ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF SPORT FISH

WATER CABIN LAKE

WATER ANALYSIS

LOCATION T7N, R12W, SEC 23-26

| DATE | STATION | TIME | SNOW COVER | ICE COVER | SAMPLE DEPTH | TEMPERATURE WATER | TEMPERATURE AIR | DO | $CO_2$ | pH | TOTAL ALKALI | REMARKS | BY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [illegible]/70 | | 1600 | 0 | 25 | 0 | 33 | 42 | 7.0 | | 6.0 | | | LH |
| " | | | | | 8 | | | 7.0 | | | | | |
| " | | | | | 15 | | | 6.0 | | | | | |
| 5/7/71 | | 1415 | 4 | 36 | 0 | | 38 | 10.0 | | 6.0 | 34 | LAKE HAD 3 IN OF OVERFLOW WHICH | DAV |
| " | | | | | 8 | | | 2.5 | | | | MAY HAVE AFFECTED DO READINGS | |
| " | | | | | 13 | | | 0.0 | | | | | |
| 9/11/74 | | 1500 | 8" | 24" | 0 | 32° | 36° | 12.8 | | | 7 (5') | titration | SH |
| | | | | | 7 | 36° | | 3.5 | | | | | |
| | | | | | 13 | 36° | | 2.4 | | | | | |
| 3/24/75 | | 1000 | 12 | 28" | 0 | 32 | | 11.0 | | | 37.2 | titration | SH |
| | | | | | 8 | 35 | | 6.4 | | | | | |
| 3/ | | | | | 16 | 38 | | 3.5 | | | | | |
| 3/5/76 | | 0900 | .12 | 30 | 0 | 33 | | 12.8 | | | | DO meter | SH |
| | | | | | 8 | 38 | | 4.8 | | | | | |
| | | | | | 15 | 40° | | 2.6 | | | | | |
| | | | | | | | | | | | | | |

DEFINE LOCATION OF STATIONS ON REVERSE

2/69
FG-208

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CENTRAL L[illegible]ORATORY, SALT LAKE CITY, [illegible]AH

WATER QUALITY ANALYSIS
LAB ID # 155069 RECORD # 18832

SAMPLE LOCATION: CARIN LK NR KENAI AK
STATION ID: 604025151192700 LAT.LONG.SEQ.: 604025 1511927 00
DATE OF COLLECTION: BEGIN--750527 END-- TIME--1400
COUNTY CODE: 120 PROJECT IDENTIFICATION: 58
DATA TYPE: 2 SOURCE: LAKE OR RESERVOIR GEOLOGIC UNIT:
COMMENTS:
75FG59 TOC WAS RECEIVED IN ANCH UNCHILLED

PROVISIONAL RECORDS SUBJECT TO REVISION

| | | |
|---|---|---|
| ALK.TOT (AS CACO3) | MG/L | 7 |
| BICARBONATE | MG/L | 9 |
| BORON TOTAL | UG/L | 90 |
| CALCIUM DISS | MG/L | 1.6 |
| CARBON TOT ORGANIC | MG/L | 0.5 |
| CHLORIDE DISS | MG/L | 2.8 |
| COLOR | | 1 |
| CONDUCTIVITY | | 28 |
| CONDUCTIVITY LAB | | 28 |
| FLUORIDE DISS | MG/L | 0.1 |
| HARDNESS NONCARB | MG/L | 0 |
| HARDNESS TOTAL | MG/L | 6 |
| IRON DISSOLVED | UG/L | 70 |
| MAGNESIUM DISS | MG/L | 0.5 |
| MANGANESE DISSOLVED | UG/L | 30 |
| NITROGEN NH4 ASN TOT | MG/L | ~~1.2~~ 1.3 |
| NITROGEN TOT AS N | MG/L | 7.5 |
| NITROGEN TOT AS NO3 | MG/L | 33 |
| NITROGEN TOT ORG N | MG/L | 6.2 |
| NITROGEN TOTKJD AS N | MG/L | ~~7.4~~ 7.2 |
| NO2 + NO3 AS N TOT | MG/L | 0.11 |
| NO2+NO3 AS N DISS | MG/L | 0.11 |
| ~~PH LAB~~ | | ~~6.5~~ |
| PHOS ORTHO DIS AS P | MG/L | 0.00 |
| PHOSPHATE DIS ORTHO | MG/L | 0.00 |
| PHOSPHORUS TOT AS P | MG/L | 0.01 |
| POTASSIUM DISS | MG/L | 0.6 |
| RESIDUE DIS CALC SUM | MG/L | 14 |
| RESIDUE DIS TON/AFT | | 0.02 |
| RESIDUE DIS 180C | MG/L | 16 |
| SAR | | 0.3 |
| SILICA DISSOLVED | MG/L | 0.2 |
| SODIUM DISS | MG/L | 1.7 |
| SODIUM PERCENT | | 35 |
| SULFATE DISS | MG/L | 1.2 |
| Temp | | 5° |

CATIONS

| | (MG/L) | (MEQ/L) |
|---|---|---|
| CALCIUM DISS | 1.6 | 0.080 |
| MAGNESIUM DISS | 0.5 | 0.042 |
| POTASSIUM DISS | 0.6 | 0.016 |
| SODIUM DISS | 1.7 | 0.074 |
| TOTAL | | 0.210 |

ANIONS

| | (MG/L) | (MEQ/L) |
|---|---|---|
| BICARBONATE | 9 | 0.148 |
| CHLORIDE DISS | 2.8 | 0.079 |
| FLUORIDE DISS | 0.1 | 0.006 |
| SULFATE DISS | 1.2 | 0.025 |
| NO2+NO3 AS N D | 0.11 | 0.008 |
| TOTAL | | 0.265 |

PERCENT DIFFERENCE = -11.44

Volumetric data - Cabin Lake

$2{,}289{,}514 + \frac{1{,}968{,}041}{2} \times 5 = 10{,}643{,}885$ cu. ft.

$1{,}968{,}041 + \frac{1{,}236{,}233}{2} \times 5 = 8{,}010{,}685$ cu. ft.

$1{,}236{,}233 + \frac{643{,}817}{2} \times 5 = 4{,}700{,}125$ cu. ft.

$643{,}817 + \frac{131{,}551}{2} \times 5 = 1{,}938{,}420$ cu. ft.

Total 25,293,115 cu. ft.

$62.4 \times 25{,}293{,}115 = 1{,}578{,}290{,}376$ lbs. $H_2O$

1,578 lbs. rotenone at 1 ppm
1,736 lbs. rotenone w/10 percent error

surface acreage 52.6 acres
max. depth 20 feet