

# FE53

FE53

NOAA FORM 76-35A	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT (HYDROGRAPHIC)	
Type of Survey	Field Examination
Field No.	SU 02445
Office No.	FE-53
LOCALITY	
State	Washington
General Locality	Hood Canal
Locality	Port Gamble
19 45	
CHIEF OF PARTY C.D. Meaney	
LIBRARY & ARCHIVES	
DATE	March 24, 1945

☆ U.S. GOV. PRINTING OFFICE: 1976-669-441

NOTE: A new system for registering Field Examinations was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as:

FE No.4 1945

F E N o . 4 1 9 4 5

F. 4 (1945)

F E N o . 4 1 9 4 5

<p>Form 504</p> <p>U. S. COAST AND GEODETIC SURVEY</p> <p>DEPARTMENT OF COMMERCE</p> <p><b>DESCRIPTIVE REPORT</b></p>	
<p>Type of Survey <u>Hydrographic</u></p>	
<p>Field No. <u>SU 02445</u> Office No. _____</p>	
<p>LOCALITY</p>	
<p>State <u>Washington</u></p>	
<p>General locality <u>Hood Canal</u></p>	
<p>Locality <u>Port Gamble</u></p>	
<p><u>1945</u></p>	
<p>CHIEF OF PARTY</p>	
<p><u>C. D. Meaney</u></p> <p>SURVEYOR</p>	
<p>LIBRARY &amp; ARCHIVES</p>	
<p>DATE <u>MAR 24 1945</u></p>	

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

**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.

REGISTER No. F. E. No., 4, 1945

Field No. SU 02445

State Washington

General locality Hood Canal

Locality Port Gamble

Scale 1:2,400 Date of survey March 6, 1945

Instructions ~~dated~~ from Supervisor, Northwestern District

Vessel Ship SURVEYOR

Chief of party C. D. Meaney

Surveyed by W. R. Porter

Soundings taken by fathometer, graphic recorder, hand lead, wire

Protracted by W. M. Martin

Soundings penciled by W. M. Martin

Soundings in fathoms feet at MLW MLLW

REMARKS: Smooth Sheet and Plotting by the

Seattle Processing Office

WPA

REPORT ON SPECIAL SURVEY - PORT GAMBLE, WASHINGTON

Ship SURVEYOR

C.D. MEANEY, Comdg.

March 1945

Authority

The authority for this survey is instructions from the Supervisor, Northwestern District supplemented by verbal instructions.

Purposes

The purposes of this survey were to check the orientation of the channel, determine the effective depth in the channel and to locate aids to navigation.

Results

The results of the survey indicated that the channel is properly oriented on chart 6412, that there is a very gradual shoaling in the channel, that lighted beacons marking the channel are charted correctly and that range marks are not charted correctly.

Range markers not shown on later prints.

The front range is a vertical red stripe in the centre of a white rectangular target about 8' X 12 feet supported on a cluster of five piles. The bottom of the target is about 8 feet above high water. The piles are driven near the low water-line.

The rear range is a vertical red stripe in the centre of a diamond shaped white target approximately the same size as the front range. The target is supported by a scaffold and is located near the high water line near the base of a bluff.

The ranges were not equipped with lights on March 6, 1945.

The <sup>bearing</sup> ~~azimuth~~ of the range computed from triangulation is <sup>355</sup> ~~175~~° 36'.  
The ~~azimuth~~ computed from sextant cuts at the front range is ~~175~~° 39'.

Coast Pilot Notes

A channel 150 feet wide and 27 feet deep has been dredged through the narrow entrance to Port Gamble. The channel is marked by two lights. The northern of the two is a white flashing light, the southern is a green flashing light. Both lights are on the east side of the channel. Unlighted range targets for entering Port Gamble were built in 1944 on the east side of Hood Canal.

The front range is a vertical red stripe in the centre of a white rectangular target 8' X 12 feet, secured to a cluster of piles near the low water line, 1.4 miles north of Port Gamble. Lat. 47° 52' 1551.7 m.  
Long. 122° 34' 910.3 m.

The rear range is a vertical red stripe in the centre of a white diamond shaped target supported by piling located near the high water line, near the base of a bluff and two miles north of Port Gamble. Lat. 47° 53' 869.0 m.  
Long. 122° 34' 1000.1 m.

The <sup>bearing</sup> azimuth of the range is <sup>355.6</sup>175.5 degrees (true). The range is not lighted and does not lead through the axis of the dredged channel. The axis of the dredged channel is <sup>360</sup>180 degrees (true).

For entering Port Gamble steer 150 degrees (true) and clear the front range one quarter of a mile on the port beam (bearing 60 degrees true). Continue on course 150 degrees (true) at a slow speed for one half a mile until on the range, then change course to 175.5 degrees (true) and hold the range astern. Pass the northern flashing white light on the port side and continue steering the range astern until the green flashing light is 100 meters off the port bow. Here change course to 185 degrees (true) and keep the long eastern face of the dock open to avoid shoal water on the western side of the channel. Berth at the long eastern face of the dock.

To continue to an anchorage in Port Gamble Harbor pass 50 yards east of the dock and change course to 180 degrees (true) when the dock and high chimney at Port Gamble bear west (true).

A sand spit, partly bare at low water, extends from the point west of the Indian Village almost to the edge of the dredged channel. This spit extends nearly half the distance from the high water line of Indian Village toward the dock at Port Gamble.

A ship continuing on the range will ground on this sand spit after passing the green flashing light.

### Miscellaneous

The triangulation was executed during February 1945.

Hydrographic signals were located March 5, 1945. Hydrography was executed on March 6, 1945. An 808 depth recorder was used for hydrography. Soundings were taken using the foot scale. Corrections were determined from leadline comparisons on March 6 and a bar check on March 7. The bar checks taken on March 6 were unsatisfactory.

Tidal corrections were determined from tide staff readings taken during March 6. The tide staff was located on the Commercial Wharf at Port Gamble. Levels connecting the tide staff and three bench marks were run on March 6. The difference in elevations between bench marks 2 and 5 computed from March 6 observations checked level data furnished this vessel. The difference in elevations computed from March 6 observations between bench mark 4 and 2 differed by approximately 0.3 of a foot from results previously obtained. M.L.L.W. on the tide staff determined from levels connecting the staff and bench marks 2 and 5 was 1.0 feet. This was used for computing tide corrections.

The depth recorder roll was scaled to feet and half feet. Tidal corrections were entered to 0.2 of a foot. Bar check corrections were entered to 0.5 of a foot.

The boat sheet and records of this survey were forwarded to the Processing Office on March 13, 1945.

*C.D. Meaney*  
C.D. MEANEY  
Commanding Officer  
U.S.C. & G.S.S. SURVEYOR

Washington Office,  
June 7, 1945.

Range is unsatisfactory and Coast Guard has been so notified. Markers are shown on latest print of Chart 6412 but range line has been omitted.

*J. A. Mc Cormick*

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. E. E. No 4, 1945

Records accompanying survey:

Boat sheets ...; sounding vols. ...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls ...;  
 special reports, etc. ....  
 .....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet		.199.
Number of positions checked		.38.
Number of positions revised		.2..
Number of soundings recorded		1560.
Number of soundings revised (refers to depth only)		.22..
Number of soundings erroneously spaced		.8...
Number of signals erroneously plotted or transferred		.2..
Topographic details	Time	.2..
Junctions	Time	.2..
Verification of soundings from graphic record	Time	3 hrs.

Verification by *G.B. Woolley* ..... Total time 16 hrs. Date Apr. 21, 1945

Review by ..... Time ..... Date .....

TIDAL NOTE

SU 02445

Washington

Port Gamble

Port Gamble Tide Staff  
Commercial Wharf

Latitude 47° 51' 28"

Longitude 122 34 45

Staff reading of MLLW ----- 1.0 feet

Bar Tests

Bar test

"a" day

Port Gamble, Wash

Corrections.

$$0 \text{ to } 18.1 = +1.0 \text{ ft}$$

$$18.2 \text{ to Max} = -10.5 \text{ ft}$$

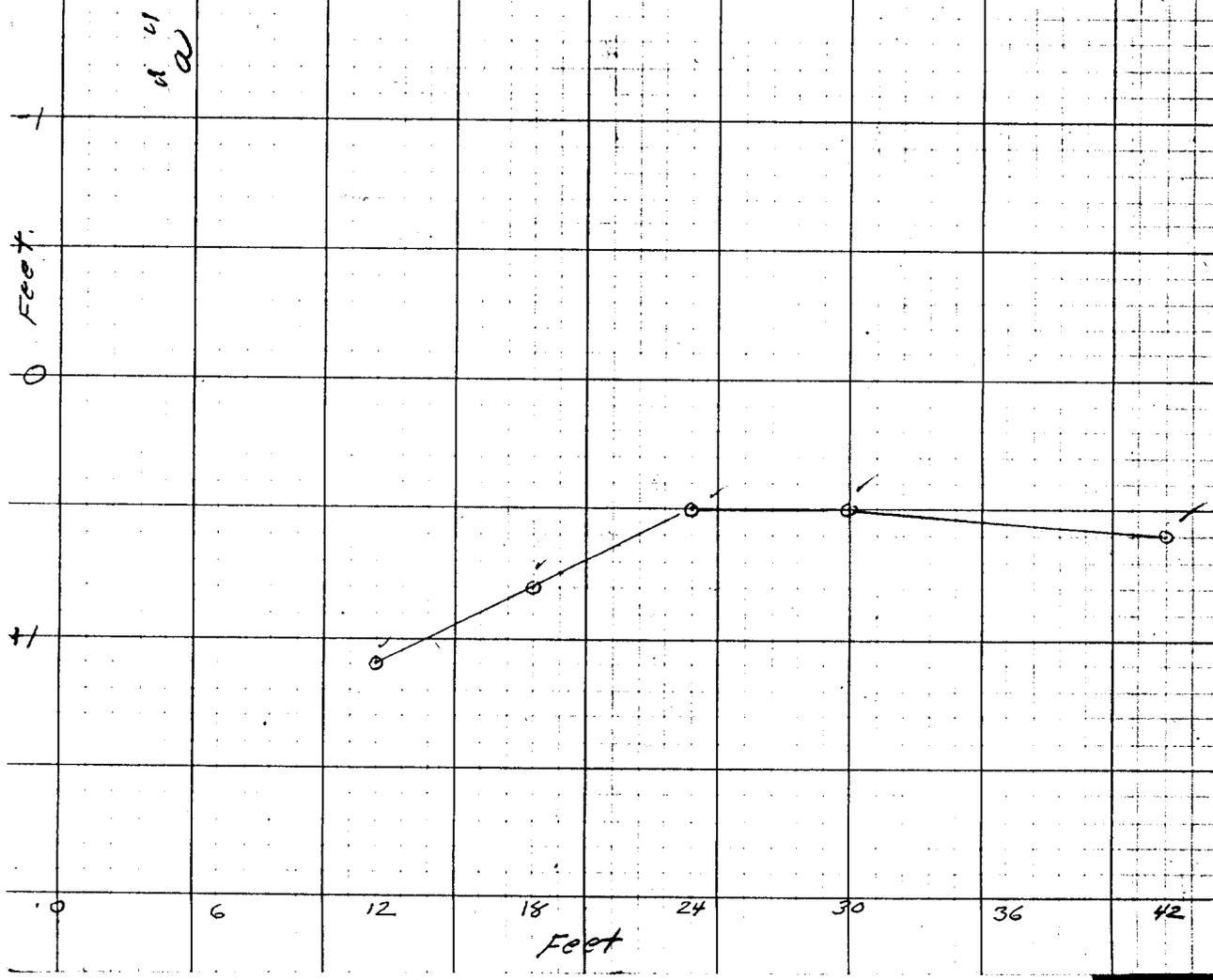
comp WMD

- KBJ

Bar test a day Launch No 4

Hood Canal March 6, 1945  
 Bar Fath Mean Diff

12	10.8	11.0	10.9	+1.1 ✓
18	17.0	17.4	17.2	+0.8 ✓
24	23.6	23.4	23.5	+0.5 ✓
30	29.5	29.5	29.5	+0.5 ✓
L.L.				
42	41.4			+0.6 ✓

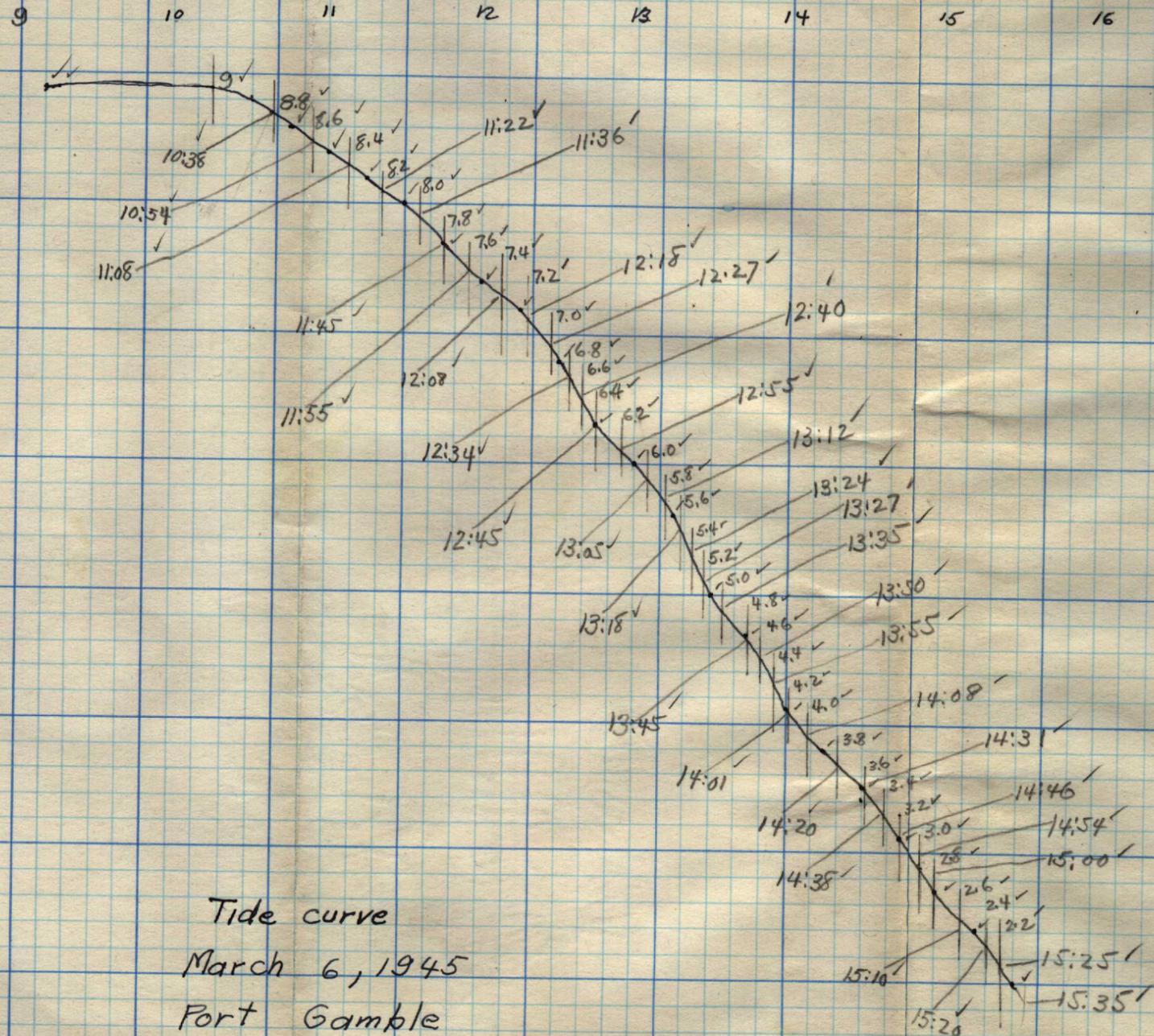


# F0053

0.1 to 0.3 = 0.2  
 0.3 to 0.5 = 0.4  
 0.5 to 0.7 = 0.6  
 0.7 to 0.9 = 0.8  
 0.9 to 1.1 = 1.0

9:00 to 10:15 = 9 ft.  
 10:15 to 10:38 = 8.8  
 10:38 to 10:54 = 8.6  
 10:54 to 11:07 = 8.4

1	11:22	8.2
	11:36	8.0
	11:45	7.8
	11:55	7.6
	12:08	7.4
	12:18	7.2
	12:27	7.0
	12:34	6.8
	12:40	6.6
	12:45	6.4
	12:55	6.2
	13:05	6.0
	13:12	5.8
	13:18	5.6
	13:24	5.4
	13:27	5.2
	13:35	5.0
	13:45	4.8
	50	4.6
	55	4.4
	14:01	4.2
	08	4.0
	20	3.8
	31	3.6
	38	3.4
	46	3.2
	54	3.0
	15:00	2.8
	10	2.6
	20	2.4
	25	2.2
	35	2.0



Tide curve  
 March 6, 1945  
 Fort Gamble  
 105 Meridian Time

9:00 10:00 11:00 12 13 14 15 16 17

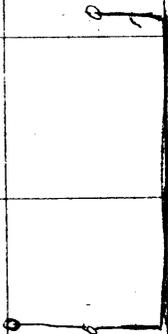
m.2.L.W = 1.016 on T.S.  
 - KDJ

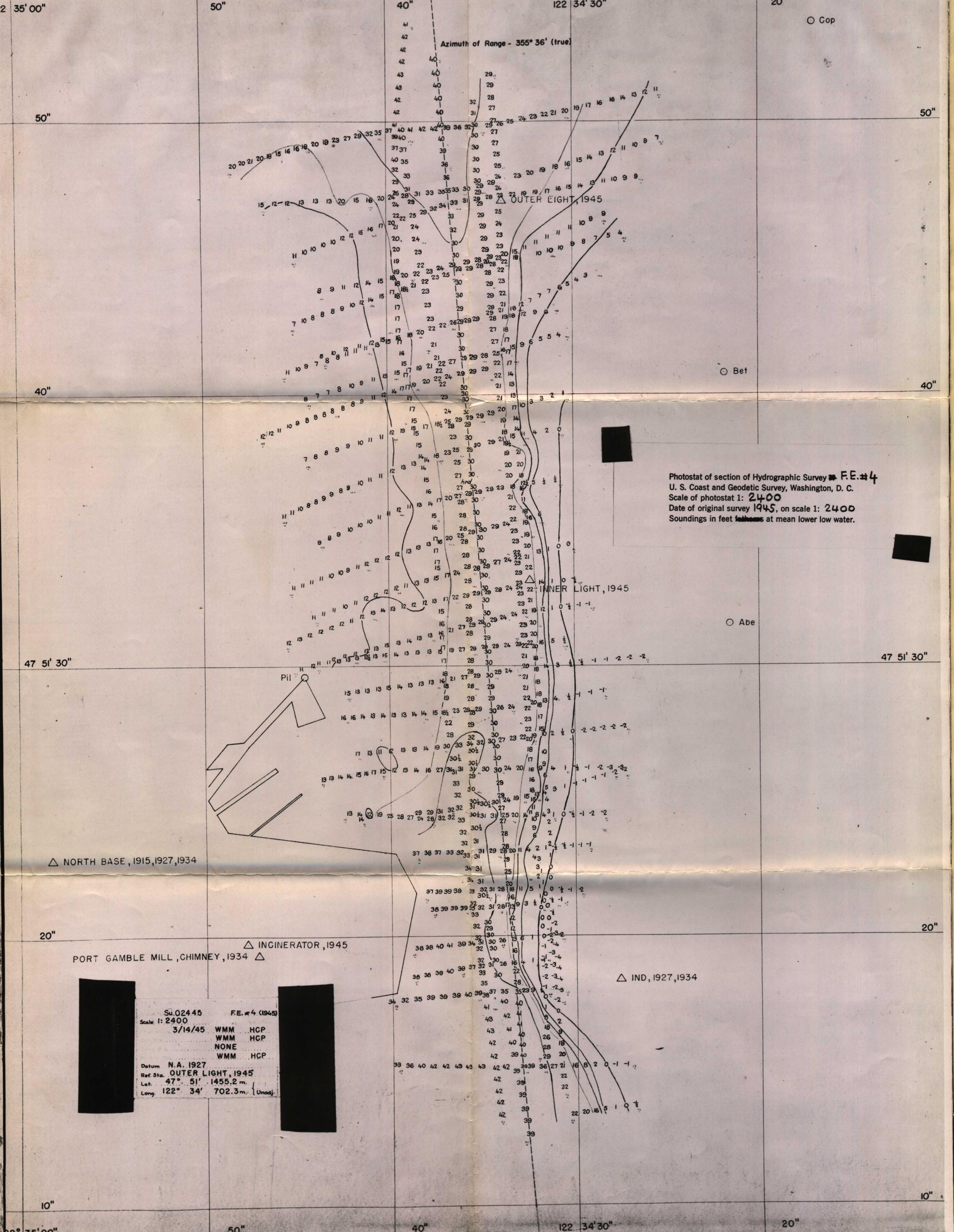
Tides

Tides - March 6

Port Gamble, Wash

"a" day





Azimuth of Range - 355° 36' (true)

Photostat of section of Hydrographic Survey **F.E.#4**  
 U. S. Coast and Geodetic Survey, Washington, D. C.  
 Scale of photostat 1: 2400  
 Date of original survey 1945, on scale 1: 2400  
 Soundings in feet ~~at~~ at mean lower low water.

Su. 02445 F.E.#4 (1945)  
 Scale 1: 2400  
 3/14/45 WMM HCP  
 WMM HCP  
 NONE  
 WMM HCP  
 Datum N.A. 1927  
 Ref. Sta. OUTER LIGHT, 1945  
 Lat. 47° 51' 14.55.2 m.  
 Long. 122° 34' 702.3 m. {Unadj.

△ NORTH BASE, 1915, 1927, 1934

△ INCINERATOR, 1945

PORT GAMBLE MILL, CHIMNEY, 1934 △

△ IND, 1927, 1934

Pill

INNER LIGHT, 1945

OUTER EIGHT, 1945

○ Cop

○ Bet

○ Abe

50"

40"

122 34' 30"

Azimuth of Range - 355° 36' (true)

50"

50"

40"

40"

47° 51' 30"

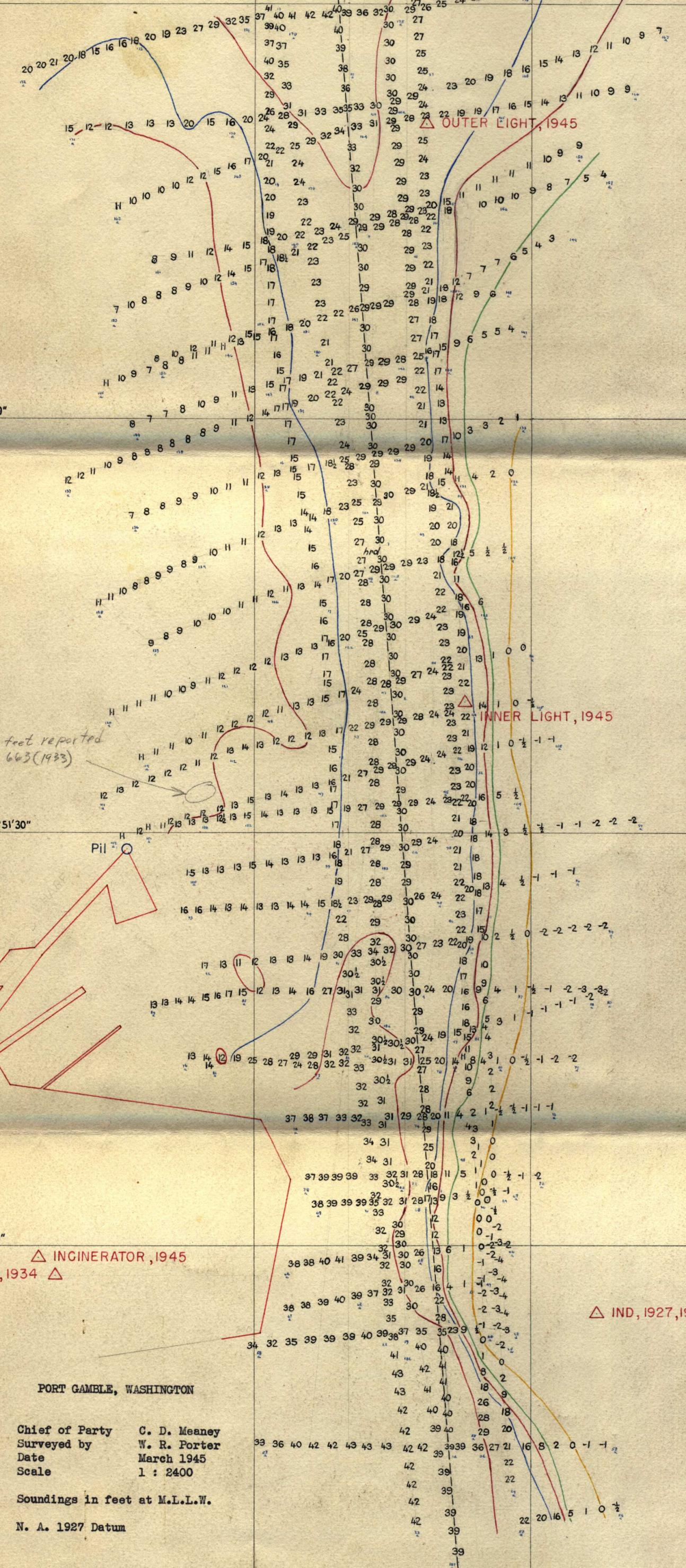
47° 51' 30"

20"

20"

10"

10"



6 feet reported L. 663 (1933)

△ INGINERATOR, 1945  
△ IND, 1927, 1934

PORT GAMBLE, WASHINGTON

Chief of Party C. D. Meaney  
Surveyed by W. R. Porter  
Date March 1945  
Scale 1 : 2400

Soundings in feet at M.L.L.W.

N. A. 1927 Datum

50"

40"

122 34' 30"

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

MAR 24 1945

ACC. NO. \_\_\_\_\_

SU 102445