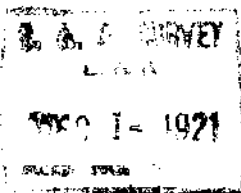


4186



Diag. Cht. No. 5702-1

4186

Form 304
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: *California*

1-5673

DESCRIPTIVE REPORT.

Hydro Sheet No. *4186*

LOCALITY:

Northern Coast
Off Trinidad Head

1921

CHIEF OF PARTY:

E. H. Pagenhart

-NOTE-

To Accompany Hydrographic Sheet #3, 1/40,000 of Trinidad Head.

USS LYDONIA, Sept. & Oct., 1921.

Most of the work on this sheet was tube soundings with sufficient up and down casts for charting purposes.

On the boat sheet all up and down casts are shown in black ink while tube soundings are in red.

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

EHP-C

HYDROGRAPHIC STATION

U.S.S. Lydonia

SHEET No. 3

1-40,000
(Base Scales 3+5)

DATE	LETTER	VOLUME	METERS	SOUNDINGS	FMS.	ANGLES	AREA
Sept. 22, 1921	A	1	11.5	103	21	42	
" 23, "	B	1	39.0	360	95	199	
" 24, "	C	1	24.5	192	49	110	
" 28, "	D	1	41.5	292	66	130	
" 30, "	E	2	34.0	269	55	121	
Sept. Totals			150.5	1216	286	602	30.0
Oct. 1, 1921	F	2	21.5	142	30	79	
" 10, "	G	2	8.0	93	15	30	
Oct. Totals			29.5	235	45	109	9.0
Total			180	1451	331	711	139 sq. m.

C O P Y

January 11, 1922.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4186

Locality: 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 North Jetty Landing, Humboldt Bay

* Allowance made for difference in time at place of soundings.

Condition of records: Satisfactory.

(Signed) G. T. Rude

Chief, Division of Tides and Currents.

Hyd. Sheet No. 4186

On this sheet, most of the soundings, which were taken at positions are vertical casts with the ship held over the position, while intermediate ones are tube soundings.

The records of the work are not carefully kept. The time at which the ship was stopped, for the up and down cast, is generally but not always recorded while the time for the "ahead" is only recorded in a very few cases.

R. L. Johnston

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

SECTION OF FIELD RECORDS.

REPORT ON HYDROGRAPHIC SHEET No. 4186.

Surveyed in 1921.

Chief of Party: E. H. Pagenhart. Protracted & soundings plotted by
W. T. Carter.
Surveyed by party of Str. LYDONIA. Inked by R. L. Johnston.

1. The records do not conform to the General Instructions in the following respects:
 - a. Instead of noting whether starboard or port sounding machine was used the record should have stated whether the tube used was Tanner-Blish or Bassnet - if the latter the number of the tube should also have been given. A comparison of the tube readings with the up and down casts would have afforded a basis for rating the tube soundings. As it is the record is useless for that purpose.
 - b. No entries were made in the column "Wire Run Out". The information that might have been obtained from this column would have assisted materially in evaluating doubtful tube soundings. Several soundings of 12 to 18 fathoms less than surrounding depths (in 50 to 65 fathoms) were rejected in the office although the fact that they were erroneous should have been noted by the field party. Had the information called for in this and the preceding paragraphs been given it would have been possible to reject other soundings which appear to be erroneous.
 - c. The time when the ship stopped for vertical casts was not always stated, and only in a few instances was the time noted when the ship went ahead and was on course. Without this information it was not possible to space the soundings accurately on the line.
 - d. The deviation table given in the sounding volumes is for the standard compass, whereas the steering compass was used. The deviation table therefore is useless.
2. The plan and character of development fulfill the requirements of the General Instructions except that no bottom characteristics were obtained.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are, in general, adequate.
5. The development is sufficient to permit drawing the usual depth

curves. The 50 fathom curve has some eccentricities caused by poor tube soundings.

6. The field plotting was completed to the extent prescribed in General Instructions and the office draftsman did not have to do any of it over.
7. The junctions with adjacent hydrography by the same party are excellent. Those with the surveys of 1872 and 1875 are also good. At the lower part of 4186 a comparison with the old work indicates a probable deepening of 2 fathoms. The overlap is not sufficient however, to warrant a definite conclusion on this point.
8. No further surveying is required within the limits of this survey.
9. The character and scope of the surveying are fair and the field drafting is good.
10. Reviewed by E. P. Ellis, April, 1922.

703
January 11, 1922.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4186

Locality: 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 North Jetty Landing, Humboldt Bay
- * Allowance made for difference in time at place of soundings.

Condition of records: Satisfactory.



Chief, Division of Tides and Currents.

COPY TO FIELD RECORDS.

January 11, 1922.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 4188

Locality: **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 North Jetty Landing, Humboldt Bay**
- * **Allowance made for difference in time at place of soundings.**

Condition of records: **Satisfactory.**



Chief, Division of Tides and Currents.

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. 4186

State . . . California

General locality . . Northern Coast, Humboldt County

Locality . Off Trinidad Head, around 50 fathom Curve

Chief of party E.H. Pagenhart

Surveyed by LYDONIA

Date of survey . . . September 22 - October 10, 1921.

Scale 1:40000

Soundings in Fathoms

Plane of reference M.L.L.W.

Protracted by W.T.C. Soundings in pencil by W.T.C.

Inked by Verified by

Records accompanying sheet (check those forwarded):

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

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

Data from other sources affecting sheet

Remarks: *Boat sheet retained on board
for continuation of work to north*