# 4587a & b

4587a = b

Form 504  DEPARTMENT OF COMMERCE  U. S. COAST AND GEODETIC SURVEY
State: California
DESCRIPTIVE REPORT.
Sheet No. 45873
LOCALITY:
Coast
Russian Gulch
1926
CHIEF OF PARTY:
C.K.Green

### DESCRIPTIVE REPORT

To accompany Hydrographic Sheet of Russian Gulch, California.

Instructions of July 2, 1926.

45878

As the channel in to the dock could not be dragged throughout on account of growing kelp, several lines of soundings were run through the kelp where the schooners pass to the dock. The sunken rock with 5 feet of water over it (position 101D), which lies 200 meters 231 degrees from end of dock makes it necessary for the vessels to pass through the kelp which lies between this sunken rock and signal "Cat". 7 feet was found on the breaker (position 50D) shown on chart 5703 as 3 fathoms.

A few soundings were taken south of the Gulch where there were holidays in the old hydrography.

Position 1aD was taken when signals Cor and Range were on range. Cor is the corner of the dock, and Range is the large, prominent, lone eucalyptus tree near the road. This range passes between the kelp patches in deep water. When 250 yards from Cor, pass 25 yards south of mooring buoy, through the kelp, to the dock. Schooners put out an after line to the buoy when passing, and the starboard bow is made fast to the outer face of the end of the dock. There is 12 feet of water at the outer face of the dock.

The 28 foot sounding shown between positions 64 and 65D, is a little south of a 14 foot sounding found with the drag ( See drag sheet position 2C.).

On page 18, volume 1, soundings, Russian Gulch, will be found the position and sounding on off lying shoal  $5\frac{1}{E}$  miles north of Point Arena light. This shoal was reported in the letter to the Director, of October 11, 1926.

Chas. H. Theen H. + G. Engr.

### STATISTICS SOUNDINGS RUSSIAN GULCH CALIFORNIA.

Date. 1926	Letter	Volume	Positions	Soundings	Miles Statute
August 23	A	1	1 /	1 ′	
August 24	В	ı	2	2	
September 25	C	1	2 /	2	
September 28	D	11	102 /	209 /	6 /
TOTAL			107 / n	214 /	6

Soundings are plotted in feet.

Plane of reference, Mean Lower Low Water.

Mean Lower Low Water on tide staff is 1.36 ft.

Lowest tide observed, reading on tide staff; 0.4 ft. at 3:45 A. M. on July 23 1926.

Highest tide observed, reading on tide staff; 8.3 ft. at 9.00  $\mathbb P$ . M. on July 23, 1926

Plann staff on pile near signal Pile. Only one tide staff used.

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

February 17, 1927.

#### SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 45878 and Wire Drag Sheet No. 4587b

Russian Gulch, California

Surveyed in 1926

Instructions dated July 2, 1926 (C. K. Green)

Chief of Party, C. K. Green.

Surveyed by C. K. G.

(45878 - W. J. Chovan.

Protracted by:

(4587<u>b</u> - E. A. Deily.

Soundings plotted by W. J. C.

Hyd. verified and inked by H. R. Edmonston.

- W. D. verified and area and depth sheet by C. E. Christopherson.
- 1. The records conform to the requirements of the General Instructions.
- 2. The plan and character of development satisfy the requirements of the General Instructions except that the 33 foot shoal in lat. 39° 19' 410 m., long. 123° 48' 700 m. should have been better developed. This area was not covered by the drag and is surrounded by deep water.
- 3. The plan and extent of development satisfy the specific instructions.
- 4. The depth and extent of the drag work satisfy the specific instructions except in the following respects:
  - a. The two bights comprising Russian Gulch were not dragged as called for in paragraph 6 of the specific instructions. As mentioned in the descriptive report, this was on account of the growing kelp.
  - b. A small area in Russian Gulch was dragged to 23 feet which is a greater distance than 3 feet from the bottom as called for.
  - c. The drag work, while extending to the general 18 fathom curve, should have been carried further to the westward in the vicinity of

lat. 39° 19' to cover a 15 1/2 fathom sounding (H.  $1586\frac{3}{2}$ ) that is surrounded by 24 and 25 fathoms. The sounding is located in lat. 39° 19' 170 m., long.  $123^{\circ}$  49' 530 m.

- 5. The least water was found on all important shoals discovered except the following:
  - a. The 20 foot sounding in lat. 39° 19'1110 meters, long. 123° 48' 1335 m. was not cleared on account of the presence of growing kelp. There is, however, a large split to the south and westward of this sounding that should have been covered to insure against shoal water existing offshore.
  - b. The 30 foot sounding about 80 meters southeast of ① Four was not cleared nor was the 14 foot sounding about 100 meters E.x N. of ② Four. These fall in deeper water and it would have been desirable to run a few sounding lines over this area if dragging was not practicable.
  - c. The 44 ft. sounding in latitude 39° 19' 400 m., longitude 123° 48' 950 m. was not cleared by the drag on account of the growing kelp. This sounding falls in depths of 13 and 14 fathoms, and it is possible that the least water was not obtained.
- 6. The overlaps are sufficient.
- 7. No further dragging is necessary to cover splits or other areas except as mentioned in paragraphs 2, 4-c and 5-a.
- 8. The field plotting was completed to the extent prescribed in the General Instructions. Several errors in plotting the drag work were noted. These were changed in the office.
- 9. Character and scope of field operations and field drafting very good.
- 10. Attention is called to the many rocks and shoals, heretofore unknown, that were found in this examination in an area that seems well covered on the old survey. This indicates the need for additional work on the inshore areas of this locality and should be a guide in the planning of future work along the California coast.
- 11. Reviewed by A. L. Shalowitz, February, 1927. Approved:

Chief, Section of Field Records (Charts)

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



Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in volumes of sounding records for

HYDROGRAPHIC SHEET NO. 45874

Locality: COAST OF CALIFORNIA.

Chief of Party:

C. K. Green

Plane of reference is MLLW

1.3 ft. on tide staff at Russian Culch.

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. Romarks.

Chiof. Division of Tides and Currents.

#### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

L	SURVEY
DEC	15 1928
Aé	e. 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.

1	REGISTER NO.	45878
State CALIFORNIA		
Vicin General locality MENDO	oity of Pt. C	abrillo <del>Coast</del>
LocalityRUSSI	AN GULCH	·
Scale_1:5000 Date	of survey	September ,192 6
Vessel SHORE PARTY	<b></b>	
Chief of PartyChas.	K. Green	
Surveyed by Chas.	k. Green	
Protracted by Walter	r.J. Chowan	
Soundings penciled byw	alter J. Chov	an
Soundings in Inthone	feet	
Plane of referenceMean	Lower Low Wa	ter
Subdivision of wire drag	ged areas by	·
Inked by		
Verified by		
Instructions dated		July 2, 1926
Remarks:		

applied to chart Comp. 5711 august 89, 1941. HEllian Swan

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Form 504

### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: California

### DESCRIPTIVE REPORT.

WIRE DRAG Sheet No. 4587b

LOCALITY:

Coast

Russian Gulch

1926

C.K.Green

& G. Surve L. a. A. Def 15 1986

o accompany Wire Drag sheet of Russian Gulch, California.

were his

### 4587h

The approach to the bight was covered to a depth of 2 feet of more, and the inshore end of the narrow channel covered to 23 feet. The dragged area was limited inshore by heavy patches of growing kelp. The 18 fathom curve was covered off shore. southernmost of the two small bights could not be dragged on account of growing kelp.

The area east and northeast of signal, "Off", is occasionally used as an anchorage in southwest weather when seas prevent docking at Russian Gulch. Only a small part of this area could be dragged on account of growing kelp.

Equipment:

The standard light wire drag was used with two 10 H.P. fishing launches. The launches were ideal for this type of drag, as they were throttled down to an average drag speed of one mile per hour, with seldom more than an 80 pound pull, and never exerted enough strain to cause a lift.

Shoals located:

The sounding of 17 feet (position 2a) was obtained on shoal found while setting out drag. The guide launch line 1A to 15A passes as close to the kelp as possible. The drag grounded on this line, and 20 feet was found (position 3a) in a small patch of kelp, which prevented covering with the drag.

Position 1b (28 feet) is the least depth found on large area of irregular bottom off signal "Off", This shoal was free of kelp, and was cleared by the drag at 25 feet.

Tides:

A plane tide staff on the dock was used. 1:36 feet on the staff is mean lower low water, as determined by comparitive readings with the San Francisco automatic gauge.

Plotting:

The peculiar directions of drag strip 1B to 19B, was the result of an endeaver to cover as much area as possible without fouling the kelp patches.

The drag fouled a growing kelp patch (position 3b) at guide launch position 27B and slipped over it. The dragged area was therefore ended on this position.

Positions 29B to 33B, shown in pencil on boat sheet, were not plotted on smooth sheet, as the bight of the drag was grounded at edge of kelp near breaker and no area covered.

The strip beginning at position 30B was started with the drag around the kelp patch, (position 3b), and continued northward to position 41B, where the drag was laid around the kelp marking the north side of the narrow channel to the dock.

Chas. H. Freen

### STATISTICS? WIRE DRAG. HUSSIAN GULCH. CALIFORNIA

DATE	LETTER	VOLUME	LENGTH OF DRAG	POSITION	MILES STATUTE	SOUNDINGS
1926 Sept.25	A	1	1400	<b>35</b>	1.2	7 '
Sept.27	В	1	1400	66	2.5	5
Sept.28	C	1	400	14	0.5	2
TOTAL -				115	4.2	14

Soundings and drag depths are in feet.

Plane of reference, Mean Lower Low Water.

Mean Lower Low Water on tide staff is 1.36 ft.

Lowest tide observed, reading on gauge; 0.4 ft. at 3:45 A.M. on July 23,1926. Highest tide observed, reading on gayge; 8.3 ft. at 9:00 P.M. on July 23,1926. Plain staff on pile near signal Pile. Only one tide staff used.

## Verification Report on Wire Deray Sheet Mr. 45876.

The records conform to the requirements of the General Instructions I secrept that there are no indications of any drag test having been made.

The legibility of the second would have been greatly inproved if more space had been given in seconding the guide launch positions. With the positions crowded together as they are in this record it was often necessary to place two positions where there was only space enough for one when the information was transferred from the end hand record.

The sheet was completed to the extent presented in the True Drag Manual. Several errors were found in the protracting. The overlaps were generous.

at position 16 A the drag was connected with a straight line instead of a full light as originally shown on the smooth sheet, the change being made in conformity with the note in the record. In two other instances the light of the drag was changed to conform more closely with the notes in the record.

2-11-27

C. E. Christopherson

For review of this sheet see Descriptive Report,

н. 4587<sup>2</sup>



Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4587B

Locality:

COAST OF CALIFORNIA.

Chief of Party:

C. K. Green

Plane of reference is M L L W 1.3ft. on tide staff at Russian Gulch.

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.

Chiof, Division of Tides and Currents.



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

C. & G. SURVEY L. & A. DEC 25 1926

# HYDROGRAPHIC TITLE SHEET 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. W, D.
REGISTER NO. 4587b

State California
Vicinity of Pt. Cabrillo General locality <u>Hendocine Sounty</u> Seast
Locality Russian Gulch
Scale 1 - 5000 Date of survey September ,1926
Vessel Harbor Survey Shore Party
Chief of Party Lieut. Chas. K. Green
Surveyed by Lieut. Chas. K. Green
Protracted byLieut. (j.g.) Earle A. Deily
Soundings penciled by Lieut. ( j.g.) Earle A. Beily
Soundings in fattloods feet
Plane of reference Mean Lower Low Water
Subdivision of wire dragged areas by Earle A. Deily
Inked by Earle A. Reily
Verified by
Instructions dated
Remarks:

G P O

458/E

applied to chart confeitation 5711. august 28, 1941. HECKIA. EWEN

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