

6799

WIRE DRAG

6799  
WIRE DRAG

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic, Wire Drag

Field No. WD1004 Office No. H 6799

W.D.

LOCALITY

State Maine

General locality Kennebec River

Locality Cox Head to Bluff Head

194 2

CHIEF OF PARTY

C.D. Mea ney

LIBRARY & ARCHIVES

DATE March 25, 1943

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.

H6799

WIRE DRAG

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. WD 1004

REGISTER NO. **H6799**

State MAINE **WIRE DRAG**

General locality Kennebec River

Locality Cox Head to Bluff Head

Scale 1:10,000 Date of survey Aug. - Oct., 1942

Vessel LYDONIA (MARINDIN & RODGERS)

Chief of Party C. D. Meaney

Surveyed by C. R. Reed

Protracted by A. B. Brownell

Soundings penciled by C. R. Reed

Soundings in fathoms feet Feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by C. R. Reed

Inked by C. R. Reed

Verified by \_\_\_\_\_

Instructions dated May 7, 1941, March 11, 1942, 19\_\_\_\_

Remarks: \_\_\_\_\_

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DESCRIPTIVE REPORT

H6799

to accompany

WIRE DRAG

WIRE DRAG SHEET FIELD NO. 1004

KENNEBEC RIVER, MAINE

COX HEAD TO BLUFF HEAD

SCALE 1:10,000

PROJECT CS-265

1942

LYDONIA SUB-PARTY

LAUNCHES MARINDIN, RODGERS & NO. 101

INSTRUCTIONS:

Instructions for the work executed on this sheet are the original project instructions dated May 7, 1941 and supplemental instructions dated March 11, 1942. ✓

SURVEY METHODS:

Standard dual control wire drag methods were employed using the wire drag launches MARINDIN and RODGERS. Lift tests were made from tender No. 101 using the floating type of tester which has been standard for several years. On G day and part of J day, when the tender failed to run, a lift greater than that normally obtained was assumed and applied. ✓

The position of the rock bare 2½ feet at mean low water southeast of Bald Head was determined by "marking" the guide launch positions when the rock was on range with one of the objects of the fix. Removed from sheet. More accurate determination on T-6911 (1942). Lat 43° 48.26' Long 69° 47.16' ✓

During a part of the work on this sheet a depth recorder installed on the guide launch was used. This proved to be a great time saver in avoiding shoal water at the edge of the channel. In attempting to drag to a depth of over 27 feet (the U. S. Engineers project depth) the ends of the drag were continually grounding prior to the installation of the depth recorder. ✓

Prior to D day a rock drill barge was operating on the ledge near the south edge of the channel opposite Lee Island (Latitude 43° 49.55', Longitude 69° 48.05'). Cables holding the barge in place prevented dragging until D day. The sharp edges of blasted rock in this area cut the ground wire when dragging was attempted. A wire drag survey of this area should be made after blasting and dredging is completed. ✓

Drag coverage here is about as good as can be expected.

The current in the river made dragging impossible a large part of the time. Soundings on groundings were rare due to the fact that the current pulled the drag over the ground with the weight bumping or parted the drag when it went fast aground. The 29 ft. sounding by the tender at Latitude 43° 50.15' opposite signal "Ram" was located by cuts from the drag vessels. 29 removed from sheet. Better determination on H-6802 (1942). ✓

H-6802

CHANNELS:

The channel was dragged to a least effective depth of 27.5 feet except as noted below under Splits and Unfinished Work. ✓

GROUNDINGS:

The drag grounded only in depths consistent with the contemporary hydrographic surveys. ✓

DISCREPANCIES:

The deepest channel lies on the wrong side of the can buoy north of Dix Island. This channel was not dragged. The current interfered seriously with making the necessary sharp turns with the drag. Buoy is about midway between 30-ft. curves, and about 100m. from reef. It is not on "wrong" side of channel but could be moved a little closer to the reef. lat. 43° 46.6' long-69° 47.4'

At position 23K (Latitude 43° 49.67' Longitude 69° 47.97') a 31.5 foot effective drag fouled while picking up the drag and a position was taken from the bow of the guide launch with the ground wire leading straight down. With 40 feet of leadline no bottom was obtained. It is probable that a section of ground wire had sufficient slack to foul the bottom while the launches were stopped preparatory to picking up the drag. H-6802 (1942) shows 40 to 45 ft. depths. Cleared with 29 ft. effective drag depth. Disregard.

SPLITS AND UNFINISHED WORK:

Additional dragging is necessary to complete this survey. Dredging operations and the end of the field season combined to prevent completion of the work planned. Not recommended.

Splits appear at the following points:

<u>Latitude</u>	<u>Longitude</u>	
43° 49.65' ✓	69° 48.08' ✓	- 50 ft. on H-6802 (1942)
43° 49.51' ✓	69° 48.22' ✓	- 75 ft. " " (1942)
43° 46.71' ✓	69° 47.38' ✓	- 37 ft. " H-6803 (1942)

The channel north of Dix Island (see "Discrepancies") should be wire dragged.

The west channel west of Perkins Island should be dragged.

Parker Flats should be dragged.

The area where ledge was removed south of Pettis Rocks (see fourth paragraph under "Survey Methods") should be wire dragged after the loose rock has been removed by dredging.

The main channel was fairly well covered. Additional work not recommended.

H6799

**WIRE DRAG**

Coverage  
satisfactory.

There is insufficient overlap at Latitude 43° 49.08' Longitude 69° 48.31'. This is in 40 feet of water on the contemporary hydrographic survey and it should not be necessary to wire drag further.

TIDES:

Tides used south of Perkins Island were from the Fort Popham portable tide gage. North of Perkins Island the tides were from the Phippsburg portable tide gage.

STATISTICS:

Statute miles of wire drag	26.8	✓
Area of wire drag (sq. st. mi.)	1.3	
Number of soundings	25	

Respectfully submitted,

*Clarence R. Reed*

Clarence R. Reed  
H. & G. Engineer  
U.S.C.&G. Survey

Approved and forwarded

*C. D. Meaney*  
C. D. Meaney  
Chief of Party

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H6799

WIRE DRAW

ADDENDUM

Sheet W.D. 1004 (Field)

DISCREPANCY:

A 20 ft. buoy "bumping" on "E" day plots at Latitude 43°49.97' and Longitude 69°47.80' in an area which was dragged to 31 feet on "K" day. Plotting of pos. 21 E corrected. 20 ft. is outside the 31 ft. strip and is consistent with depths on H-6802 (1942) ✓

SMOOTH PLOTTING:

This sheet was processed at the Norfolk Processing Office. ✓

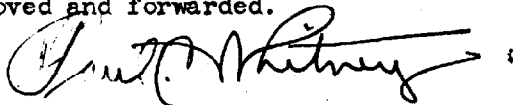
Respectfully submitted,



Isadore M. Zeskind  
Associate Cartographic Engineer

Norfolk, Va.  
March 24, 1943.

Approved and forwarded.



Paul C. Whitney  
Supervisor Southeastern District

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6799**

**WIRE DRAG**

Records accompanying survey:

Boat sheets .2.; sounding vols. .2.; wire drag vols. 4...;  
 bomb vols. 0....; graphic recorder rolls 0.....;  
 special reports, etc. 1 A&D Overlay tracing.....  
 .....

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

Number of positions on sheet	.....	
Number of positions checked	..56.	56
Number of positions revised	...3.	3
Number of soundings recorded	...5.	5
Number of soundings revised (refers to depth only)	.....	
Number of soundings erroneously spaced	.....	
Number of signals erroneously plotted or transferred	.....	
Topographic details	Time .....	
Junctions	Time ... $\frac{1}{2}$ .	
Verification of soundings from graphic record	Time ...0.	
Verification by <i>J.F. Jordan</i> .....	Total time .....	Date May 7, 1943
Review by <i>J.A. McCormick</i> .....	Time ..20.	Date Nov. 3, 1943.

HC799  
WIRE DRAG

HC799

Remarks.

Decisions

	Remarks.	Decisions
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GEOGRAPHIC NAMES

Survey No. **H6799**

**WIRE DRAW**

Name on Survey

On Chart No.    On previous survey No.    On U. S. Quadrangle Maps    From local information    On local Maps    P. O. Guide or Map    Rand McNally Atlas    U. S. Light List

	A	B	C	D	E	F	G	H	K
<u>Maine</u>									1
<u>Kennebec River</u>									2
<u>Bluff Head</u>									3
<u>Cox Head</u>									4
<u>Lee Island</u>									5
<u>Ft. Popham</u>									6
									7
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<u>Phippsburg</u>									10
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Names underlined in red approved  
by L. Heck on 5/21/43

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT } No. H **H6799**  
 PHOTOSTAT OF } No. T **WIRE DRAG**

{ received **March 26, 1943**  
 { registered **March 26, 1943**  
 { verified  
 { reviewed  
 { approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
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62			
63			
82			
✓ 83	Page 4	H2H	Lieut Comdr Finnegan Mr. Eydbick. 7/8/43
88			
90			

RETURN TO

82	R.W.Knox
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*AK*

## TIDE NOTE FOR HYDROGRAPHIC SHEET

May 5, 1943.

~~Division of Hydrography and Topography:~~

Division of Charts: Attention: H. R. Edmonston

Tide Reducers are approved in  
6 volumes of sounding <sup>and wire drag</sup> records for

HYDROGRAPHIC SHEET 6799

Locality Cox Head to Bluff Head, Kennebec River, Maine

Chief of Party: C. D. Meaney in 1942  
Plane of reference is mean low water reading  
3.2 ft. on tide staff at Phippsburg  
19.3 ft. below B.M. 1  
2.9 ft. on tide staff at Fort Popham  
14.8 ft. below B. M. 1

Height of mean high water above plane of reference is  
8.0 feet at Phippsburg; 8.3 feet at Fort Popham.

Condition of records satisfactory except as noted below:

*C. K. Green*

Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6799 W.D.

Field No. W.D. 1004

Maine; Kennebec River; Cox Head to Bluff Head  
Surveyed August - October 1942; Scale 1:10,000  
Instructions dated March 11, 1942 (Project C.S. 265)

Wire Drag

Dual Control

Chief of Party - C. D. Meaney  
Surveyed by - C. R. Reed  
Protracted by - A. B. Brownell  
Subdivision of dragged areas by - C. R. Reed  
Inked by - C. R. Reed  
Verified by - G. F. Jordan  
Reviewed by - J. A. McCormick  
Inspected by - H. R. Edmonston, November 3, 1943

1. Shoreline and Signals

Shoreline and topographic signals are from topographic maps T-5972 and T-5973 and from graphic control surveys T-6910 and T-6911 of 1942.

2. Adjoining Wire Drag Surveys

A satisfactory junction was effected with H-6780 (1942) W.D. on the south.

3. Hydrographic Surveys

H-6802 (1942), H-6803 (1942)

With effective depths generally ranging between 27 and 32 feet, the drag was constantly scraping bottom on both sides of the main channel. Effective depths in all such cases were consistent with the soundings on H-6802 and H-6803. In Lat.  $43^{\circ}46.7'$ , Long.  $69^{\circ}47.3'$  there is a decided conflict between effective drag depths of 28 and 31 feet and soundings of 26 and 27 feet on H-6803. It is probable that the drag was towed well up on the shoal before its progress was noticeably impeded.

The few soundings obtained by the drag party were unimportant and, along with the groundings, were removed from the smooth sheet. One sounding of 14 feet fell in depths of 30 feet on H-6803. The office verification proved conclusively that one of the two angles which fixed its position was 9 degrees in error. The revised plotting placed it in depths of 13 and 14 feet.

4. Comparison with Chart 314 (Print of May 27, 1943)

Conflicts between charted depths and effective drag depths are of the same order as those between drag depths and soundings of the hydrographic surveys discussed in the preceding paragraph.

5. Compliance with Project Instructions

Satisfactory.

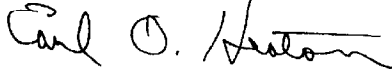
6. Additional Field Work Recommended


The descriptive report recommends several items of additional work. The drag party has done a commendable job of covering most of the main channel from 30-ft. curve to 30-ft. curve and it is not considered necessary to undertake additional work at this time.

Examined and approved:

  
Chief, Surveys Branch

  
Chief, Division of Charts

  
Chief, Section of Hydrography

  
Chief, Division of  
Coastal Surveys

Applied to Ch 314. April 1943. J.H. S.  
No Cor. to Ch 1204 - JTW 3/5/45  
Applied to chs 2308 238 thru H6802 + 6803 4/20/45 JTE

# 6799 WIRE DRAG

Additional work

6799 WIRE DRAG

Additional work

<small>Form 504</small> <b>U. S. COAST AND GEODETIC SURVEY</b> DEPARTMENT OF COMMERCE  <b>DESCRIPTIVE REPORT</b>	
<i>Type of Survey</i> ..... <b>HYDROGRAPHIC - WIRE DRAG</b>	
<i>Field No.</i> ..... <i>Office No.</i> <b>H-6799</b>	
<b>LOCALITY</b>	
<i>State</i> ..... <b>MAINE</b>	
<i>General locality</i> ..... <b>KENNEBEC RIVER</b>	
<i>Locality</i> ..... <b>PARKER FLATS</b>	
<hr/> <b>1944</b> <hr/>	
<b>CHIEF OF PARTY</b>	
<i>L. C. Johnson</i> ..... <i>J. H. Brittain</i>	
<b>LIBRARY &amp; ARCHIVES</b>	
<b>DATE</b> .....	

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. \_\_\_\_\_ H-6799

REGISTER NO.

State \_\_\_\_\_ MAINE \_\_\_\_\_

General locality \_\_\_\_\_ KENNEBEC RIVER \_\_\_\_\_

Locality \_\_\_\_\_ PARKER FLATS \_\_\_\_\_

Scale \_\_\_\_\_ 1-10,000 \_\_\_\_\_ Date of survey \_\_\_\_\_ July - August \_\_\_\_\_, 1944

Vessel s \_\_\_\_\_ WAINWRIGHT & HILGARD \_\_\_\_\_

Chief s of Party \_\_\_\_\_ L. C. Johnson & J. H. Brittain \_\_\_\_\_

Surveyed by \_\_\_\_\_ L. C. Johnson & J. H. Brittain \_\_\_\_\_

Protracted by \_\_\_\_\_

Soundings penciled by \_\_\_\_\_

Soundings in ~~sections~~ feet \_\_\_\_\_

Plane of reference \_\_\_\_\_ Mean Low Water \_\_\_\_\_

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by \_\_\_\_\_

Verified by \_\_\_\_\_

Instructions dated \_\_\_\_\_ March 11, 1942; March 16, 1943; \_\_\_\_\_, 1944

Remarks: \_\_\_\_\_ Additional work on sheet H-6799, in 1944 \_\_\_\_\_



## DESCRIPTIVE REPORT

to accompany

SHEET H 6799 (WIRE DRAG)

ADDITIONAL WORK IN 1944

### AUTHORITY:

This wire drag survey was executed under Supplemental Instructions, Project CS 265, dated March 11, 1942, March 16, 1943, and March 11, 1944.

### LIMITS:

This survey is additional wire dragging in the Kennebec River from south of Parker Head to south of Squirrel Point. This dragging covered the channel on west side of the shoal to west side of Perkins Island, and widening of the area around Parker Flats.

### METHODS:

This wire drag was done with the WAINWRIGHT as guide launch, the HILGARD as end launch and launch 101 as tender.

Standard dual control methods were used. The drag strips were controlled by three-point fixes on shore objects. Lift was determined on most sections of the drag by tests taken from the tender, using a graduated rod coated with a mixture of white lead and tallow, suspended from a float by means of a graduated stranded 1/8" wire.

Due to strong tidal currents the dragging was done only at or near slack water.

### CONTROL:

Existing triangulation stations and stations located by graphic control by the LYDONIA in 1942 furnished adequate control for this survey.

### COMPARISON WITH HYDROGRAPHY AND CHARTED SOUNDINGS:

The soundings were already in the boat sheet and no changes in those charted are recommended.

On pos. 20 A day, it was noted that L & F buoys grounded and cleared. Though the effective depth was only 17 ft., the lift was 4½ ft., giving a depth of upright of 21½ ft. It is believed the depths of about 20 ft. shown on the hydro sheet here are correct. The end launch ran its fathometer here and did not obtain anything shoaler than 20 feet.

The same spot was hung at 55 A day, effective depth of 16 ft., lift was 4½ ft., and recommendations in above paragraph still apply. The area was covered by one strip, 1 - 6 B, effective depth of 14½ ft. and in opposite direction, 8 - 11B, with effective depth of 14½ ft.

- 2 -

DESCRIPTIVE REPORT

to accompany

SHEET H 6799 (WIRE DRAG

ADDITIONAL WORK IN 1944

TIDES:

Auto-portable tide gages were established at Phippsburg and Fort Popham, to furnish reducers for reducing the drag depths to mean low water. The data from the Phippsburg Gage was used for the work north of the Blue line on the boat sheet west of Perkins Island, and data from Fort Popham gage for the work south of above line.

*L. C. Johnson*  
L. C. Johnson

*John H. Brittain*  
John H. Brittain

STATISTICS SHEET 6799 (W.D.)

(ADDITIONAL WORK 1944)

Date	Day	No. Positions	No. Soundings	Stat. Mi. Drag Strip
July 26, 1944	A	55	0	4.3
Aug. 4, 1944	B	11	0	0.7
<hr/>				
Totals		66	0	5.0

Area Covered 0.7 Square statute miles

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO **H6.79.9**

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	...	66
Number of positions checked	...	66
Number of positions revised	...	---
Number of soundings recorded	...	0
Number of soundings revised (refers to depth only)	...	---
Number of soundings erroneously spaced	...	---
Number of signals erroneously plotted or transferred	.....	.....
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	.....

Plotting and  
 Verification by... J.A. McCormick Total time 15 hrs. Date 10/30/44.

Review by ..... J.A. McCormick ..... Time 1 hr. Date 10/30/44.

**GEOGRAPHIC NAMES**  
 Survey No. **H6799**

Name on Survey											
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Remarks

Decisions

	Remarks	Decisions
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TIDE NOTE FOR HYDROGRAPHIC SHEET

September 30, 1944

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in  
1 volumes of sounding records for

HYDROGRAPHIC SHEET 6799

Locality Parker Flats, Kennebec River, Maine.

Chief of Party: L. C. Johnson & J. H. Brittain in 1944  
Plane of reference is mean low water reading  
-0.1 ft. on tide staff at Phippsburg  
19.4 ft. below B. M. 1

Height of mean high water above plane of reference is 8.0 feet.

Condition of records satisfactory except as noted below:

*C. J. Green*  
Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY REGISTRY NO. 6799 Add'l. Work

Field No. 1004

Maine; Kennebec River; Cox Head to Bluff Head  
Surveyed in July and August 1944; Scale 1:10,000  
Project C. S. 265


Wire Drag

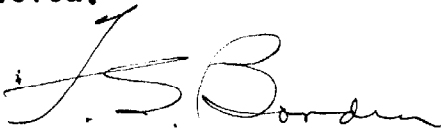
Dual Control

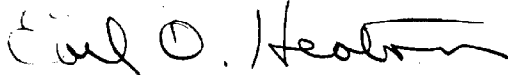
Chief of Party - L. C. Johnson  
Surveyed by - L. C. Johnson  
Protracted by - J. C. McCormick  
Verified and inked by - J. A. McCormick  
Reviewed by - J. A. McCormick  
Inspected by - H. R. Edmonston, October 30, 1944

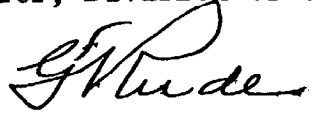
Additional area was dragged in the channel west of the 5-ft. ledge in Lat.  $43^{\circ}47.3'$ , Long.  $69^{\circ}47.3'$ . A split in the original work at Lat.  $43^{\circ}46.7'$ , Long.  $69^{\circ}47.4'$  was reduced in size but not completely covered. Effective depths are consistent with soundings on H-6802 and H-6803 of 1942. The additional work was well done and satisfies supplemental instructions of March 11, 1944.

Examined and approved:

  
Chief, Surveys Branch

  
Chief, Division of Charts

  
Chief, Section of Hydrography

  
Chief, Division of Coastal  
Surveys



No Cor. to Ch 1204 - JTW 3/5/45  
" " " " 238 JTW 2/7/46  
" " " " 314 Z.M.A. 3-26-46  
" " " " 1000 Nichols Aug 55

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-C