

4464

Form 504

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

..... Director

G. & G. SURVEY

L. & A.

DEC 13 1921

Acc. No.

State: Alaska

DESCRIPTIVE REPORT

Topographic  
Hydrographic

Sheet No.

4464

LOCALITY

Kodiak Island-Cape Ugat  
K-Cape Kuliuk to Broken Pt.

1929

CHIEF OF PARTY

R.R. Lukens

GOVERNMENT PRINTING OFFICE

C. & G. SURVEY  
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DEPARTMENT OF COMMERCE  
U.S.Coast & Geod. Survey.

R.S.Patton, Director.

DESCRIPTIVE REPORT

Topographic Sheet "G"

West Coast of Kodiak Island, Alaska.

Broken Point to Cape Kuliuk.

1929

R.R.Lukens Chief of Party

Str. SURVEYOR.

DESCRIPTIVE REPORT TO ACCOMPANY  
TOPOGRAPHIC SHEET # G.

4464

INSTRUCTIONS DATED MARCH 14-th. 1929.

LOCALITY: This sheet covers the shoreline of Western Kodiak from Triangulation station Broken Point to triangulation station Bank.

GENERAL DESCRIPTION: The country covered by this sheet consists of many irregular twisted ridges, sparsely covered with grass and with many eroded slides on the deeper slopes. Patches and streaks of white volcanic ash are scattered over the area, especially on the higher slopes. There are several low valleys extending well inland, but most of the valleys terminating at the shore, rise rapidly to saddles or notches in the ridges about a mile inshore.

The country back of the area contoured is apparently similar to the part contoured, ridges alternating with valleys.

INDUSTRY: Salmon fishing is carried on in this area. Many gill nets are strung from the points and headlands to points a couple hundred meters offshore. Fishermen's tents dot the shoreline in the little coves found along this shore, during the fishing season.

DETAILED DESCRIPTION AND LANDMARKS: The shoreline from triangulation station Broken Point to signal Ol consists of low rocky bluffs backed by a grassy tableland which rises to moderate hills. From signal Ol to signal 1. No extends a broad shingle beach, the border of eroded and partly rocky bluffs. A valley runs inshore from this beach into two forks, one fork extending to a saddle southwest of the beach, the other running due south to a decided pass through the ridge south of the beach. The steep-sided ridge west of this beach which runs to Miner Point is covered with streaks and patches of white volcanic ash. This volcanic ash is sandlike in appearance, but light and fluffy. MINER POINT. is quite unusual and distinctive in appearance. Three high mounds form steps, the outer being about 190 feet high, the inner rising to about 450 feet high. The outer portion of Miner Point has a steep, rock bound coast. It is rolling and grass covered. A low sand-choked strip connects it to the middle mound. A pond of brackish water lays in this strip. The middle mound resembles a bee hive or sugar loaf. Miner Point is striking in appearance from the west and the north, for the western sides of the two higher mounds are deeply eroded as if cut away by large mining operations, or sliced vertically by some huge knife.

The shoreline between Miner Point and Cape Ugat is precipitous and rugged. High steep promontories alternate with small sand-beached coves. Bluffs back of these beaches are the terminations of rapidly rising, grass covered, valleys. The hill tops look haphazardly located. They are sparsely covered with grass and with streaks and patches of volcanic ash.

The ridge ending at the shoreline between signal SY and signal PA  $1\frac{1}{2}$  miles east of Cape Ugat is bold and eroded on its sea face. This ridge is crowned by two hill tops which show conspicuously from offshore positions to the east and west.

CAPE UGAT. is a conspicuous landmark to ships coasting within several miles of this cape. The cape is low, long, narrow, and grassy. A grass covered islet lays off the point. Three grassy hummocks about 80 ft high lay on the outer end of the cape. The inner end of the cape is a long neck about 20 ft in elevation. A red house (signal house) and several smaller shacks are located here. A sandy beach on the east side is used by fishermen as a landing place. The offlying islet is coneshaped, on the apex of which is situated triangulation station Cape Ugat. A long reef, covered at  $2/3$ -rd tides, lays about 180 meters west of this islet.

Cannery tenders use the channel between Cape Ugat and the islet at all stages of the tides.

Back of the low peninsula the cape rises abruptly to a double pointed hill, the higher summit being inshore of the lower. This hill is grassy, but is also much eroded, and has many bare rock patches.

A fine sand beach about one mile long, lays between Cape Ugat and Twocone Point. Back of this beach is a low valley extending far inland. A stream called LITTLE RIVER meanders through this valley to the beach.

TWOCONE POINT. is bound by rocky bluffs. This headland rises to a peak whose summit consists of two conelike points, sharp and distinctive.

The valley between Twocone Point and Cape Kuliuk is more plateau than valley, it rises so rapidly to the hills behind.

CAPE KULIUK. is a conspicuous landmark for many miles distant. Although the cape itself is small and only about 40 ft high, the terrain behind it rises abruptly to the highest ridge in this locality. This ridge, 2000 ft high, is reddish and barren. It runs parallel to the shore from Cleft to the valley between Cape Kuliuk and Twocone Point where it runs inland to Cape Kuliuk. The sea slope is very bold and deeply eroded. Streaks of volcanic ash whiten the upper slopes, especially on the slope facing the valley west of Twocone Point.

Triangulation station BOX on the western edge of this ridge is a boxlike block of rock showing conspicuously well offshore. There is also a needlelike pinnacle protruding from the slope  $2/3$ -rd up from Cape Kuliuk to the top of the slope. Clouds obscured this ridge a good part of the summer.

There is a broad sand beach south of Cape Kuliuk to the end of the sheet. This beach borders grass covered banks and mounds, eroded on the sea slopes. Triangulation station Bank is 100 meters west of the highest mound in this locality.  $\frac{1}{4}$  mile north of triangulation station Bank is the mouth of a stream which flows through a valley extending well inland. A broad fine sand beach lays at the mouth of this stream. Large boulders are scattered for 100 meters offshore from triangulation station Bank.

OFFLYING ROCKS. There are no known offlying rocks in this locality.

There are numerous detached rocks close to shore as shown on the sheet. The notations concerning the heights of reefs are copied from the hydrographic sheet. The more important of these are the following. A reef extends 100 meters offshore N by E. of Miner Point. The outer end is always above water, the rocks behind it, and the shore cover only at high tide. There is a group of rocks extending 180 meters offshore from the point near signal OH, baring at half tide. The reef 120 meters west of Cape Ugat is a continuous bare reef at low water.

### 3.

At higher tides it becomes a series of points protruding above water. It covers at about 2/3-rd tide.

#### SURVEY METHODS.

This sheet was surveyed entirely by traverse. Since the shoreline between triangulation stations Broken Point and Miners Point had been previously surveyed, the purpose of the traverse on this stretch was mainly to locate signals for hydrographic use. The old shoreline however, was found in error in several places, particularly in the bight between signals IN and Na. More detailed work was required at these places. The shoreline at these places is shown in solid line. The dotted parts of the shoreline are traced from the old survey. The closing error of the traverse between triangulation stations Cape Ugat and Cleft was 10 meters at signal Sin. The error was distributed between signals Dig and Sign.

#### SUMMARY OF TRAVERSES.

FROM	TO	DISTANCE	CLOSING ERROR
Triangulation stations			
Broken Point	Miners Point	5.2 miles.	5 meters.
Miners Point	Cape Ugat.	7.2 " .	0 " .
Cape Ugat.	Cleft.	6.3 " .	10 " .
Cleft.	Bank.	2.2 " .	0 " .

CONTOURS. At least one cut and elevation was obtained by plane table to every important peak. Owing to the ruggedness and steepness of the shoreline, however, most of the cuts were obtained by sextant from a motor boat laying at points about one mile offshore. The less prominent points were located and the contours sketched from these offshore points.

NEW PLACE NAMES. It is recommended that the point laying between Cape Ugat and Cape Kuliuk be named Twocone Point. The name is suggested by the two conelike tips on the ridge back of the point. These tips are marked on the sheet by elevations 1232 and 1450.

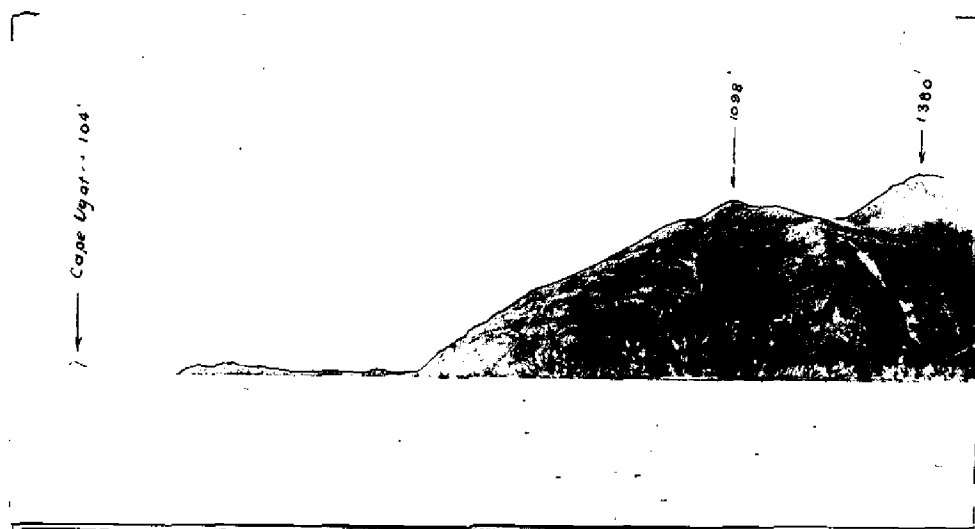
PHOTOGRAPHS. Three photographs of points in this locality taken by R.R. Lukens are attached to this report.

PLANE TABLE POSITIONS.

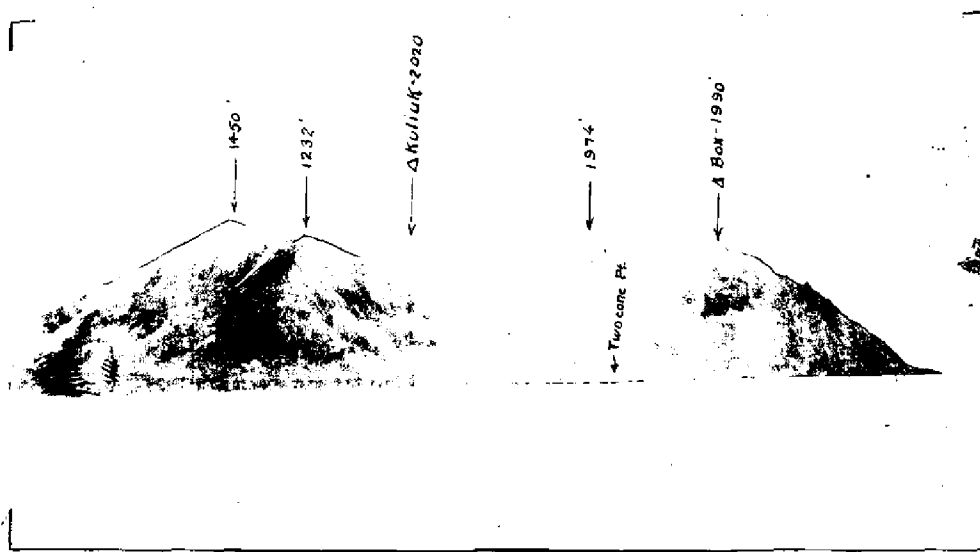
OBJECT AND DESCRIPTIONS	LATITUDE	D.M.	LONGITUDE.	D.P.	HEIGHT.	REMARKS.
AL, conspicuous shoulder off beach.	<sup>0</sup> 57 --53'	341 m.	<sup>0</sup> 153 --43'	337 m.	10ft	Top.
OH, highest detached rock.	57 --52	946	153 --46	806	15	Top.
HOUSE, red shack, east door.	57 --51	1612	153 --51	175	20	
BEN, old shack near beach.	57 ---46	1087	153 --56	265	10	

*approved*  
*R.R. Lukens*  
*Chief of Party*

*L.S. Hubbard.*  
 L.S. Hubbard.



Cape Ugat as it appears from a point about one mile to the westward. The elevations on the print correspond to the elevations shown on the topographic sheet.

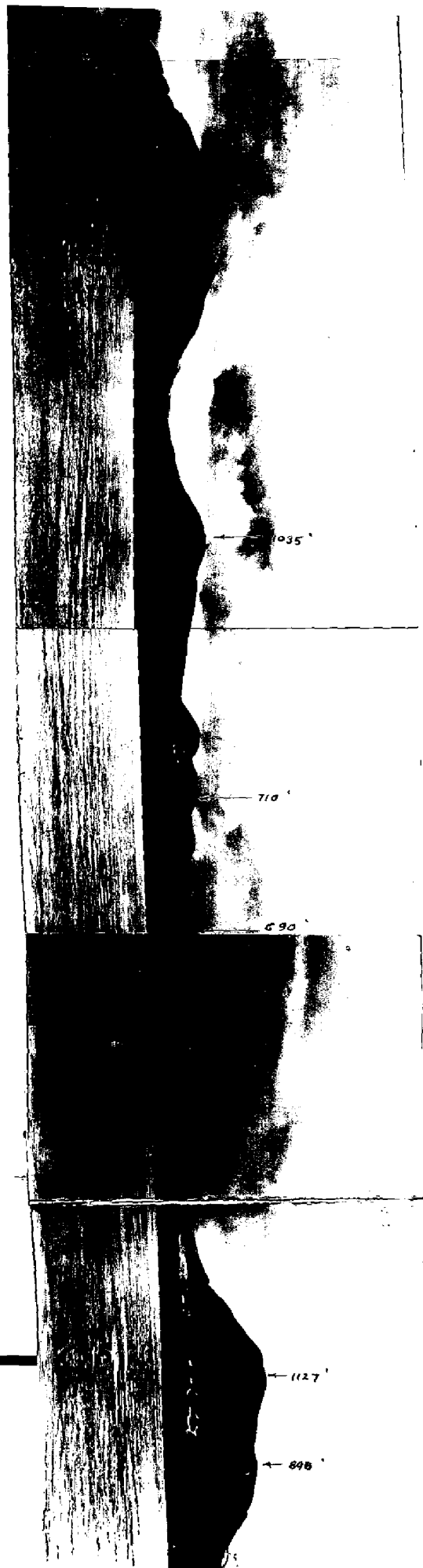


Cape Kuliuk and Twocone Point. Taken from a position about one mile westward from Cape Ugat. It has been recommended that BOX be shown as a point on the chart.

Panorama of coast from Broken Point  
to Miner Point. The elevations  
marked on the print correspond  
to the elevations shown on  
the topographic. The  
white streaks are  
volcanic ash.







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TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. G.

REGISTER NO. **4464**

State ALASKA

General locality Kodiak Island - Cape Ugat

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

Scale 1-20 000 Date of survey June, 1929

Vessel Str. NEWTON

Chief of Party R.R. Lukens

Surveyed by L.S. Hubbard

Inked by L.S. Hubbard

Heights in feet above M.H.W. to ground to ~~tops of trees~~

~~Contour, Approximate contour, Form line interval~~ 100 feet

Instructions dated March 14, 1929

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