



3957

O. & G. SURVEY
L. & A.
MAY 8 1917
Acc. No.

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

State: *Alaska*

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. *3957*

LOCALITY:

*Egg Island to Pete
Dahl Slough
Copper R. Delta*

1917

CHIEF OF PARTY:
E. E. Smith

F NO.

3957

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO.

EGG ISLAND TO PETE DAHL SLOUGH.
COPPER RIVER DELTA.

The main feature of this sheet is the entrance through the sand bars just east of Egg Islands, and the deep Alaganik channel. On approaching this entrance the ten fathom curve is found about five miles south of the chain of sand bars. Three miles south of the narrowest part of the entrance the water shoals to four fathoms, then gradually deepens again to sixteen fathoms abreast of Sta. Egg. The low water line of Egg Islands extends about two miles true south from Sta. Egg and is steep to, soundings being made close to it and the low water line sketched in. (See boat sheet) At the narrowest part the channel has a clear width of half a mile. East of this place is a line of bars, some of which show at low tide, continuing for several miles to the eastward.

A large slough runs from Egg Island about two miles northwestward, then swinging to the west is dissipated in the vicinity of Point Whitshed. However this falls on Sheet B.

The main shore is very flat at the level of extreme high tide, and over grown with heavy marsh grass. There are no marks upon it except occasionally a fisherman's hut. Two or three miles inland the country is equally flat, but a little higher above tide and has some trees. The outer line of sand bars are very flat and featureless, and hardly higher than high tide.

Half way from Egg Island to the entrance to Alaganik Slough is a high sand flat which bares very soon after high tide and which is indicated by breakers or ripples at all tides. Beginning just inside of the bars the channel, leads from Egg Island to this sand flat, skirts close to it and leads off to the northward toward Glacier River house (Sta. Swamp) for about half a mile, thence in a straight line up the slough. This channel is deep and the current is strong (three to four knots). More water comes through this channel than any other flowing through the delta; possibly half the flow of Copper River finds its outlet here. At low tide bare flats border the channel on both sides. The limits of the bare areas have been sketched on the boat sheets. The channel is about 300 meters wide at its narrowest and crookedest part near the sand flat mentioned. A short distance up the slough from this point it is 800 meters wide and 30 feet deep and runs straight and clear as far as investigation was carried, about three quarters of a mile inside of the grass line. However the fishermen report that the channel is soon filled with sand and they were not able during the past season to take even a Columbia River fishing boat past Snag Point at the upper end of the slough.

The mouth of Glacier River was investigated but no channel exists which is of any value for navigation by even small boats. It has about half a foot of running water at low tide.

About three quarters of a mile southeast from Glacier River is a branch slough about a hundred meters wide, with seven feet of water from its connection with the Alaganik Slough nearly to the grass line. Above this it is dissipated.

The channel to Eyak River leads north from Egg Island entrance and follows the sounding line between positions 21e day and 36 e day. There is one or two feet of water even at low tide. The fishermen have it staked with trees and use this channel as an approach to the cannery in Eyak River.

The vicinity of Tree 8 (in Lat. 60-22 Long. 145-32) is the dividing place to the westward of which all water drains through the Egg Island entrance, and to the eastward of which all water drains through the entrance near Triangulation Station Reef 6. in Longitude 145-27. The set of ebb and of flood tides bears this out as well as the soundings.

In proceeding east across the flats from Egg Island run up Alaganik Slough to the high sand flat, round the flat to the northward and steer for Cyp (a tree in the flats), then run from tree to tree through Steam Boat Slough. As the flats just go bare at Cyp when the tide is at the datum plane a height of tide greater than the draft is required.

Fishermen in this locality every Spring mark the turns with trees stuck in the mud and it is necessary to know from them on which side and how far to leave the trees. Steamboat Slough is narrow and crooked. It leads to a connection with Pete Dahl Slough.

Pete Dahl Slough is a reasonable straight and fair channel for about two miles out from the grass line. Above the grass line it is shoaler. During the past season a skow, using hoisting engine and kedge anchor, worked its way up Pete Dahl Slough to the railroad bridge. The draft was 30 inches. The outer part of Pete Dahl Slough is called The Race Track.

Except for the few sloughs the area of the sheet is occupied by mud flats whose limits have been sketched on the boat sheets. Anchorage may be found anywhere in Alaganik Slough or in the deep water north of the Egg Island entrance but the Egg Island entrance is exposed to the swell from the sea and tide rips are frequently found in that part of Alaganik Slough between Egg Island and the high sand flat previously referred to. There is no protection from winds, even inside of the high water line. Information concerning currents is contained in the Report on Currents in Orca Inlet and the Copper River Delta.

Respectfully submitted

E. E. Smith

Assistant, C. & G. Survey.

Hydrographic signals on C sheet. (3957.)

Copper River Delta, Alaska; E. E. Smith, Assistant, Chief of party.
Season of 1916, Valdez datum.

Cyp

60 21 (1813)
145 33 (0065)

Station is a tree stuck up in the mud to mark channel.

Endurs only a few months.

* * * * *

Tree 11

60 22 (0447)
145 34 (0353)

Station is a tre similar to tree Cyp

* * * * *

Peg

60 24 (0852)
145 29 (0555)

Station is a stake on the bank of Alaganik Slough.

Not recoverable.

* * * * *

Po

60 24 (1677)
145 30 (0160)

Station is a stake on the bank of Alaganik Slough.

Not recoverable.

STATISTICS SHEET NO...C.....

Date 1916	Letter	Volume	Positions	Soundings	Miles- Statute	Vessels
July 13	a	1	70	520	10.4	Whaleboat
" 14	b	1	93	702	10.5	"
" 18	c	1	31	243	5.0	"
" 18	c	2	68	467	9.9	"
" 19	d	2	131	986	17.4	"
" 20	e	3	54	564	8.5	"
Aug. 1	f	3	100	917	17.8	"
" 2	g	3	19	176	3.0	"
" 2	g	4	53	504	15.0	"
" 22	h	4	77	716	18.5	"
" 23	h	4	33	324	8.3	"
" 23	j	5	97	1010	25.1	"
" 24	k	5	13	175	4.1	"
" 25	l	5	51	467	11.5	"
" 25	l	6	22	253	5.8	"
" 26	m	6	105	938	22.2	"
June 10	A	7	63	499	10.3	Taku
" 21	A'	7	53	281	10.0	"
July 7	B	8	78	379	16.7	"
" 8	C	8	76	356	12.5	"
" 10	D	8	26	153	6.0	"
" 11	E	8	102	374	26.7	"
" 12	F	9	134	562	30.6	"
" 13	G	9	103	500	25.2	"
" 14	H	9	78	270	18.0	"
" 18	J	10	31	183	6.5	"
" 19	K	10	153	727	39.6	"
" 20	L	10	152	768	35.6	"
" 31	M	11	11	69	4.0	"

		TOTALS...	2077	13933'	435.0	
June 15	B'	12	209	275	12.2	"
		Totals	2116	14258	447.2	

Shevidan
Glacier

0 Hill

ADDRESS
U. S. COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO NO 5-VEC

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

October 27, 1917.

HYDROGRAPHY ETC., (HT)
FIELD RECORDS (H)
CHIEF DIVISION (HT)

Division of Hydrography and Topography:
FIELD RECORDS (H)
Division of Charts:

Tidal reductions are approved in
12 volumes of Sounding records for

HYDROGRAPHIC SHEET 3957

Vicinity of Orca Inlet, Alaska
E. E. Smith in 1916.

Plane of reference is
Mean lower low water, reading

2.9 ft. on tide staff at Alaganik Slough.
4.3 " " " " " Point Whitshed.

Paul Schureman

Acting Chief, Section of
Tides and Currents.

LIBRARY
Place with descriptive report
of hydrographic sheet No. 3957
S.D.T.
Drawing Section.