

APPENDIX D

HYDROMETRIC STATION DESCRIPTIONS

- D.1 General Information**
- D.2 Third Portage Lake Outlet**
- D.3 Tern Lake Outlet**
- D.4 Drilltrail Lake Outlet**
- D.5 Second Portage Lake Outlet**

APPENDIX D.1

General Information

Hydrometric Station Descriptions General Information

This appendix contains the following standard information for each station:

- A "Hydrometric Station Description" master record sheet with sketches and information regarding history, location coordinates, equipment, description of the measurement and control sections, and description of the station benchmarks; and
- A "Gauge History" page reporting the benchmark surveys made at the site.

APPENDIX D.2

Third Portage Lake Outlet

AMEC EARTH & ENVIRONMENTAL HYDROMETRIC STATION DESCRIPTION

Station No.: _____ Drainage Area: 88.9 km²
 Station Name: (3PL) THIRD PORTAGE LAKE OUTLET
 District: _____
 Latitude: N 65.0132 Longitude: W 96.0516
 UTM NAD: 83 GRID: 14 E: 638928
 N: 7213171
 Established: 25 JUNE 2002 By: DAN DUBE /AMC/
NVDC

Description of Gauging Equipment and Location:

SHELTER CONTAINS VEDAS II LOGGER
AND SAFE PURGE AND
PRESSURE TRANSDUCER

STATION IS LOCATED 79.5 km NORTH OF
BAKER LAKE AIRPORT, 1.0 km ENE OF OLD
MEADOWBANK CAMP
GAUGE IS ON RIGHT BANK OF WEST OUTLET
OF 3PL

Description of Control & Measuring Section

NATURAL ROCK AND BOULDER CONTROL

WADING MEASUREMENTS MADE ~ 150-200m
DOWNSTREAM OF STATION. SECTION CONSISTS
OF SMALL AND MEDIUM SIZED BOULDERS.

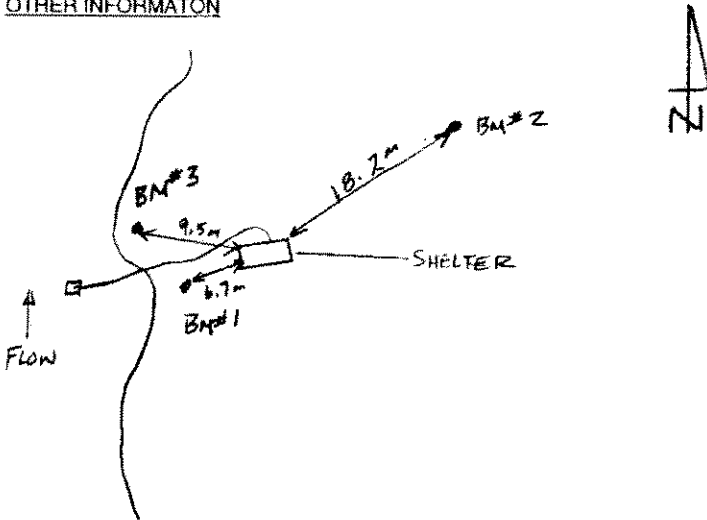
Prepared By: A. CHAN Date: 27 AUG 2002

ELEVATION OF GAUGE DATUM AND DESCRIPTION OF BENCH MARKS

Elevation Of Gauge Datum: 0.000 m. (assumed)
 Conversion Equation: _____ to convert to _____

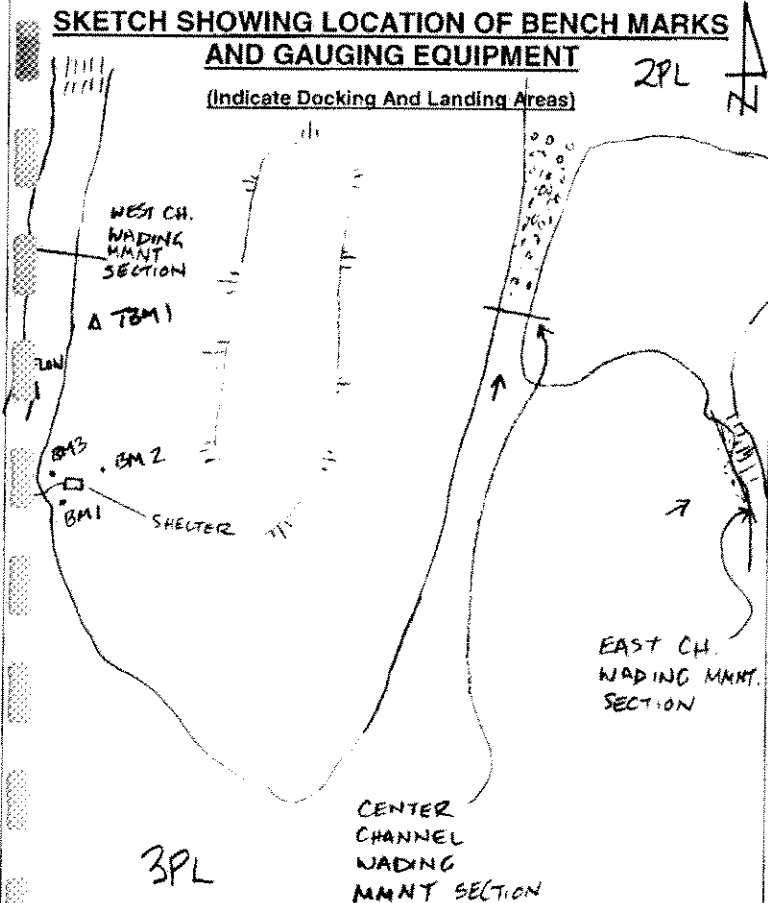
BM#1 RED PAINT MARK ON BEDROCK
 6.7m WEST OF SHELTER ELEV. 10.000m
 BM#2 RED PAINT MARK ON LARGE ROCK
 18.2m NORTHEAST OF SHELTER ELEV. 10.523m
 BM#3 RED PAINT MARK ON BEDROCK
 9.5m WNW OF SHELTER ELEV. 9.800m

OTHER INFORMATION



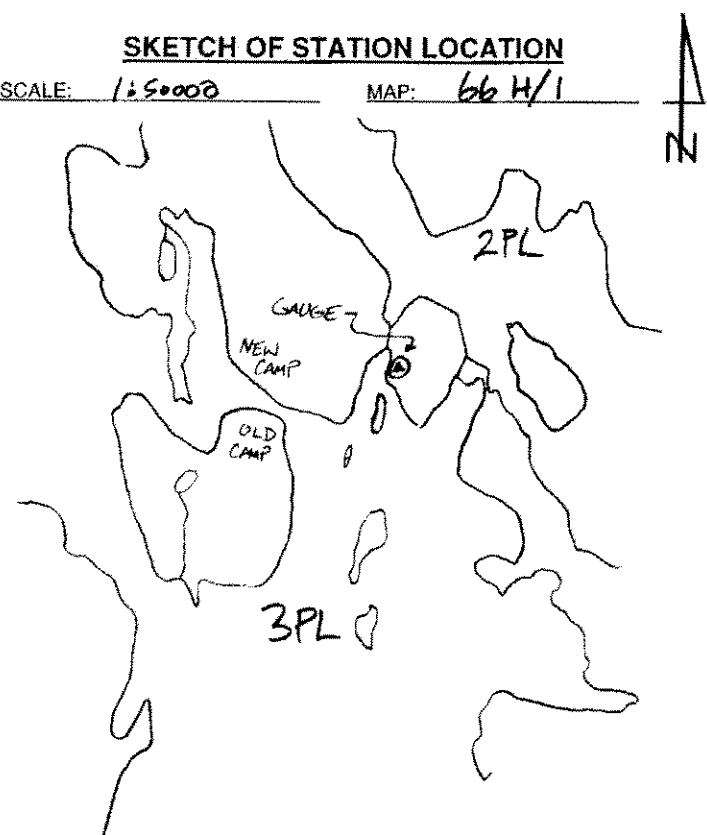
SKETCH SHOWING LOCATION OF BENCH MARKS AND GAUGING EQUIPMENT

(Indicate Docking And Landing Areas)



SKETCH OF STATION LOCATION

SCALE: 1:50000 MAP: 66 H/1



GAUGE HISTORY

STATION NAME: Outlet of Third Portage Lake (3PL)
STATION NUMBER: **ELEVATION OF GAUGE DATUM:** 0.000 m.
LATITUDE: N 65° 00' 48" **LONGITUDE:** W 96° 03' 06"
UTM NAD83 Grid: 14 **Easting:** 638 928 **Northings:** 7 213 171
BENCH MARKS:

B.M. #1	Red paint mark on bedrock 6.7 meters W of shelter.	Elev. 10.000 m. (assumed)
B.M. #2	Red paint mark on large rock 18.2 meters NE of shelter.	Elev. 10.523 m.
B.M. #3	Red paint mark on bedrock 9.5 meters WNW of shelter.	Elev. 9.800 m.
T.B.M. #1	Red paint mark and flagging on bedrock ~ 50 metres S of shelter.	Elev. 10.044 m.

B.M. #1 is control bench mark.

HISTORY OF GAUGE CORRECTIONS, BENCH MARKS, AND OTHER EQUIPMENT

DATE	GAUGE CORRECTIONS (BENCH MARK USED TO OBTAIN WATER LEVELS: BOLD TYPE AND UNDERLINED)					NOTES ON INSTALLATION OR REMOVAL OF BENCH MARKS, ETC.
	B.M. #1	B.M. #2	B.M. #3	T.B.M. #1		
2002						
25 June	10.000	10.539	<u>9.802</u>			Established Bench Marks
27 June	10.000	10.532	<u>9.801</u>			
27 July	10.000	10.523	<u>9.801</u>			
28 July	10.000	10.523	<u>9.800</u>	10.044		
20 Sept	10.000	10.515	<u>9.801</u>	10.031		
2003						
8 May	10.000	10.551	<u>9.801</u>			
4 Jun	10.000	10.557	<u>9.801</u>			
7 June	10.000	10.555	<u>9.801</u>			
9 June	10.000	10.551	<u>9.801</u>			
10 June	10.000	10.552	<u>9.801</u>			
12 June	10.000	10.556	<u>9.801</u>			
13 June	10.000		<u>9.800</u>			
25 Jul	10.000	10.530	<u>9.800</u>			
7 Sept	10.000	10.511	<u>9.803</u>			
2004						
22 May	10.000	10.542	<u>9.802</u>			
25 June	10.000	10.544	<u>9.802</u>			
27 June	10.000	10.536	<u>9.801</u>			
28 June	10.000	10.532	<u>9.802</u>			
29 June	10.000	10.530	<u>9.801</u>			
29 June	10.000	10.528	<u>9.801</u>			
2 July	10.000	10.525	<u>9.801</u>			
4 July	10.000	10.524	<u>9.801</u>			
6 Aug	10.000	10.519	<u>9.801</u>			
11 Sept	10.000	10.519	<u>9.802</u>			

APPENDIX D.3

Tern Lake Outlet

AMEC EARTH & ENVIRONMENTAL HYDROMETRIC STATION DESCRIPTION

Station No.: _____ Drainage Area: 20.9 km²

Station Name: TERN LAKE OUTLET

District: _____

Latitude: N 65.0499 Longitude: W 96.0051

UTM NAD: 83 GRID: 14 E: 640926

N: 7217355

Established: 26 JUNE 2002 By: P. DUBE /AMC/

NVDC

Description of Gauging Equipment and Location:

SHELTER CONTAINS VEDAS II LOGGER
WITH SAFE PURGE AND
PRESSURE TRANSDUCER

STATION IS LOCATED 83.7 km NORTH OF
BAKER LAKE AIRPORT, 5.5 km NE OF
OLD MEADOWBANK CAMP

GAUGE IS ON RIGHT BANK OF TERN LAKE
OUTLET

Description of Control & Measuring Section

NATURAL ROCK AND BOULDER CONTROL

WADING MEASUREMENTS MADE ~ 50m
DOWNSTREAM OF STATION. SECTION CONSISTS
OF SMALL AND MEDIUM SIZED BOULDERS

Prepared By: A. CHAN Date: 28 AUG 2002

ELEVATION OF GAUGE DATUM AND DESCRIPTION OF BENCH MARKS

Elevation Of Gauge Datum: 0.000 m, (assumed)

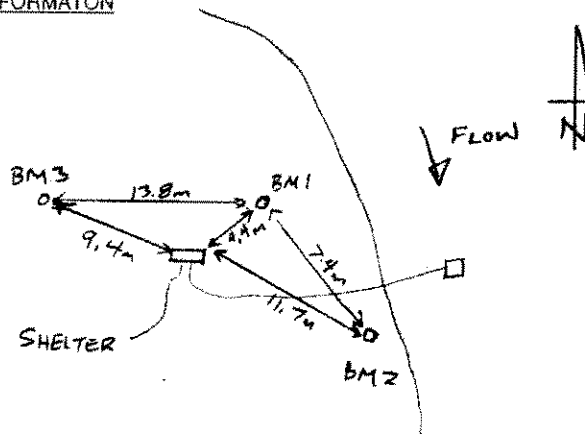
Conversion Equation: _____ to convert to _____

BM #1 RED PAINT ON LARGE ROCK
4.4m NE OF SHELTER ELEV. 10.000 m

BM #2 RED PAINT ON BEDROCK NEAR WATER'S EDGE
11.7m SE OF SHELTER ELEV. 9.682 m

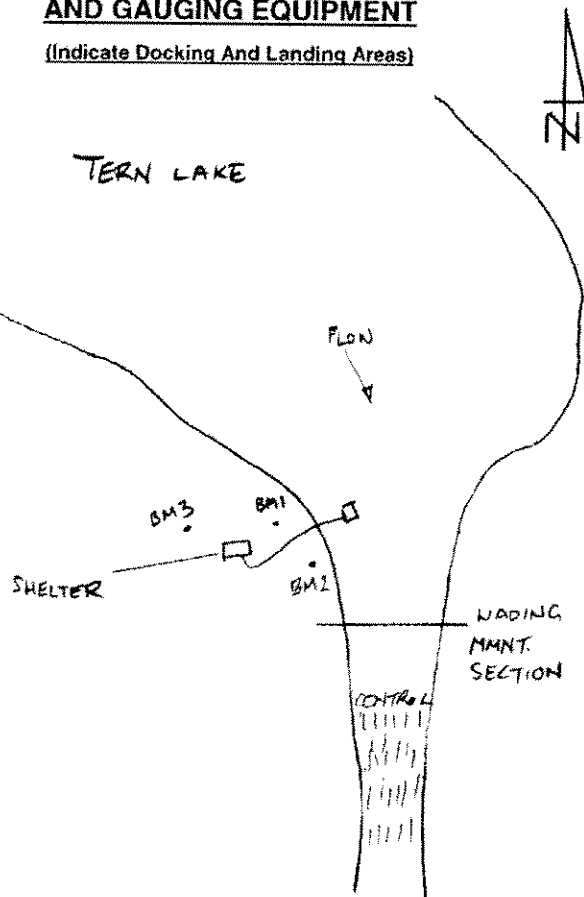
BM #3 RED PAINT ON LARGE ROCK
9.4m NW OF SHELTER ELEV. 10.219 m

OTHER INFORMATION



SKETCH SHOWING LOCATION OF BENCH MARKS AND GAUGING EQUIPMENT

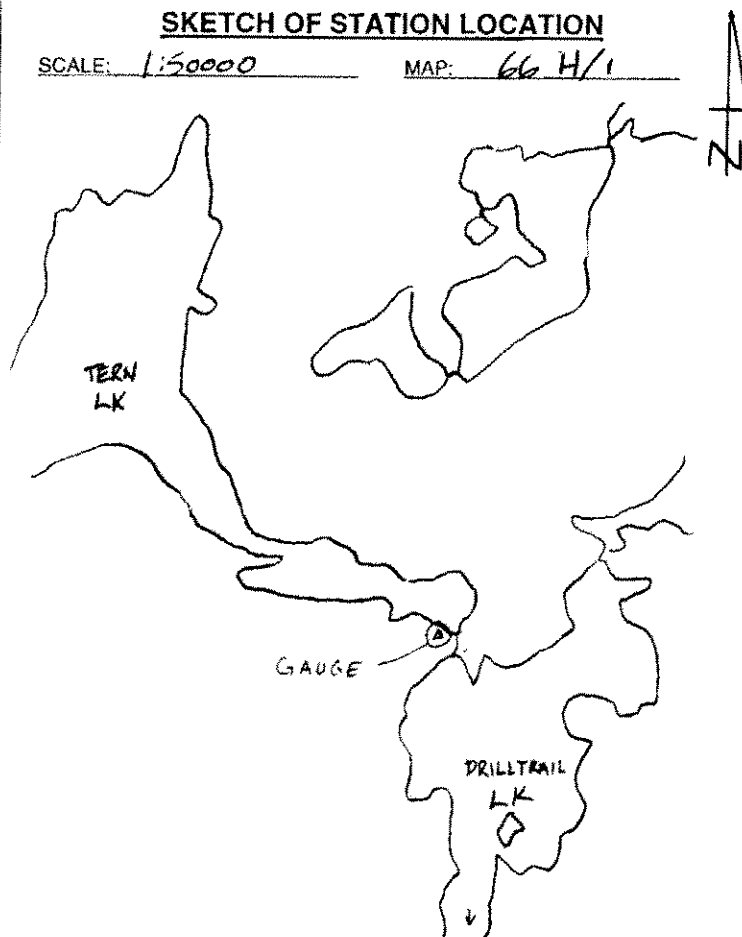
(Indicate Docking And Landing Areas)



SKETCH OF STATION LOCATION

SCALE: 1:50000

MAP: 66 H/1



GAUGE HISTORY

STATION NAME: Outlet of Tern Lake

STATION NUMBER: ELEVATION OF GAUGE DATUM:
0.000 m.

ASSUMED DATUM

LATITUDE: N 65° 03' 00"

LONGITUDE:

W 96° 00' 18"

UTM NAD83 Grid: 14

Easting:

640 926

Northings: 7 217 355

BENCH MARKS:

B.M. #1	Red paint mark on large rock 4.4 meters NE of shelter.	Elev.	10.000 m. (assumed)
B.M. #2	Red paint mark on bedrock near water's edge 11.7 meters SE of shelter.	Elev.	9.682 m.
B.M. #3	Red paint mark on large rock 9.4 meters NW of shelter.	Elev.	10.219 m.

B.M. #1 is control bench mark.

HISTORY OF GAUGE CORRECTIONS, BENCH MARKS, AND OTHER EQUIPMENT

DATE	GAUGE CORRECTIONS (BENCH MARK USED TO OBTAIN WATER LEVELS: BOLD TYPE AND UNDERLINED)					NOTES ON INSTALLATION OR REMOVAL OF BENCH MARKS, ETC.
	B.M. #1	B.M. #2	B.M. #3			
2002						
26 June	10.000	<u>9.700</u>	10.224			Established Bench Marks
26 July	10.000	<u>9.682</u>	10.219			
19 Sept	10.000	<u>9.681</u>	10.219			
2003						
8 May	10.000	<u>9.698</u>	10.241			
3 June	10.000	<u>9.698</u>	10.243			
4 June	10.000	<u>9.698</u>	10.241			
9 June	10.000	<u>9.707</u>	10.241			
10 June	10.000	<u>9.699</u>	10.242			
12 June	10.000	<u>9.699</u>	10.242			
24 July	10.000	<u>9.680</u>	10.220			
6 Sept	10.000	<u>9.680</u>	10.219			
2004						
24 May	10.000	<u>9.694</u>	10.240			
23 June	10.000	<u>9.696</u>	10.236			
24 June	10.000	<u>9.695</u>	10.233			
25 June	10.000	<u>9.698</u>	10.230			
27 June	10.000	<u>9.697</u>	10.228			
1 July	10.000	<u>9.697</u>	10.223			
4 July	10.000	<u>9.695</u>	10.224			
5 Aug	10.000	<u>9.681</u>	10.217			
11 Sept	10.000	<u>9.681</u>	10.220			

APPENDIX D.4

Drilltrail Lake Outlet

AMEC EARTH & ENVIRONMENTAL HYDROMETRIC STATION DESCRIPTION

Station No.: _____ Drainage Area: 106.5 km²

Station Name: DRILLTRAIL LAKE OUTLET

District: _____
Latitude: N 65.0283 Longitude: W 96.0005

UTM NAD: 83 GRID: 14 E: 641257

N: 7214964

Established: 26 JUNE 2002 By: D. DUBE / AMC / NRC

Description of Gauging Equipment and Location:

SHELTER CONTAINS VEDAS II LOGGER WITH
SAFE-RAGE AND
PRESSURE TRANSDUCER

STATION IS LOCATED 3.8 km NE OF OLD
MEADOWBANK CAMP + 8.1 km NORTH
OF BAKER LAKE AIRPORT

GAUGE IS ON RIGHT BANK AT OUTLET
OF DRILLTRAIL LAKE TO ZPL

Description of Control & Measuring Section

NATURAL ROCK AND BOULDER CONTROL

WADING MEASUREMENTS MADE JUST
DOWNSTREAM OF SHELTER BEFORE
RAPIDS

Prepared By: A. CHAN Date: 28 AUG 2002

ELEVATION OF GAUGE DATUM AND DESCRIPTION OF BENCH MARKS

Elevation Of Gauge Datum: 21000 m. (assumed)

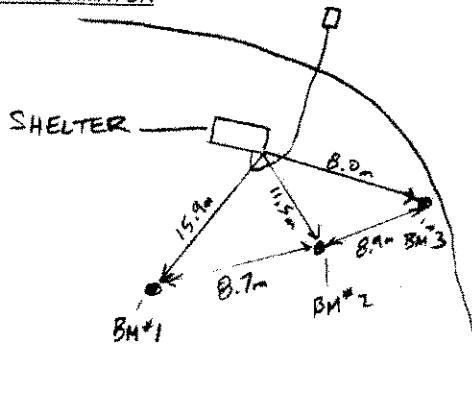
Conversion Equation: _____ to convert to _____

BM#1 RED PAINT ON LARGE BOULDER
15.9m SOUTH OF SHELTER ELEV. 10.000m

BM#2 RED PAINT ON SMALL BOULDER
11.5m SE OF SHELTER ELEV. 10.353m

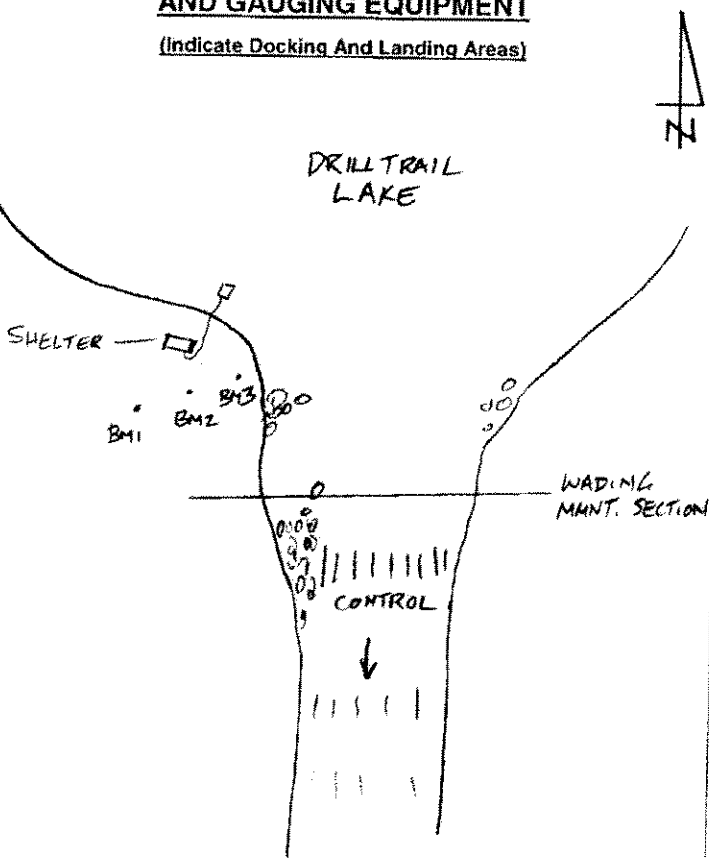
BM#3 RED PAINT ON BOULDER NEAR WATER'S EDGE
8.0m EAST OF SHELTER ELEV. 9.273m

OTHER INFORMATION



SKETCH SHOWING LOCATION OF BENCH MARKS AND GAUGING EQUIPMENT

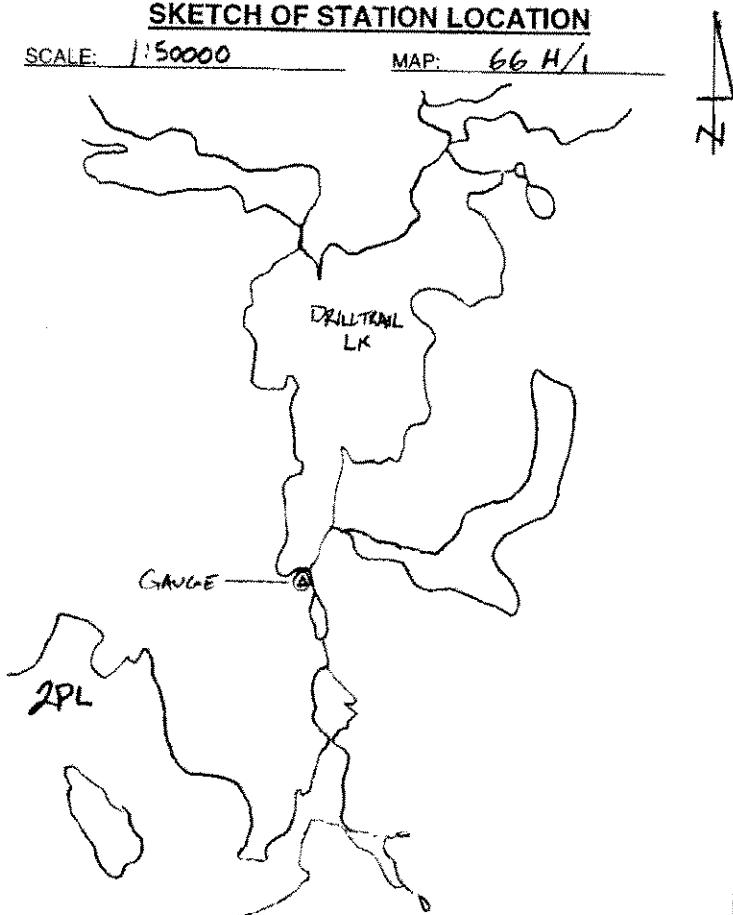
(Indicate Docking And Landing Areas)



SKETCH OF STATION LOCATION

SCALE: 1:50000

MAP: 66 H/1



GAUGE HISTORY

STATION NAME: Outlet of Drilltrail Lake

STATION NUMBER: ELEVATION OF GAUGE DATUM: 0.000 m.

ASSUMED DATUM

LATITUDE: N 65° 01' 42"

LONGITUDE:

W 96° 00' 02"

UTM NAD83 Grid: 14

Easting:

641 257

Northing:

7 214 964

BENCH MARKS:

B.M. #1	Red paint mark on large boulder 15.9 meters S of shelter.	Elev. 10.000 m. (assumed)
B.M. #2	Red paint mark on small boulder 11.5 meters SE of shelter.	Elev. 10.333 m.
B.M. #3	Red paint mark on boulder near water's edge 8.0 meters E of shelter.	Elev. 9.273 m.

B.M. #1 is control bench mark.

HISTORY OF GAUGE CORRECTIONS, BENCH MARKS, AND OTHER EQUIPMENT

DATE	GAUGE CORRECTIONS (BENCH MARK USED TO OBTAIN WATER LEVELS: BOLD TYPE AND UNDERLINED)				NOTES ON INSTALLATION OR REMOVAL OF BENCH MARKS, ETC.
	B.M. #1	B.M. #2	B.M. #3		
2002					
26 June	10.000	10.330	<u>9.273</u>		Established Bench Marks
27 June	10.000	10.330	<u>9.273</u>		
27 July	10.000	10.333	<u>9.271</u>		
19 Sept	10.000	10.369	<u>9.273</u>		
2003					
5 June	10.000	10.325	<u>9.274</u>		
6 June	10.000	10.324	<u>9.273</u>		
8 June	10.000	10.324	<u>9.273</u>		
10 June	10.000	10.325	<u>9.274</u>		
12 June	10.000	10.326	<u>9.272</u>		
24 July	10.000	10.333	<u>9.272</u>		
7 Sept	10.000	10.325	<u>9.273</u>		
2004					
22 May	10.000	10.336	<u>9.282</u>		
23 June	10.000	10.330	<u>9.279</u>		
24 June	10.000	10.330	<u>9.287</u>		
25 June	10.000	10.329	<u>9.279</u>		
26 June	10.000	10.329	<u>9.279</u>		
26 June	10.000	10.329	<u>9.279</u>		
27 June	10.000	10.330	<u>9.280</u>		
28 June	10.000	10.330	<u>9.278</u>		
29 June	10.000	10.330	<u>9.276</u>		
29 June	10.000	10.330	<u>9.277</u>		
30 June	10.000	10.330	<u>9.277</u>		
3 July	10.000	10.330	<u>9.275</u>		
5 Aug	10.000	10.335	<u>9.274</u>		
11 Sept	10.000	10.334	<u>9.273</u>		

APPENDIX D.5

Second Portage Lake Outlet

AMEC EARTH & ENVIRONMENTAL HYDROMETRIC STATION DESCRIPTION

Station No.: _____ Drainage Area: 210.5 km²
 Station Name: (ZPL) SECOND PORTAGE LAKE OUTLET
 District: _____
 Latitude: N 65 0049 Longitude: W 96.0158
 UTM NAD: 83 GRID: 14 E: 640656
 N: 7212324
 Established: 25 JUNE 2002 By: D. DUBE / AME / NIDG

Description of Gauging Equipment and Location:

SHELTER CONTAINS VEDAS II LOGGER WITH
SAFE-PURGE AND
PRESSURE TRANSDUCER

STATION IS LOCATED 2.7 KM EAST OF
OLD MEADOWBANK CAMP & 78.6 KM NORTH
OF BAKER LAKE AIRPORT

GAUGE IS ON RIGHT BANK AT OUTLET
OF ZPL TO TEHEK LAKE

Description of Control & Measuring Section

NATURAL ROCK AND BOULDER CONTROL

WADING MEASUREMENTS MADE AFTER FIRST
SET OF RAPIDS ~ 400m SE OF SHELTER

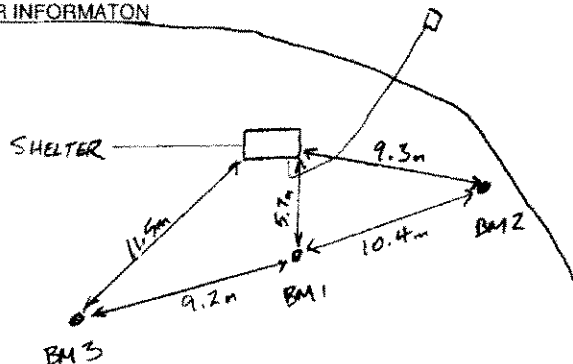
Prepared By: A. CHAN Date: 28 AUG 2002

ELEVATION OF GAUGE DATUM AND DESCRIPTION OF BENCH MARKS

Elevation Of Gauge Datum: 0.000 m. (assumed)
 Conversion Equation: _____ to convert to _____

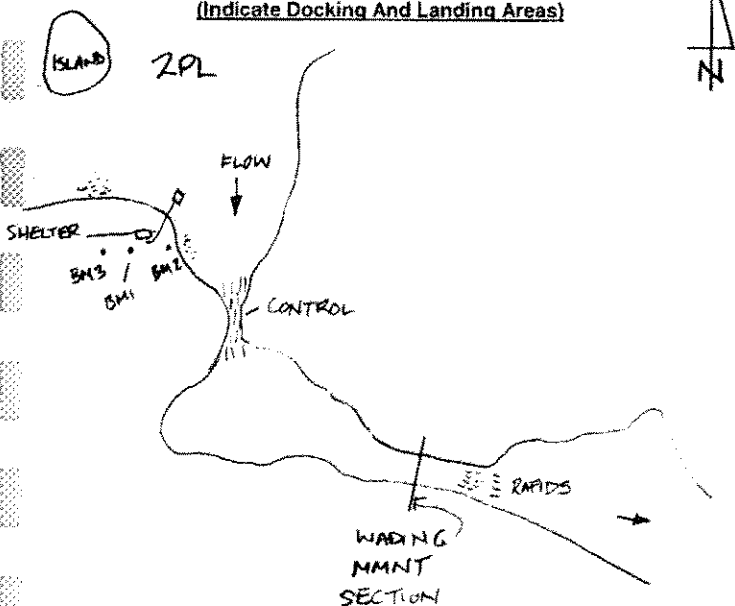
BM#1 RED PAINT ON LARGE FLAT ROCK
 5.7m SW OF SHELTER ELEV. 10.000m
 BM#2 RED PAINT ON BEDROCK NEAR EDGE OF WATER
 9.3m SE OF SHELTER ELEV. 8.513m
 BM#3 RED PAINT ON SMALL FLAT ROCK
 11.5m WEST OF SHELTER ELEV. 9.917m

OTHER INFORMATION



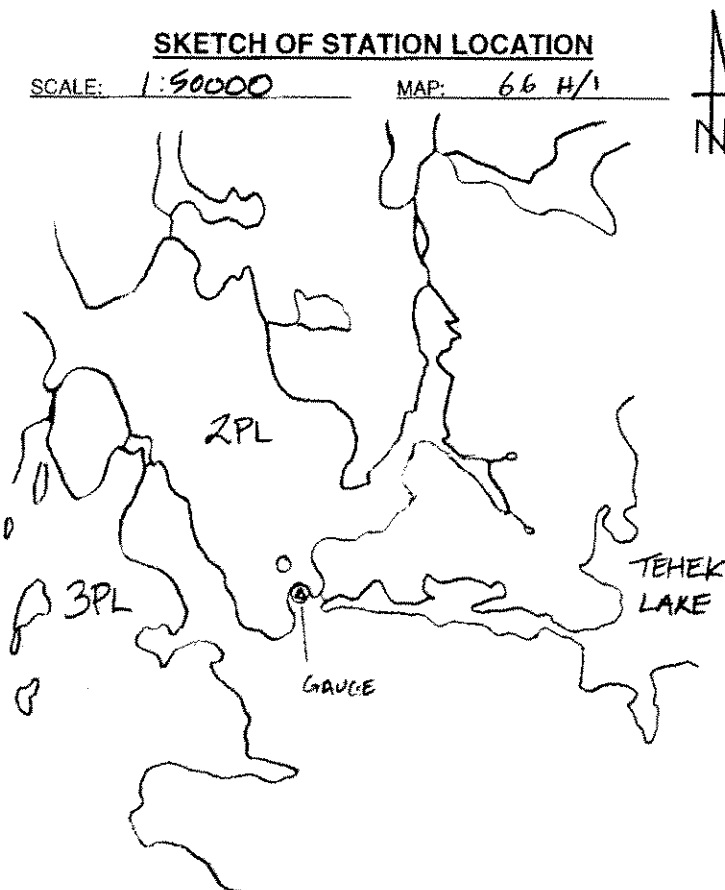
SKETCH SHOWING LOCATION OF BENCH MARKS AND GAUGING EQUIPMENT

(Indicate Docking And Landing Areas)



SKETCH OF STATION LOCATION

SCALE: 1:50000 MAP: 66 H/1



GAUGE HISTORY

STATION NAME: Outlet of Second Portage Lake (2PL)

STATION NUMBER: ELEVATION OF GAUGE DATUM: 0.000 m.

ASSUMED DATUM

LATITUDE: N 65° 00' 18"

LONGITUDE:

W 96° 00' 57"

UTM NAD83 Grid: 14

Easting:

640 656

Northing:

7 212 324

BENCH MARKS:

B.M. #1	Red paint mark on large flat rock 5.7 meters SW of shelter.	Elev. 10.000 m. (assumed)
B.M. #2	Red paint mark on bedrock near edge of water 9.3 meters SE of shelter.	Elev. 8.513 m.
B.M. #3	Red paint mark on small flat rock 11.5 meters W of shelter.	Elev. 9.917 m.

B.M. #1 is control bench mark.

HISTORY OF GAUGE CORRECTIONS, BENCH MARKS, AND OTHER EQUIPMENT

DATE	GAUGE CORRECTIONS (BENCH MARK USED TO OBTAIN WATER LEVELS: BOLD TYPE AND UNDERLINED)					NOTES ON INSTALLATION OR REMOVAL OF BENCH MARKS, ETC.
	B.M. #1	B.M. #2	B.M. #3			
2002						
25 June	10.000	<u>8.513</u>	9.920			Established Bench Marks
26 July	10.000	<u>8.513</u>	9.917			
28 July	10.000	<u>8.513</u>	9.917			
20 Sept	10.000	<u>8.511</u>	9.914			
2003						
8 May	10.000		9.913			
3 June	10.000		9.908			
4 June	10.000	<u>8.497</u>	9.908			
6 June	10.000	<u>8.498</u>	9.908			
8 June	10.000	<u>8.497</u>	9.909			
12 June	10.000	<u>8.497</u>	9.908			
13 June	10.000	<u>8.497</u>	9.909			
25 June	10.000	<u>8.514</u>	9.920			
8 Sept	10.000	<u>8.513</u>	9.915			
2004						
25 May	10.000	<u>8.505</u>	9.911			
24 June	10.000	<u>8.509</u>	9.917			
26 June	10.000	<u>8.513</u>	9.917			
27 June	10.000	<u>8.513</u>	9.910			
29 June	10.000	<u>8.512</u>	9.919			
1 July	10.000	<u>8.514</u>	9.919			
3 July	10.000	<u>8.514</u>	9.919			
4 July	10.000	<u>8.513</u>	9.919			
6 Aug	10.000	<u>8.513</u>	9.916			
12 Sept	10.000	<u>8.515</u>	9.918			