{\circ}57'$, and includes the entrance and southern half of Drakes Estero. It is joined on the west by Sheet A and on the east by Sheet C, both of this season's work.

Control and Survey Methods

The usual survey methods were used. Control points were established by a supplementary triangulation with such frequency that but little traverse was necessary. A system of plane table triangulation extended into Drakes Estero furnished control for that area.

General Description of Shore Line

Sand spits marked by a few isolated grass patches extend on either side of the estero entrance. About $1/3$ mile west of the entrance a nearly vertical, dirt cliff rises about 130 feet. Against this cliff sand has drifted to form a large dune as indicated on the sheet. The spit to the right of the entrance is flat and free of sand dunes except in the vicinity of the easternmost hydrographic signal. Inside the estero grass and brush covered hills slope gently to the water, ending in various places in low bluff as shown. The southern extremities of the headlands on either side of longitude $122^{\circ}55'$ are marked with perpendicular, dirt cliffs about 130 feet in height.

Comparison with Previous Surveys

The area was originally surveyed in 1859 on Sheet 805, on a scale of 1 to 10,000.

In comparison with the present survey the following changes are noted:

On the original survey the storm high water line was shown instead of the mean high water line.

The spit to the west of the estero entrance has receded about 300 meters and filled in to the north.

The spit to the east of the entrance is practically unchanged.

All other changes worthy of note are indicated on the sheet with appropriate legends.

In surveying the area inside the estero as well as the indentation to the right of longitude $122^{\circ} 55'$ the shore line was found to agree so nearly with the original survey that it was deemed inexpedient to extend the survey further than shown.

The contours and elevations shown in pencil on the sheet were transferred from the original survey and checked in the field. They were found to be exceptionally accurate.

Landmarks

No landmarks of permanent value exist in the area covered. Just beyond the low water line of the spit $1/3$ mile east of the estero entrance is the wreck of a small fishing craft. It is fast breaking up and of no value for charting purposes. The small dock just west of station Drake is a fragile structure, useful only for skiffs as is also the dock $1/2$ mile east of it.

John A. Bond
John A. Bond
Lieut. U.S.C. & G. Survey.

Approved:

O. W. Swainson
O. W. Swainson
Commanding Str. PIONEER.