

new watershed code
Lk seq 3
480-6972-254-000
NAME: Deception Lake

LAKE SURVEY DATA
91-09-18
G.O.L

Accepted for Inventory & operations
Unit - J.D. Balkwill
WATERSHED CODE: 48-6400-270

SURVEYED BY: David Coombes/Duane Jesson

MAP REF. CODE NO: 93 L/10

DATE SURVEYED: Sept. 17, 18 1982

MANAGEMENT UNIT: 6-8

DATA ON FILE FOR THIS SURVEY:

Physical Data	<u>X</u>	Netting Results	<u>X</u>
Contour Map	<u>X</u>	Fish Samples	<u>-</u>
Terrain Features	<u>X</u>	Stomach Analysis	<u>X</u>
Chemical	<u>X</u>	Scale Reading	<u>X</u>
Flora	<u>X</u>	Resort & Campsite	<u>X</u>
Invertebrates	<u>-</u>	Habitation	<u>X</u>
Temperature Series	<u>X</u>	Access	<u>X</u>
Obstructions & Pollutions	<u>X</u>	Oxygen	<u>X</u>
Stocking	<u>X</u>	Photography	<u>X</u>
Miscellaneous	<u>X</u>	Rehabilitation _____ Year	<u>-</u>
Location map/photo	<u>X</u>	Bench Mark	<u>X</u>

LOCATION: About 35 km by air east of Smithers, B.C.

Latitude, Longitude 54°58':126°35' U.T.M. 9.6517.60640

Drainage, System Guess Ck →Fulton R. (Fulton Lk) →Babine Lk →Babine R. →Skeena R. →
Hecate Strait

ELEVATION 1090 m (~3575 ft.)

PHYSICAL DATA:

Surface Area 1,008,000 sq. m. Volume 7,870,000 cu. m.
Area above 6 m contour 402,000 sq. m. Shoreline Perimeter 5,900 m.
Maximum Depth 16.0 m Mean Depth 7.8 m.
Filterable Residue (T.D.S.) 62 mg/L Secchi Reading 4.2 m.

Bench mark: Located 2 m above the present water level in a 31 cm. white spruce tree, just east of the outlet on the shoreline beach berm.

TERRAIN FEATURES:

IMMEDIATE SHORELINE The north shore beaches are made up of angular cobbles. The south shore is similar in some spots but is mostly small gravels, sand, and silt from alluvial fans. The west end is very marshy, due to beaver activity. It has a dry sedge fringe with white spruce, subalpine fir, and the occasional lodgepole pine coming down to the water.

SURROUNDING COUNTRY: Deception Lake is in a valley with gently sloping sides. Guess Creek flows along the valley floor and has a population of minnows and cutthroat trout. Spruce and subalpine fir cover the hills, except the highest ones. The cover is till over lava bedrock. Substantial areas have been logged.

LAKE DRAINAGE

NAME: Deception Lake

INLET #2

SITE LOCATION: 15 m upstream from mouth

FLOW STAGE low to moderate

MAX. DEPTH 26 cm

CHANNEL WIDTH 1.6 m

MEAN DEPTH 24 cm

WETTED WIDTH 1.6 m

WATER TEMP. 8°C

SLOPE (%) .5%

VELOCITY 0.07 m/sec

BED MATERIALS (%) mostly sand, small gravels, silt, -banks are silt.

COMPACTION moderate

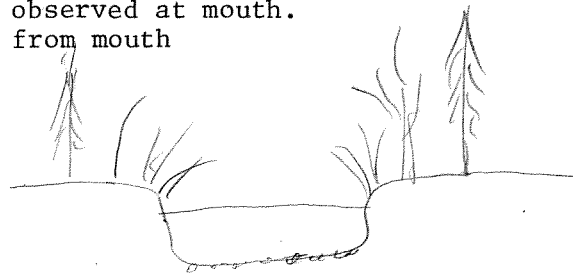
COLOUR/TURBIDITY clear

HIGH WATER LEVEL 0.5 m

BANK FORM, HEIGHT AND STABILITY 35 cm, steep, stable

COMMENT SECTION

- Probably used for rearing by both cutthroat & suckers.
 - Deciduous vegetation = alders (-cover stream)
 - Coniferous vegetation = spruce, subalpine fir, lodge pole pine
 - Understory = alder, and willow
 - Ground cover = grasses, sedges, and juvenile alders
 - Orange leeches observed at mouth.
- Photo 7 - upstream from mouth



Guess Creek - Inlet #1

- 10.5°C
- Photo 8 - beaver dam at mouth

RAIN FEATURES: (continued)

LAKE DRAINAGE

POINT SAMPLE

Point No. 1 of 2

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COMMENTS

- C_x Pond located 50 m downstream from point sample
 - S₁ Gastropods, caddisfly
 - C₁ Chub sample taken
 - S₂ Spruce, lodgepole pine, subalpine fir
 - S₃ Willow, cottonwood
 - S₄ Juvenile willow
 - S₅ Sedges, grasses, moss, Equisetum sp., aster & other minor species
 - S₆ Sedges, Potamogeton sp.
 - C_x Pretty spot.
- Point is representative of 90% of reach.

LAKE Deception

ERRAIN FEATURES: (continued)

LAKE DRAINAGE

POINT SAMPLE

Point No. 2 of 2

c		L		BANK		R		c		BED MATERIAL			
S		F		Form		F		S		Ice Scouring Y ? (N) C Texture (%)			
M		Genetic Mat.		M						Imbric (Nil) L M H Org. 0 F			
		Texture %								Compac (Nil) L M H Clay 0			
F		0		Org.		0		F		Lag (Nil) L M H Silt 0 20			
60		50		Clay 004		0				D ₉₀ (cm) 12 Sand 20			
		10		Silt 062		40		50		HYDRAULICS Meth S. Gr. 20 60			
		2		Sand		10				Valley W(m) 37.0 M			
6		10		S. Gr.		10		6		Chan W(m) 5.5 M			
20		10		L. Gr.		10		20		Wet W(m) 5.5 M			
		20		Cob.		20		L		Slope (%) 0.5 E			
20		0		Boul.		10		30		Max Depth (cm) 16 M			
0		0		Bedr.		0		0		Avg. Depth (cm) 15 M			
Distr.		Sp		VEG.		Sp		Distr.		Wet X-sec area			
8		1		Conif.		1		8		Velocity (m/sec) 0.3 F			
6		2		Decid.		2		6		Flow (m ³ /sec)			
5		3		Under		3		5		Bank Height (m) 0.25 M			
9		4		Ground		4		9		Fld. Signs (Ht./Type) 1.3/T			
										Bank Ice Scour Y ? (N)			
Distr.		% Area		Level		% Area		Distr.		Stage Dry L (M) H Fld			
4		T		Crown		0				Flow Char. P (S) R B T			
				Over		T		4		Valley:Chan 0-2 2-5 (5-10) 10+ N/A			
										Side Chan (Nil) L M H			
										DEBRIS Channel Nil (L) M H			
										Stable % 0			
										Floodplain Nil L (M) H			

System Name: Guess Creek
 No. 486400270
 Site Location: Between lake and bridge
 Reach No.
 Date: 82-09-18 Time: 1800 Access: 2W
 yr mo day
 NTS Map: 93L 10 Agency: ASB Crew: DC/DJ
 Field Photo Init.: DC Photo Nos.
 Weather: sunny, clear Fish Sample No.
 Air Temp. °C: 17 Water Sample No.

C	WATER	Water temp.	Turbidity	TDS	D.O.	pH
	QUAL.	15 °C	16 f m (cm)			

FISH SPECIES PRESENT: *L. chub*

COMMENTS

- C₁ Debris also present
- C₂ One caught in minnow trap
- C₃ Debris from old bridge at old bridge site appears stable
- S₁ Spruce, subalpine fir
- S₃ Young alder
- S₄ Grasses, sedges
- S₅ Moss, liverwort, Potamogeton sp., Ranunculus sp.
- S₆ Gastropods, leeches, stonefly & others.
- C_x Parts appear excellent for fish spawning
- S₇ Some downstream from point
- C_x Point is representative of 80% of reach.

GENERAL INFORMATION

LAKE Deception

- ACCESS: 1. Directions From the centre of Telkwa, take the Telkwa Hi-Road north. 8.7 km along, turn right onto Burnt Cabin Road. 26.5 km along, the road joins the Babine Road. Continue east along the Babine Road 32.5 km and turn right onto the Chapman Lake Road which is just past the upper Fulton Road. From this intersection, drive 37.2 km and make a sharp turn to the right. Drive 5.9 km. and turn right, then drive a further 10.1 km and turn left. Drive 1.4 km, park, and hike down (to the left) on foot 1.0 km.
2. Road Type and Conditions Highway 16 is paved. The Telkwa Hi-road, Eckman, Burnt Cabin and Babine Road are excellent gravel roads. The Chapman Lake Forest Road is good gravel, and the Deception Lake turnoff is poor, ungraded gravel. The last part is a cat trail and very soft over the middle section.
3. Restrictions, Prohibitions None

RESORT & CAMPSITES:

Two rough campsites on the north shore - one at the outlet - one north of the inlet have been used. There is no official campsite.

OTHER HABITATION:

None

OBSTRUCTIONS AND POLLUTIONS:

The main inlet has a substantial beaver dam on it.
Considerable logging has taken place within 1-2 km of the lake shore.

SOUNDING DEVICE:

Furuno FG 11 MK III

MAP OUTLINE:

B.C. air photo 7747:229 (July 6, 1975)

AQUATIC PLANTS: From "Aquatic Plants in the Lakes of British Columbia" (P.D. Warrington, Water Management Branch)

Potamogeton pectinatus

P. zosteriformis

P. richardsonii

P. gramineus

Ranunculus aquatilis

Callitriche hermaphroditica

Hippuris vulgaris

Equisetum fluviatile

MISCELLANEOUS COMMENTS:

Wildlife: Two loons were seen.

General: The alternate outlet shown on the map does not exist. Deception Lake is an attractive lake for recreationalists, but a bit cold. The access is poor, but a 4x4 with a winch would be able to reach the lake and return in dry weather.

LAKE Deception STATION No. LS1 EQUIS No. 1132034
 DATE September 18, 1982 WATERSHED CODE No. 48-6400-270
 TIME 1500-1545 hrs

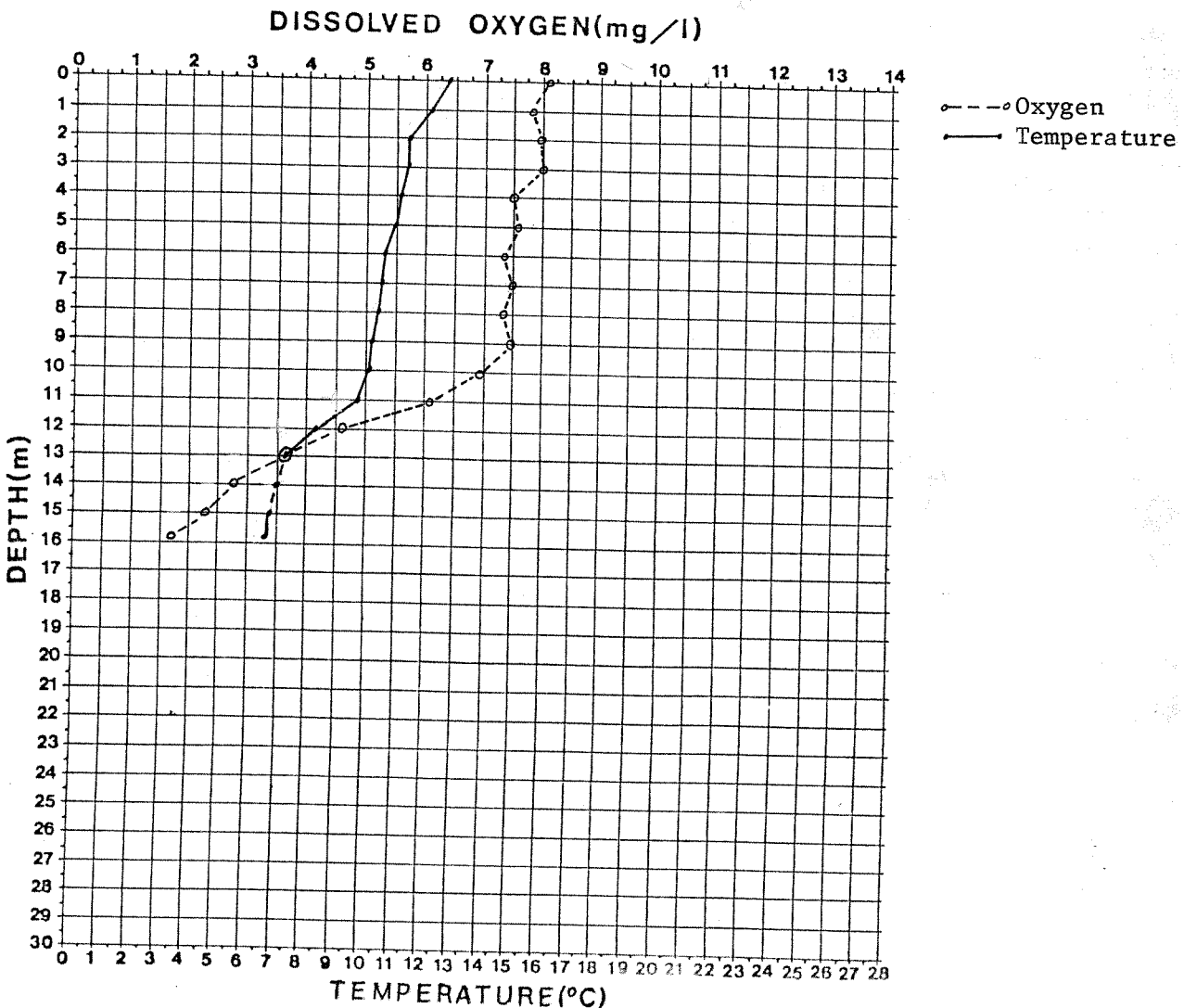
AIR TEMPERATURE 19.00°C WIND VELOCITY 0.5 km/hr
 CLOUD COVER 1 /10 O.C. WIND DIRECTION varied
 SURFACE CONDITION light
 SECCHI DISC 4.2 m
 WATER COLOUR tea coloured

pH SURFACE 6.5 Hast sticks.
14.5 m 6.0
 _____ m _____
 _____ m _____
 H₂S SURFACE Not
tested.
 _____ m _____

RESIDUE FILTERABLE 105 °C (T.D.S.) : SPECIFIC CONDUCTANCE :
 SURFACE 62 mg / L SURFACE 83 umhos / cm
14.5 m 59 mg / L 14.5 m 74 umhos / cm
 _____ m _____ mg / L _____ m _____ umhos / cm
 METHOD / AGENCY USED : Environmental Laboratory

COMMENTS : Lab pH 6.9 top and bottom. Sample too long in transit. Fairly oligotrophic - phosphorus limited in nutrients.

DISSOLVED OXYGEN AND TEMPERATURE PROFILE



OXYGEN-TEMPERATURE RECORD SHEET

LAKE Deception STATION NO. LS1

DATE September 18, 1983 TIME 1511 HRS. AIR TEMPERATURE 19.0 °C

INSTRUMENT(S) USED: TEMPERATURE YSI O₂ Meter (model 57)

DISSOLVED OXYGEN YSI O₂ Meter (model 57)

COMMENTS Air temperature taken with a hand-held, alcohol-filled thermometer.

DEPTH (m)	O ₂ (mg/l)	TEMP (°C)	DEPTH (m)	O ₂ (mg/l)	TEMP (°C)	DEPTH (m.)	O ₂ (mg/l)	TEMP (°C)
Surface	8.2	12.8	12.0	4.55	8.2	34.0		
0.5			13.0	3.55	7.2	35.0		
1.0	7.7	12.2	14.0	2.74	7.0	36.0		
1.5			15.0	2.30	6.8	37.0		
2.0	7.9	11.5	15.8	bottom 1.70	6.8	38.0		
2.5			17.0			39.0		
3.0	8.0	11.5	18.0			40.0		
3.5			19.0			41.0		
4.0	7.5	11.2	20.0			42.0		
4.5			21.0			43.0		
5.0	7.6	11.0	22.0			44.0		
5.5			23.0			45.0		
6.0	7.3	10.8	24.0			46.0		
6.5			25.0			47.0		
7.0	7.5	10.7	26.0			48.0		
7.5			27.0			49.0		
8.0	7.3	10.5	28.0			50.0		
8.5			29.0			60.0		
9.0	7.5	10.2	30.0			70.0		
9.5			31.0			80.0		
10.0	6.9	10.1	32.0			90.0		
11.0	6.2	9.8	33.0			100.0		

NET SET RECORD

LAKE Deception

NET #1 Type* Sinking monofilament Date September 17, 1982 Time 1816
 _____ Date Lifted September 18/82 Time 1149
 Net Dimensions: Length 92 m. Depth 2.4 m.
 Mesh Size(s) In Order of Set 63.5,— 38.1,— 88.9,— 50.8,— 76.2,— 25.4 mm
 Shallow End Mesh Size 63.5 mm., Depth 2 m., Substrate cobbles
 Deep End Mesh Size 25.4 mm., Depth 10 m., Substrate mud

NET #2 Type* _____ Date _____ Time _____
 _____ Date Lifted _____ Time _____
 Net Dimensions: Length _____ m. Depth _____ m.
 Mesh Size(s) In Order of Set _____
 Shallow End Mesh Size _____ mm., Depth _____ m., Substrate _____
 Deep End Mesh Size _____ mm., Depth _____ m., Substrate _____

NET #3 Type* _____ Date _____ Time _____
 _____ Date Lifted _____ Time _____
 Net Dimensions: Length _____ m. Depth _____ m.
 Mesh Size(s) In Order of Set _____
 Shallow End Mesh Size _____ mm., Depth _____ m., Substrate _____
 Deep End Mesh Size _____ mm., Depth _____ m., Substrate _____

NET #4 Type* _____ Date _____ Time _____
 _____ Date Lifted _____ Time _____
 Net Dimensions: Length _____ m. Depth _____ m.
 Mesh Size(s) In Order of Set _____
 Shallow End Mesh Size _____ mm., Depth _____ m., Substrate _____
 Deep End Mesh Size _____ mm., Depth _____ m., Substrate _____

* Sinking or Floating, Twisted or Monofilament, or Beach Seine.

SPECIES	NET NUMBER				ANGLED	OTHER	TOTAL	# SAMPLE	# PRESERVED	SIZE RANGE (cm)
	1	2	3	4						
Longnose sucker	78				0	0	78	0	0	12.1 - 45
Cutthroat	47				0	0	47	47	0	11.6 - 30

MINNOW TRAPS:

BAIT: Bread & roe

HOURS	DEPTH (m)	SUBSTRATE	SPECIMENS
20	1.0	weeds & mud	nil
22	0.7		one chub

FISHERIES COMMENTS:

The outlet could be improved to increase spawning potential.

A heavy level of parasitism was noted. Perhaps one vector could be controlled in some manner which would benefit the fishery potential.

Guess Creek had a substantial population of cutthroat trout and minnows (sucker and chub juveniles).

FISH DATA SUMMARY

FIELD DESCRIPTION CODES:

LAKE/STREAM

Deception Lake

DATE

September 18, 1982

METHOD OF CAPTURE

Experimental Monofilament Gill Net

SEX	GONADAL MATURITY	FISH SAMPLE TYPE
M-Male	IMM-Immature	EG-Egg
F-Female	MG-Maturing	FR-Fin Ray
?-Not Obvious	MT-Mature	HD-Head
	GV-Gravid	ML-Mill
	SP-Spent	OT-Otolith
	?-Not Obvious	SC-Scale
		ST-Stomach
		TG-Fish Tag
		WF-Whole Fish

SPECIES	FORK LENGTH (cm)	WEIGHT (gm)	SEX	GONADAL MATURITY	SAMPLE TYPE	AGE (yrs)	STOMACH CONTENTS					COMMENTS
							BOTTOM ORGANISMS	PLANKTON	INSECTS	FISH	OTHER	
Cutthroat trout	21.4	110	F	Imm.	SC		shrimp-like		ants			parasites
Cutthroat trout	22.0	105	F	MT	SC		org's(mysids?)		stuffed with ants			parasites
Cutthroat trout	22.9	115	F	MG	SC							gut empty,
Cutthroat trout	22.9	130	M?	V. Imm.	SC				ants			parasites
Cutthroat trout	23.0	120	M	Imm	SC				insects			parasites
Cutthroat trout	23.0	125	M	Imm	SC				ants			tapeworms(?)
Cutthroat trout	23.5	120	F	MT	SC				ants			parasites
Cutthroat trout	24.1	130	?	V. Imm.	SC		small "shrimp"		ants			some parasites
Cutthroat trout	24.1	150	F	MT	SC		in gut					
Cutthroat trout	24.8	145	F	MT	SC		shrimp-like					parasites
Cutthroat trout	24.8	155	F	MT	SC		organisms(mysids?)	zooplankton	insects			parasites
Cutthroat trout	24.8	155	M	MT	SC		copepods		ants			numerous parasite
Cutthroat trout	25.8	165	M?	V. Imm.	SC				ants			cysts on body wal
Cutthroat trout	26.2	170	M	MT	SC				ants			parasites
Cutthroat trout	26.4	210	?	V. Imm.	SC		shrimp-like		ants, caddis			some parasites
Cutthroat trout	26.4	220	M	MT	SC		organisms(mysids?)		cases			small parasites
Cutthroat trout	26.4	220	M	MT	SC				ants			parasite cysts on
Cutthroat trout	26.8	205	M	MG	SC							wall of gut
Cutthroat trout	27.0	200	M	Imm.	SC				ants			
Cutthroat trout	30.0	275	M	MG	SC				ants			parasite cysts on
Cutthroat trout	30.0	275	M	MG	SC				ants			wall of gut

FISH DATA SUMMARY

FIELD DESCRIPTION CODES:

LAKE/STREAM

Deception Lake

DATE

September 18, 1982

METHOD OF CAPTURE

Experimental Monofilament Gill Net

SEX	GONADAL MATURITY	FISH SAMPLE TYPE
M-Male	IMM-Immature	EG-Egg
F-Female	MG-Maturing	FR-Fin Ray
?-Not Obvious	MT-Mature	HD-Head
	GV-Gravid	ML-Mill
	SP-Spent	OT-Otolith
	?-Not Obvious	SC-Scale
		ST-Stomach
		TG-Fish Tag
		WF-Whole Fish

SPECIES	FORK LENGTH (cm)	WEIGHT (gm)	SEX	GONADAL MATURITY	SAMPLE TYPE	AGE (yrs)	STOMACH CONTENTS					COMMENTS
							BOTTOM ORGANISMS	PLANKTON	INSECTS	FISH	OTHER	
Cutthroat trout	11.6	17	?	?	-							
Cutthroat trout	12.9	20	?	?	-							
Cutthroat trout	13.3	25	?	?	-							
Cutthroat trout	13.5	22	?	?	-							
Cutthroat trout	13.7	25	?	?	-							
Cutthroat trout	14.0	25	?	?	-							
Cutthroat trout	14.1	25	?	V. Imm.	SC				gr. flies			parasites
Cutthroat trout	14.2	30	?	?	-							
Cutthroat trout	14.2	30	?	?	-							
Cutthroat trout	14.2	35	?	V. Imm.	SC							
Cutthroat trout	14.8	30	F	Imm.	SC			zooplankton	insects			
Cutthroat trout	15.0	35	?	V. Imm.	SC							stomach empty, few parasites
Cutthroat trout	16.0	35	?	?	-							
Cutthroat trout	16.0	45	?	V. Imm.	SC				ants			no visible parasites
Cutthroat trout	16.0	50	?	V. Imm.	SC		amphipod					
Cutthroat trout	17.0	50	?	?	-							
Cutthroat trout	17.1	65	?	?	-							
Cutthroat trout	17.3	55	F	Imm.	SC							stomach attached to abdominal wall due to parasites
Cutthroat trout	17.5	55	?	?	-							
Cutthroat trout	17.7	55	?	?	-							
Cutthroat trout	18.3	65	?	?	-							
Cutthroat trout	18.5	60	?	?	-							
Cutthroat trout	19.3	80	?	?	-							
Cutthroat trout	19.4	60	?	?	-							
Cutthroat trout	20.1	70	F	Imm.	SC		copepods					
Cutthroat trout	20.2	90	F	?	SC		shrimp-like org. (mysids?)		ants			parasites
Cutthroat trout	20.2	90	F	Imm.	SC				ants			
Cutthroat trout	20.3	85	?	?	SC		orange "shrimp"		ants			parasites

Figure 7 is off
airphoto to the
North.



MAP OR AIR PHOTO IDENTIFICATION

LAKE: Deception







DATE SURVEYED: September 17-18, 1982

REFERENCE NO: B.C. 7747:229 (July 6, 1975)

SCALE: 1:13,693[±]1%

FIGURE NO: 1

LEGEND:

-  - Figure number, area and direction.
-  - Point Sample, number and location.
-  - Bench Mark.
-  - Limno Station number.
-  - Net Set and number.
-  - Stream flow direction and number.

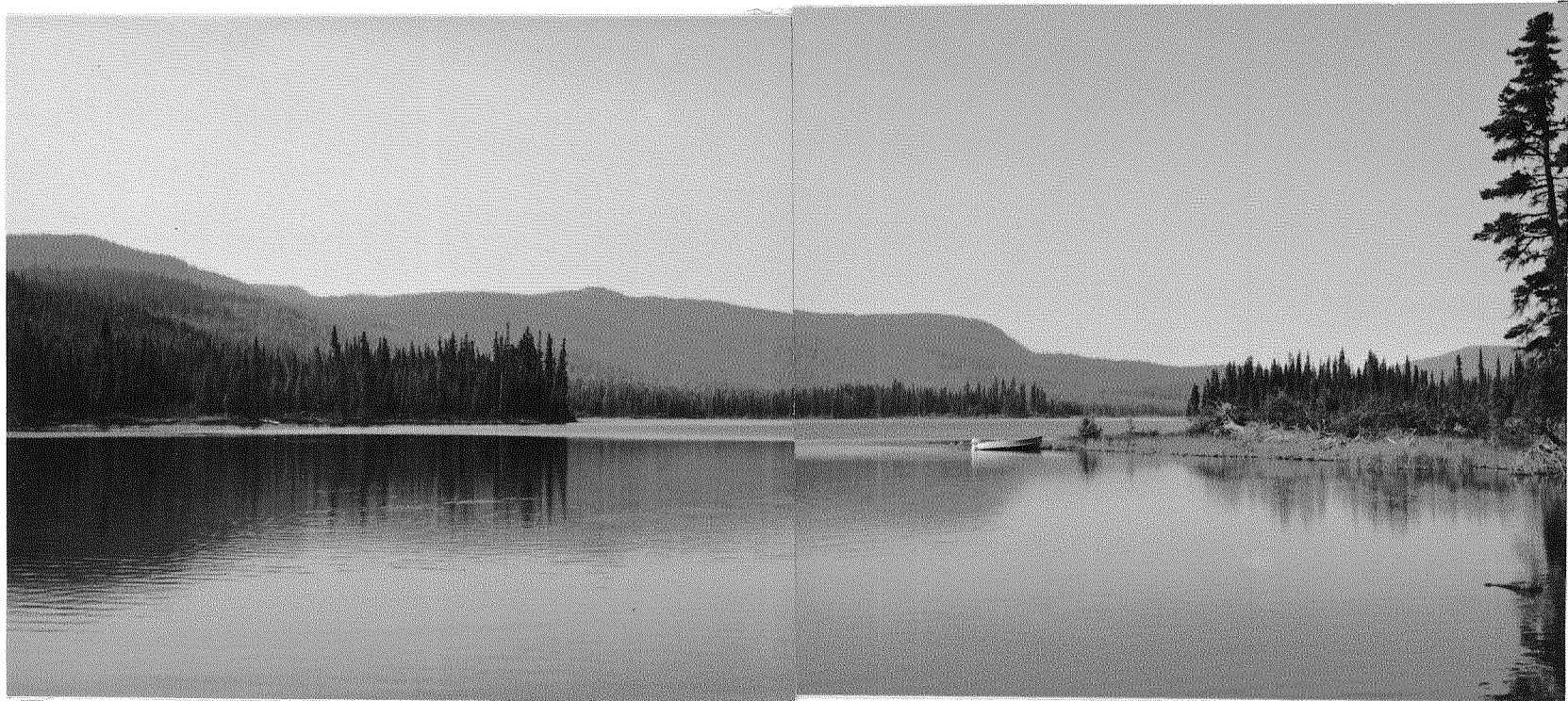


Figure 2: View to east from end of Deception Lake.

DECEPTION LAKE



Figure 3: View upstream, at mouth of Inlet #2, Deception Lake.



Figure 4: View upstream from bridge, showing point sample on outlet (Guess Creek) of Deception Lake.

DECEPTION LAKE



Figure 5: View downstream to point sample and bridge on Guess Creek, outlet to Deception Lake.



Figure 6: View upstream of Guess Creek, at inlet into Deception Lake.

DECEPTION LAKE



Figure 7: Downstream view from point sample location on Guess Creek above Deception Lake.

WATER QUALITY REPORT FOR SAMPLE 212938W

TO: AQUATIC STUDIES BRANCH
765 BROUGHTON ST.
VICTORIA, B.C. V8V 1X5
ATTENTION OF: L SWAIN

FOR SITE: 1132034 DECEPTION LK DEEP STATION

SAMPLING DATE(S): SEP 18/82 0000 HRS
SAMPLE TYPE: FRESH WATER
SAMPLING DEPTH: 0
SAMPLED BY: AQUATIC STUDIES BR., MOE
CHARGE TO: TERRESTRIAL STUDIES
DATE RECEIVED BY LABORATORY: SEP 30/82

0040101	PH	K REL UNIT	0071701	RES:FILT.105C	62. MG/L
0110101	SPECIFIC CONduc	83. UMHO/CM	1000001	SPECIAL ANALYS.	K MG/L
1083704	NITROGN:AMMONIA	L 0.005* MG/L	1093703	NITROGN:NO2 NO3	L 0.02* MG/L
1120003	NITROGN:ORGANIC	0.23* MG/L	1133601	NITROGN:KJELDAH	0.23 MG/L
1140001	NITROGEN:TOTAL	0.23* MG/L	1183703	PHOSPHORUS:ORT	L 0.003 MG/L
1193703	PHOSPHORUS :TOT DISSOLVED	0.005 MG/L	1193603	PHOSPHORUS :TOT	0.008 MG/L
2530310	CADMIUM TOTAL	L 0.0005 MG/L	2560310	COPPER TOTAL	L 0.001 MG/L
2580310	LEAD TOTAL	0.002 MG/L	2630310	NICKEL TOTAL	L 0.01 MG/L

FOLLOWING ARE PACKAGE TESTS:

2510214	ARSENIC TOTAL	L 0.25 MG/L	2530214	CADMIUM TOTAL	L 0.01 MG/L
2540214	CALCIUM TOTAL	14.5 MG/L	2550214	CHROMIUM TOTAL	L 0.01 MG/L
2560214	COPPER TOTAL	L 0.01 MG/L	2570214	IRON TOTAL	L 0.01 MG/L
2580214	LEAD TOTAL	L 0.1 MG/L	2590214	MAGNESIUM TOTAL	1.17 MG/L

SAMPLE NO. 212938W CONTINUED ON NEXT PAGE.

WATER QUALITY REPORT FOR SAMPLE 212938W

2600214	MANGANESE TOTAL	L 0.01 MG/L	2620214	MOLYBDENUM TOTAL	L 0.01 MG/L
2630214	NICKEL TOTAL	L 0.05 MG/L	2660214	ZINC TOTAL	L 0.01 MG/L
2670214	ALUMINUM TOTAL	0.03 MG/L	2680214	COBALT TOTAL	L 0.1 MG/L
2720214	VANADIUM TOTAL	L 0.01 MG/L			

THE APPROXIMATE COST OF THE ABOVE TESTS IS \$ 157.00

REMARKS:

SPECIAL ANALYSES: COST OF TITRATION CURVE ATTACHED \$25.00.
pH 6.9 relative units

Sample too long in transit.

R. ...
 FOR ENVIRONMENTAL LABORATORY

TOTAL ALKALINITY (CaCO₃) = 36.9 mg/l

WATER QUALITY REPORT FOR SAMPLE 212939W

TO: AQUATIC STUDIES BRANCH
765 BROUGHTON ST.
VICTORIA, B.C. V8V 1X5
ATTENTION OF: L SWAIN

FOR SITE: 1132034 DECEPTION LK DEEP STATION

SAMPLING DATE(S): SEP 18/82 0000 HRS
SAMPLE TYPE: FRESH WATER
SAMPLING DEPTH: 14.5
SAMPLED BY: AQUATIC STUDIES BR., MOE
CHARGE TO: TERRESTRIAL STUDIES
DATE RECEIVED BY LABORATORY: SEP 30/82

0040101	PH	K REL UNIT	0071701	RES:FILT.105C	59. MG/L
0110101	SPECIFIC CONDUCT	74. UMHO/CM	1000001	SPECIAL ANALYS.	K MG/L
1083704	NITROGN:AMMONIA	L 0.005* MG/L	1093703	NITROGN:NO2 NO3	L 0.02* MG/L
1120003	NITROGN:ORGANIC	0.17* MG/L	1133601	NITROGN:KJELDAH	0.17 MG/L
1140001	NITROGEN:TOTAL	0.17* MG/L	1183703	PHOSPHORUS:ORT	L 0.003 MG/L
1193703	PHOSPHORUS :TOT DISSOLVED	0.004 MG/L	1193603	PHOSPHORUS :TOT	0.009 MG/L
2530310	CADMIUM TOTAL	L 0.0005 MG/L	2560310	COPPER TOTAL	G 0.02 MG/L
2580310	LEAD TOTAL	L 0.001 MG/L	2630310	NICKEL TOTAL	L 0.01 MG/L

FOLLOWING ARE PACKAGE TESTS:

2510314	ARSENIC TOTAL	L 0.25 MG/L	2530314	CADMIUM TOTAL	L 0.01 MG/L
2540314	CALCIUM TOTAL	12.5 MG/L	2550314	CHROMIUM TOTAL	L 0.01 MG/L
2560314	COPPER TOTAL	0.05 MG/L	2570314	IRON TOTAL	0.12 MG/L
2580314	LEAD TOTAL	L 0.1 MG/L	2590314	MAGNESIUM TOTAL	1.08 MG/L

SAMPLE NO. 212939W CONTINUED ON NEXT PAGE.

WATER QUALITY REPORT FOR SAMPLE 212939W

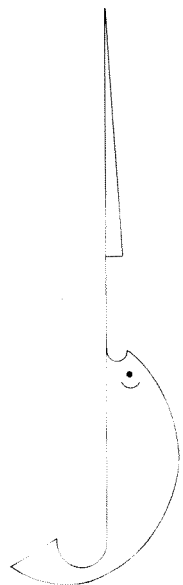
2600214	MANGANESE TOTAL	0.05 MG/L	2620214	MOLYBDENUM TOTAL	L 0.01 MG/L
2630214	NICKEL TOTAL	L 0.05 MG/L	2660214	ZINC TOTAL	L 0.01 MG/L
2670214	ALUMINUM TOTAL	L 0.02 MG/L	2680214	COBALT TOTAL	L 0.1 MG/L
2720214	VANADIUM TOTAL	L 0.01 MG/L			

THE APPROXIMATE COST OF THE ABOVE TESTS IS \$ 157.00

REMARKS: Special Analysis: Cost of titration curve attached \$25.00
pH 6.9 relative units
Sample too long in transit

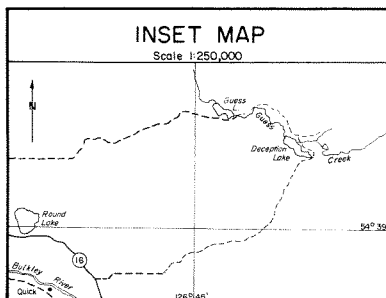
RS
FOR ENVIRONMENTAL LABORATORY

TOTAL ALKALINITY (Ca CO₃) = 32.9 mg/l



NOTE ● DENOTES BENCH MARK

Reduced to
50%
of Original



SURVEYED BY: D.M.V. COOMBES DATE: SEPT. 17, 18, 1982
OUTLINE SOURCE: B.C. AIR PHOTO 7747-229

STATISTICS AT TIME OF SURVEY

- | | |
|---|-----------------|
| 1. ELEVATION | 1090 ± m. |
| 2. SURFACE AREA | 1,008,000 sq.m. |
| 3. VOLUME | 7,870,000 cu.m. |
| 4. EST. ANNUAL FLUCTUATION | +0.4 m. |
| 5. MEAN DEPTH | 7.8 m. |
| 6. MAX. DEPTH | 16 m. |
| 7. PERIMETER | 5,900 m. |
| 8. AREA ABOVE 6 m. CONTOUR | 402,000 sq. m. |
| 9. HEIGHT OF BENCH MARK ABOVE WATER LEVEL | 2 m. |

AQUATIC STUDIES BRANCH
MINISTRY OF ENVIRONMENT

INVENTORY OPERATIONS UNIT

DECEPTION LAKE

DEPTHS IN METERS

WATERSHED CODE NO. 48-6400-270

M.U. 6-8	U.T.M. CO-ORDINATE: 9-6517 60640
DATE: DEC 28, 1983	DRAWN: J.A.B.
CALCULATIONS: D.M.V.C.	CHECK: J.A.B.
PLOTTING: D.M.V.C.	APPROVED: <i>J.A. Boland</i>
FAIR DWG. B.A.D.	N.T.S. No. 93L/10