

4187

U. S. COAST AND GEODETIC SURVEY
DEC 1 - 1921

Diag. Cht. Nos. 5702-1 & 5800-1

4187

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: *California*

17-5813

DESCRIPTIVE REPORT.

Hydro Sheet No. *4187*

LOCALITY:

Northern Coast

Tibbitts Bank

1921

CHIEF OF PARTY:

E. H. Pagenhart

DISCRIPTIVE REPORT

To accompany Hydrographic sheet of Tibbitts bank

USS LYDONIA, August, 1921.

This sheet covers the search for the reported Tibbitts Bank off the Northern California Coast, as called for in supplemental instruction dated July 12, 1921.

All work is on dead reckoning, and ships sights. At the start the weather was thick, but the wind soon came up and after the first 10 hours run we encountered a 30 to 40 mile wind with heavy sea which lasted throughout the entire week of work.

A departure was taken from Turtle Rock off Rocky Point and a run of 5 miles north was made to the first sounding, the course was then changed to west (true) and a line run out to the bank; soundings spaced 10 miles apart. The first sight, obtained after 24 hours running, placed the ship 20 miles south of the dead reckoning, after this position, 4 B. the first allowance was made for leeway.

The sights cannot be entirely relied upon because at best the condition were only fair on account of the rough sea; the dead reckoning is weakened on account of the sea and wind which as stated before was a 30 to 40 mile north wind blowing steadily.

The plotted positions are a compromise between dead reckoning and sights, and they represent careful work in the adjustment. The depths shown on the line from position 4 A. to position 4 B. are incorrect as ship was allowed to drift and was not held up to the lead. Both before and after that section of the line the soundings are correct.

At 6 p.m., August 5th, 1921, the latitude 41° Long. 125° $35'$ while standing in, discolored water was noticed; it was obscured from that time until dark and probably extended the entire distance inshore. This is mentioned because Captain Tibbetts who reported the Bank, lays stress on the discolored water and it is very probable that discolored water may at times extend well beyond where we first noticed it.

E. H. Pagenhart
E. H. Pagenhart,
Chief of Party.

HYDROGRAPHIC STATISTICS

BOAT U.S.S. Lydonia

SHEET No.

Chart # 5052

Tibbits Bank

DATE	LETTER	VOLUME	MILES	SOUNDINGS	RR. POS.	Radio Sigs. AREA	AREA
Aug. 1, 1921	A	1	87.4	7			
" 2, "	B	1	124.2	9			
" 3, "	C	1	140.3	10			
" 4, "	D	1	102.4	9			
" 5, "	E	1	136.8	9			
" 6, "	F	1	80	3			5750
Aug. Totals			599.1	47	D.R.		5750

COPY TO FIELD RECORDS.

January 7, 1922.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
volumes of sounding records for

HYDROGRAPHIC SHEET **4187**

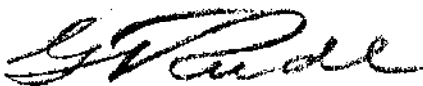
Locality: **Tibbits Bank, off Trinidad Head, California**

Chief of Party: **E. H. Pagenhart in 1921**

Plane of reference is **mean lower low water, reading**

4.0 ft. on tide staff at **N. Jetty Ldg., Humboldt Bay.**

Condition of records: **Satisfactory**



Chief, Division of Tides and Currents.

Hyd. Sheet No. 4187

This work is controlled entirely by dead reckoning and ships sights. Only the soundings were verified.

Those soundings, questioned by the chief of party on account of the ship being allowed to drift, were not inked.

The scale of the sheet was found to be one half of the scale given or one centimeter equals two minutes of longitude instead of one centimeter equals one minute of longitude.

R. L. Johnston

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS

REPORT ON HYDROGRAPHIC SHEET No. 4187.

Surveyed in 1921.

Chief of Party: E. H. Pagenhart. Protracted and soundings plotted by
R. P. Eyma.
Surveyed by party of Str. LYDONIA. Verified and inked by R. L. Johnston.

1. The sounding records are unsatisfactory in the following respects:

Although the time between soundings averaged $2\frac{1}{2}$ hours the records are very carelessly written. At times the pencil used was so hard that the writing is scarcely legible.

No data are furnished by which the net depths were calculated. Amount of wire on drum should have been noted. No note as to whether a registering sneave was used, and if so the amount of correction required. Neither the sounding nor other records submitted state the log factor (slip) or transfer. All this information is required to permit the adjustment which must frequently be made.

The log and revolution readings should have been inserted in the "Angles" column and all remarks should have been in the "Remarks" column. Form No. 612 should have been used for the dead reckoning record.

2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development fulfill the specific instructions. It should be noted that the sounding 996 on chart No. 5052 (lat. $41^{\circ} 30'$, long. $127^{\circ} 10'$) is confirmed by this survey, which however failed to develop the locality sufficiently to reveal if shoaler water exists there.
No evidence of Tibbetts Shoal was found although discolored water was encountered 65 miles offshore. * From TUSCARORA (1874)
H. W. Murray
4. The sounding line crossings are adequate.
5. The field plotting was completed to the extent prescribed by General Instructions and none of it had to be done over.
6. No further surveying is required except some development to fill in the extensive open areas on the sheet and possibly additional work on the 996 spot when opportunity offers.
7. The character of the surveying and plotting are fair.
8. Reviewed by E. P. Ellis, March, 1922.

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. 4187

State California Northern Coast

General locality ~~150 miles off Trinidad Head~~

Locality "TIBBIT'S BANK"

Chief of party . . E. H. Pagenhart

Surveyed by LYDONIA

Date of survey . . August 1-5th 1921

Scale 1 cm. = 1' Longitude

Soundings in Fathoms

Plane of reference . . M.A.L.W.

Protracted by : R.P.F. . . Soundings in pencil by R.P.F.

Inked by Verified by

Records accompanying sheet (check those forwarded):

Des. report, _____ Tide books, _____ Marigrams, _____ Boat sheets,

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

Data from other sources affecting sheet

Remarks:

Partially applied to Chart 5021

Mar. 4, 1947 R.