DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: ALASKA

DESCRIPTIVE REPORT.

Topo Sheet No. X-2 4035

LOCALITY:

S.W. Alaska, Cook Inlet
Kachemak Bay, Middle Part
Cook Inlet, Kachemak Bay

1923

CHIEF OF PARTY:

H. A. SERAN
BOUNDARIES

Topographic Sheet No. K-2, which includes the mid section of Kachemak Bay, has as its extreme boundaries, the following:

- lat 59 46, lon 151 27 to lat 59 50, lon 151 14
- and lat 59 34, lon 151 11 to lat 59 38, lon 150 48

SHORELINES

Mid sections of both the northern and southern shorelines of the Bay are covered by the sheet.

The North Shore:

The northern shoreline is practically straight and is not broken by any indentations. A steep bluff ranging from 100' elevation at the west end to 520' at the east end of the shore extends along its entire length.

The country behind the edge of the bluff is wooded and has a gradual increasing slope, the topography of which is in no case marked by any peaks, summits etc.

Beginning at the middle of the shoreline, and running at intervals of 2 miles westward are four canyons which extend inland a considerable distance.

The low water line, on the average, lies about 800 metres outside the high water line. The beach is hard mud at low water and is scattered with rock boulders large enough to cause smaller boats trouble if they are not avoided.

A striking characteristic of the north shore is the coal veins which run horizontally along the sides of the bluff. In connection with this, the topographer found countless places along the beach at low water where gas was given off. On igniting several of these little gas jets, it was found that they gave a flame lasting from three to fifteen minutes.

The South Shore:

The southern shoreline of the Bay included on the sheet is of irregular contour marked by bays, lagoons, and high water inundations which give it an appearance marked in contrast to that at low water.

Mountain peaks ranging from 1000' to 5500' rise immediately
behind the south shoreline.

About the mid point of the south shore is the Grewingk Glacier, which rising from a broad flat moraine extends back several miles where it is connected with the newly renamed "Harding Glacier". The foot of the glacier lies about three miles south of the shoreline and has about a 1000' rise in 2/3 miles.

In connection with the moraine it could be stated that certain sections of the land is of a character such that an airplane could land. The ground in most cases is fairly smooth gravel with enough loam to permit a small amount of grass to fertilize.

In conversation with men who have prospected gold in glacier streams near the foot of the glacier, they claim that the glacier is receding at the rate of about five to ten feet each year. This action is probably the indirect cause of changing the directions of the several glacier streams emanating from the foot and sides of the glacier, and which has caused considerable discomfort and annoyance to several fox ranchers who were located in the path of the changing glacier stream.

Another glacier, or rather a branch of the above is located at the east edge of the topographic sheet. This branch is obscured more or less by hills directly in front of the glacier, but which form no obstruction to an outlet for the glacier streams.

HALIBUT COVE, located at the west edge of the sheet, is an excellent harbor and is well shielded by mountains.

Except for the shoreline immediately in front of the glacier, the low water line on the southern shore does not extend on the average more than 20 metres from the high water line.

Respectfully submitted,

James F. Downey Jr.
Aid, U.S.C. & G.S.

* Portlock Glacier. - J.W.M.
PLANE TABLE POSITIONS TO ACCOMPANY DESCRIPTIVE

REPORT OF TOPOGRAPHIC SHEET NO. K-2

***************

<table>
<thead>
<tr>
<th>OBJECT &amp; DESCRIPTION</th>
<th>LAT</th>
<th>D.M.</th>
<th>LONG</th>
<th>D.P.</th>
<th>HGH</th>
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<td></td>
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<td>Whitewash on E. Pt. of Is.</td>
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<td>965</td>
<td>151 11</td>
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<td>MAST</td>
<td></td>
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<tr>
<td>Derrick pole on saltery pier</td>
<td>59 35</td>
<td>1596</td>
<td>151 10</td>
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<td>LEDGE</td>
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<tr>
<td>Center of rock ledge off</td>
<td>59 42</td>
<td>308</td>
<td>151 06</td>
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<td>N. Tang. of single rock</td>
<td>59 43</td>
<td>435</td>
<td>151 04</td>
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Respectfully submitted,

James E. Downey Jr.
Aid, U.S.C. & G.S.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON

November 17, 1922.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4035
Kachemak Bay, Alaska
Surveyed in 1923
Instructions dated February 21, 1923

Chief of Party, H. A. Seran.

Surveyed and inked by J. F. Downey, Jr.

1. The records conform to the requirements of the General Instructions.

2. The plan and extent of the survey fulfill the requirements of the General Instructions and satisfy the specific instructions.

3. The field drafting was completed to the extent prescribed by the General Instructions.

4. The junctions with adjoining sheets are satisfactory.

5. No further surveying is required within the limits of the sheet.

6. The character and scope of the surveying and field drafting are excellent.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. **4035**

<table>
<thead>
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<th>State</th>
<th>Alaska</th>
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<tr>
<td>General locality</td>
<td>S.W. Alaska, Cook Inlet</td>
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<td>Locality</td>
<td>Kachemak Bay, Alaska - Middle Part</td>
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<td>Chief of party</td>
<td>H.A. Seam, H.&amp; G. Engr.</td>
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<tr>
<td>Surveyed by</td>
<td>James F. Downey Jr., Aid</td>
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<tr>
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<td>Contour interval</td>
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<tr>
<td>Inked by</td>
<td>J.F. Downey Jr.</td>
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<tr>
<td>Lettered by</td>
<td>J.F. Downey Jr.</td>
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Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet

Remarks: