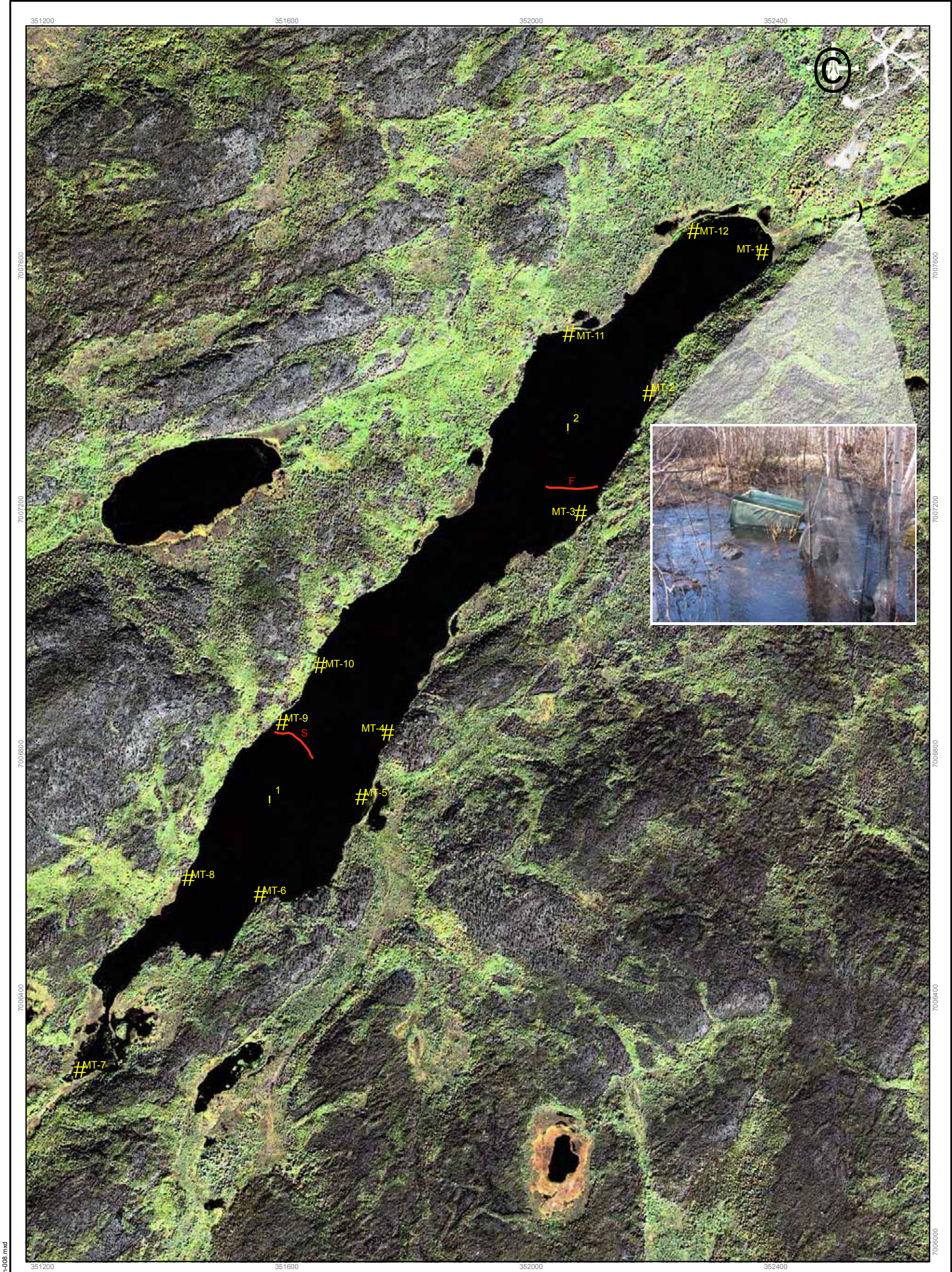




G:\Vancouver\GIS\0701_YELLOWknife\aquatics\new\B-Fish-008.mxd

LEGEND

- ! Water Quality Station
-) Narrow Lake Inlet Trap (Spring)
- S— F— Gillnetting (S=Sinking, F=Floating)
- # Minnow Trap

DISCLAIMER

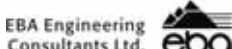
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Base data sources:

Imagery Source: IKONOS (July 27th and August 2nd 2004. Landsat TM (August 11th 2001)
Water Features: Extracted from IKONOS Imagery

YELLOWKNIFE GOLD PROJECT

Fisheries and Aquatic Resources
Spring and Summer 2005
Narrow Lake Sampling Locations

PROJECTION: UTM Zone 12		DATUM: NAD83		
Scale: 1:6,000 5025050100150 Metres				
FILE NO: B-Fish-008		DATE: April, 2006		
JOB NO: 1740180		REVISION NO: 4		
OFFICE: EBA-VANCOUVER		DRAWN: TJS CHECK: TA		
				Figure 8

APPENDIX

APPENDIX A PHOTOGRAPHS



Photo 1
Electroshocking Location ES2 on Winter Lake



Photo 2
Winter Lake Outlet Trap



Photo 3
Narrow Lake Inlet Trap



Photo 4
Bay on east side of Winter Lake south basin



Photo 5
Pond lily's at southeastern portion of Winter Lake



Photo 6
Water sedge at southern limit of Winter Lake



Photo 7
Point on west side of Winter Lake south basin



Photo 8
West shore near island in Winter Lake south basin



Photo 9
West shore of Narrow Lake north basin



Photo 10
Scouring rush and yellow water lily on west shore of Narrow Lake



Photo 11
Wetland near Narrow Lake outlet



Photo 12
Northern pike and Slimy sculpin caught in Narrow Lake inlet trap



Photo 13
All weather road stream crossing Location 1



Photo 14
All weather road stream crossing Location 2



Photo 15
All weather road stream crossing Location 3



Photo 16
All weather road stream crossing Location 4



Photo 17
Winter Lake snorkel survey

APPENDIX

APPENDIX B MERISTICS FOR FISH COLLECTED BY GILLNET AND STREAM TRAPS

APPENDIX B - GILL NET RAW DATA
WINTER LAKE - NORTHERN PIKE

Winter Lake Gill Net Raw Data - Northern Pike									
Date	Net	Fish ID	Fork Length (cm)	Total Length (cm)	Weight (g)	Tissue Sampled	Sex	Stomach Contents	Age
6-Aug	sink 2	NP1	50.1	52.1	1225	muscle, liver	male	unknown	3+
6-Aug	sink 2	NP2	51.3	53.6	1293	muscle, liver	male	unknown	3+
6-Aug	float 2	NP3	22.2	22.9	96	muscle, liver	unknown	unknown	1+
7-Aug	sink 1	NP4	14.6	15.5	22	whole fish	unknown	unknown	-
7-Aug	sink 1	NP5	21	21.9	64	none	unknown	unknown	-
7-Aug	sink 1	NP6	48.9	50.3	1180	muscle, liver	male	insects	3+
7-Aug	float 1	NP7	21.6	22.2	72	whole fish	unknown	unknown	-
7-Aug	sink 2	NP8	23.5	24.5	103	none	unknown	unknown	-
7-Aug	sink 2	NP9	54	55.4	1247	muscle, liver	male	insects	3+
7-Aug	sink 2	NP10	47	49.5	907	none (live - released)	unknown	unknown	-

Mean	35.42	36.79	620.9
Std Dev	15.91	16.46	588.50
Min	14.6	15.5	22
Max	54	55.4	1293

APPENDIX B - GILL NET RAW DATA
NARROW LAKE - LAKE WHITEFISH AND NORTHERN PIKE

Narrow Lake Gill Net Raw Data - Lake Whitefish									
Date	Net	Fish ID	Fork Length (cm)	Total Length (cm)	Weight (g)	Tissue Sampled	Sex	Stomach Contents	Age
8-Aug	float	WF1	23.5	26.4	300	none (live - released)	unknown		
8-Aug	float	WF2	14.7	16.3	36	none	unknown		
8-Aug	float	WF3	22.2	25.2	121	none	unknown		
8-Aug	float	WF4	16	17.6	46	none	unknown		
8-Aug	float	WF5	23.6	26.5	154	none	unknown		
8-Aug	float	WF6	15.1	16.8	43	none	unknown		
8-Aug	float	WF7	23.5	26.5	140	none	unknown		
8-Aug	float	WF8	25.9	29.5	205	muscle, liver	unknown		4+
8-Aug	float	WF9	25.1	28.1	172	none	unknown		4+
8-Aug	float	WF10	25	28.5	178	none	unknown		
8-Aug	float	WF11	23.5	26.9	172	none	unknown		
8-Aug	float	WF12	25.7	29.2	196	none	unknown		
8-Aug	float	WF13	23.4	26.1	142	none	unknown		
8-Aug	float	WF14	23.5	26.4	163	none	unknown		
8-Aug	float	WF15	23.8	26.9	156	none	unknown		
8-Aug	float	WF16	24.5	27.9	175	none	unknown		
8-Aug	float	WF17	25.2	28.4	164	none	unknown		
8-Aug	float	WF18	22.5	25.5	133	none	unknown		
8-Aug	float	WF19	25.2	28.6	177	none	unknown		
8-Aug	float	WF20	24.1	27.6	172	none	unknown		
8-Aug	float	WF21	22.2	25.1	120	none	unknown		
8-Aug	float	WF22	16	17.9	46	none	unknown		
8-Aug	float	WF23	16.8	18.8	48	none	unknown		
8-Aug	float	WF24	24.1	27.6	170	none	unknown		
8-Aug	float	WF25	23.7	27.1	153	none	unknown		
8-Aug	float	WF26	23.5	26.3	149	none	unknown		
8-Aug	float	WF27	25	28.2	174	none	unknown		
8-Aug	float	WF28	24.5	27.6	171	none	unknown		
8-Aug	float	WF29	23.1	25.9	133	none	unknown		
8-Aug	float	WF30	15.1	17.5	48	none	unknown		
8-Aug	float	WF31	15.6	17.5	48	none	unknown		
8-Aug	float	WF32	14.9	16.5	41	none	unknown		
8-Aug	float	WF33	15.1	17.5	41	none	unknown		
8-Aug	float	WF34	15.4	17.2	44	none	unknown		
8-Aug	float	WF35	14.9	16.2	39	none	unknown		
8-Aug	float	WF36	14.7	16.1	44	none	unknown		
8-Aug	float	WF37	14.9	16.6	39	none	unknown		
8-Aug	float	WF38	16	18	47	none	unknown		
8-Aug	float	WF39	15.2	17	47	none	unknown		
8-Aug	float	WF40	15.5	17.3	44	none	unknown		
8-Aug	float	WF41	14.4	16.2	39	none	unknown		
8-Aug	float	WF42	14.9	16	38	none	unknown		
8-Aug	float	WF43	15.1	16.3	39	none	unknown		
8-Aug	float	WF44	15.3	17.1	40	whole fish	unknown		
8-Aug	float	WF45	15.2	17.7	47	none	unknown		
8-Aug	sink	WF46	45.2	50.9	1350	muscle, liver	female (ripe)		19+
8-Aug	sink	WF47	43.2	48.5	950	muscle, liver	mature male		17+
8-Aug	sink	WF48	37.8	42.6	620	muscle, liver	female (ripe)		9+
8-Aug	sink	WF49	33.8	38.2	950	muscle, liver	immature male		8+
8-Aug	sink	WF50	29.3	33.1	300	muscle, liver	mature male		8+
8-Aug	sink	WF51	36	40.6	511	muscle, liver	immature male		10+
8-Aug	sink	WF52	32.2	36.4	424	muscle, liver	female (ripe)		7+
8-Aug	sink	WF53	29	32.6	293	none	unknown		
8-Aug	sink	WF54	33.5	37.3	433	none	unknown		
8-Aug	sink	WF55	28	31.3	266	none	unknown		
8-Aug	sink	WF56	28.4	32.4	275	none	unknown		
8-Aug	sink	WF57	26.3	30.2	218	none	unknown		
8-Aug	sink	WF58	25.2	28.4	175	none	unknown		
8-Aug	sink	WF59	24.9	28.3	171	none	unknown		
8-Aug	sink	WF60	31.7	35.7	380	none	unknown		
8-Aug	sink	WF61	26.2	30	198	none	unknown		
8-Aug	sink	WF62	29.1	33.2	282	none	unknown		
8-Aug	sink	WF63	27.5	31.2	226	none	unknown		
8-Aug	sink	WF64	26.2	29.5	213	none	unknown		
8-Aug	sink	WF65							

APPENDIX B - GILL NET RAW DATA
NARROW LAKE - LAKE WHITEFISH AND NORTHERN PIKE

Narrow Lake Gill Net Raw Data - Lake Whitefish									
Date	Net	Fish ID	Fork Length (cm)	Total Length (cm)	Weight (g)	Tissue Sampled	Sex	Stomach Contents	Age
8-Aug	sink	WF73	32.4	37	407	none	unknown		
8-Aug	sink	WF74	31.4	35.5	385	none	unknown		
8-Aug	sink	WF75	24.3	27.6	167	none	unknown		
8-Aug	sink	WF76	24	27.5	169	none	unknown		
8-Aug	sink	WF77	35.4	39.9	573	none	unknown		
8-Aug	sink	WF78	24.6	27.9	182	none	unknown		
8-Aug	sink	WF79	31.4	35.7	294	none	unknown		
8-Aug	sink	WF80	24.5	27.4	161	none	unknown		
8-Aug	sink	WF81	28.6	32.5	265	none	unknown		
8-Aug	sink	WF82	27.2	30.9	244	none	unknown		
8-Aug	sink	WF83	27.6	31.4	252	none	unknown		
8-Aug	sink	WF84	27.3	30.6	223	none	unknown		
8-Aug	sink	WF85	23.1	26.2	142	none	unknown		
8-Aug	sink	WF86	24.5	27.9	158	none	unknown		
8-Aug	sink	WF87	26.7	30	225	none	unknown		
8-Aug	sink	WF88	25.5	29.1	191	none	unknown		
8-Aug	sink	WF89	26.3	29.9	203	none	unknown		
8-Aug	sink	WF90	24.5	26.2	158	none	unknown		
8-Aug	sink	WF91	34	38.2	448	none	unknown		
8-Aug	sink	WF92	28.6	32.2	370	none	unknown		
8-Aug	sink	WF93	26.2	29.6	201	none	unknown		
8-Aug	sink	WF94	25.4	29	186	none	unknown		
8-Aug	sink	WF95	30.1	33.9	329	none	unknown		
8-Aug	sink	WF96	24.6	28	184	none	unknown		

Mean	24.87	28.06	232.07
Std Dev	6.74	7.65	220.18
Min	14.4	16	36
Max	45.2	50.9	1350

Narrow Lake Gill Net Raw Data - Northern Pike									
Date	Net	Fish ID	Fork Length (cm)	Total Length (cm)	Weight (g)	Tissue Sampled	Sex	Stomach Contents	Age
8-Aug	float	NP1	68.5	72.5	2350	muscle, liver	male		12+
8-Aug	sink	NP2	72.2	76	3000	none (live - released)	unknown		
8-Aug	sink	NP3	60	62.7	1700	muscle, liver	male	white fish (30.5 cm T.L.)	7+
8-Aug	sink	NP4	60	63	1550	muscle, liver	male		7+
8-Aug	sink	NP5	63.4	66	1600	muscle, liver	male		9+
8-Aug	sink	NP6	44.4	46.8	600	muscle, liver	female		4+
8-Aug	sink	NP7	38.5	40.6	750	none	unknown		
8-Aug	sink	NP8	25.1	26.4	93	none	unknown		
8-Aug	sink	NP9	30.6	32.3	177	none	unknown		
8-Aug	sink	NP10	19.7	20.9	47	none	unknown		

Mean	48.24	50.72	1186.7
Std Dev	19.04	19.94	1014.18
Min	19.7	20.9	47
Max	72.2	76	3000

APPENDIX B

NARROW LAKE INLET TRAP RAW DATA

Narrow Lake Inlet Trap Raw Data										
Date	Time	Location	Species	Label	Total Length (cm)	Fork Length (cm)	Weight (g)	Sex	Ageing Strucutre	Comments
31-May	8:40 AM	Narrow Lake inlet trap	NP	NP1	11.4	10.6	6.0	n/a	n/a	Whole specimen taken
1-Jun	1:30 PM	Narrow Lake inlet trap	NP	NP2	10.6	9.8	5.0	n/a	n/a	Whole specimen taken
2-Jun	8:25 AM	Narrow Lake inlet trap	NP	NP3	11.6	10.6	8.0	n/a	n/a	Whole specimen taken
2-Jun	8:25 AM	Narrow Lake inlet trap	NP	NP4	13.6	12.7	12.0	n/a	n/a	Whole specimen taken

Mean	11.8	10.9	7.8
Standard Deviation	1.28	1.24	3.10

Date	Time	Location	Species	Label	Total Length (cm)	Fork Length (cm)	Weight (g)	Sex	Ageing Strucutre	Comments
1-Jun	8:05 PM	Narrow Lake inlet trap	SS	SS1	6.0	6.0	2.0	n/a	n/a	Whole specimen taken
2-Jun	8:25 AM	Narrow Lake inlet trap	SS	SS2	7.6	7.6	3.0	n/a	n/a	Whole specimen taken
2-Jun	8:30 PM	Narrow Lake inlet trap	SS	SS3	6.4	6.4	2.0	n/a	n/a	Whole specimen taken
3-Jun	7:35 AM	Narrow Lake inlet trap	SS	SS4	6.6	6.6	3.0	n/a	n/a	Whole specimen taken
3-Jun	7:35 AM	Narrow Lake inlet trap	SS	SS5	7.6	7.6	4.0	n/a	n/a	Whole specimen taken

Mean	6.8	6.8	2.8
Standard Deviation	0.73	0.73	0.84

APPENDIX

APPENDIX C MINNOW TRAP DATA

APPENDIX C - MINNOW TRAP DATA

Meristics for Minnow Trap							
Location	Number of Traps	Date In DD/MM/YY	Time In	Date Out DD/MM/YY	Time Out	Number of Fish Collected	Other Contents
Winter Lake							
Effort 1	12	5-Aug-06	1700	6-Aug-06	1300	0	bettles, dragonfly nymphs, leeches
Effort 2	12	6-Aug-06	1300	7-Aug-06	1200	0	bettles, dragonfly nymphs, leeches
Narrow Lake							
Effort 1	12	8-Aug-06	1630	9-Aug-06	900	0	

Note:

Traps deployed along shoreline of lake

APPENDIX

APPENDIX D INLET/OUTLET TRAPS - RAW DATA

APPENDIX D - INLET AND OUTLET TRAP CHECKING

Narrow Lake Inlet Trap										
Installed 11:30AM May 26										
Date	Time	# Fish Total	Northern Pike	Slimy Sculpin	Fish Code	Temperature (degrees C)	D.O.	Conductivity	pH	Comments
26-May	4:10 PM	0	0	0		-	-	-	-	
27-May	8:45 AM	0	0	0		-	-	-	-	cleaned leaves from mesh
27-May	8:40 PM	0	0	0		-	-	-	-	cleaned leaves, extended mesh onto south bank of creek
28-May	10:20 AM	0	0	0		6.4	-	0.21	7.07	minor cleaning
28-May	7:30 PM	0	0	0		-	-	-	-	minor cleaning
29-May	9:20 AM	0	0	0		7.8	-	0.20	7.12	minor cleaning
29-May	8:00 PM	0	0	0		-	-	-	-	minor cleaning
30-May	9:15 AM	0	0	0		-	-	-	-	minor cleaning
30-May	8:00 PM	0	0	0		8.4	-	0.18	7.02	minor cleaning
31-May	8:40 AM	1	1	0	NP1	-	-	0.18	7.16	minor cleaning, ice on Narrow Lake fully melted
31-May	5:50 PM	0	0	0		-	-	-	-	minor cleaning
1-Jun	9:25 AM	0	0	0		7.8	-	0.20	7.15	minor cleaning
1-Jun	1:30 PM	1	1	0	NP2	-	-	-	-	minor cleaning
1-Jun	8:05 PM	1	0	1	SS1	-	-	-	-	minor cleaning
2-Jun	8:25 AM	3	2	1	NP3, NP4, SS2	8.5	-	0.21	7.16	minor cleaning
2-Jun	8:30 PM	1	0	1	SS3	-	-	-	-	minor cleaning
3-Jun	7:35 AM	2	0	2	SS4, SS5	10.4	-	0.21	7.20	minor cleaning, trap removal

Winter Lake Outlet Trap										
Installed 10:35AM May 26										
Date	Time	# Fish Total	Species (number)	Species (number)	Species (number)	Temperature (degrees C)	D.O.	Conductivity (ms/cm)	pH	Comments
26-May	4:00 PM	0	0	0	0	-	-	-	-	
27-May	8:30 AM	0	0	0	0	-	-	-	-	cleaned leaves from trap net and mesh, frog and dragon fly nymphs in trap
27-May	8:30 PM	0	0	0	0	-	-	-	-	cleaned leaves, extended mesh onto south bank of creek
28-May	10:10 AM	0	0	0	0	6.3	-	0.20	7.03	cleaned leaves from mesh, copepods and water beatles in trap
28-May	7:30 PM	0	0	0	0	-	-	-	-	cleaned leaves from mesh
29-May	9:00 AM	0	0	0	0	7.8	-	0.21	7.09	Removed fine mesh from vents on inside of trap to increase flow. Debris was getting caught and creating stagnant water inside the trap. 9:05 AM, Approx. 12 inch Northern Pike was observed to swim into trough of trap and turn around back upstream. Attempts
29-May	8:00 PM	0	0	0	0	-	-	-	-	cleaned leaves from trap and fish screen. Possible small mammal observation (muskrat or minx)
30-May	9:15 AM	0	0	0	0	-	-	-	-	cleaned leaves from trap and fish screen.
30-May	7:55 PM	0	0	0	0	8.4	-	0.18	6.90	cleaned leaves from trap and fish screen. Ice fully melted on Winter Lake
31-May	8:30 AM	0	0	0	0	6.0	-	0.18	7.17	cleaned leaves from trap and fish screen. Leaf-like insect captured in trap
31-May	5:45 PM	0	0	0	0	-	-	-	-	cleaned leaves from trap and fish screen.
1-Jun	9:15 AM	0	0	0	0	7.7	-	0.20	7.07	cleaned leaves from trap and fish screen. Bullfrog captured and released
1-Jun	13:30 PM	0	0	0	0	-	-	-	-	cleaned leaves from trap and fish screen.
1-Jun	8:00 PM	0	0	0	0	-	-	-	-	cleaned leaves from trap and fish screen.
2-Jun	8:20 AM	0	0	0	0	8.9	-	0.21	7.16	cleaned leaves from trap and fish screen. Bullfrog captured and released
2-Jun	8:30 PM	0	0	0	0	-	-	-	-	cleaned leaves from trap and fish screen.
3-Jun	7:30 AM	0	0	0	0	10.4	-	0.22	7.14	cleaned leaves from trap and fish screen.

APPENDIX

APPENDIX E FISH AGE DATA

APPENDIX E - FISH AGE RESULTS

Narrow Lake Raw Age Data - Northern Pike				
Date	Net	Fish ID	Age (yrs)	Sex
8-Aug	float	NP1	12+	male
8-Aug	sink	NP3	7+	male
8-Aug	sink	NP4	7+	male
8-Aug	sink	NP5	9+	male
8-Aug	sink	NP6	4+	female

Mean	7.8
Std Dev	2.95
Min	0
Max	0

Winter Lake Raw Age Data - Northern Pike				
Date	Net	Fish ID	Age (yrs)	Sex
6-Aug	sink 2	NP1	3	male
6-Aug	sink 2	NP2	3	male
6-Aug	float 2	NP3	1	unknown
7-Aug	sink 1	NP6	3	male
7-Aug	sink 2	NP9	3	male

Mean	2.6
Std Dev	0.894427191
Min	1
Max	3

Narrow Lake Raw Age Data - Whitefish				
Date	Net	Fish ID	Age (yrs)	Sex
8-Aug	float	WF8	4+	male
8-Aug	float	WF9	4+	male
8-Aug	sink	WF46	19+	
8-Aug	sink	WF47	17+	
8-Aug	sink	WF48	9+	
8-Aug	sink	WF49	8+	
8-Aug	sink	WF50	8+	male
8-Aug	sink	WF51	10+	male
8-Aug	sink	WF52	7+	female

Mean	9.56
Std Dev	5.22
Min	0
Max	0

APPENDIX

APPENDIX F METALS IN FISH TISSUES LAB ANALYSIS DATA



Your Project #: 1740082.023
Your C.O.C. #: 14818, 23745, 23747, 10886

Attention: Richard Couture
EBA ENGINEERING
9TH FLOOR - OCEANIC PLAZA
1066 WEST HASTING STREET
VANCOUVER, BC
Canada V6E 3X2

Report Date: 2005/08/23

ANALYTICAL REPORT

MAXXAM JOB #: A531638

Received: 2005/08/15, 11:50

Sample Matrix: TISSUE
Samples Received: 38

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Elements by ICPMS (total) - Tissue	38	2005/08/17	2005/08/18	ING112 Rev 1.5	Based on EPA 200.8

MAXXAM Analytics Inc.

MEAGHAN NORTON DANIEL

MN3/mn3
encl.

Total cover pages: 1

Burnaby: 8577 Commerce Court V5A 4N5 Telephone(604) 444-4808 Fax(604) 444-4511

This document is in electronic format, hard copy is available on request.

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889654	889655	889656	889657		
Sampling Date		2005/08/06	2005/08/06	2005/08/06	2005/08/06		
COC Number		14818	14818	14818	14818		
	Units	WINTER	WINTER	WINTER	WINTER	DL	QC Batch
		LAKE-NP1-MUSCLE	LAKE-NP1-LIVER	LAKE-NP2-MUSCLE	LAKE-NP2-LIVER		

Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	ND	ND	0.2	861524
Total Barium (Ba)	mg/kg	1.7	ND	1.0	ND	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	0.05	861524
Total Calcium (Ca)	mg/kg	4030	130	3920	ND	100	861524
Total Chromium (Cr)	mg/kg	1	ND	1	ND	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	ND	37.4	ND	21.4	0.5	861524
Total Iron (Fe)	mg/kg	ND	161	ND	113	100	861524
Total Lead (Pb)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	405	143	442	128	100	861524
Total Manganese (Mn)	mg/kg	6.8	1.2	6.1	0.7	0.2	861524
Total Mercury (Hg)	mg/kg	0.38	0.13	0.39	0.13	0.05	861524
Total Molybdenum (Mo)	mg/kg	ND	0.1	ND	0.1	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4920	2350	4700	1970	10	861524
Total Potassium (K)	mg/kg	4550	3050	4370	3090	100	861524
Total Selenium (Se)	mg/kg	ND	1.1	ND	1.0	0.5	861524
Total Silver (Ag)	mg/kg	ND	0.09	ND	0.05	0.05	861524
Total Sodium (Na)	mg/kg	487	1000	622	1050	100	861524
Total Strontium (Sr)	mg/kg	4.6	0.2	3.9	ND	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	11.7	39.2	10.6	31.9	1	861524
Total Zirconium (Zr)	mg/kg	1.3	0.8	ND	0.5	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889658	889659	889661	889662		
Sampling Date		2005/08/06	2005/08/06	2005/08/07	2005/08/07		
COC Number		14818	14818	14818	14818		
	Units	WINTER LAKE-NP3-MUSCLE	WINTER LAKE-NP3-LIVER	WINTER LAKE-NP6-MUSCLE	WINTER LAKE-NP6-LIVER	DL	QC Batch

Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	ND	ND	0.2	861524
Total Barium (Ba)	mg/kg	0.7	ND	0.7	ND	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	0.05	861524
Total Calcium (Ca)	mg/kg	2800	ND	2870	ND	100	861524
Total Chromium (Cr)	mg/kg	ND	1	1	ND	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	ND	5.3	ND	23.2	0.5	861524
Total Iron (Fe)	mg/kg	ND	ND	ND	197	100	861524
Total Lead (Pb)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	375	192	400	164	100	861524
Total Manganese (Mn)	mg/kg	5.6	1.4	3.5	1.2	0.2	861524
Total Mercury (Hg)	mg/kg	0.14	0.15	0.39	0.15	0.05	861524
Total Molybdenum (Mo)	mg/kg	ND	0.1	ND	0.2	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4120	3360	3900	2360	10	861524
Total Potassium (K)	mg/kg	4270	2580	4620	2760	100	861524
Total Selenium (Se)	mg/kg	ND	ND	ND	1.0	0.5	861524
Total Silver (Ag)	mg/kg	ND	ND	ND	ND	0.05	861524
Total Sodium (Na)	mg/kg	703	1090	400	668	100	861524
Total Strontium (Sr)	mg/kg	3.1	0.1	2.7	ND	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	10.4	41.4	9	36.2	1	861524
Total Zirconium (Zr)	mg/kg	ND	ND	ND	ND	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889664	889665	889666	889667		
Sampling Date		2005/08/07	2005/08/07	2005/08/08	2005/08/08		
COC Number		14818	14818	23745	23745		
	Units	WINTER LAKE-NP9-MUSCLE	WINTER LAKE-NP9-LIVER	N.L. NP1-MUSCLE	N.L. NP1-LIVER	DL	QC Batch

Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	0.2	ND	0.2	861524
Total Barium (Ba)	mg/kg	1.1	ND	ND	ND	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	0.05	861524
Total Calcium (Ca)	mg/kg	4410	ND	565	145	100	861524
Total Chromium (Cr)	mg/kg	1	ND	ND	ND	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	ND	30.5	1.1	6.5	0.5	861524
Total Iron (Fe)	mg/kg	ND	137	ND	ND	100	861524
Total Lead (Pb)	mg/kg	ND	ND	0.2	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	433	137	386	199	100	861524
Total Manganese (Mn)	mg/kg	3.8	0.9	0.5	1.5	0.2	861524
Total Mercury (Hg)	mg/kg	0.42	0.14	1.28	1.19	0.05	861524
Total Molybdenum (Mo)	mg/kg	ND	0.1	ND	ND	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4680	2140	2700	3300	10	861524
Total Potassium (K)	mg/kg	4610	2980	4180	3300	100	861524
Total Selenium (Se)	mg/kg	ND	1.0	ND	1.5	0.5	861524
Total Silver (Ag)	mg/kg	ND	ND	ND	0.05	0.05	861524
Total Sodium (Na)	mg/kg	514	810	434	1080	100	861524
Total Strontium (Sr)	mg/kg	4.8	ND	0.4	0.1	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	12.3	39.1	7	72.4	1	861524
Total Zirconium (Zr)	mg/kg	0.8	ND	ND	ND	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889668	889669	889670	889671	889672		
Sampling Date		2005/08/08	2005/08/08	2005/08/08	2005/08/08	2005/08/08		
COC Number		23745	23745	23745	23745	23745		
	Units	N.L. NP3-MUSCLE	N.L. NP3-LIVER	N.L. NP4-MUSCLE	N.L. NP4-LIVER	N.L. NP5-MUSCLE	DL	QC Batch

Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	ND	ND	0.3	0.2	861524
Total Barium (Ba)	mg/kg	0.3	ND	0.2	ND	0.4	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Calcium (Ca)	mg/kg	2980	ND	3270	ND	4420	100	861524
Total Chromium (Cr)	mg/kg	ND	ND	ND	ND	ND	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	ND	7.2	ND	8.7	ND	0.5	861524
Total Iron (Fe)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Lead (Pb)	mg/kg	ND	ND	ND	ND	0.1	0.1	861524
Total Magnesium (Mg)	mg/kg	423	173	413	133	425	100	861524
Total Manganese (Mn)	mg/kg	2.3	1.0	3.1	0.9	4.3	0.2	861524
Total Mercury (Hg)	mg/kg	0.82	0.58	0.92	0.62	1.51	0.05	861524
Total Molybdenum (Mo)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4380	2930	4320	2270	4840	10	861524
Total Potassium (K)	mg/kg	5040	3290	4120	2760	4180	100	861524
Total Selenium (Se)	mg/kg	ND	1.0	ND	1.1	ND	0.5	861524
Total Silver (Ag)	mg/kg	ND	0.11	ND	0.05	ND	0.05	861524
Total Sodium (Na)	mg/kg	555	1180	603	1630	604	100	861524
Total Strontium (Sr)	mg/kg	2.5	ND	2.5	ND	3.4	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	ND	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	10.5	45.7	9	66.7	11.2	1	861524
Total Zirconium (Zr)	mg/kg	ND	ND	ND	0.5	ND	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889673	889674	889675	889676	889677		
Sampling Date		2005/08/08	2005/08/08	2005/08/08	2005/08/08	2005/08/08		
COC Number		23745	23745	23745	23745	23745		
	Units	N.L. NP5-LIVER	N.L. NP6-MUSCLE	N.L. NP6-LIVER	N.L. WF8-MUSCLE	N.L. WF8-LIVER	DL	QC Batch

Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	0.2	861524
Total Barium (Ba)	mg/kg	ND	0.2	ND	0.1	ND	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Calcium (Ca)	mg/kg	116	1900	ND	2020	139	100	861524
Total Chromium (Cr)	mg/kg	ND	ND	ND	ND	1	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	13.4	ND	10.2	ND	4.5	0.5	861524
Total Iron (Fe)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	165	396	197	393	200	100	861524
Total Manganese (Mn)	mg/kg	1.4	2.5	1.5	1.4	1.8	0.2	861524
Total Mercury (Hg)	mg/kg	1.89	0.38	0.30	0.23	0.50	0.05	861524
Total Molybdenum (Mo)	mg/kg	0.1	ND	0.2	ND	0.1	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	2700	3720	3400	3780	4170	10	861524
Total Potassium (K)	mg/kg	3100	3250	4000	4530	3210	100	861524
Total Selenium (Se)	mg/kg	1.4	ND	0.9	ND	1.5	0.5	861524
Total Silver (Ag)	mg/kg	0.10	ND	0.18	ND	ND	0.05	861524
Total Sodium (Na)	mg/kg	1590	549	997	497	1710	100	861524
Total Strontium (Sr)	mg/kg	0.1	1.7	ND	2.9	0.2	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	ND	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	152	8	70.7	10.6	31.0	1	861524
Total Zirconium (Zr)	mg/kg	ND	ND	ND	ND	ND	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889678	889704	889706	889707	889708		
Sampling Date		2005/08/08	2005/08/08	2005/08/08	2005/08/08	2005/08/08		
COC Number		23747	23747	23747	23747	23747		
	Units	N.L. WF9-LIVER	N.L. WF9-MUSCLE	N.L. WF46-MUSCLE	N.L. WF46-LIVER	N.L. WF47-MUSCLE	DL	QC Batch

Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	ND	ND	ND	0.2	861524
Total Barium (Ba)	mg/kg	ND	0.2	0.2	ND	0.6	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Calcium (Ca)	mg/kg	215	3050	2960	ND	9110	100	861524
Total Chromium (Cr)	mg/kg	1	1	1	ND	1	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	7.4	ND	ND	4.1	ND	0.5	861524
Total Iron (Fe)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	196	396	342	180	367	100	861524
Total Manganese (Mn)	mg/kg	1.9	1.1	2.2	2.1	4.3	0.2	861524
Total Mercury (Hg)	mg/kg	0.50	0.24	1.18	2.60	0.20	0.05	861524
Total Molybdenum (Mo)	mg/kg	0.1	ND	ND	0.1	ND	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4270	4450	4180	3450	6920	10	861524
Total Potassium (K)	mg/kg	3340	5480	4960	2480	4030	100	861524
Total Selenium (Se)	mg/kg	1.7	ND	ND	1.4	ND	0.5	861524
Total Silver (Ag)	mg/kg	0.08	ND	ND	ND	ND	0.05	861524
Total Sodium (Na)	mg/kg	1680	583	680	1500	916	100	861524
Total Strontium (Sr)	mg/kg	0.4	4.5	3.3	ND	11.1	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	0.1	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	1	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	29.2	12.9	7	23.3	33.0	1	861524
Total Zirconium (Zr)	mg/kg	ND	ND	0.7	ND	ND	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889709	889710	889711	889712	889713		
Sampling Date		2005/08/08	2005/08/08	2005/08/08	2005/08/08	2005/08/08		
COC Number		23747	23747	23747	23747	23747		
	Units	N.L. WF47-LIVER	N.L. WF48-MUSCLE	N.L. WF48-LIVER	N.L. WF49-MUSCLE	N.L. WF49-LIVER	DL	QC Batch

Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	0.4	ND	ND	0.2	861524
Total Barium (Ba)	mg/kg	ND	1.0	0.2	0.4	ND	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	0.05	0.05	861524
Total Calcium (Ca)	mg/kg	ND	12600	767	6980	ND	100	861524
Total Chromium (Cr)	mg/kg	ND	ND	ND	1	ND	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	6.2	ND	14.8	ND	8.8	0.5	861524
Total Iron (Fe)	mg/kg	307	ND	147	ND	353	100	861524
Total Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	171	422	209	399	199	100	861524
Total Manganese (Mn)	mg/kg	1.9	14.7	8.9	2.7	2.2	0.2	861524
Total Mercury (Hg)	mg/kg	0.78	0.37	0.76	0.18	0.57	0.05	861524
Total Molybdenum (Mo)	mg/kg	0.2	ND	0.2	ND	0.2	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4090	8670	4010	6210	3910	10	861524
Total Potassium (K)	mg/kg	3210	4050	3630	4410	3610	100	861524
Total Selenium (Se)	mg/kg	1.7	ND	1.2	ND	1.9	0.5	861524
Total Silver (Ag)	mg/kg	0.06	ND	0.18	ND	ND	0.05	861524
Total Sodium (Na)	mg/kg	1550	942	1280	715	1180	100	861524
Total Strontium (Sr)	mg/kg	ND	14.2	0.4	10.4	0.1	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	ND	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	22.3	15.6	28.9	13.0	27.4	1	861524
Total Zirconium (Zr)	mg/kg	ND	ND	ND	ND	ND	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889714	889715	889716	889718	889719		
Sampling Date		2005/08/08	2005/08/08	2005/08/08	2005/08/08	2005/08/08		
COC Number		23747	23747	10886	10886	10886		
	Units	N.L. WF50-MUSCLE	N.L. WF50-LIVER	N.L. WF51-MUSCLE	N.L. WF51-LIVER	N.L. WF52-MUSCLE	DL	QC Batch

Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	ND	ND	ND	ND	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	ND	ND	0.3	ND	0.2	861524
Total Barium (Ba)	mg/kg	0.3	ND	ND	0.1	0.1	0.1	861524
Total Beryllium (Be)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Calcium (Ca)	mg/kg	4460	543	225	1480	3160	100	861524
Total Chromium (Cr)	mg/kg	ND	1	ND	ND	1	1	861524
Total Cobalt (Co)	mg/kg	ND	ND	ND	ND	ND	0.3	861524
Total Copper (Cu)	mg/kg	ND	4.5	8.5	ND	ND	0.5	861524
Total Iron (Fe)	mg/kg	ND	167	309	ND	ND	100	861524
Total Lead (Pb)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	335	249	184	280	335	100	861524
Total Manganese (Mn)	mg/kg	1.3	2.3	3.4	0.8	1.0	0.2	861524
Total Mercury (Hg)	mg/kg	0.22	0.58	2.34	0.39	0.36	0.05	861524
Total Molybdenum (Mo)	mg/kg	ND	0.2	0.3	ND	ND	0.1	861524
Total Nickel (Ni)	mg/kg	ND	ND	ND	ND	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4560	4670	4200	2940	4120	10	861524
Total Potassium (K)	mg/kg	4310	3190	3510	4800	4910	100	861524
Total Selenium (Se)	mg/kg	ND	1.9	3.1	ND	ND	0.5	861524
Total Silver (Ag)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Sodium (Na)	mg/kg	667	1330	1340	695	721	100	861524
Total Strontium (Sr)	mg/kg	6.6	1.0	0.4	2.2	4.2	0.1	861524
Total Thallium (Tl)	mg/kg	ND	ND	ND	ND	ND	0.05	861524
Total Tin (Sn)	mg/kg	ND	ND	ND	ND	ND	0.1	861524
Total Titanium (Ti)	mg/kg	ND	ND	ND	ND	ND	1	861524
Total Vanadium (V)	mg/kg	ND	ND	ND	ND	ND	2	861524
Total Zinc (Zn)	mg/kg	10.7	27.6	25.6	7	8	1	861524
Total Zirconium (Zr)	mg/kg	ND	ND	0.6	ND	ND	0.5	861524

ND = Not detected

ICPMS FULL SCAN METALS - TISSUE (TISSUE)

Maxxam ID		889720		
Sampling Date		2005/08/08		
COC Number		10886		
	Units	N.L. WF52-LIVER	DL	QC Batch

Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	ND	100	861524
Total Antimony (Sb)	mg/kg	ND	0.1	861524
Total Arsenic (As)	mg/kg	ND	0.2	861524
Total Barium (Ba)	mg/kg	ND	0.1	861524
Total Beryllium (Be)	mg/kg	ND	0.1	861524
Total Bismuth (Bi)	mg/kg	ND	0.1	861524
Total Cadmium (Cd)	mg/kg	0.10	0.05	861524
Total Calcium (Ca)	mg/kg	ND	100	861524
Total Chromium (Cr)	mg/kg	ND	1	861524
Total Cobalt (Co)	mg/kg	ND	0.3	861524
Total Copper (Cu)	mg/kg	7.3	0.5	861524
Total Iron (Fe)	mg/kg	ND	100	861524
Total Lead (Pb)	mg/kg	ND	0.1	861524
Total Magnesium (Mg)	mg/kg	224	100	861524
Total Manganese (Mn)	mg/kg	2.5	0.2	861524
Total Mercury (Hg)	mg/kg	0.67	0.05	861524
Total Molybdenum (Mo)	mg/kg	0.2	0.1	861524
Total Nickel (Ni)	mg/kg	ND	0.8	861524
Total Phosphorus (P)	mg/kg	4800	10	861524
Total Potassium (K)	mg/kg	3200	100	861524
Total Selenium (Se)	mg/kg	1.2	0.5	861524
Total Silver (Ag)	mg/kg	ND	0.05	861524
Total Sodium (Na)	mg/kg	1320	100	861524
Total Strontium (Sr)	mg/kg	0.2	0.1	861524
Total Thallium (Tl)	mg/kg	ND	0.05	861524
Total Tin (Sn)	mg/kg	1.0	0.1	861524
Total Titanium (Ti)	mg/kg	ND	1	861524
Total Vanadium (V)	mg/kg	ND	2	861524
Total Zinc (Zn)	mg/kg	31.7	1	861524
Total Zirconium (Zr)	mg/kg	ND	0.5	861524
ND = Not detected				



Maxxam Job #: A531638
Report Date: 2005/08/23

EBA ENGINEERING
Client Project #: 1740082.023
Site Reference:
Sampler Initials: TA

General Comments

Results relate only to the items tested.

Quality Assurance Report

Maxxam Job Number: VA531638

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
861524 DH4	SPIKE	Total Arsenic (As)	2005/08/18		115	%	75 - 125
		Total Cadmium (Cd)	2005/08/18		103	%	75 - 125
		Total Chromium (Cr)	2005/08/18		110	%	75 - 125
		Total Cobalt (Co)	2005/08/18		108	%	75 - 125
		Total Copper (Cu)	2005/08/18		115	%	75 - 125
		Total Lead (Pb)	2005/08/18		105	%	75 - 125
		Total Mercury (Hg)	2005/08/18		113	%	75 - 125
		Total Selenium (Se)	2005/08/18		110	%	75 - 125
		Total Thallium (Tl)	2005/08/18		99	%	75 - 125
		Total Zinc (Zn)	2005/08/18		115	%	75 - 125
	BLANK	Total Aluminum (Al)	2005/08/18	ND, DL=100		mg/kg	
		Total Antimony (Sb)	2005/08/18	ND, DL=0.1		mg/kg	
		Total Arsenic (As)	2005/08/18	ND, DL=0.2		mg/kg	
		Total Barium (Ba)	2005/08/18	ND, DL=0.1		mg/kg	
		Total Beryllium (Be)	2005/08/18	ND, DL=0.1		mg/kg	
		Total Bismuth (Bi)	2005/08/18	ND, DL=0.1		mg/kg	
		Total Cadmium (Cd)	2005/08/18	ND, DL=0.05		mg/kg	
		Total Calcium (Ca)	2005/08/18	ND, DL=100		mg/kg	
		Total Chromium (Cr)	2005/08/18	ND, DL=1		mg/kg	
		Total Cobalt (Co)	2005/08/18	ND, DL=0.3		mg/kg	
		Total Copper (Cu)	2005/08/18	ND, DL=0.5		mg/kg	
		Total Iron (Fe)	2005/08/18	ND, DL=100		mg/kg	
		Total Lead (Pb)	2005/08/18	ND, DL=0.1		mg/kg	
		Total Magnesium (Mg)	2005/08/18	ND, DL=100		mg/kg	
		Total Manganese (Mn)	2005/08/18	ND, DL=0.2		mg/kg	
		Total Mercury (Hg)	2005/08/18	ND, DL=0.05		mg/kg	
		Total Molybdenum (Mo)	2005/08/18	ND, DL=0.1		mg/kg	
		Total Nickel (Ni)	2005/08/18	ND, DL=0.8		mg/kg	
		Total Phosphorus (P)	2005/08/18	14, DL=10		mg/kg	
		Total Potassium (K)	2005/08/18	ND, DL=100		mg/kg	
		Total Selenium (Se)	2005/08/18	ND, DL=0.5		mg/kg	
		Total Silver (Ag)	2005/08/18	ND, DL=0.05		mg/kg	
		Total Sodium (Na)	2005/08/18	ND, DL=100		mg/kg	
		Total Strontium (Sr)	2005/08/18	0.1, DL=0.1		mg/kg	
		Total Thallium (Tl)	2005/08/18	ND, DL=0.05		mg/kg	
		Total Tin (Sn)	2005/08/18	ND, DL=0.1		mg/kg	
		Total Titanium (Ti)	2005/08/18	ND, DL=1		mg/kg	
		Total Vanadium (V)	2005/08/18	ND, DL=2		mg/kg	
		Total Zinc (Zn)	2005/08/18	ND, DL=1		mg/kg	
		Total Zirconium (Zr)	2005/08/18	ND, DL=0.5		mg/kg	
	RPD						
	[889655-01]	Total Aluminum (Al)	2005/08/18	NC		%	35
		Total Antimony (Sb)	2005/08/18	NC		%	35
		Total Arsenic (As)	2005/08/18	NC		%	35
		Total Barium (Ba)	2005/08/18	NC		%	35
		Total Beryllium (Be)	2005/08/18	NC		%	35
		Total Bismuth (Bi)	2005/08/18	NC		%	35
		Total Cadmium (Cd)	2005/08/18	NC		%	35
		Total Calcium (Ca)	2005/08/18	NC		%	35
		Total Chromium (Cr)	2005/08/18	NC		%	35
		Total Cobalt (Co)	2005/08/18	NC		%	35
		Total Copper (Cu)	2005/08/18	5.4		%	35
		Total Iron (Fe)	2005/08/18	NC		%	35
		Total Lead (Pb)	2005/08/18	NC		%	35
		Total Magnesium (Mg)	2005/08/18	NC		%	35
		Total Manganese (Mn)	2005/08/18	1.4		%	35

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Quality Assurance Report (Continued)

Maxxam Job Number: VA531638

QA/QC Batch	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
861524 DH4	RPD						
	[889655-01]	Total Mercury (Hg)	2005/08/18	NC		%	35
		Total Molybdenum (Mo)	2005/08/18	NC		%	35
		Total Nickel (Ni)	2005/08/18	NC		%	35
		Total Phosphorus (P)	2005/08/18	0.9		%	35
		Total Potassium (K)	2005/08/18	4.8		%	35
		Total Selenium (Se)	2005/08/18	NC		%	35
		Total Silver (Ag)	2005/08/18	NC		%	35
		Total Sodium (Na)	2005/08/18	2.9		%	35
		Total Strontium (Sr)	2005/08/18	NC		%	35
		Total Thallium (Tl)	2005/08/18	NC		%	35
		Total Tin (Sn)	2005/08/18	NC		%	35
		Total Titanium (Ti)	2005/08/18	NC		%	35
		Total Vanadium (V)	2005/08/18	NC		%	35
		Total Zinc (Zn)	2005/08/18	0.4		%	35
		Total Zirconium (Zr)	2005/08/18	NC		%	35
		Total Aluminum (Al)	2005/08/18	NC		%	35
		Total Antimony (Sb)	2005/08/18	NC		%	35
		Total Arsenic (As)	2005/08/18	NC		%	35
		Total Barium (Ba)	2005/08/18	NC		%	35
		Total Beryllium (Be)	2005/08/18	NC		%	35
		Total Bismuth (Bi)	2005/08/18	NC		%	35
		Total Cadmium (Cd)	2005/08/18	NC		%	35
		Total Calcium (Ca)	2005/08/18	NC		%	35
		Total Chromium (Cr)	2005/08/18	NC		%	35
		Total Cobalt (Co)	2005/08/18	NC		%	35
		Total Copper (Cu)	2005/08/18	3.1		%	35
		Total Iron (Fe)	2005/08/18	NC		%	35
		Total Lead (Pb)	2005/08/18	NC		%	35
		Total Magnesium (Mg)	2005/08/18	NC		%	35
		Total Manganese (Mn)	2005/08/18	NC		%	35
		Total Mercury (Hg)	2005/08/18	NC		%	35
		Total Molybdenum (Mo)	2005/08/18	NC		%	35
		Total Nickel (Ni)	2005/08/18	NC		%	35
		Total Phosphorus (P)	2005/08/18	6.1		%	35
		Total Potassium (K)	2005/08/18	1		%	35
		Total Selenium (Se)	2005/08/18	NC		%	35
		Total Silver (Ag)	2005/08/18	NC		%	35
		Total Sodium (Na)	2005/08/18	1.7		%	35
		Total Strontium (Sr)	2005/08/18	NC		%	35
		Total Thallium (Tl)	2005/08/18	NC		%	35
		Total Tin (Sn)	2005/08/18	NC		%	35
		Total Titanium (Ti)	2005/08/18	NC		%	35
		Total Vanadium (V)	2005/08/18	NC		%	35
		Total Zinc (Zn)	2005/08/18	2.4		%	35
		Total Zirconium (Zr)	2005/08/18	NC		%	35
		Total Aluminum (Al)	2005/08/18	NC		%	35
		Total Antimony (Sb)	2005/08/18	NC		%	35
		Total Arsenic (As)	2005/08/18	NC		%	35
		Total Barium (Ba)	2005/08/18	2.9		%	35
		Total Beryllium (Be)	2005/08/18	NC		%	35
		Total Bismuth (Bi)	2005/08/18	NC		%	35
		Total Cadmium (Cd)	2005/08/18	NC		%	35
		Total Calcium (Ca)	2005/08/18	5.1		%	35
		Total Chromium (Cr)	2005/08/18	NC		%	35
		Total Cobalt (Co)	2005/08/18	NC		%	35

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Quality Assurance Report (Continued)

Maxxam Job Number: VA531638

QA/QC Batch			Date Analyzed				
Num Init	QC Type	Parameter	yyyy/mm/dd	Value	Recovery	Units	QC Limits
861524 DH4	RPD [889664-01]	Total Copper (Cu)	2005/08/18	NC		%	35
		Total Iron (Fe)	2005/08/18	NC		%	35
		Total Lead (Pb)	2005/08/18	NC		%	35
		Total Magnesium (Mg)	2005/08/18	NC		%	35
		Total Manganese (Mn)	2005/08/18	1.6		%	35
		Total Mercury (Hg)	2005/08/18	3.0		%	35
		Total Molybdenum (Mo)	2005/08/18	NC		%	35
		Total Nickel (Ni)	2005/08/18	NC		%	35
		Total Phosphorus (P)	2005/08/18	6.8		%	35
		Total Potassium (K)	2005/08/18	1.2		%	35
		Total Selenium (Se)	2005/08/18	NC		%	35
		Total Silver (Ag)	2005/08/18	NC		%	35
		Total Sodium (Na)	2005/08/18	0.2		%	35
		Total Strontium (Sr)	2005/08/18	2.4		%	35
		Total Thallium (Tl)	2005/08/18	NC		%	35
		Total Tin (Sn)	2005/08/18	NC		%	35
		Total Titanium (Ti)	2005/08/18	NC		%	35
		Total Vanadium (V)	2005/08/18	NC		%	35
		Total Zinc (Zn)	2005/08/18	2.6		%	35
		Total Zirconium (Zr)	2005/08/18	NC		%	35
ND = Not detected NC = Non-calculable RPD = Relative Percent Difference							

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APPENDIX

APPENDIX G STREAM HABITAT ASSESSMENT DATA

APPENDIX G - STREAM CROSSINGS RAW DATA
STREAM HABITAT ASSESSMENT - SITE 1 - Proposed Access Road

Stream Habitat Assessment - Site 1 - Proposed Access Road							
Coordinates @ Station 4	N 63 14 33.2						
	W 113 48 44.3						
Elevation (m)	313						
Date, Time	May 27, 10:00 AM						
	Station 1 (30m Downstream)	Station 2 (20m Downstream)	Station 3 (10m Downstream)	Station 4 (Estimated Road Crossing)	Station 5 (10m Upstream)	Station 6 (20m Upstream)	Station 7 (30m Upstream)
Substrate	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt
Wetted Width (m)	13.5	11.5	4.9	5.8	14.8	8	6.6
Channel Width (m)	15.5	15.3	6.5	7.8	17.8	11.1	9.7
Water depth (cm)	31	34	33	25	41	42	
Cover Percent	75	80	40	40	75	60	40-60
D.O.	9.7 (7.35 on June 3rd)	9	8.38	8.5 (7.33 on June 3rd)	7.6	9.1	9.88 (7.25 on June 3rd)
Temperature	3.1	4	3.5	3.4	3.5	4	4.9
Conductivity	0.01	0.02	0.02	0.02	0.02	0.02	0.04
pH							6.11
Instream veg	willow, sedge	sedge, willow	sedge, willow	sedge	willow, sedge	willow	willow, sedge, spruce
Riparian veg	birch, spruce	sparse birch, spruce, willow	willow	willow, sparse spruce and birch	spruce, willow	spruce	willow, sedge, spruce
approx Velocity	0.2	0.2	0.25	0.33	0.2	0.25	
Observed habitat value	good for pike	moderate	poor to moderate	poor to moderate	good	good	good
Electroshocker Effort (conducted June 3rd)	217 seconds (all stations). No fish captured. No fish observations						
Comments	natural path	natural path	channel banks off winter road at this point, then travels along natural path	on winter road	channel banks onto winter road at this point, then travels along road	natural path	natural path

Note: Stations 3,4,5 fall on winter road

Note: Stations 1-6 evaluated on May 27, 10:00 AM. Station 7 assessed May 26, 2:00 PM.

Electroshocker settings: Mode Switch I-3, Voltage 300/400

APPENDIX G - STREAM CROSSINGS RAW DATA
STREAM HABITAT ASSESSMENT - SITE 2 - Proposed Access Road

Stream Habitat Assessment - Site 2 - Proposed Access Road							
Coordinates @ Station 4	N 63 14 33.2						
	W 113 48 57.0						
Date, Time	May 27, 12:00						
	Station 1 (30m Downstream)	Station 2 (20m Downstream)	Station 3 (10m Downstream)	Station 4 (Estimated Road Crossing)	Station 5 (10m Upstream)	Station 6 (20m Upstream)	Station 7 (30m Upstream)
Substrate	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt	Organic with some fine silt
Wetted Width (m)	4.5	9.9	10.5	3.3	2.4	3	4.2
Channel Width (m)	5.9	11.5	12.2	5.2	4.4	5.1	6.4
Water depth (cm)	45	46	37	36	38	17	37
Cover Percent	20	60	70	50	50	70	50
D.O.	6.55 (June 3rd)			6.75 (June 3rd)			6.77 (June 3rd)
Temperature	6.7 (12.4 on June 3rd)	7.1	6.9	6.8 (12.5 on June 3rd)	6.9	6.8	6.8 (12.5 on June 3rd)
Conductivity	0.04	0.04	0.04	0.04	0.04	0.04	0.04
pH							
Instream veg	willow, sedge	willow, sedge	sedge, willow	sedge	willow, sedge	willow, sedge	willow, sedge
Riparian veg	spruce, willow	spruce	spruce	spruce	spruce	spruce	spruce
approx Velocity	0.1	0.1		0.33	0.5	0.5	0.15
Observed habitat value	moderate	moderate to good	moderate to good	moderate	good	good	good
Electroshocker Effort (conducted June 3rd)	202 seconds (all stations). No fish captured, No fish observations						
Comments	channel distinct	pool	large pool	channel distinct	above riffle, channel distinct	riffle, channel distinct	
evidence of forest fire							

Note: Station 4 on winter road

Note: Downstream of sampling points Location 2 channel has confluence with Location 1 stream and both then flow into

Electroshocker settings: Mode Switch I-3, Voltage 400

APPENDIX G - STREAM CROSSINGS RAW DATA
STREAM HABITAT ASSESSMENT - SITE 3 - Proposed Access Road

Stream Habitat Assessment - Site 3 - Proposed Access Road							
Coordinates @ Station 4	N 63 13 8.2						
	W 113 52 23.6						
Elevation	315						
Date, Time	May 27, 2:00 PM						
	Station 1 (30m Downstream)	Station 2 (20m Downstream)	Station 3 (10m Downstream)	Station 4 (Estimated Road Crossing)	Station 5 (10m Upstream)	Station 6 (20m Upstream)	Station 7 (30m Upstream)
Substrate	Organic debris	Organic debris	Organic debris	Organic debris	Organic debris	Organic debris	Organic debris
Wetted Width (m)	3.9	6.9	6	10.6	13.8	4.3	9.7
Channel Width (m)	4.9	12.1	15	12.6	17	6.3	10.9
Water depth (cm)	12	9	26	29	18	20	10
Cover Percent	50	60	70	80	60	70	90
D.O.	10.04 (June 3rd)			4.86 (June 3rd)			5.53 (June 3rd)
Temperature	6.4 (6.9 on June 3rd)	5.7	4.7	4.8 (5.3 on June 3rd)	4.8	4.3	4.8 (5.0 on June 3rd)
Conductivity	0	0	0	0	0	0	0
pH	5.97	5.6	5.7	5.6	5.6	5.66	5.54
Instream veg	sedge, spagnum moss	sedge, spagnum moss	sedge, spagnum moss	sedge, spagnum moss, willow	sedge, spagnum moss, willow	sedge, spagnum moss, willow	sedge, spagnum moss, willow
Riparian veg	birch	birch	spruce	spruce	spruce	spruce, labrador tea	spruce, labrador tea
approx Velocity							
Observed habitat value	poor	poor	poor	moderate	moderate	poor to moderate	poor to moderate
Electroshocker Effort (conducted June 3rd)	125 seconds (all stations). No fish captured, No fish observations						
Comments		bear scat	moose scat. Slope flattens		ponds could be suitable fish habitat. Spagnum bog	ponds could be suitable fish habitat. Spagnum bog	ponds could be suitable fish habitat. Spagnum bog

Note: possible fish barrier down stream of Station 1 due to slope. Channel highly braided. Low water flow. Evidence of forest fire. Water velocity at stations 1-3 higher due to increased slope relative to other stations

Inclinometer readings: Stations 6 to Station 4: 0.5 degrees. Station 3 to station 1: 8 degrees. Station

Electroshocker settings: Mode Switch I-3, Voltage 400

During electroshocking on June 3rd, flow was greatly reduced compared to May 27

APPENDIX G - STREAM CROSSINGS RAW DATA
STREAM HABITAT ASSESSMENT - SITE 4 - Proposed Access Road

Stream Habitat Assessment - Site 4 - Proposed Access Road							
Coordinates @ Station 4	N 63 11 25.2						
	W 113 53 42.7						
Elevation	282						
Date, Time	May 27, 5:00 PM						
	Station 1 (30m Downstream)	Station 2 (20m Downstream)	Station 3 (10m Downstream)	Station 4 (Estimated Road Crossing)	Station 5 (10m Upstream)	Station 6 (20m Upstream)	Station 7 (30m Upstream)
Substrate	Organic over cobble	Organic over cobble (ice)	Organic over cobble (ice)	Organic over cobble (ice)	Organic over cobble (ice)	Organic over cobble (ice)	Organic over cobble (ice)
Wetted Width (m)	40	25	18	13.1	18.4	19	21
Channel Width (m)	45	28.4	22.5	15.5	20.2	22	23.5
Water depth (cm)	26	25	21	18	18	15	24
Cover Percent	80	60	40	50-70	50-70	40-50	70-90
D.O.	12.31 (June 3rd)			13.10 (June 3rd)			12.9 (June 3rd)
Temperature	1.0 (2.4 on June 3rd)	0.7	0.6	0.6 (2.1 on June 3rd)	0.6	0.5	0.5 (1.8 on June 3rd)
Conductivity	0.02	0.02	0.02	0.01	0.02	0.02	0
pH	6.15	6.23	6.32	6.37	6.23	6.25	7
Instream veg	willow, spagnum moss, spruce	willow, spagnum moss, spruce	willow, spagnum moss, spruce	willow, spagnum moss, spruce	willow, spagnum moss, spruce	willow, spagnum moss, spruce	willow, spagnum moss, spruce
Riparian veg	willow, spagnum moss, spruce, labrador tea	willow, spagnum moss, spruce, birch, labrador tea	willow, spagnum moss, spruce, birch, labrador tea	willow, spagnum moss, spruce, birch, labrador tea	willow, spagnum moss, spruce, birch, labrador tea	willow, spagnum moss, spruce, birch, labrador tea	willow, spagnum moss, spruce, birch, labrador tea
approx Velocity	0.5	0.5	0.33	0.5	0.5	0.5, 2	0.5, 3
Observed habitat value	moderate to good	moderate to good	moderate to good	moderate to good	moderate to good	moderate to good	moderate to good
Electroshocker Effort (conducted June 3rd)	198 seconds (all stations). No fish captured, No fish observations						
Comments	Wide meandering channel, braided		more defined bank on north side	more defined bank on north side	more defined bank on north side. Spuce and willow on islands.	small fall (not judged to be a fish barrier)	flooded terrestrial environment

Note: increasing ice upstream. Could be flood plain accomodating snow melt. Less flow and smaller channel anticipated in summer. Most stations resemble flooded terrestrial environment, heavy vegetation, undefined channel and highly braided.

Electroshocker settings: Mode Switch I-3, Voltage 400

During electroshocking on June 3rd, flow was greatly reduced compared to May 27. Much of the ice had melted, however still ice under stream bed

APPENDIX G - STREAM CROSSINGS RAW DATA
WINTER LAKE NARROW LAKE - CREEK HABITAT ASSESSMENT

Winter Lake & Narrow Lake Creek Habitat Assessment							
Total Length of Creek	165 m						
Date, Time	May 29, 11:00 AM						
	Station 1 - Winter Lake Outlet	Station 2 - Winter Lake Outlet Trap (25m downstream from outlet)	Station 3 - Narrow Lake Inlet Trap (50m downstream from outlet)	Station 4 (75m downstream from outlet)	Station 5 (100m downstream from outlet)	Station 6 (125m downstream from outlet)	Station 7 - Narrow Lake Inlet
Coordinates	N 63 11' 25.2"	N 63 10' 5.2"	N 63 10' 5.5"				N 63 10" 5.2"
	W 113 53' 42.7"	W 113 55' 44.1"	W 113 55' 43.9"				W 113 55' 45.4"
Elevation	279m	279m	281m?				277
Substrate	Silty gravel, some organics	Gravel, some silt	Organic and cobble, some boulders	Organic	undeterminable due to ice cover	Organic	Organic and silt, some boulders
Wetted Width (m)	2.3	2.2	5	9.8	undeterminable due to ice cover	16	24 (wetland or lake inundation)
Channel Width (m)	3.3	3	5.6	10	undeterminable due to ice cover	17.5	1 (main channel)
Water depth (cm)	36	35	36	21	undeterminable due to ice cover	44	56
Cover Percent	40	10	20	80	undeterminable due to ice cover	100	90 (main channel 0)
Instream veg	sedge	sedge	sedge, willow	sedge	willow, spruce (through ice)	sedge, willow	willow, sedge (wetland), nothing (channel)
Riparian veg	birch, willow, labrador tea	birch, spruce, willow, labrador tea	birch, willow	birch, willow, spruce	willow, spruce (through ice)	willow, sedge	willow, sedge
approx Velocity	0.5	0.25	0.75	low (pool)	undeterminable due to ice cover	N / A	0.33
Observed habitat value	good	good	good	good (pike)	undeterminable due to ice cover	good	good
Comments	defined channel, overhanging vegetation	defined channel, some overhanging vegetation, staff gauge: 0.375m			Station 100 m from Winter lake outlet 100% ice covered	Station 125 m from Winter lake outlet 50% ice covered, Rock bluff 10m to south of south shoreline	Inlet is wide and braided, including winter road area. Wetland habitat; sedge and willow. Principle inlet flow is in deep (56cm), narrow (1m) channel

Notes:
12 m downstream from Narrow Lake trap, main flow enters Winter road where water pools
Inclinometer readings:
65 m upstream of Narrow Lake Inlet to Narrow Lake inlet:1 degree
Winter Lake outlet to 75 m downstream of outlet: 2.5-3 degrees

APPENDIX

APPENDIX H WINTER LAKE SNORKEL SURVEY DATA

APPENDIX H - WINTER LAKE SNORKEL SURVEY DATA

Winter Lake Snorkel Survey					
Transect	Total Length (m)	Distance (m)	Visibility (m)	Water Depth (m)	Substrate
T1	50	50-10	1.5	2.50	100% silt
T1		10-0		1.20	90% round boulders, 10% cobble/gravel. 15% vegetation cover (pond lilly)
T2	50	50-9.5	1.5	2.80	100% silt
T2		9.5-7		1.35	100% angular boulders
T2		7-5		0.50	80% gravel, 20% silt (organic layer over top), 10% vegetation (scouring rush)
T2		5-3		0.40	80% boulder, 10% vegetaion (SB #1)
T2		3-1.5		0.30	90% sedge, substrate 80 % silt, 20% gravel
		1.5-0		0.30	100% willow
T3	50	50-21	1.5	4.50	100% silt
T3		21-13.5		2.80	100% silt
T3		13.5-11.5		1.10	100% rounded boulders
T3		11.5-6.5		0.70	70% gravel, 30% silt
T3		6.5-0		0.35	100% boulders, sparse scouring rush.
T4	50	50-25	1.5	1.10	100% silt over hard clay (clay becomes softer, 30 m from shore)
T4		25-18		0.90	100% silt, sparse emergent vegetation (scouring rush)
T4		18-12		0.70	100% silt, sparse emergent vegetation (scouring rush) and SB#1
T4		12-0		0.55	80% silt, 20% cobble, 10% vegetation (scouring rush and SB#1), sedge at shoreline
T5	50	50-30	1.5	1.00	100% silt
T5		30-13		0.90	100% silt, 80% vegetation cover Soft-stemmed rush
T5		13-0		0.50	100% silt over cobble, 80% cover of Soft-stemmed rush
T6	50	50-12	1.5	1.80	100% silt
T6		12-0		0.70	angular boulders, sparse vegetation, submergent milfoil and SP#2
T7	50	50-8	1.5	1.30	100% Soft spongy organics/ silt
T7		8-3		0.80	100% Soft spongy organics / silt, 50 % emmergent vegetation (yellow pond lillys)
T7		3-0		0.40	50% silt organic, 50% cobble, 70% emmergent vegetation (yellow pond lilly), sparse SB #1
T8	50	50-13	1.5	0.95	100% organics/silt
T8		13-3		0.30	100% organics/silt, sparse vegetation (burreed)
		3-1		0.25	100% organics/silt, 50% vegetation (25% burreed, 25% yellow pond lilly, sparse Richardson's pondweed)
T8		1-0		0.25	100% organic/ silt, willow extending over water
T9	50	50-25	1.5	0.90	100% organic/ silt
T9		25-15		0.75	organic layer over rounded boulders
		15-6		0.70	angular boulders
T9		6-0		0.45	substrate angular shale over bedrock, willow and alder hanging over water
T10	50	50-15	1.5	0.95	100% organic silt,
T10		15-7		0.75	organic layer over angular boulders, sparse vegetaion (water milfoil)

APPENDIX H - WINTER LAKE SNORKEL SURVEY DATA

Transect	Total Length (m)	Distance (m)	Visibility (m)	Water Depth (m)	Substrate
T10		7-0		0.50	cobble and gravel over bedrock, sparse thread-leaved pondweed, and various-leaved pondweed, willow at shoreline
T11	50	50-18	1.5	1.20	100% silt/organic
T11		18-10		0.95	90% angular cobble, 10% silt
		10-7		0.75	50% angular boulders, 30% gravel, 20% silt, 30% vegetation cover (bladder wort), willow overhanging from shore
		7-0		0.50	50% angular boulders, 30% gravel, 20% silt, 30% vegetation cover (scouring rush)
T12	50	50-34	1.5	1.45	100% organic/silt
		34-21		1.20	100% organic/ silt, sparse vegetation (yellow pond lilly)
		21-5		0.75	95% organic/ silt, 5% angular boulders, sparse vegetation (yellow pond lilly)
		5-0		0.50	40% cobble, 40% gravel, 20% organic silt, willow overhanging from shoreline

APPENDIX

APPENDIX I FIELD WATER QUALITY DATA AND DEPTH PROFILES

APPENDIX I - FIELD WATER QUALITY DATA

Field Water Quality Data - Streams					
Water Name:	Winter Lake Outlet Stream				
Sample Date:	Water Temperatures (degrees C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	pH	
28/05/2004	6.30		0.20	7.03	
29/05/2004	7.80		0.21	7.09	
30/05/2004	8.40		0.18	6.90	
31/05/2004	6.00		0.18	7.17	
1/6/2004	7.70		0.20	7.07	
2/6/2004	8.90		0.21	7.16	
3/6/2004	10.40		0.22	7.14	
Water Name:	Narrow Lake Inlet Stream				
Sample Date:	Water Temperatures (degrees C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	pH	
28/05/2004	6.40		0.21	7.07	
29/05/2004	7.80		0.20	7.12	

APPENDIX I - FIELD WATER QUALITY DATA

30/05/2004	8.40		0.18	7.02
31/05/2004			0.18	7.16
1/6/2004	7.80		0.20	7.15
2/6/2004	8.50		0.21	7.16
3/6/2004	10.40		0.21	7.20

Field Water Quality Data - Proposed Access Road Stream Crossings

Water Name:	Proposed All Weather Road Stream Crossings			
Sample Date:	27/05/2005			
Location	Water Temperatures (degrees C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	pH
Site 1				
Station 1	3.10	9.70	0.01	
Station 2	4.00	9.00	0.02	
Station 3	3.50	8.38	0.02	
Station 4	3.40	8.50	0.02	
Station 5	3.50	7.60	0.02	
Station 6	4.00	9.10	0.02	
Station 7	4.90	9.88	0.04	6.11
Site 2				
Station 1	6.70		0.04	
Station 2	7.10		0.04	
Station 3	6.90		0.04	
Station 4	6.80		0.04	
Station 5	6.90		0.04	
Station 6	6.80		0.04	
Station 7	6.80		0.04	
Site 3				
Station 1	6.40		0.00	5.97
Station 2	5.70		0.00	5.60
Station 3	4.70		0.00	5.70
Station 4	4.80		0.00	5.60
Station 5	4.80		0.00	5.60
Station 6	4.30		0.00	5.66
Station 7	4.80		0.00	5.54
Site 4				
Station 1	1.00		0.02	6.15
Station 2	0.70		0.02	6.23
Station 3	0.60		0.02	6.32
Station 4	0.60		0.01	6.37
Station 5	0.60		0.02	6.23
Station 6	0.50		0.02	6.25
Station 7	0.50		0.00	7.00
Sample Date:	3/6/2005			
Location	Water Temperatures (degrees C)	Dissolved Oxygen (mg/L)	Specific Conductivity (µs/cm)	pH
Site 1				
Station 1	7.35			
Station 4	7.33			
Station 7	7.25			
Site 2				
Station 1	12.40	6.55		
Station 4	12.50	6.75		
Station 7	12.50	6.77		
Site 3				
Station 1	6.90	10.04		
Station 4	5.30	4.86		
Station 7	5.00	5.53		
Site 4				
Station 1	2.40	12.31		
Station 4	2.10	13.10		
Station 7	1.80	12.90		

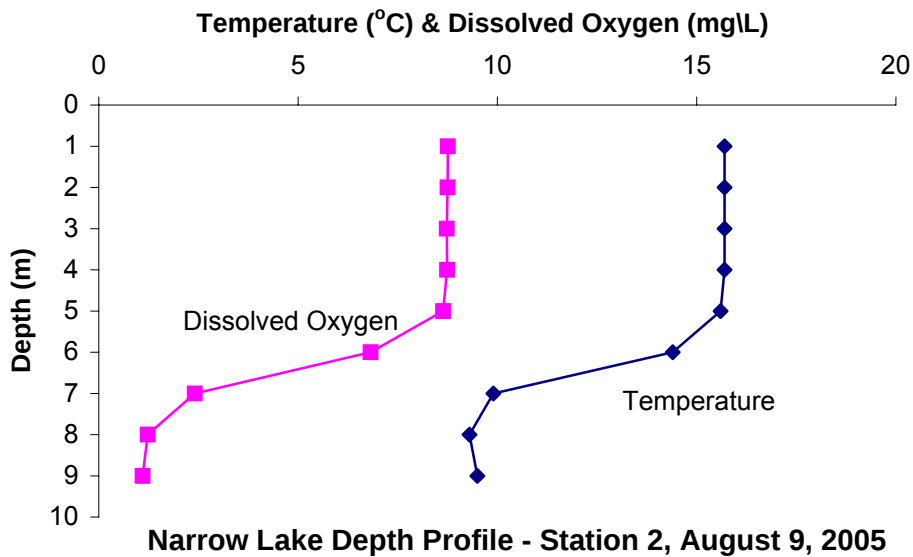
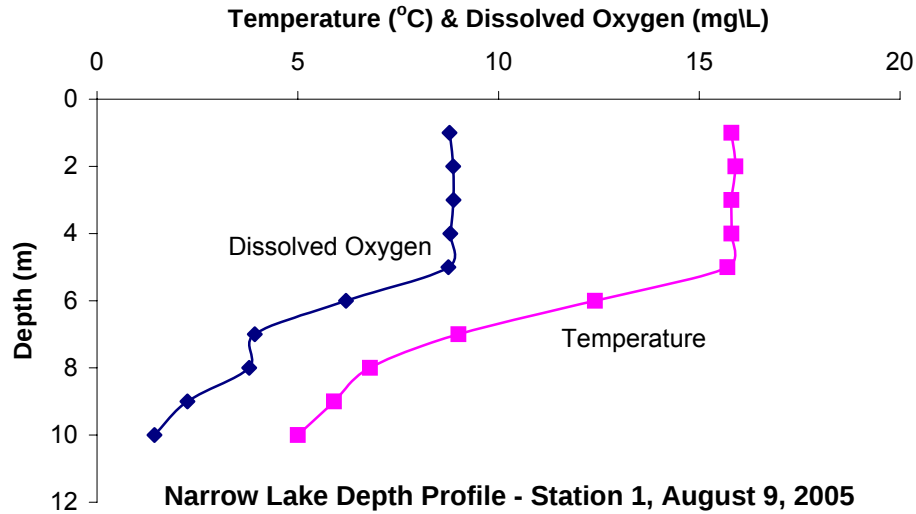
Notes:

** Depth indicates thermocline

Specific conductivity is reported as conductivity at 25 degrees Celsius (25 C).

APPENDIX I - WATER QUALITY DATA

Dissolved Oxygen and Temperature Profiles for Narrow Lake

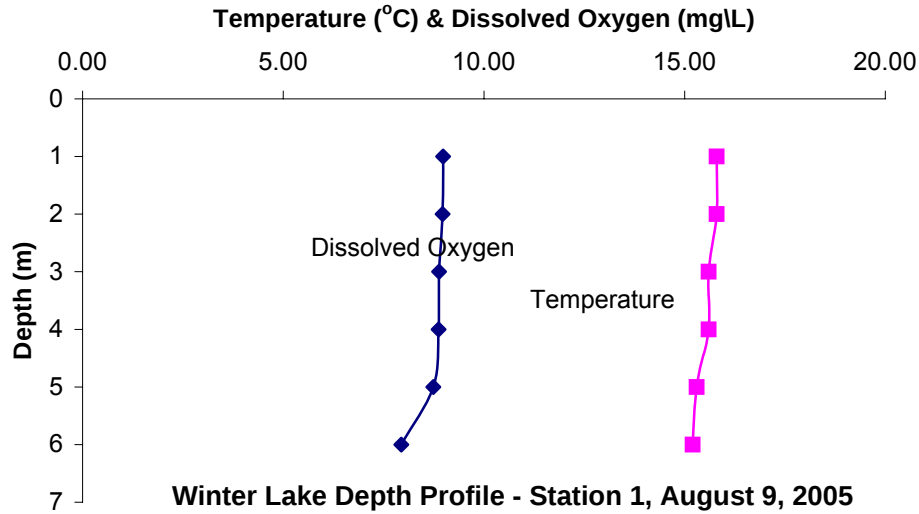


Note:

See Figure 8 for sample locations

APPENDIX I - WATER QUALITY DATA

Dissolved Oxygen and Temperature Profiles for Winter Lake



Note:

See Figure 7 for sample locations