

4220

Diag. Ckt. 5530-4

4220

Form 504 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: <i>California</i>
11-5613
DESCRIPTIVE REPORT.
<i>Hydro Sheet No. 4220</i>
LOCALITY:
<i>San Pablo Bay</i>
19 <i>12</i>
CHIEF OF PARTY:
<i>D. W. Swanson</i>

Statistics to accompany Hydrographic Sheet F. 4220

Date 1922	Letter	Vol	Fms	Sound	Miles	Vessel.
Feb. 1	a	1	32	257	4.5	M.S.
2	b	1	15	108	2.4	
3	c	1	12	86	2.0	
7	d	1	12	85	2.2	
18	e	1	17	134	3.0	
28	f	1&2	71	582	8.7	
Mar. 1	g	2	139	1035	15.8	
2	h	2	70	519	8.7	
3	i	2	27	171	2.5	
9	j	2&3	48	275	5.5	
17	k	3	30	163	3.0	
Apr. 10	l	3	14	77	1.3	
			<u>497</u>	<u>3492</u>	<u>59.6</u>	

Unit of Soundings ft

Plane of Reference M L L W

Tide gauge at Sonoma Cr. Black Pt (j k and l)

Plane of Reference on gauge 3.91 5.26

Lowest tide " " " 0.3 - 0.1

Highest " " " " 8.0 6.7

C.I.C.

COPY TO FIELD RECORDS.

Feb. 9, 1923.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET 4280

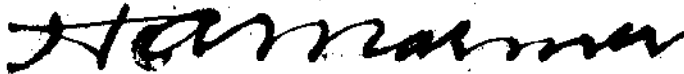
Locality: Entr. Sonoma Creek, San Pablo Bay, Cal.

Chief of Party: C.W. Swainson, in 1922

Plane of reference is Mean lower low water, reading
3.9 ft. on tide staff at Tubbs Island Wharf, Sonoma Creek
5.3 " " " " Black Point, Petaluma Creek.

For reduction of soundings, 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 each 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.

Hydrographic Sheet No. 4220.
San Pablo Bay - California

The work shown on this sheet is a development of the Entrance to Sonoma Creek and also Tolay Creek from Entrance the first bridge above Entrance

The ground covered is closely sounded and appears sufficient for a good development. However it would seem that the ground within of the low water curve is unnecessary, over developed unless some special reason exists for such a close development of these flats.

The records are well kept altho bottom Characteristics are given in but a few cases. However this is considered in a note on sheet in "The bottom over the entire area of this sheet is mud"

The sheet was pencil plotted by the field party in fractions. This is not in accordance with "General Regulations" and should be avoided.

But a few cross lines are run but where run the crossings coincide.

No serious errors were found in protracting and only the fractions in plotting.

John D. Torrey
3/5/23.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 2, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4220.

Surveyed in 1922.

Instructions dated June 1, 1921.

Chief of Party, O. W. Swainson.

Surveyed by M. O. Witherbee, R. F. Studds, and O. W. Swainson.

Protracted by O. W. Swainson.

Soundings plotted by G. J. Zintao.

Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions except that a descriptive report was not submitted.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions. It should be noted that the spacing between sounding lines at the entrance to Sonoma Creek is 100 meters instead of 200 meters as specified in the instructions.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The field plotting was completed to the extent prescribed in the General Instructions.
7. Many soundings on this sheet were plotted by the field party in fractions of feet contrary to Paragraph 357 of the General Instructions.
8. The junction with H. 4229 shows an apparent difference in depths of about one foot. An examination of the sounding books shows that the differences are seldom greater than a few tenths of a foot.

H. 4220 - 2.

9. No further surveying is required within the limits of the sheet. Attention is called, however, to the fact that no information is available regarding Sonoma Creek and Napa Slough above their junction.
10. The character and scope of the surveying and field drafting are good.
11. Reviewed by E. P. Ellis, April, 1923.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic 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. 4220 Field No. F

State . California

General locality . San Pablo Bay

Locality . Entrance to Sonoma Creek & Tolay Cr.

Chief of party . . O. W. Swainson

Surveyed by M. O. Witherbee, H. & G. E. and R. F. Studs, Jr. H. & G. E.

Date of survey . . February and March, 1922

Scale . . . 1 : 10,000

Soundings in . Feet

Plane of reference . Mean Lower Low Water

Protracted by . O. W. S. . Soundings in pencil by C. J. Z.

Inked by Verified by

Records accompanying sheet (check those forwarded):

Des. report, ~~1~~² Tide books, _____ Marigrams, 1 Boat sheets,

3 Sounding books, _____ Wire-drag books, _____ Photographs.

Data from other sources affecting sheet

Remarks: Report combined with Sheet G.