

4531
4531

4531

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

State: OREGON

11-5613

DESCRIPTIVE REPORT.

Hydro. Sheet No. 4531

LOCALITY:

Vest of Coquille Light-

Vic. Port Orford to Cape Arago Offshore

STR. TIDE.

1924-'25

CHIEF OF PARTY:

R. E. Lucas and T. H. Maher

T

May 29, 1926.

~~Division of Hydrography and Topography:~~

Division of Charts:

Tide reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4531

Locality: Oregon

Chief of Party: R. F. Luce in 1924; T. J. Maher in 1925

Plane of reference is M.L.L.W
4.6 ft. on tide staff at Empire
2.4 " " " " " Port Orford

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.



Chief, Division of Tides and Currents.

431
 STATISTICS HYDROGRAPHIC SHEET "C" - COAST OF OREGON

WEST OF COQUILLE LIGHT - STR. GUIDE - 1924. - R.F.Luce, Comdg.

1924			Miles	Soundings	Positions
● Vol. #1	July 24th	- A Day	32.2	120	21
	" 25th	- B "	30.5	88	24
	" 29th	- C "	24.2	70	25
	" 30th	- D "	58.5	167	84
	" 31st	- E "	9.7	20	6
Vol. #2	" 31st	- E "	24.6	57	42
	Aug. 1st	- F "	16.3	35	12
	" 2nd	- G "	17.9	45	16
	" 15th	- J "	19.5	68	24
	" 21st	- K "	45.2	127	44
	" 26th	- L "	20.3	83	25
	" 27th	- M "	23.9	65	26
Vol. #3	" 27th	- M "	36.8	104	35
	Sept. 2nd	- N "	-	-	-
	" 8th	- P "	47.0	151	83
	" 11th	- Q "	23.3	75	25
	" 15th	- R "	12.2	46	17
	" 16th	- S "	26.2	79	32
	" 17th	- T "	49.3	113	42
Vol. #4	" 17th	- T "	5.2	32	16
	" 18th	- U "	52.0	128	48
	" 25th	- V "	53.0	126	43
	Oct. 10th	- W "	51.3	159	65
	Nov. 5th	- X "	7.5	26	24
Vol. #1 - 1925.					
	June 8th	- A "	46.0	102	50
	" 9th	- B "	11.0	24	16
	" 12th	- C "	.2	7	4
	" 30th	- D "	36.0	77	29
	July 7th	- E "	23.0	51	24
	" 23rd	- F "	6.0	19	12
	Nov. 6th	- G "	34.0	82	33

STATISTICS HYDROGRAPHIC SHEET "C" - COAST OF OREGON

WEST OF COQUILLE LIGHT - STR. GUIDE - 1924. - R.F. Luce, Comdg.

1924			Miles	Soundings	Positions
Vol. #1	July 24th	- A Day	32.2	120	21
	" 25th	- B "	30.5	88	24
	" 29th	- C "	24.2	70	25
	" 30th	- D "	58.5	167	84
	" 31st	- E "	9.7	20	6
Vol. #2	" 31st	- E "	24.6	57	42
	Aug. 1st	- F "	16.3	35	12
	" 2nd	- G "	17.9	45	15
	" 15th	- J "	19.5	68	24
	" 21st	- K "	45.2	127	44
	" 26th	- L "	80.3	85	25
	" 27th	- M "	23.9	65	26
Vol. #3	" 27th	- M "	36.8	104	35
	Sept. 2nd	- N "	-	-	-
	" 8th	- P "	47.0	151	83
	" 11th	- Q "	23.3	78	25
	" 15th	- R "	12.2	46	17
	" 16th	- S "	25.2	79	32
	" 17th	- T "	49.3	113	42
Vol. #4	" 17th	- T "	5.2	32	16
	" 18th	- U "	52.0	128	48
	" 25th	- V "	53.0	126	43
	Oct. 10th	- W "	51.3	158	65
	Nov. 5th	- X "	7.5	26	24
Vol. #1 - 1925.					
	June 8th	- A "	46.0	102	50
	" 9th	- B "	11.0	24	16
	" 12th	- C "	.2	7	4
	" 30th	- D "	36.0	77	29
	July 7th	- E "	23.0	51	24
	" 23rd	- F "	5.0	19	12
	Nov. 6th	- G "	34.0	82	33

Hydrographic Sheet No. 4531

This sheet covers an "off shore" survey from the vicinity of Port Orford to Cape Arago "Oregon"

The major portion of the survey is "dead reckoning" and "Sonic depths"

The lines established on the sheet by the Field Party have been accepted as approximately correct and while the soundings vary considerably with those shown on adjoining sheets the work appears satisfactory for an approximate development

John D. Torrey.

9/28/26.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

October 25, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4531

Oregon Coast - Offshore

Surveyed in 1924 and 1925

Instructions dated April 29, 1924 (GUIDE)

Chiefs of Party, R. F. Luce, T. J. Maher.

Surveyed by R. F. L., T. J. M.

Protracted and soundings plotted by L. B. Clore and T. B. Reed.

Verified and inked by J. D. Torrey.

1. The records conform to the requirements of the General Instructions except that in many instances notes in ink appear after a sonic depth to the effect that "sonic record shows 477 fathoms", the changed depth differing considerably from the first recorded depth, but in no case was the first sounding crossed out. Such uncertainty could be easily eliminated by the field party. In such case the office assumed that the inked sounding was correct.
2. The plan and character of the survey conforms to the requirements of the General Instructions, except as will be noted hereafter.
3. The plan and extent of development satisfy the requirements of the specific instructions except that many sonic soundings were taken under 100 fathoms, whereas the instructions called for the use of this method in 100 fathoms and over. There is also an excessive duplication of work where this sheet overlaps H. 4503^a.
4. The information is sufficient for drawing the usual depth curves.
5. The sounding line crossings are generally adequate. There are some apparent discrepancies between some of the cross lines as well as between closely spaced adjacent lines. This may be accounted for by the irregularity of the bottom as well as by the survey methods employed--the non-standardized method of sounding

(sonic depth finder) and the experimental method of position fixing (R. A. R.) and the uncertain dead reckoning and astro-nomic fixes. Wherever possible changes were made based on the best available data, yet without attempting to make an office survey. Line 37-42 V (Red) was omitted as being manifestly in error.

6. The usual field plotting was done by the field party. Only the visual fixes were checked by the office cartographer, all others being accepted as plotted. The customary check was given the soundings.
7. The junctions with H. 4452 and H. 4218 are satisfactory. The work on these two sheets is tube and wire work. They join H. 4531 in depths well over 100 fathoms and in depths where tubes and vertical casts were taken and hence there is a good agreement.

The junctions with H. 4479, H. 4505 and H. 4503^a will be discussed in the note at the end of this review.

8. No additional work is necessary within the limits of this survey.
9. Character and scope of field operations - good.
Field drafting - good.
10. Reviewed by A. L. Shalowitz, October, 1926.

Note:

Considerable discrepancies between the soundings on this sheet and those on the adjacent sheets H. 4479, H. 4505 and H. 4503^a were noted. The trouble appeared to be with the sonic soundings in depths of 110 fathoms and less. No two of the sheets were in agreement and considerable time was lost in attempting to reconcile the various surveys. A careful study was made of all the soundings on the overlapping portions of the various sheets and these soundings that appeared manifestly in error were rejected. No iron bound rule, however, was followed. The greatest weight was given to wire and pressure tube soundings, with some consideration given to the general trend of the 100 fathom curve. As the wire and tube soundings clearly indicate a broken bottom and the improbability of shoals or submarine valleys existing in this area, it is considered that the survey is adequate for charting purposes, notwithstanding the evident defects. The changes made were concurred in by the Chief of Field Work and Field Records.

Approved -
N. J. S.
LOR

POST-OFFICE ADDRESS: Str. GUIDE, San Pedro, Calif.

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

MAR 27 9 50 AM '26

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

~~14~~
Phase 3
rel...
HHT

Str. GUIDE,
March 22nd, 1926.

FIELD RECORDS (C)

To: Director, Coast and Geodetic Survey, Wash., D.C.
From: Commanding Officer, Str. GUIDE, San Pedro, Calif.
Subject: Offshore hydrographic sheet covering area west of Cape Blanco.

Sheet C
not yet diagrammed
Apr 1, 1926

4501


Most of the work on this sheet was done during 1924. The smooth sheet with some positions plotted on it and four volumes of soundings were turned over to this party. During 1925, while operating in this area, a few additional sounding lines were run; this work was recorded in the fifth volume of soundings. On the smooth sheet the position numbers of the 1925 work are in green, while those of the 1924 work are in red.

Attention is called to the soundings between positions #40 and #43, "V" Day, where they cross the soundings of "D" Day; they do not check very well. The discrepancy is probably due to the unskillfulness on the part of the sonic operator as I have frequently had similar trouble. This one line was not plotted on the boat sheet, which leads me to believe that a further investigation was to have been made in this area. While in the field, I was not cognizant of the discrepancy. It is suggested that the ship operating from Marshfield during 1926 run a few additional lines in this section. I will retain the boat sheet on board until instructions are received, as this party may be detailed to do that work; if not, the sheet can be readily transferred to the party that will take it up.

There appear to be no dangers in the area covered. During the summer months when northwest winds prevail, a southerly set was usually experienced, though, on two occasions during thick fogs, when there was practically no wind, a northerly set of about one-half knot per hour was experienced.

There is a considerable amount of inshore work to be done in this section. It appears to me that this can be best accomplished by a party operating from Bandon, using a chartered boat for that purpose and employing the owner either as coxswain or en-

gineer. The local knowledge of the boatman so employed will be of material assistance to the officer in charge when crossing the bar, and in getting anchorages in the lee of rocks and reefs in case of emergency. During 1925, automatic tide gauge was maintained at Port Orford.



Thos. J. Maher

COMMANDING OFFICER,

Str. GUIDE.

TJM-e

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4531

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. C

REGISTER NO. 4531

State Oregon

General locality Coast of Oregon Pacific Coast

Locality Vic. of Port Orford to G. Arago - Off shore
~~Port Orford to Marshfield~~

Scale 1:20000 Date of survey July to Nov. 1924

June to July 1925, 1924 & 1925.

Vessel Guide

Chief of Party E. F. Luce & T. J. Maher

Surveyed by E. F. Luce and T. J. Maher

Protracted by L. B. Clore, T. B. Reed

Soundings penciled by L. B. Clore, T. B. Reed

Soundings in fathoms ~~XXXX~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by J. H. Torrey

Verified by

Instructions dated April 29, 1924, 192

Remarks: 4 volumes of 1924 work, 1 volume 1925 work.
Positions in red 1924, positions in green 1925