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Diag. Cht. No. 1218-2 & 1219-2

4870

Form 504	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY, Director	
State: <u>New Jersey</u>	
DESCRIPTIVE REPORT	
Topographic Hydrographic	} Sheet No. <u>4870</u>
LOCALITY	
<u>Cape May</u>	
<u>Wildwood to Cape May</u>	
<u>Harbor</u>	
1928	
CHIEF OF PARTY	
<u>R. L. Schoppe</u>	

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
E. LESTER JONES, DIRECTOR

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET #2
COAST OF NEW JERSEY OFF WILDWOOD

S.S. RANGER

RAY L. SCHOPPE,
CHIEF OF PARTY

1928

DEPARTMENT OF COMMERCE
U.S.COAST AND GEODETIC SURVEY
E. LESTER JONES, DIRECTOR.

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC-SHEET #2
COAST OF NEW JERSEY OFF WILDWOOD

S.S RANGER

Ray L.Schoppe,
Chief of Party.

1928

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET #2

COAST OF NEW JERSEY OFF WILDWOOD

STEAMER RANGER, 1928

The work on this sheet is done by authority of instructions dated May 23, 1928. The limits of the sheet are as follows: On the west it extends inshore along Wildwood Beach to approximately the two fathom curve where it joins launch work on sheet #4. On the east, Long. $74^{\circ} 40'$ where it joins sheet 3. On the south, Lat $38^{\circ} 56.3'$ where it joins sheets 1 and 3. On the north, Lat. $38^{\circ} 58.7'$, where it joins the 1928 work of the M.V. NATOMA.

There were no unusual methods used in this work. All soundings were by hand lead from the ship, using bronze center mahogany timber rope for lead line. Positions were fixed by sextant angles on shore objects, practically all of which were located by triangulation. The signals on the fish traps were located by sextant, primarily for use on sheet 4 and they were used very little on this sheet. They give a good location of the east end of the traps. The trap in Lat. $38^{\circ} 57.3'$ and Long. $74^{\circ} 47.2'$ does not lie within the fish trap area as shown on chart #1219.

There are no discrepancies calling for explanations. There are no dangers to navigation on this sheet. In Lat. $38^{\circ} 57.2'$ Long. $74^{\circ} 48.7'$ a shoal with several 16 foot soundings, is located on a ridge

running northeast and southwest. In Lat. ³⁸37° 57.8' Long. 74° 47.0' near the northeast end of the ridge, 26 feet was found but this whole ridge is so close to fish traps that vessels must keep to the south and east of it to clear the traps. Some of the piles supporting these traps are left in place the whole year to act as markers for the trap location and since the area is never cleared of piling, it is probable that submerged remnants of broken piles, will be found at the trap locations.

A 28 foot spot charted in Lat. 38° 57.5' Long. 74° 43.6' was not found. The original system of lines show no trace of it and a split line (33 - 42 Q) fail to show any trace of that depth. A least depth of 32 feet was found 280 meters southeast of this position. It was planned to do additional development in this area but the weather proved too unfavorable for such work. A uniform sandy bottom was found. If the shoal consisted of a piece of wreckage it will be difficult to prove or disprove its existence without a small drag. This vessel is not equipped with a wire drag.

This 28 foot
Adp. (auth. H-153)
should be
34 feet.
an error of
1 fathom
was made
in the
reduction.
A.L.S.

Vessels drawing more than 28 feet do not pass west of Five Fathom Bank. The channel inside of Five Fathom Bank is not recommended for vessels drawing over 18 feet, and such vessels can safely cross the area covered by this sheet. There are no anchorages on the area covered by this sheet.

The shoals described above indicate that the ridge parallel to the coast and lying 1-3/4 miles off Wildwood, has moved somewhat to the southward and the least water now charted (18 feet) is replaced by a series of 16 foot spots located about 1/4 mile SSW from the previous crest of the shoal. As noted above, the changes on this shoal have no practical effect on navigation.

No wire drag work was done on this sheet. Landmarks for charts have been submitted in connection with Topographic sheet #1.

A Table of Statistics is attached.

Respectfully submitted,

Ray L. Schoppe

Ray L. Schoppe,
Chief of Party.

STATISTICS
to accompany

HYDROGRAPHIC SHEET #2 .

Date	Day letter	Vol.	Miles	Sdgs.	Positions.	Boat
8-8-28	A	1	17.6	344	90	RANGER
8-15-28	B	1	14.5	271	81	"
8-16-28	C	1	16.5	344	92	"
8-21-28	D	1	13.6	342	77	"
8-31-28	E	1	12.0	177	56	"
8-31-28	E	2	10.0	171	51	"
9-10-28	F	2	38.4	800	192	"
9-11-28	G	2	35.4	713	195	"
9-11-28	G	3	5.0	96	25	"
9-14-28	H	3	33.2	571	164	"
9-22-28	J	3	2.7	53	15	"
9-28-28	K	3	39.5	826	214	"
9-28-28	K	4	5.8	102	27	"
10-11-28	L	4	6.0	96	25	"
10-16-28	M	4	41.2	705	156	"
10-17-28	N	4	32.5	681	189	"
10-23-28	P	5	17.8	363	115	"
10-24-28	Q	5	20.0	408	113	"
10-30-28	R	5	1.8	38	14	"
Totals			363.3	7101	1891	

Section of Field Records

Report on Sheet No 4870
Chief of Party R.L. Schappe
Protracted by G.E. Morris
Verified & Inked by J. Walker

Surveyed in 1928
Surveyed by Ship Officers
Sounding Plotted by
G.E. Morris.

The sounding records were complete and were neatly kept.

The protracting was good. However the wrong signals were used occasionally and twice mistake were made in numbering the positions.

The time intervals were carefully adhered to in plotting the soundings. Most of the soundings revised were due to changes in the fives and wrong numbering of the fives.

The sheet was clean and the work was legible.

The drafting conformed to General Instruction. A buoy was located "apparently adrift" in Vol 3, page 7. It was not plotted on this sheet.

A whistling buoy was also located approx. Lat 39-00-20 Long 74-44-40. This is off the area covered by the soundings on this sheet. The chart shows this buoy about half a mile west.

The positions of the three fish traps shown on this sheet could not be verified accurately and they were inked in as shown by the field party.

Reviewed by

Date

Respectfully submitted
J. Walker
5/18/29

O.K. (A.L.S.)

April 19, 1929.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 4870

Locality: Cape May, New Jersey.

Chief of Party: R. L. Schoppe in 1928.

Plane of reference is mean low water, reading
2.3 ft. on tide staff at Cold Spring Inlet (C.G. Sta., N.J.)

~~XXXXXXXXXXXX~~

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 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.

Paul C. Whitney

Chief, Division of Tides and Currents.

DEPARTMENT OF COMMERCE

AND REFER TO NO. 11-DRM

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 12, 1929.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4870

Wildwood to Cape May Harbor, New Jersey

Surveyed in 1928

Instructions dated May 23, 1928 (RANGER)

Chief of Party, R. L. Schoppe.

Surveyed by Field Party.

Protracted and soundings plotted by G. E. Morris.

Verified and inked by J. T. Walker.

1. The records conform to the requirements of the General Instructions.
2. The plan, extent and character of the survey conform to the requirements of the specific instructions with the exception that the area east of longitude $74^{\circ} 48'$ was surveyed on a scale of 1:20,000 instead of 1:40,000. This departure is considered justifiable in view of the importance of the locality and the practicability of using the shore signals for the entire survey. It would probably have been more in keeping with the intention of the specific instructions if the ridge in the vicinity of the fish traps, with depths less than 5 fathoms, had been more closely developed. However, since vessels must avoid the fish traps and so pass clear of the ridge, there is no need for additional work here at the present time.
3. A comparison of adjacent sounding lines shows a good agreement.
4. The information is sufficient for drawing the usual depth curves.
5. The usual field plotting was done by the field party and with the exception of an occasional use of wrong signals, was satisfactory.
6. The junction with the contemporary inshore survey, H. 4859, has been considered in the review for that sheet. The junctions with the other contemporary surveys joining this sheet


will be taken up when those sheets are reviewed.

While no detailed comparison has been made with the old survey, H. 1533, it is noted that a general shoaling has taken place in the vicinity of the 30 foot curve, moving it about 200 meters offshore. The ridge in the vicinity of the fish traps has also moved offshore about the same distance. In the vicinity of the 18 foot curve the change has not been so great.

7. On account of the detailed nature of the present survey, and the fact that no critical shoals appear on the old survey (except the 28 foot sounding which will be considered below) that have not been found on the present survey, it is recommended that this sheet supersede all other sources of information heretofore used in the compilation of the chart.
8. Attention is called to the fact that the charted 28 foot sounding in lat. $38^{\circ} 57'.5$, long. $74^{\circ} 43'.6$ should be omitted from all future issues of the chart. The authority for this sounding is H. 1533 (surveyed in 1862) but an inspection of the original sounding records shows that an error of 1 fathom was made in the reduction and should have been 34 feet instead. The present survey shows 35 feet close by and a least depth of 32 feet on the ridge and about 200 meters southeast of the fictitious 28. The survey of 1844 (H. 116) shows a least depth of 30 feet on the ridge and located about 300 meters to the northward of the 32 foot depths found on the present survey, but since the bottom here is of a character susceptible to wave and current action, it is reasonable to assume that during a period of 85 years some changes have taken place. It is therefore recommended that the 30 foot sounding on H. 116 should not be used to supplement the work on the new survey.
9. No additional work is necessary here at the present time.
10. a. A black and white can buoy was located by the field party in approximate latitude $38^{\circ} 58'$, longitude $74^{\circ} 48'$. As there is no record in the office of any such buoy in this vicinity it was doubtless adrift and is not shown on the smooth sheet.
b. The difference in position of the whistle buoy No. 1 from its charted position is of no consequence since at this writing the Lighthouse Bureau has moved the buoy about 1 mile southwest of its charted position.

11. Reviewed by A. L. Shalowitz, June, 1929.

Approved:


Chief, Section of Field Records (Charts)


Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
APR 16 1929
Acc. No.

REG. NO. 4870

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. 2

REGISTER NO. 4870

State NEW JERSEY

General locality North of Cape May

Locality Wildwood to Cape May Harbor
~~Cape May Harbor Entrance to Crawford Inlet.~~

Scale 1-20,000 Date of survey Aug. Oct., 19 28

Vessel RANGER

Chief of Party R.L. Schöppe

Surveyed by Ships Officers

Protracted by G.E. Morris

Soundings penciled by G.E. Morris

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by none

Inked by J.T. Walker

Verified by J.T.W.

Instructions dated May 25, 19 28

Remarks: _____

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 12, 1929.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4870

Wildwood to Cape May Harbor, New Jersey

Surveyed in 1928

Instructions dated May 23, 1928 (RANGER)

Chief of Party, R. L. Schoppe.

Surveyed by Field Party.

Protracted and soundings plotted by G. E. Morris.

Verified and inked by J. T. Walker.

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2. The plan, extent and character of the survey conform to the requirements of the specific instructions with the exception that the area east of longitude $74^{\circ} 48'$ was surveyed on a scale of 1:20,000 instead of 1:40,000. This departure is considered justifiable in view of the importance of the locality and the practicability of using the shore signals for the entire survey. It would probably have been more in keeping with the intention of the specific instructions if the ridge in the vicinity of the fish traps, with depths less than 5 fathoms, had been more closely developed. However, since vessels must avoid the fish traps and so pass clear of the ridge, there is no need for additional work here at the present time.
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will be taken up when those sheets are reviewed.

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 - b. The difference in position of the whistle buoy No. 1 from its charted position is of no consequence since at this writing the Lighthouse Bureau has moved the buoy about 1 mile southwest of its charted position.

11. Reviewed by A. L. Shalowitz, June, 1929.

Approved:

Chief, Section of Field Records (Charts)

Chief, Section of Field work (H. & T.)

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4870

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

Number of positions on sheet . 1891
Number of positions checked . 257
Number of positions revised . . 22
Number of soundings recorded . 7101
Number of soundings revised . 186
Number of signals erroneously
plotted or transferred 0

Date: May 18, 1929

Cartographer: J. Walker

Applied to 826-Sc 6-3-63 Frasier