ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF SPORT FISH
LAKE SURVEY SUMMARY

LAKE Birch Lake

MAP REF. Big Delta B-6 T 7S R 5E S 12,13 LAT. 64°19'N LONG. 146°40'W

LOC. 308 Richardson Hwy. SURF. ELEV. 825

1. SURF. ACRES 803 MAX. DEPTH 49 ft. AVG. DEPTH ACRE FT. 10,624
SHOAL AREA WATER COLOR SECCHI READING
AQUATIC VEGETATION

2. FISH SPECIES: NATIVE cisco, N. pike, burbot, sculpin, whitefish INTRODUCED rainbow trout

3. FISHING HISTORY lake treated 20 & 21 July '66, present fishery is composed of rainbow trout and some silver salmon

4. INVERTEBRATES Diaptomus, tricoptera & odonata found in RT stomachs

5. INLETS 2 small streams on S.E. shore DISCHARGE (summer) less than 1.0 cfs
1 " " on N.W. shore DISCHARGE " " " 3.0 cfs
1 " " on N. E. shore DISCHARGE " " " 1.0 cfs
BARRIERS None (Beaver dams on N.W. stream are occasionally a problem)

6. OUTLETS Birch Creek on W. shore DISCHARGE 0-summer; 50-spring cfs
DISCHARGE cfs
BARRIERS control structure

7. SPAWNING AREAS N.W. stream suitable for rainbows

8. WATERSHED TYPE white spruce, birch DRAINAGE AREA 11,140 ACRES

9. ACCESSIBILITY secondary road

10. ACCESS STATUS 2,640 ft. of state-owned frontage

11. USE SITE Boat landing and beach FACILITIES

12. OTHER USE

13. POLLUTION Possible sewage seepage from homes and cottages, also two petroleum storage tanks on E. shore

14. REMARKS

BY DATE

FG 206 2/68

Black Lake

pH = 7.5

Average Depth = 14.6

Conductivity = 110.

Acre ft = 10,276

Surface Acre 803

Max Depth = 48

Late winter DOs
no D-O problem

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CENTRAL LABORATORY, SALT LAKE CITY, UTAH

PROVISIONAL RECORDS
SUBJECT TO REVISION

WATER QUALITY ANALYSIS
LAB ID # 157046 RECORD # 19304

SAMPLE LOCATION: BIRCH LK AT OUTLET NR FAIRBANKS
STATION ID: 641900146393500 LAT.LONG.SEQ.: 641900 1463935 00
DATE OF COLLECTION: BEGIN--750527 END-- TIME--1335
COUNTY CODE: 090 PROJECT IDENTIFICATION: 78
DATA TYPE: 2 SOURCE: LAKE OR RESERVOIR GEOLOGIC UNIT:
COMMENTS:
BOTTLES F 3 FIELD VALUE USED FOR PH BICARB AND COND

ALK,TOT (AS CACO3)	MG/L	52	NITROGEN TOT ORG N	MG/L	0.63
ALUMINUM TOTAL	UG/L <	10	NITROGEN TOTKJD AS N	MG/L	0.66
BICARBONATE	MG/L	63	NO2 + NO3 AS N TOT	MG/L	0.02
BORON TOTAL	UG/L	30	NO2+NO3 AS N DISS	MG/L	0.01
CALCIUM DISS	MG/L	13	OXYGEN DISSOLVED	MG/L	10.2
CARBON TOT ORGANIC	MG/L	23	PH		7.0
CARBONATE	MG/L	0	PH LAB		7.1
CHLORIDE DISS	MG/L	2.4	PHOS ORTHO DIS AS P	MG/L	0.01
COBALT TOTAL	UG/L <	50	PHOSPHATE DIS ORTHO	MG/L	0.03
COLOR		30	PHOSPHORUS TOT AS P	MG/L	0.00
CONDUCTIVITY		110	POTASSIUM DISS	MG/L	6.3
CONDUCTIVITY LAB		111	RESIDUE DIS CALC SUM	MG/L	68
COPPER TOTAL	UG/L	10	RESIDUE-DIS-TON/AFT		0.12
DEPTH(FT.FR.SURFACE)		1.0	RESIDUE-DIS-TON/DAY		2380
FLUORIDE DISS	MG/L	0.2	RESIDUE DIS 180C	MG/L	88
HARDNESS NONCARB	MG/L	3	SAR		0.2
HARDNESS TOTAL	MG/L	55	SILICA DISSOLVED	MG/L	2.5
IRON DISSOLVED	UG/L	160	SODIUM DISS	MG/L	3.3
MAGNESIUM DISS	MG/L	5.5	SODIUM PERCENT		10
MANGANESE DISSOLVED	UG/L	20	STREAMFLOW(CFS)-INST		9999
MOLYBDENUM TOTAL	UG/L	0	SULFATE DISS	MG/L	3.7
NITROGEN NH4 ASN TOT	MG/L	0.03	VANADIUM TOTAL	DETR	DELETED
NITROGEN TOT AS N	MG/L	0.68	WATER TEMP (DEG C)		10.0
NITROGEN TOT AS NO3	MG/L	3.0	ZINC TOTAL	UG/L	0

CATIONS	(MG/L)	(MEQ/L)	ANIONS	(MG/L)	(MEQ/L)
CALCIUM DISS	13	0.649	BICARBONATE	63	1.033
MAGNESIUM DISS	5.5	0.453	CARBONATE	0	0.000
POTASSIUM DISS	6.3	0.162	CHLORIDE DISS	2.4	0.068
SODIUM DISS	3.3	0.144	FLUORIDE DISS	0.2	0.011
			SULFATE DISS	3.7	0.078
			NO2+NO3 AS N D	0.01	0.001
TOTAL		1.406	TOTAL		1.189

PERCENT DIFFERENCE = 8.37