PRELIMINARY LAKE SURVEY

FORM 1

1980 Field Form

Lake identification (name, ID number, bay or fjord receiving drainage) "Lower Rostislaf" Lake 109-10-17-A – Chatham Strait S of Patterson Pt, Baranof I. Sampling station no. X,

Lake area & elevation 607' on topo map Weather & lake surface conditions 13 Aug: overcast in afternoon, light wind (5-15 kn) & small chop; intermittent rain in evening with less wind; 14 Aug — intermittent light rain & thick overcast with little or no wind in am; light wind beginning ~1100 h & continuing to mid-afternoon, no rain & ceiling lifting; late afternoon and evening w/ broken skies, no wind then light wind and small riffles.

Date 13-14 Aug. 1980 Observers Schmidt & Crone

BIOLOGICAL PARAMETERS :

Phytoplankton: Water sample collected at 1.0 -m depth at 1042 h; processed for ?

14 Aug. chlorophyll a (y,n) _____, phytoplankton biomass (y,n) —, and species identification (125 ml sample fixed w/ Lugol's)(y,n) — processed at 1140-1200 h.

Zooplankton: Location and time(s) of samples X, [illegible]; #[illegible] @ 1352 h; #[illegible].

14 Aug. Tow depths & elapsed times 50m each in 67, 66 [illegible]. Tow angle vertical?, or ___°.

Dominant zooplankters observed Diaptomus, Halopedium, Bosmina

Lake-resident fish(es): Give number of fish collected (by gear type & species) for analysis of -- diet & age (~~preserved~~ dead in net) 4 RBT, gillnet-caught, length (live) 6 rainbow

13-14 Aug. by gillnet (4 dead, discarded, 2 live, released) length-weight (live) 0, population size 0, and pathogens 0.

Comments 5 of rainbow of nearly the same size (range 203-215 mm); other rainbow 425 mm.

PHYSICAL & CHEMICAL PARAMETERS :

Bathymetry: List depth transects completed (e.g., A→K, B→C) A→B, C→D, E→F, G→H, I→J, K→L, M→N, O→P, Q→R, S→T, U→C, V→W, X→Y, Z→AA, BB→CC, AA→DD, EE→FF Σ = 17 transects

13-14 Aug. Gear used recording depth sounder. Maximum depth observed in each basin 123 m by handline in W basin; 35 m by sounder in E basin. No. of major basins 2.

Secchi disc: Time 1328 h. Lake surface conditions overcast, light wind & riffle.

14 Aug. Depth(s) disc disappeared/reappeared 20.2/19.5 m, ← average of several tries.

COMMENTS : Areas of abundant filamentous green algae observed in W end inlet & the outlet stream. The W end inlet also had areas of brown algae covered rock; the outlet stream near the lake had bottom stones covered with thick [illegible] except in the green algae area right at the beginning of the outlet stream. Filamentous green algae covered nearshore bottom of lake near mouth of inlet on north shore of W basin.

14 Aug.

Field analyses: Obtain depth profile data (as described in the detailed lake survey procedures) for those parameters available on meter + cable equipment. Determine the remaining water chemistry parameters by Hach kit at 1.0-m, mid-epilimnion, and mid-hypolimnion depths. If dissolved oxygen is determined by Hach kit, include a near-bottom water sample.

→ Bromothyroid Blue

Depth (m)	Temperature (°C) 1415-1423 h: Hydrolab	other thermistor thermom.	pocket thermom.	Light intensity (%)	DO (mg/l): Hydrolab	Hach kit	pH: Hydrolab	Hach kit wide range	narrow range	Conductivity (µmhos/cm): Hydrolab		Alkalinity (mg/l)	Hardness (mg/l)
above surface	12.2												used ManVer II sol.
≈5 cm deep	13.5												
0.5 m													
1.0	13.5		13.5			used 0.705 ml = 10.58 mg/l		~6.6	6.65		16.5	used 0.21 ml X 15 = 3.15 mg/l	used [illegible] mg/l
1.5													
2.0	13.5												
2.5													
3.0	13.5												
3.5													
4.0	13.0												
4.5	12.2												
5.0	11.5												
5.5	11.0												
6.0	10.8												
6.5	10.0												
7.0	9.5												
7.5	9.0												
8.0	8.7												
8.5	7.8												
9.0	7.5												
9.5													
10.0	7.0												
10.5													
11.0	6.7												
11.5													
12.0	6.1												
13.0	5.9												
14.0	5.5												
15.0	5.2												
16.0	5.0												
17.0	5.0												
18.0	4.8												
19.0													
20.0													
60 m			5.5			used 0.69 ml = 10.3 mg/l		~6.3	6.3		19	used 0.20 ml X 15 = 3.00 mg/l	used [illegible] mg/l

Times of samples: Parameter profiles, 1415 to 1423 h; Hach kit determinations at 1.0 m 1042 h (Collected @ 1125-1203 h), ~~mid-epilimnion (—— m)~~ ____ h, mid-hypolimnion (60 m) 1423 h (Collected @ 1400-1600 h), and ~~near-bottom (—— m)~~ ____ h.

Water samples collected for lab analyses? (yes, no) [illegible], including metals (y, n) —.

Samples collected at? mid-epilimnion (—) ____, mid-hypolimnion (y, n) ____,

other (designate) 1.0 Time(s) of collection 1042 h; processing 1130-1140 h.