LAKE SURVEY DATA

NAME: KINASKAN MAP. REF. CODE NO. 104 G/9 E

SURVEYED BY: T. Webber/B. Tupniak DATE SURVEYED: August 16, 17, 1981

MANAGEMENT UNIT: 6 - 21

DATA ON FILE:

Physical Data	-	Netting Results	x
Contour Map	-	Fish Samples	-
Geography	x	Stomach Analysis	x
Chemical	x	Scale Reading	-
Flora	x	Resort & Campsite	x
Invertebrates	x	Habitation	x
Temperature Series	x	Access	x
Obstructions & Pollutions	x	Oxygen	x
Stocking	-	Photography	x
Miscellaneous	x	Rehabilitation ____ Year	-
		Bench Mark	x

LOCATION: 354 Km North of Prince Rupert

Latitude, Longitude 57° 37' : 130° 07' U.T.M. 9.4330. 63860

Drainage, System Outlet --> Iskut R. (Natadesleen L., Cascade Falls) --> Stikine R.

Elevation 821.1 (m) (2694 ft.)

PHYSICAL DATA:

Surface Area N/A sq. m. Volume N/A cu. m.

Area, 6 m contour N/A sq. m. Shoreline Perimeter N/A m.

Maximum Depth N/A m. Mean Depth N/A m.

Filterable Residue (T.D.S.) 130 mg/1. Secchi Reading 2.4 m.

Bench Mark 2 m and 2 m m.

GEOGRAPHY:

Immediate Shoreline: The shoreline consists of mainly large cobbles and gravel with some boulders; isolated patches of gravel and fines. Some sand bars at the north and south ends; east and west shores are generally steep and access is poor. Some bedrock faces near middle of lake. Excellent access from the south end of the lake. Shoreline debris is low to moderate.

Surrounding Country: Valley lake with the north (inlet) and south (outlet) ends being quite flat, becoming hilly and mountainous to the east and west with much bare bedrock visible. The mountains on the west side of the lake are rugged and sparsely treed in the gullies with mixed conifer/deciduous growth; spruce in gully areas and near shore; lodgepole pine in dry areas; aspen in rocky areas. The east side of the lake is more heavily treed with conifers. There is evidence of an old burn on the west side of the lake.

LAKE KINASKAN

GEOGRAPHY (continued)

Lake Drainage: INLETS

Inlet #1: Iskut River (from Tatogga Lake) - Low spawning potential due to mostly fines and some small gravels. Compaction is high. Rearing potential is good as there are deep pools and some cover. Flow character varies from placid to swirling and falling. Wetted and channel width averages 25 meters. Understory, groundcover, crowncover and channel debris are all low. Flow stage was moderate and the banks were stable. The water is heavily silted.

Inlet #2: Spawning potential is very low due to a substrate of 10% boulder, 30% cobble, 50% large gravel and 10% fines. Rearing is low. Compaction was high, H_2O temperature - 6.0°C. Flow character was rolling and tumbling. Wetted width was 2 meters and channel width 2.5-3 meters. Understory moderate, groundcover nil and coniferous crown cover high. High channel debris. Flow stage was moderate and the banks were stable. Many flood channels in first 100 meters.

Inlet #3: Very similar to inlet #2, though rearing potential increased with more ground and understory cover. Banks are steep and stable. H_2O temperature was slightly higher (7.5°C).

Outlet:

Iskut River - Moderate to high flow. The river is fast flowing with many large boulders in midstream. Averages approximately 40 meters wide. Good rearing potential. Spawning is unlikely due to fast flow. There are some patches of gravel near the start of the outlet.

LAKE KINASKAN

GENERAL INFORMATION

ACCESS: 1. Directions 25.2 km south of Tatogga Lake Lodge on Highway 37. The Lake is to the right of the highway and is clearly visible from the road. (Tatogga Lake Lodge is 523 km north of Smithers)

2. Road Type & Conditions
All weather 2 way traffic gravel road. Road is in good condition and well maintained, but very dusty.

3. Restrictions, Prohibitions
None except in the campsite area.

RESORTS & CAMPSITES: Provincial campsite at south end of lake. Approximately 30 camping sites, fire pits etc.

OTHER HABITATION: Several houses and cabins at the south end of the lake.

OBSTRUCTIONS & POLLUTIONS:

None

MISCELLANEOUS COMMENTS: Good fishing reported in this area. The trout caught in our nets averaged slightly larger than those caught in Eddontenajon and Ealue Lakes. All fish had brightly coloured orange and red flesh. Many are gut parasitized by Acanthocephalons but not as bad as those caught out of Ealue Lake. The fish appear healthy and in good shape.

LAKE: KINASKAN

Limno Station #1 of 2
August 16, 1981

LIGHT PENETRATION: Water slightly silty

Secchi Disc 2.4 m 1 /10 O.C. **Time** 0930 hrs.
Wind Velocity 10 km/hr. **Direction** south-west

Surface Condition Choppy

WATER CHEMISTRY:

pH:	**Surface** 7.9		**H_2S:**	**Surface** nil	**milligrams/liter**
	40 m 7.8			40 m nil	" "
	m			m	" "
	m			m	" "

Taylor colour comparitor ph kit

Filterable Residue at 105°C (T.D.S.):

EQUIS NO. 1130638

Surface 130	**milligrams/liter**	
40 m 129	"	"
m	"	"
m	"	"

Specific Conductance:

Surface 203	**umhos/cm**	
40 m 209	"	"
m	"	"

Method and/or Agency Used Environment Lab at U.B.C.

Report date September 10, 1981

BENCH MARK: **Located** 2 **m above the present water level in a** 30 **cm** maturing white spruce **tree,** south end of the lake east side, at the waters edge in a campsite area. The second bench mark is located 2 m. above the present water level in a 50 cm. white spruce tree, north end of the lake west shore, at the waters edge.

SOUNDING DEVICE: N/A

MAP OUTLINE: 1:50,000 TOPO Map NTS# 104 G/9 E

AQUATIC PLANTS: very sparse in distribution and abundance. Difficult to ascertain as water is silty.

TEMPERATURE PROFILE RECORD

Lake KINASKAN Station LSI of two

Date August 16, 1981 Time 0930

Air Temperature °C 12.1 Instrument Used YSI O_2 temp. meter

Remarks Maximum temperature probe depth is 40m. Air temperature done with hand held thermometer (alcohol type)

Depth in m.	Temperature in °C	Depth in m.	Temperature in °C	Depth in m.	Temperature in °C
Surface	12.2	20.5		41.0	
0.5		21.0		41.5	
1.0	12.2	21.5		42.0	
1.5		22.0		42.5	
2.0	12.2	22.5		43.0	
2.5		23.0		43.5	
3.0	12.2	23.5		44.0	
3.5		24.0		44.5	
4.0	12.2	24.5		45.0	
4.5		25.0	6.0	45.5	
5.0	12.1	25.5		46.0	
5.5		26.0		46.5	
6.0	12.1	26.5		47.0	
6.5		27.0		47.5	
7.0	12.1	27.5		48.0	
7.5		28.0		48.5	
8.0	12.1	28.5		49.0	
8.5		29.0		49.5	
9.0	12.1	29.5		50.0	
9.5		30.0	5.8	50.5	
10.0	12.1	30.5		60.0	
10.5		31.0		65.0	
11.0		31.5		70.0	
11.5		32.0		75.0	
12.0		32.5		80.0	
12.5		33.0		85.0	
13.0		33.5		90.0	
13.5		34.0		95.0	
14.0		34.5		100.0	
14.5		35.0	5.3	105.0	
15.0	10.0	35.5		110.0	
15.5		36.0		115.0	
16.0		36.5		120.0	
16.5		37.0		125.0	
17.0		37.5		130.0	
17.5		38.0		135.0	
18.0		38.5		140.0	
18.5		39.0		145.0	
19.0		39.5		150.0	
19.5		40.0	5.2		
20.0	7.1	40.5			

OXYGEN PROFILE RECORD

Lake KINASKAN Station LSI of Two

Date August 16, 1981 Time 0930

Instrument Used YSI O_2 / Temperature probe

Remarks Maximum O_2 probe length in 40 meters

Depth in m.	O_2 in mg/l	Depth in m.	O_2 in mg/l	Depth in m.	O_2 in mg/l
Surface	9.2	20.5		41.0	
0.5		21.0		41.5	
1.0	9.1	21.5		42.0	
1.5		22.0		42.5	
2.0	9.1	22.5		43.0	
2.5		23.0		43.5	
3.0	9.1	23.5		44.0	
3.5		24.0		44.5	
4.0	9.1	24.5		45.0	
4.5		25.0	9.9	45.5	
5.0	9.0	25.5		46.0	
5.5		26.0		46.5	
6.0	9.0	26.5		47.0	
6.5		27.0		47.5	
7.0	9.0	27.5		48.0	
7.5		28.0		48.5	
8.0	8.9	28.5		49.0	
8.5		29.0		49.5	
9.0	8.9	29.5		50.0	
9.5		30.0	10.0	50.5	
10.0	8.9	30.5		60.0	
10.5		31.0		65.0	
11.0		31.5		70.0	
11.5		32.0		75.0	
12.0		32.5		80.0	
12.5		33.0		85.0	
13.0		33.5		90.0	
13.5		34.0		95.0	
14.0		34.5		100.0	
14.5		35.0	10.2	105.0	
15.0	9.3	35.5		110.0	
15.5		36.0		115.0	
16.0		36.5		120.0	
16.5		37.0		125.0	
17.0		37.5		130.0	
17.5		38.0		135.0	
18.0		38.5		140.0	
18.5		39.0		145.0	
19.0		39.5		150.0	
19.5		40.0	10.2		
20.0	9.6	40.5			

LAKE: KINASKAN Limno Station #2 of Two

LIGHT PENETRATION:

slight haze

Secchi Disc 1.5 m 1 /10 O.C. Time 0930 hrs.

Wind Velocity 5 km/hr. Direction south west

Surface Condition Rippled

WATER CHEMISTRY: Taylor ph color comparitor

	pH:	H_2S:	
Surface	7.8	Surface nil	milligrams/liter
45 m	7.7	45 m nil	" "
m		m	" "
m		m	" "

Filterable Residue at 105°C (T.D.S.):

EQUIS NO – 1130640

Surface	125	milligrams/liter
45 m	130	" "
m		" "
m		" "

Specific Conductance:

Surface	200	umhos/cm
45 m	210	" "
m		" "

Method and/or Agency Used Environment Lab at U.B.C.

Report date September 10, 1981

BENCH MARK: Located ____ m above the present water level in a ____ cm _____ tree,

SOUNDING DEVICE:

MAP OUTLINE:

AQUATIC PLANTS:

TEMPERATURE PROFILE RECORD

Lake KINASKAN Station LS 2 of Two

Date August 17, 1981 Time 0930

Air Temperature °C 11.5 Instrument Used YSI O_2 / Temp. meter

Remarks Maximum temperature probe depth is 40 meters

Depth in m.	Temperature in °C	Depth in m.	Temperature in °C	Depth in m.	Temperature in °C
Surface	13.4	20.5		41.0	
0.5		21.0		41.5	
1.0	13.4	21.5		42.0	
1.5		22.0	7.6	42.5	
2.0	13.4	22.5		43.0	
2.5		23.0		43.5	
3.0		23.5		44.0	
3.5		24.0		44.5	
4.0	13.3	24.5		45.0	
4.5		25.0	6.8	45.5	
5.0		25.5		46.0	
5.5		26.0		46.5	
6.0	13.2	26.5		47.0	
6.5		27.0		47.5	
7.0		27.5		48.0	
7.5		28.0		48.5	
8.0	13.2	28.5		49.0	
8.5		29.0		49.5	
9.0		29.5		50.0	
9.5		30.0	6.0	50.5	
10.0	13.1.	30.5		60.0	
10.5		31.0		65.0	
11.0		31.5		70.0	
11.5		32.0		75.0	
12.0	13.1	32.5		80.0	
12.5		33.0		85.0	
13.0		33.5		90.0	
13.5		34.0		95.0	
14.0		34.5		100.0	
14.5		35.0	5.7	105.0	
15.0		35.5		110.0	
15.5		36.0		115.0	
16.0	13.0	36.5		120.0	
16.5		37.0		125.0	
17.0		37.5		130.0	
17.5		38.0		135.0	
18.0	12.8	38.5		140.0	
18.5		39.0		145.0	
19.0		39.5		150.0	
19.5		40.0	5.2		
20.0	10.0	40.5			

OXYGEN PROFILE RECORD

Lake KINASKAN Station LS #2 of Two

Date August 17, 1981 Time 0930

Instrument Used YSI O_2 - Temp. meter

Remarks Maximum O_2 probe depth is 40 meters

Depth in m.	O_2 in mg/l	Depth in m.	O_2 in mg/l	Depth in m.	O_2 in mg/l
Surface	9.4	20.5		41.0	
0.5		21.0		41.5	
1.0	8.8	21.5		42.0	
1.5		22.0	9.6	42.5	
2.0	8.8	22.5		43.0	
2.5		23.0		43.5	
3.0		23.5		44.0	
3.5		24.0		44.5	
4.0	8.7	24.5	10.0	45.0	
4.5		25.0		45.5	
5.0		25.5		46.0	
5.5		26.0		46.5	
6.0	8.7	26.5		47.0	
6.5		27.0		47.5	
7.0		27.5		48.0	
7.5		28.0		48.5	
8.0	8.7	28.5		49.0	
8.5		29.0		49.5	
9.0		29.5		50.0	
9.5		30.0	10.2	50.5	
10.0	8.6	30.5		60.0	
10.5		31.0		65.0	
11.0		31.5		70.0	
11.5		32.0		75.0	
12.0	8.6	32.5		80.0	
12.5		33.0		85.0	
13.0		33.5		90.0	
13.5		34.0		95.0	
14.0		34.5		100.0	
14.5		35.0	10.3	105.0	
15.0		35.5		110.0	
15.5		36.0		115.0	
16.0	8.5	36.5		120.0	
16.5		37.0		125.0	
17.0		37.5		130.0	
17.5		38.0		135.0	
18.0	8.6	38.5		140.0	
18.5		39.0		145.0	
19.0		39.5		150.0	
19.5		40.0	10.4		
20.0	9.3	40.5			

Lake KINASKAN

FISH SAMPLE RECORD

Net #1. Type* Sinking Monofilament Date set August 16 Time 0830 hours
Date lifted Aug. 16 Time 1345 hours

Net Dimensions: length 91.4 m. depth 2.4 m.

Shallow end mesh size 25.4 mm. and depth 3.0 m. Substrate cobble, fines

Deep end mesh size 63.5 mm. and depth 3.0 m. Substrate fines

Net #2. Type* sinking Monofilament Date set Aug. 17 Time 0900 hours
Date lifted Aug. 17 Time 1245 hours

Net Dimensions: length 91.4 m. depth 2.4 m.

Shallow end mesh size 25.4 mm. and depth 5 m. Substrate gravel, fines

Deep end mesh size 63.5 mm. and depth 40+ m. Substrate fines

Net #3. Type* sinking Monofilament Date set Aug. 17, 1981 Time 0915 hours
Date lifted Aug. 17 Time 1215 hours

Net Dimensions: length 91.4 m. depth 2.4 m.

Shallow end mesh size 63.5 mm. and depth 3 m. Substrate gravels, fines

Deep end mesh size 25.4 mm. and depth 25 m. Substrate mud

SPECIES	NET # 1	2	3	ANGLED	TOTAL	SCALE SAMPLES TAKEN	# PRESERVED
Rainbow trout	20	18	6	0	44	20 - SC	None

MINNOW TRAPS: Three set each of two days - total six, all about 7 hrs. each.

		Hours	Depth	Substrate	Fish Caught
4&	#1	7.0			none
5&	#2	7.0			none
6&	#3	7.0			none

MINNOW TRAP BAIT: No bait

* Sinking or floating, twisted or monofilament, or beach seine

LAKE SURVEYS - FISH DATA SHEET

LOCALITY Kinaskan

DATE August 16/17, 1981

METHOD OF CAPTURE Gill Net

LEGEND:

1. MATURITY:
   - IM - Immature
   - MG - Maturing
   - MT - Mature
   - R - Ripe
   - SP - Spent
   - ? - Not Known
2. SAMPLE TYPE:
   - TG - Fish Tag
   - OT - Otolith
   - SC - Scale
3. SEX:
   - M - Male
   - F - Female
   - ? - Not Known

SPECIES	FORK LENGTH (cm)	WEIGHT (gm)	SEX	MATURITY	SAMPLE TYPE	AGE	STOMACH CONTENTS				TOTAL VOLUME	COMMENTS
							BOTTOM ORGANISMS	PLANKTON	TERRESTRIAL INSECTS	FISH		
Rainbow Trout	26.8	210	F	Imm	SC							
" "	27.0	240	F	Imm	SC							
" "	28.0	275	F	Imm	SC							
" "	28.4	250	F	Imm	SC				Midge pupae			
" "	29.6	275	F	Imm	SC		gastropods					
" "	29.7	300	F	Imm	SC							
" "	31.0	275	M	Imm	SC			Fresh water shrimp				
" "	31.0	350	M	Imm	SC							
" "	31.5	350	F	Imm	SC							
" "	31.5	375	M	Imm	SC		gastropods					
" "	31.8	350	F	MG	SC							
" "	32.3	375	M	MG	SC							
" "	32.5	375	F	Imm	SC							
" "	33.0	350	M	MG	SC							
" "	33.5	425	F	Imm	SC		gastropods					
" "	34.0	400	F	MG	SC			Fresh water shrimp				
" "	34.2	400	F	Imm	SC		gastropods					
" "	34.4	425	F	MG	SC							
" "	36.3	550	M	Imm	SC		gastropods					
" "	37.5	550	M	Imm	SC							

SAMPLER'S COMMENTS: LIMNO #1 OF 2

FOR ENVIRONMENTAL LABORATORY

WATER QUALITY REPORT FOR SAMPLE 113089W

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

FOR SITE: 1130638 KINASKAN LAKE STATION #1

SAMPLING DATE(S): AUG 16/81 0930 HRS
SAMPLE TYPE: FRESH WATER
SAMPLING DEPTH: 40
SAMPLING LOCATION: HYPOLIMNION
SAMPLED BY: AQUATIC STUDIES BR., MOE
DATE RECEIVED BY LABORATORY: AUG 26/81

0071701	RES:FILT.:OSC	129. MG/L	0110101	SRECIFIC CONDUC	209. UMHO/CM
1083704	NITROGN:AMMONIA	0.005 MG/L	1093703	NITROGN:NO2 NO3	0.04 MG/L
1120003	NITROGN:ORGANIC	0.01* MG/L	1133601	NITROGN:KJELDAH	0.01* MG/L
1140001	NITROGEN:TOTAL	0.05* MG/L	1183703	PHOSPHORUS:ORT	L 0.003 MG/L
1193703	PHOSPHORUS :TOT DISSOLVED	L 0.003 MG/L	1193603	PHOSPHORUS :TOT	0.004 MG/L

THE APPROXIMATE COST OF THE ABOVE TESTS IS $ 82.00

THERE IS NO CHARGE FOR THE FOLLOWING TESTS

004 PH A

REMARKS:

FOR ENVIRONMENTAL LABORATORY

SAMPLERS'S COMMENTS: LIMNO #1 OF 2

WATER QUALITY REPORT FOR SAMPLE 113090W

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

FOR SITE: 1130640 KINASKAN LAKE STATION #2

SAMPLING DATE(S): AUG 17/81 0930 HRS
SAMPLE TYPE: FRESH WATER
SAMPLING DEPTH: 0
SAMPLING LOCATION: SURFACE
SAMPLED BY: AQUATIC STUDIES BR., MOE
DATE RECEIVED BY LABORATORY: AUG 26/81

0071701	RES:FILT.105C	125. MG/L	0110101	SPECIFIC CONDUC	200. UMHO/CM
1083704	NITROGN:AMMONIA	L 0.005 MG/L	1093703	NITROGN:NO2 NO3	0.03 MG/L
1120003	NITROGN:ORGANIC	0.04 MG/L	1133601	NITROGN:KJELDAH	0.04 MG/L
1140001	NITROGEN:TOTAL	0.07 MG/L	1183703	PHOSPHORUS:ORT	L 0.003 MG/L
1193703	PHOSPHORUS :TOT DISSOLVED	L 0.003 MG/L	1193603	PHOSPHORUS :TOT	0.005 MG/L

THE APPROXIMATE COST OF THE ABOVE TESTS IS $ 82.00

THERE IS NO CHARGE FOR THE FOLLOWING TESTS

004 PH A

REMARKS:

FOR ENVIRONMENTAL LABORATORY

SAMPLERS'S COMMENTS: LIMNO #2 OF 2

SEPTEMBER 10, 1981 ENVIRONMENTAL LABORATORY PAGE 1
MINISTRY OF THE ENVIRONMENT

WATER QUALITY REPORT FOR SAMPLE 113091W

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

FOR SITE: 1130640 KINASKAN LAKE STATION #2

SAMPLING DATE(S): AUG 17/81 0930 HRS
SAMPLE TYPE: FRESH WATER
SAMPLING DEPTH: 45
SAMPLING LOCATION: HYPOLIMNION
SAMPLED BY: AQUATIC STUDIES BR., MOE
DATE RECEIVED BY LABORATORY: AUG 26/81

0071701	RES:FILT.105C	130. MG/L	0110101	SPECIFIC CONDUC	210. UMHO/CM
1083704	NITROGN:AMMONIA	0.006 MG/L	1093703	NITROGN:NO2 NO3	0.05 MG/L
1120003	NITROGN:ORGANIC	L 0.01* MG/L	1133601	NITROGN:KJELDAH	0.01* MG/L
1140001	NITROGEN:TOTAL	0.06* MG/L	1183703	PHOSPHORUS:ORT	L 0.003 MG/L
1193703	PHOSPHORUS :TOT DISSOLVED	L 0.003 MG/L	1193603	PHOSPHORUS :TOT	0.003 MG/L

THE APPROXIMATE COST OF THE ABOVE TESTS IS $ 82.00

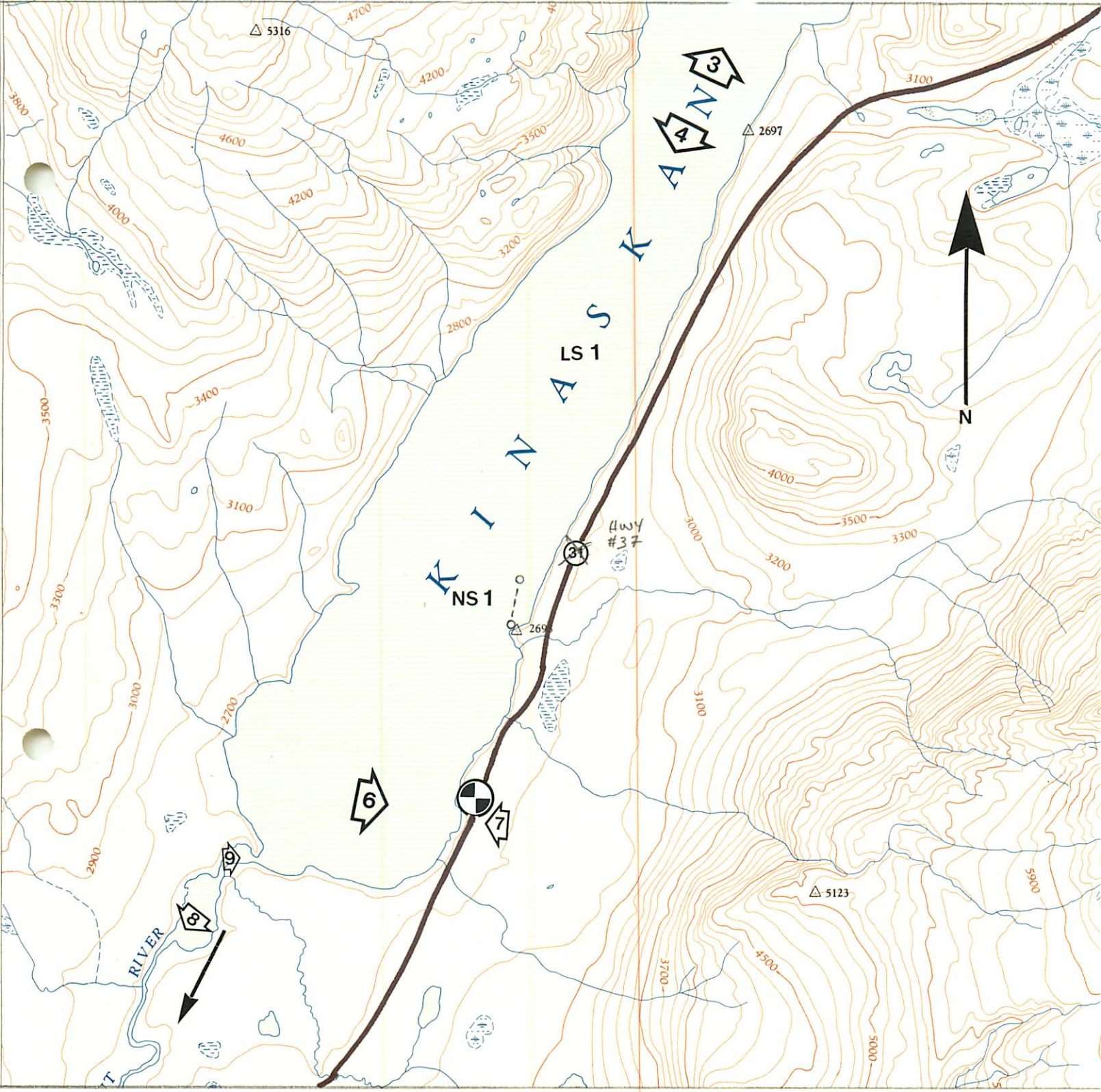
THERE IS NO CHARGE FOR THE FOLLOWING TESTS

004 PH A

REMARKS:

FOR ENVIRONMENTAL LABORATORY

SAMPLERS'S COMMENTS: LIMNO #2 OF 2



MAP OR AIR PHOTO IDENTIFICATION

LAKE: Kinaskan

DATE SURVEYED: August 16 & 17, 1981

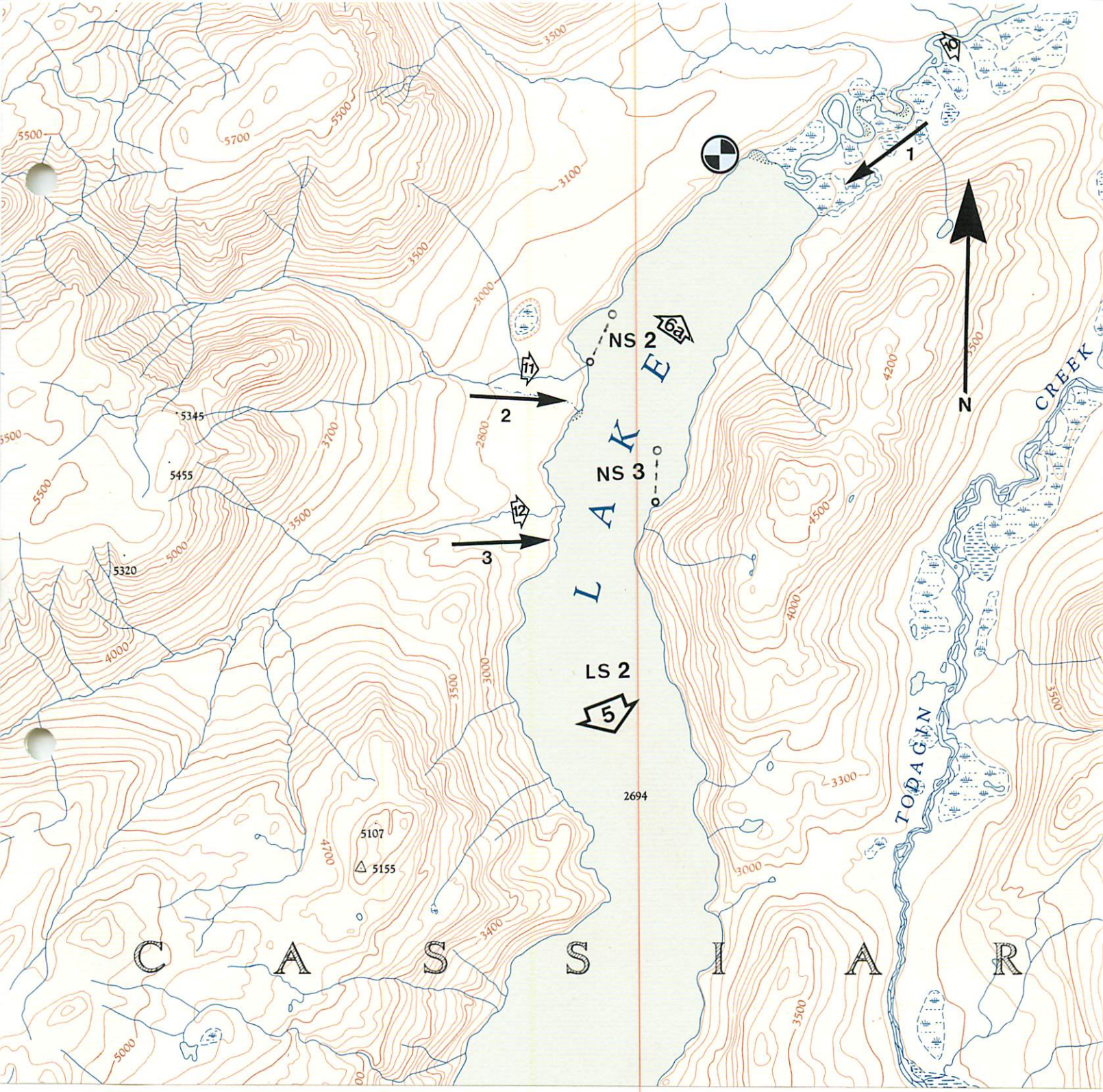
REFERENCE NO: NTS #104 G/9E

SCALE: 1:50000

FIGURE NO: 1

LEGEND:

- 2 - Figure number, area and direction.
- 1 - Point Sample, number and location.
- Bench Mark.
- LS 1 - Limno Station number.
- o---o NS1 - Net Set and number.
- 1 - Stream flow direction and number.



MAP OR AIR PHOTO IDENTIFICATION

LAKE: Kinaskan

DATE SURVEYED: August 16 & 17, 1981

REFERENCE NO: NTS #104 G/9E

SCALE: 1:50000

FIGURE NO: 2

LEGEND:

- 2 - Figure number, area and direction.
- 1 - Point Sample, number and location.
- Bench Mark.
- LS 1 - Limno Station number.
- o---o NS1 - Net Set and number.
- 1 - Stream flow direction and number.

Figure 3. Kinaskan Lake - Panorama from the middle of the lake towards the north.

Figure 4. Kinaskan Lake - Panorama from the middle of the lake towards the south.

Figure 5. Kinaskan Lake - View towards south of lake from limnology station #2.

Figure 6. Kinaskan Lake - B.C.F.S. campsite and boat launch.

Figure 6a. Kinaskan Lake - Panorama of north end of lake.

Figure 7. Kinaskan Lake - Boat launch site with south end of lake in background and Highway 31 in foreground.

Figure 8. Kinaskan Lake - Mouth of the Iskut River, main outlet at south end of lake.

Figure 9. Kinaskan Lake - North view of the first narrows of main outlet.

Figure 10. Kinaskan Lake - Upstream view of the Iskut River, the main inlet to the lake.

Figure 11. Kinaskan Lake - Downstream view of unnamed creek #1 (inlet #2).

Figure 12. Kinaskan Lake - Downstream view of unnamed creek #2 (inlet #3).