

4036

G. S. SURVEY  
U. S. A.  
1923  
Acc. No.

Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: ALASKA

11-5813

DESCRIPTIVE REPORT.

Topographic Sheet No. 3 - 4036

LOCALITY:

SW Alaska, Cook Inlet

Kachemak Bay — Head of Bay

~~1922~~  
1923

CHIEF OF PARTY:

H. A. Seran ..... H. & G. Engineer

4036

DESCRIPTIVE REPORT  
to accompany  
TOPOGRAPHIC SHEET No. 3

Kachemak Bay, Cook Inlet, Alaska.

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LIMITS: The work on this sheet includes the upper portion of Kachemak Bay, lying east of triangulation station LOST (Lat. 59-46.1, Long. 151-07.8) on the north shore and station CRAG (Lat. 59-43.2, Long. 151-04.9) on the south shore.

GENERAL DESCRIPTION OF COAST: Bear Cove, on the south side of the bay near the western edge of the sheet, is one half mile wide by one and one half miles long; Bear Island and Indian Island are two small wooded islands, to the west and east respectively, of the entrance to Bear Cove. The shores of Bear Cove, Bear Island and Indian Island are, in general, rocky, with short stretches of sand or gravel beach. Wooded hills of 100 feet to 350 feet elevation rise directly from the shore. A lone rock, bare at all stages of tide is nearly in the center of the cove.

To the eastward of Indian Island the shore continues steep and rocky for a distance of one mile and then becomes low and marshy. The high water line is very indefinite; in general, the outer edge of the marsh was taken as the high water line, altho it is probable that much of it is covered by the spring tides.

The north shore is nearly straight. A steep bluff 500 to 600 feet in elevation extends from the western edge of the sheet to the mouth of Swift Creek. Between Swift Creek and Fox Creek the shore is low and flat, the foot of the hills being about 1/4 mile back from the shore line. To the eastward of Fox Creek the shore line becomes marshy with hills rising from the edge of the marsh.

A broad flat wooded valley extends to the northeastward from the head of the bay. It is drained by two rivers of considerable size, Fox River and Sheep River, which flow into the head of the bay. These rivers are said by residents of the locality to be two mouths of the same river which divides about five miles above the head of the bay, as shown on Chart 8554. Sheep River is navigable for small boats, but can only be entered by them at extreme high tide. Fox River is not navigable for small boats at any stage of tide.

A mountain range with summits of 1500 feet to 4800 feet rises from about 3 miles back from the south shore. The timber line is at from 1200 to 1500 feet. Three branches of the newly named Harding Glacier are along the southern edge of the sheet; the glacial streams unite to form Bradley River.

The country back of the north shore is wooded and slopes gradually from about 600 feet near the shore to 1200 to 1600 feet about 3 miles back. It is cut by three canyons.

SURVEY METHODS: Plane table triangulation was used to carry the control into Bear Cove. For the remainder of the sheet the three point problem was used wherever possible; a combination of traverse and resection was used otherwise.

Form lines are controlled by numerous plane table elevations. The low water line was not determined by the topographic party on account of its great distance from shore, but was transferred from the hydrographic sheet.

NAMES: All names of topographic features are local names as obtained from residents of the locality.

Respectfully submitted,

*M. O. Witherbee*

M. O. WITHERBEE,  
H. & G. Engineer.

Approved

H. A. SERAN,  
H. & G. Engineer, Chief of Party.

# PLANE TABLE POSITIONS

TOPOGRAPHIC SHEET NO. 3

Object & Description	Latitude	D.M.	Longitude	D.P.	Remarks.
"Lone" Rock in middle of Bear Cove.	59° 43'	231	151° 02'	314	Summit
"But" Outlying rock	59° 43'	432	151° 03'	538	"
"Ter" Western point of small rocky island	59° 43'	821	151° 02'	621	Whitewash
Rock awash	59° 44'	6	151° 03'	218	

DESCRIPTIVE REPORT  
to accompany  
TOPOGRAPHIC SHEET No. 3

Kachemak Bay, Cook Inlet, Alaska.

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*M. O. Witherbee*

M. O. WITHERBEE,  
H. & G. Engineer.

Approved

*H. A. Seran*

H. A. SERAN,  
H. & G. Engineer, Chief of Party.

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DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 17, 1923.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4036

Kachamak Bay, Alaska

Surveyed in 1923

Instructions dated February 21, 1923

Chief of Party, H. A. Seran.

Surveyed and inked by M. O. Witherbee.

1. The records conform to the requirements of the General Instructions.
2. The plan and extent of the survey satisfy the specific instructions.
3. The field drafting was completed to the extent prescribed by the General Instructions.
4. The junctions with the 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.
7. Reviewed by E. P. Ellis, November, 1923.



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. 4036 K3

State Alaska

S.W. Alaska

General locality Cook Inlet

Locality Kachemak Bay - Head of Bay

Chief of party H.A. Seran

Surveyed by M.O. Witherbee

Date of survey July, 1923

Scale 1-20000

Heights in feet above Mean sea level

Contour interval 100 feet.

Inked by M.O. Witherbee Lettered by M.O. Witherbee

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, ☒ Horizontal angle books, Field computations,

Data from other sources affecting sheet

Remarks: