

4278

Diag. Cht. No. 5502-2

4278

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
State: <u>California</u>	
<small>11-5613</small>	
DESCRIPTIVE REPORT.	
Hyd. <u>Sheet No.</u>	<u>4278</u>
LOCALITY:	
<u>San Pablo Bay</u>	
<u>Sonoma Cr. + Napa and Navy Yard Sloughs</u>	
<hr/> 191 ²² <hr/>	
CHIEF OF PARTY:	
<u>O. W. Swainson</u>	

Statistics to accompany Hydrographic Sheet G.

4278

Date 1922	Letter	Vol	Pos	Sound	Miles	Vessel
Feb. 7	a	1	93	458	10.0	U. S
8	b	1	16	69	2.9	
9	c	1	118	741	18.0	
16	d	1&2	94	582	12.0	
Mar. 2	e	2	44	336	9.0	
3	f	3	148	862	20.0	
Apr. 10	g	3	71	469	9.0	
May 9	h	3	48	341	5.4	
10	i	3&4	44	303	5.2	
			<u>676</u>	<u>4161</u>	<u>90.6</u>	

Unit of Soundings ft.
 Plane of Reference M L L W
 Tide gauge at
 Plane of Reference on gauge
 Lowest tide " " "
 Highest " " " "

June 11, 1923.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in:

4 volumes of sounding records for

HYDROGRAPHIC SHEET 4278

Locality: Sonoma Creek, San Pablo Bay, Calif.

Chief of Party: O. W. Swainson in 1922

Plane of reference is mean lower low water, reading

3.9 ft. on tide staff at Sonoma Creek

3.3 " " " " Brazos

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. Yield 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.



Chief, Division of Tides and Currents.

TIDES: HOURLY HEIGHTS

Station: Drawbridge, Brazos, Napa River, Cal. Year: 1922

Chief of Party: _____ Lat. _____ Long. _____

Time Meridian: _____ Tide Gauge No. _____ Scale 1: _____ Reduced to Staff. _____

Month and Day.	mo.	d.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum.							
			May 9	9-10	10												
Time	hrs.	min.	Feet.	Time	hrs.	min.	Feet.	Time	hrs.	min.	Feet.						
	0:00		11.40	18:20			4.05	9:00			4.53						
	:10		11.38	:30			4.10	:30			5.28						
	:20		11.30	:40			4.23	10:00			5.96						
	:30		11.26	:50			4.42	:30			6.60	3.3					
	:40		11.13	19:00			4.68	11:00			7.28	4.0					
	:50		11.01	:10			4.91	:30			8.00	4.7					
	1:00		10.84					:40			8.20	4.9					
								:50			8.40	5.1					
	5:05		4.30	23:10			10.45	12:00			8.69	5.4					
	:10		4.17	:20			10.52	:10			8.90	5.6					
	:20		3.90	:30			10.69	:20			9.09	5.8					
	:30		3.66	:40			10.79	:30			9.25	6.1					
	:40		3.47	:50			10.86	:40			9.46	6.2					
	:50		3.31					:50			9.59	6.3					
				May 10				13:00			9.70	6.4					
								:10			9.78	6.5					
	6:00		3.20	0:00			10.93	:20			9.86	6.6					
	:10		3.11	:10			10.97	:30			9.90	6.6					
	:20		3.09	:20			10.98	:40			9.90	6.6					
	:30		3.18	:30			11.01	:50			9.88	6.6					
	:40		3.24	:40			10.98	14:00			9.84	6.5					
	:50		3.32	:50			10.95	:10			9.78	6.5					
	7:00		3.44	1:00			10.88	:20			9.66	6.4					
				:10			10.80	:30			9.55						
Noon.	11:40		9.35	:20			10.71	15:00			9.08						
	:50		9.55	:30			10.69	:30			8.48						
	12:00		9.65					16:00			7.80						
	:10		9.75					:10			7.60						
	:20		9.85	5:35			3.90	:30			7.14						
	:30		9.95	:40			3.77	17:00			6.50						
	:40		9.97	:50			3.49	:30			5.80						
	:50		10.00	6:00			3.27	18:00			5.18						
	13:00		9.98	:10			3.10	:10			4.92						
	:10		9.93	:20			2.92	:20			4.69						
	:20		9.87	:30			2.78	:30			4.50						
	:30		9.81	:40			2.51	:40			4.38						
	:40		9.73	:50			2.50	:50			4.29						
	:50		9.65	7:00			2.49	19:00			4.27						
	14:00		9.47	:10			2.46	:10			4.28						
	:30		8.85	:20			2.39	:20			4.38						
	15:00		8.10	:30			2.40	:30			4.52						
	:30		7.45	:40			2.49	:40			4.73						
	16:00		6.90	:50			2.59	:50			4.93						
	:30		6.03	8:00			2.78										
	17:04		5.20	:10			2.95										
				:20			3.18										
				:33			3.57										
Sum.																	

Mean L.L. W. on Staff = 3.3 ft.

Sum for 29 days, 1 to 29 of

Divisor = 696; mean for 29 days =

Tabulated by _____ Date _____ Summed by _____ Date _____

TIDES: HOURLY HEIGHTS

Station: _____ Year: _____
 Chief of Party: _____ Lat. _____ Long. _____
 Time Meridian: _____ Tide Gauge No. _____ Scale 1: _____ Reduced to Staff. _____

11-202

Month and Day.	mo.	d.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum.	
Day of Series.											
Hour.	Feet.		Feet.		Feet.		Feet.		Feet.		Feet.
0
1
2
3
4
5
6
7
8
9
10
11
Noon.
13
14
15
16
17
18
19
20
21
22
23
Sum.											

Sum for 29 days, 1 to 29 of

=

Divisor=696; mean for 29 days=

Tabulated by _____ Date _____ Summed by _____ Date _____

Hydrographic Sheet No. 4278.
Sonoma Cr. Kapa + Navy Ford Sloughs.
San Pablo Bay - Cal.

The work of the party covered by this sheet appears to develop the several Creeks and Sloughs in a satisfactory manner and while there some open spaces which might have added to the development had they been covered yet the adjacent soundings do not indicate shoals or danger spots. It does not appear necessary for additional work in the area covered.

The protracting by the Field Party can be considered good. Extensive verifications were made in this work and but few errors found.

Platting by Field party and Office found good. Records clear and well kept yet but few bottom characteristics recorded and changes in course not always noted.

The pencil shore line did not always agree with the Topographic Sheets and in some cases the shore line had to be changed from the Topographic Sheet to suit Hydrographic work. Eventually these changes should be made on the Topographic Sheets.

John D. Torrey
July 27, 1923.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

September 27, 1923.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4278.

Sonoma Creek, Napa and Navy Yard Sloughs

Surveyed in 1922

Instructions dated June 1 and Sept. 6, 1921

Chief of Party, O. W. Swainson.

Surveyed by M. O. Witherbee.

Protracted by M. O. Witherbee.

Soundings plotted by M. O. Witherbee and F. M. Albert.

Verified and inked by J. D. Torrey.

1. The sounding records are well kept, but bottom characteristics, boats' courses and descriptions of locations of sounding lines are generally omitted. No descriptive report nor title sheet was submitted and not more than one-half of the work was plotted on the boat sheet. As many of the lines conformed to the shoreline, the absence of information in the sounding records and on the boat sheet rendered the plotting and checking difficult.
2. The plan and character of development fulfill the requirements of the General Instructions and satisfy the specific instructions.
3. The sounding line crossings are adequate.
4. The information is sufficient for drawing the usual curves.
5. The protracting was done by the field party, the balance of the drafting being done in the office.
6. The junctions with adjacent sheets are satisfactory.
7. No further surveying is required within the limits of the sheet.
8. The field work is fair and the field drafting is excellent.
9. Reviewed by E. P. Ellis, September, 1923.

Applied to Oct 5533 re instruction 2-16 54 R.I.D.