

4933

Dwg. Cht. No. 8502-2 & 8556-1

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
R. S. Patton, Director	
U. S. COAST AND GEODETIC SURVEY L. & A. DEC 5 1929 Acc. No.	
State: Alaska.	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 12. 4933
LOCALITY	
Kodiak Island.	
Broken Point to Cape Kuliuk	
Cape Kuliuk to Broken Point	
1929	
CHIEF OF PARTY	
R. R. Luken H. S. G. E.	

GOVERNMENT PRINTING OFFICE

4933

DESCRIPTIVE REPORT

HYDROGRAPHIC SHEET # 12

Str. SURVEYOR

R. R. Lukens, Comdg.

Scale 1:20,000

1929.

Authority. The work executed on this sheet was done in accordance with instructions dated March 14, 1929.

Limits. The work consists of inshore hydrography on the west coast of Kodiak Island extending from Broken Point to three-quarters of a mile south of Cape Kuliuk. The hydrography is carried offshore for a distance ranging from one to two miles to join the limits of field sheet # 7 which is a survey of Shelikof Strait on a scale of 1:100,000. It is joined on the south by the limits of sheet # 15 on a scale of 1:20,000.

Control. The signals were located by plane table traverse between triangulation stations. The only appreciable closing error, amounting to ten meters, ~~was~~ ^{is} between triangulation stations Ugat and Cleft which was adjusted.

Tide Gauge. Tides are referred to the Standard Automatic Tide Gauge at Uyak without adjustment.

Surveying Methods. All the soundings was done by the motor sailer with the usual surveying methods being employed. In general the lines were spaced 300 meters apart with closer spacing on shoal indications. The lines were run normal to the beach using a 12# hand lead for depths up to 10-12 fathoms and shifting to a power driven sounding machine with a 20# lead for greater depths. For the machine soundings the launch ran full speed between soundings coming to a full stop for the cast. Ranges were run throughout this area, no courses being recorded.

Shoals. Three offlying shoals were developed within the area covered by this sheet. The shoal lying 350 meters N.E. of Broken Point was developed by running 25 meter lines and sounding to thirteen fathoms with the hand lead. The 13-fathom no-bottom soundings were not plotted. The least depth found on this shoal was 5½ fathoms at

note. 3 1/2 fms. at this shoal from H-2963

M.L.L.W. Another shoal, developed in the same manner lies $\frac{3}{4}$ mile N.N.W. of signal Fas with a least depth of $7\frac{3}{4}$ fathoms at M.L.L.W. Some of the developing lines fell very close together so a part of the lines having soundings of 10-12 were omitted on the smooth sheet to avoid confusion. Owing to the distance of the signals used in the fixes it was impracticable to plot the positions on a larger scale on a sub-plan. The third shoal lies one mile N.N.W. of Miner Point with a least depth of 14 fathoms at M.L.L.W.

Reefs. The reef, 120 meters N.^W.E. of triangulation station Cape Ugat, is a continuous reef at low water with several protruding points at half tide. It covers at about two thirds high tide. The reef lying 250 meters E.N.E. of Broken Point is awash at two feet minus tide. Its position was determined at extreme low water, in running to another working ground when the boat sheet was not in the launch. When plotting the position later it was found that the fix obtained with a check angle disagreed with the original fix by a distance of 40 meters. The fix which plotted the farther offshore was used as the position.

Character of Coast. The coast line is quite rugged, with rocks covering at high water close inshore. The beach between signals Ol and By is covered with boulders extending offshore. At the time of the survey there was heavy kelp in the bights as shown on the sheet, and in most cases impenetrable with a launch.

Bottom Characteristics. The bottom offshore is covered with a yellowish volcanic ash from the Katmai eruption in 1912. The ash resembles fine sand and is recorded and plotted as such.

Channels. A channel line between the peninsula and the island off Cape Ugat was run with a least depth of 40 feet reduced. At the time there was a strong head current running. Cannery tenders operating in this vicinity use this channel at full speed constantly.

Anchorage. There are no anchorages for large vessels in this area. The area east of Cape Ugat is clear, and offers protection for small craft in SW'ly winds.

Prominent Objects. The island lying off Cape Ugat is conical shaped, and stands out so that it can be seen for miles up and down the coast. The ridge rising from Cape Kuliuk has a height of 2000 ft., and appears as the most prominent ridge in the vicinity.

Geographic Names. The names of the points, Broken Point, Miner Point, Cape Ugat, Cape Kuliuk are used locally as they appear on chart " 8055. The point on which signal Fas is located was named Twocone point on Topographic Sheet "G".

Respectfully submitted,

Harry F. Garber
Harry F. Garber
Aid.

Note by Chief of Party:

During the summer there is a great deal of beach fishing along this coast. Usually two fishermen work together from a camp on the beach. They use gill nets and seines. Tenders from the canneries come along at frequent intervals and pick up the salmon which they catch. During the fishing season, the coast is dotted with the white tents of the fishermen.

In former years there was considerable beach mining for gold here, but it is no longer profitable.

Referring to the patches of volcanic ash showing at various places, these might easily be mistaken for snow patches. All the peaks in this vicinity are bare of snow by late in the summer, with only an occasional streak showing on a few high ravines.

The discrepancy in the position of the low tide rock off Broken Point was only called to my attention after arrival in Seattle and there was no opportunity for verifying it.

CAPE UGAT There is a cove on the east side of this cape which affords good small boat anchorage in westerly weather. At the time of the survey, it was so full of gill nets that a close development was not possible. The fact that gill nets are used here indicates that there are no obstructions.

Referring to hydro. signals UZ-SPIRE-OUT, the officer in charge of the launch unfortunately did not record the cuts in the sounding volume. The positions have been taken from the boat sheet.

R.R. Lukens
R.R. Lukens

Chief of Party.

Statistics for Hydrographic Sheet # 12.

Day.	Vol.	Sta.Miles of Sdg.Lines.	No of Sdgs.	No of Positions.	Date.
a.	1	25.0	440	120	6/21/29
b.	1	20.2	463	106	6/22/29
c.	1&2	17.2	333	101	6/28/29
d.	2	5.0	156	33	7/18/29
e.	2	18.0	289	93	7/19/29
f.	2	2.7	82	23	7/20/29
g.	2&3	27.9	585	147	7/25/29
h.	3	21.3	601	141	7/26/29

Totals:---	<u>137.3</u>	<u>2949</u>	<u>764</u>
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List of Signals on Hydrographic Sheet # 12.

Hydro Name.	Location.	Hydro Name.,	Location.
Bro.	Broken Point. 1908.	La.	Topographic Signal
Min.	Miner's Point--1908.	Fa.	Sheet G.
Gat.	Cape Ugat--1908.	To.	" "
Cleft.	Cleft--1908.	En.	" "
Bank.	Bank--1908 '929	Pi.	" "
Las.	Topo Signal Sheet G.	Sy.	" "
Go.	" " " "	Ru.	" "
g.	" " " "	We.	" "
Sp.	" " " "	If.	" "
In.	" " " "	House.	" "
To.	" " " "	Peg.	" "
My.	" " " "	Cap.	" "
Cr.	" " " "	Big.	" "
Ug.	" " " "	Low.	" "
Na.	" " " "	Sat/	" "
Mu.	" " " "	Got.	" "
Ol.	" " " "	Mis.	" "
Ti.	" " " "	Tix.	" "
Bo.	" " " "	Sti.	" "
Me.	" " " "	Sin.	" "
Al.	" " " "	Ite.	" "
By.	" " " "	Wow.	" "
No.	" " " "	Dig.	" "
Wr.	" " " "	Him.	" "
t.	" " " "	Fas.	" "
As.	" " " "	Slo.	" "
Ki.	" " " "	Toy.	" "
Lu.	" " " "	Sun.	" "
Da.	" " " "	Box.	" "
Fo.	" " " "	Mab.	" "
Ox.	" " " "	Nex.	" "
At.	" " " "	Ate.	" "
El.	" " " "	Tib.	" "
Is.	" " " "	Pal.	" "
Am.	" " " "	Tre.	" "
.	" " " "	Cor.	" "
Oh.	" " " "	Tel.	" "
Et.	" " " "	Ben.	" "
Pe.	" " " "	Oat.	" "
Ot.	" " " "	Uz.	Hydro-Signal.No cuts reco

Spire.rded,plotted from boat
Cut. Sheet.

January 21, 1930.

Division of Hydrography and Topography:

Division of Tides and Currents:

Reductions are approved in
volumes of standard records for

HYDROGRAPHIC SHEET 4655

Locality: Alaska (West Coast of Kodiak Island)

Name of Party: R. R. Lukens in 1929

Name of reference is ~~from~~ lower low water, reading
on tide staff at ~~Byak~~

~~at Byak~~

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. Headline 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. Headline 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 G. WILSON

Chief, Division of Tides and Currents.

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

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 20, 1930.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4933

Cape Kuluik to Broken Point, Alaska

Surveyed in 1929

Instructions dated March 14, 1929 (SURVEYOR)

Chief of Party, R. R. Lukens.

Surveyed by C. A. Egner.

Protracted and soundings plotted by H. F. Garber.

Verified and inked by J. H. Church.

1. The records conform to the requirements of the Hydrographic Manual.
2. The work conforms to the specific instructions, but the shoaling off Broken Point should have been further developed at the offshore end. The survey of 1908 (H. 2963) shows a depth of 22 feet where the new survey shows 6 fathoms. The old sounding should have been verified or disproved. For the present it will be retained on the charts.
3. The junction with the contemporary surveys will be taken up when these sheets are reviewed.

A satisfactory junction can be effected with the old work on H. 2963.

4. No additional work is required within the limits of this survey unless it is desired to develop the used channel between the islet north of Cape Ugat and the mainland (see page 2, Descriptive Report) and the bight to the southward of this point.

Also, if further work is done in this locality, it will be desirable to relocate the reef about 200 meters northeast of Broken Pt. There is some doubt as to its correct location (see page 2, Descriptive Report). A further examination should also be made of the 22 foot sounding mentioned in paragraph 2, above.

5. No cartographic problems are raised by this sheet. The information from the old survey, within the limits of this survey, that should be carried over is shown in red on the new survey.
6. Reviewed by A. L. Shalowitz, February, 1930.

Approved:

A. M. Sobieralski
Chief, Section of Field Records (Charts)

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

Section of Field Records
Report on Sheet No. 4933
Chief of Party - P. L. Lukens
Subsided by - C. A. Egner
Protracted by - H. J. Forbes
Soundings plotted by - H. J. Forbes
Verified and inked by - G. Church

1. The records conform to the requirements of the general instructions except par. 75 b and c the hydrographic manual. The courses were all run by ranges so compass bearings were not recorded.

2. The plan and character of the development fulfil the requirements of the general instructions.

3. The usual depth curves can be completely drawn within the limits of the sheet.

4. The field plotting was completed to the extent prescribed by the general instructions.

5. The junior draftsman did not have to do over any part of the field plotting except as noted under remarks.

6. An examination of the junction with the adjoining sheets will be made when these sheets are inked.

7. Remarks:-

The protracting was very satisfactory but the time spacing of the soundings next to the shore was not strictly adhered to.

The reef lying about 250 M. E.N.E.

of Broken Point was found to be awash at
 Ohave (3) feet minus tide instead of Two (2)
 feet and is shown by a rock awash and
 sunken rock which covers both the original
 fix and check angle fix. Refs to page 2
 Descriptive Report for this sheet or page 46
 Vol. 3 Sounding Boards for this sheet.

It was found necessary to replat
 the shore line from O A to O No to make it
 conform to the contemporary topographic
 sheet. Also the shore line was dashed
 in those portions as shown on the
 smooth sheet to conform to the topographic
 sheet.

Respectfully Submitted
 Feb. 13, 1950
 J. B. Hunt.

Form 537
11-28127

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
DEC 5 1929
Acc. No.

REG. NO.
4933

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. 12. 4933

REGISTER NO. 4933

State Alaska.

General locality Kodiak Island.

Locality ~~Broken Point to Cape Kuliuk.~~ to Broken Pt.

Scale 1:20,000 Date of survey June-July, 1929

Vessel Str. SURVEYOR.

Chief of Party R.R. Lukens.

Surveyed by C.A. Egner.

Protracted by H.F. Garber.

Soundings penciled by H.F. Garber.

Soundings in fathoms feet

Plane of reference M.L.L.W. at Uyak.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated March 14, 1929.

Remarks:

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

AND REFER TO No. 11-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

March 20, 1930.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4933

Cape Kuluik to Broken Point, Alaska

Surveyed in 1929

Instructions dated March 14, 1929 (SURVEYOR)

Chief of Party, R. R. Lukens.

Surveyed by C. A. Egner.

Protracted and soundings plotted by H. F. Garber.

Verified and inked by J. H. Church.

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2. The work conforms to the specific instructions, but the shoaling off Broken Point should have been further developed at the offshore end. The survey of 1908 (H. 2963) shows a depth of 22 feet where the new survey shows 6 fathoms. The old sounding should have been verified or disproved. For the present it will be retained on the charts.
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6. Reviewed by A. L. Shalowitz, February, 1930.

Approved:

Chief, Section of Field Records (Charts)

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