

3771



Diag. Chf. No. 5530-4

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

Superintendent.

State: *California*

DESCRIPTIVE REPORT.

*Hyd. Sheet No. 3771.*

LOCALITY:

*Luisen Bay  
Middle Point and  
Stake Point.*

1915

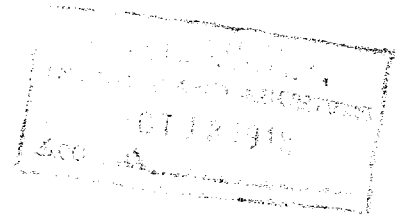
CHIEF OF PARTY:

*F. Moore*

11-4645

1223

Title for Sheet No.1



U.S. Coast and Geodetic Survey  
E. Lester Jones, Superintendent

Special Examination of Bar between Middle Point and Stake Point

Suisun Bay, California

Sept. 29-Oct. 1, 1915

Scale  $\frac{1}{20,000}$

By Fremont Morse, Assistant

Made at the request of the Inspector of the 18th Lighthouse District.

Descriptive Report to accompany sheet entitled " U.S.Coast and Geodetic Survey, E. Lester Jones, Superintendent. Special Examination of Bar between Middle Point and Stake Point, Suisun Bay, California, Sept. 29-Oct.1, 1915. Scale 1/10.000. By Fremont Morse, Assistant. Made at the request of the Inspector of the 18th Lighthouse District,"

As indicated in the title this survey was made at the request of the Lighthouse Inspector for this district, on the strength of reports from pilots of steamers passing through Suisun Bay that the bar in question had shoaled greatly, and that the main channel had closed up and that one was cutting to the Southward of the middle ground, near Middle and Stake Points. The Inspector had been asked to shift the buoys to conform with what was supposed to be the best crossing of the bar. Naturally he desired to know definitely where the best water was before making any change.

The results of the survey show conclusively that the pilots were mis-  
in one respect  
taken, for the main channel is still practically the same as it was at the time the preceding survey was made. Ten feet can be carried across the bar at the mean of the lower low waters, which is the same depth shown by the previous survey. There seems to be a tendency for the depths to increase, and the bar to improve slightly, since a comparison of the two surveys shows a narrower space between the 12-foot curves in the recent survey than in the one made in 1914. The pencil line "A-B" shows the main channel crossing.

In another respect the pilots were right, for the bar depths have increased Southward of the middle ground, and ten feet can be carried across on the line "C-D". On this crossing, however, the bar is about twice as wide as on the other.

Fremont Morse,  
Assistant.

Statistics, Sheet No. 1,

Date, 1915	Letter	Posi- tions	Sound- ings	Miles, statute	Volume	Vessel
Sept. 29	a	65	310	8	1	Launch
" 30	b	78	432	11.6	1	"
Oct. 1	c	<u>21</u>	<u>98</u>	<u>2.9</u>	1	"
		164	840	12.5		

Note: The Soundings are in feet and tenths after reduction in the record, and are plotted to the nearest foot on the sheet.

The Plane of Reference is the mean of the lower low waters, and reads 1 foot on the staff gauge established at the dock of the Smith Lumber Co. at Bay Point.

Highest tide during observations read 7.45 feet on staff.

Lowest " " " " 1.4 " " "

The plane of reference was deduced from a 24-hour series of simultaneous observations with the tidal station at Army Point, Benicia, Cal.

VEC  
Nov. 30, 1915

*L. S. S.*

HYDROGRAPHIC SHEET 3771.

Suisun Bay (Bar between Middle and Stake Points), California,  
by Assistant Fremont Morse in 1915.

TIDES.

	Bay Point ft.
Mean lower low water, or plane of reference on staff	1.0
Lowest tide observed " "	0.5
Highest " " " "	8.2
Mean range of tide	4.8

DEPARTMENT OF COMMERCE

Hyd. Sheet No 3771

Comparison with the former survey in 1914, (Hyd 3657) shows no change of any consequence.

There were a number of discrepancies in the time intervals in the record and no bottom characteristics were recorded.

Positions should not be shown by small colored circles.

(Par. #327, General Instructions)

R. L. Johnston

Soundings shown in feet.

Protracted by field party.  
Soundings plotted by field party.  
Verified and inked by R. L. J.