Field Form

Lake identification (name, ID number, bay or fjord receiving drainage) Lake A of unnamed 2-lake chain, 113-66-01; Neva Strait, Baranof Island Sampling station no. 1

Lake area & elevation 10 ha ; Weather & lake surface conditions afternoon of May 12 - sunny skies, high scattered clouds, light north wind; riffles turning to light chop in evening. May 13 - overcast, light rain in pm, slight wind; light riffles (morning) May 14 - overcast; calm

Date May 12, 13, 14 1980 Observers Longenbaugh, Parker, Sands, Straley, Zimmerman

PHYSICAL & CHEMICAL PARAMETERS :

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.

Time; date / Depth (m)	1730h; May 12 Temperature (°C)	1100h; May 13 Light intensity ~~(%)~~ foot candles	May 13 DO (mg/l)	May 13 pH #1, #2 (T(°C))	May 13 pH #1, #2	May 13 Conductivity (µmhos/cm)	May 13 Alkalinity (mg/l)	May 13 Hardness (mg/l)
above surface	13.0	0.14×10^4	#1, #2			#1 #2	#1 #2	#1 #2
≈5 cm deep	10.5	0.48×10^3						
0.5 m	10.0	0.29×10^3						
1.0	9.5	0.17×10^3	10.02, 10.96	(9.4, 9.6)	6.05, -	15.8, 19.5	1 drop 8, partial drop 7	1 drop 16, 3/4 drop 8
1.5	9.0	0.14×10^3						
2.0	9.0	0.83×10^2						
2.5	8.5	0.48×10^2						
3.0	8.5	0.34×10^2						
3.5	7.5	0.21×10^2						
4.0	7. +	0.14×10^2						
4.5	7.0	8.60						
5.0	6. +	6.40	11.06	7.0	5.73	18.5	13 1 drop	33 3 drops
5.5	6.0	4.50						
6.0	6. -	3.40						
6.5	6. -	2.40						
7.0	5. +	1.50						
7.5	4.5	0.85						
8.0	4.5	0.60						
8.5	4. +	0.42						
9.0	4. +	0.27						
9.5	4.0	0.18						
10.0	4.0	0.12	14.5	5.0	5.60	19.5	4 1/4 drop	15 1 drop
10.5	4.0							
11.0	4.0							
11.5	4.0							
12.0	4.0							
13.0	4.0							
14.0	4.0		7.05	4.5		27		
15.0	4.0							
16.0								
17.0								
18.0								
19.0								
20.0								
21.0								
22.0								

Field analysis (cont'd):

Depth (m)	Temperature (°C)	Light intensity (%)	DO (mg/l)	pH	Conductivity (µmhos/cm)	Alkalinity (mg/l)	Hardness (mg/l)
23.0							
24.0							
25.0							

May 13 1980 Times of samples: Parameter profiles, 1110 to 1545 h; Hach kit determinations a:
* 1.0 m #1 1120 #2 1527 h, mid-epilimnion (5.0 m) 1335 h, mid-hypolimnion (10.0 m
1420 h, and near-bottom (14.0 m) 1508 h.

May 14 Water samples collected for lab analyses?(yes,no) yes, including metals (y,n) May 13 y, 1210h; y, 1335 y, 1420
Samples collected at? mid-epilimnion(y,n) y, 5.0m 1021h, mid-hypolimnion (y,n) y, 10.0 m 1030h,
other (designate) 1.0m 1015h. Time(s) of collection 1015; 1021; 1030h; processing 1700 h

May 13 Secchi disc: Time 1020 h. Lake surface conditions calm, light overcast, no rain
Depth(s) disc disappeared/reappeared 3.9 / 3.5 m,

May 13 Bathymetry: List depth transects completed (e.g., A→K, B→C) A→B; 0900 h; C→D, E→F, G→H; 1630-1815 h
Gear used Sitex recording fathometer and sounding line. Maximum depth observed 11.5 fathoms

Lake level & flow:

May 13 Water depth of lake at standard measuring site 2 stations ~~cm~~; #1 camp station (using chnometer) 1.85 m; #2 outlet station .186 m

May 12 Outlet: Velocities measured _____ m/sec; mean velocity ($\bar{v}$) _____ m/s
depths measured _____ m; mean depth _____ m;
width _____ m; cross-sectional area (A) _____ m²; streambed coefficient (k)
0.8 or 0.9; discharge ($Q = A\bar{v}k$) 0.455 ft³/sec ~~m³/sec~~. or 0.001 m³/sec

May 12 Major inlets (list largest first): Mean depth(s) _____ m; width(s) _____
_____ m; mean velocity _____ m/sec; streambed coefficient(s)
(k) _____; estimated flow(s) _____ m³/sec. ** all inlets < .001 m³

Comments: * redid water chemistry at 1.0 m as assurance the digital titrator was being consistent. Not sure about alk. + hardness figures. Possibly need to use a pipet
** inlet flows did not register with the Gurley meter as flow and depths too small to be measured with this style of meter. A pigmy Gurley meter is needed.

Field Form

Lake identification (name, ID number, bay or fjord receiving drainage) Lake A of unnamed 2-lake chain, 113-66-01; Neva Strait; Baranof Island Sampling station no. 1

Lake area & elevation _____ Weather & lake surface conditions scattered clouds, no rain, intermittant sun; light ripple on surface, later moderate chop, steady NE winds

Date 20-June 80 Observers B. Parker, F. Parker, Straley, Zische

PHYSICAL & CHEMICAL PARAMETERS:

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.

Depth (m)	Temperature (°C) Hydro-lab	Light intensity ~~(%)~~ foot candles	DO (mg/l) Hydro-lab	pH Hydro lab	pH HACH	Conductivity (µmhos/cm) Hydro-lab	Alkalinity (mg/l) pipet w/ 0.29N Sulf. Acid	Hardness (mg/l) HACH
above surface		0.55×10^4						
≈5 cm deep		0.20×10^4						
0.5 m	14.1		9.40	5.51		27		
1.0	14.1	0.16×10^3	9.41	5.47	6.1	27	0.30 × 14.5 = 4.4	
1.5	14.0							
2.0	14.0	0.14×10^3	9.42	5.43		27		
2.5	13.1							
3.0	12.6	0.09×10^3	9.53	5.29		28		
3.5	12.3							
4.0	11.7	0.50×10^2	9.60	5.23		28		
4.5	10.7		9.70	5.12		28		
5.0	9.7	0.23×10^2	9.88	4.98	5.8	28	0.33 × 14.5 = 4.8	
5.5	7.8		10.11					
6.0	6.0	0.14×10^2	10.07 bounced around (mid-reading)	4.75		28		
6.5	5.6							
7.0	4.9	0.45×10	10.31	4.73		28		
7.5	4.5							
8.0	4.3	0.14×10	10.12	4.73		28		
8.5	4.2							
9.0	4.1	0.06×10	9.71	4.74		30		
9.5	4.1							
10.0	4.0	0.06×10	8.96	4.85	5.6	31	0.30 × 14.5 = 4.4	
10.5	4.0							
11.0	4.0	0.03×10	8.36	4.89		33		
11.5	4.0							
12.0	4.0	0.11	7.15	4.95		36		
13.0	3.9	0.05						
14.0	3.9		3.74	5.07		43		
15.0	3.5							
16.0								
17.0								
18.0								
19.0								
20.0								
21.0								
22.0								

APR 21 RECD

Depth (m)	Temperature (°C)	Light intensity (%)	DO (mg/l)	pH	Conductivity (µmhos/cm)	Alkalinity (mg/l)	Hardness (mg/l)
23.0							
24.0							
25.0							

Times of samples: Parameter profiles, 0905 to 1330 h; Hach kit determinations at 1.0 m 0905 h, mid-epilimnion (5.0 m) 1133 h, mid-hypolimnion (10.0 m) 1306 h, and near-bottom (- m) — h.

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

Samples collected at? mid-epilimnion (y, n) —, mid-hypolimnion (y, n) 10.0 m, other (designate) 1.0 m. Time(s) of collection 1428, 1438 h; processing 2000-2200 h.

Secchi disc: Time 0956 h. Lake surface conditions moderate ripple; sunny + scattered clouds.

Depth(s) disc disappeared/reappeared 5.5 / 4.5 m,

Bathymetry: List depth transects completed (e.g., A→K, B→C) _____

Gear used _____. Maximum depth observed _____.

Lake level & flow:

Water depth of lake at standard measuring site 21.2 cm; station 2 near outlet

Outlet: Velocities measured _____ m/sec; mean velocity ($\bar{v}$) _____ m/s; depths measured _____ m; mean depth _____ m; width _____ m; cross-sectional area (A) _____ m^2; streambed coefficient (k) 0.8 or 0.9; discharge ($Q = A\bar{v}k$) 0.84 ft^3/sec ~~m^3/sec~~.

Major inlets (list largest first): Mean depth(s) _____ m; width(s) _____ m; mean velocity _____ m/sec; streambed coefficient(s) (k) _____; estimated flow(s) _____ m^3/sec.

Comments: _____