

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
WATER RESOURCES DIVISION
DISCHARGE MEASUREMENT AND
GAGE INSPECTION NOTES

Meas. No. 49,50
Comp. by _____
Checked by _____

Sta. No. _____
Sta. Name F1-Canada
Date Jan 8, 2003 Party PAS, JDG, KDC
Width _____ Area _____ Vel. _____ G.H. _____ Disch. _____
Method _____ No. secs. _____ G.H. change _____ in _____ hrs.
Method coef. _____ Horiz. angle coef. _____ Susp. _____ Tags checked _____
Meter Type _____ Meter No. _____ Meter _____ ft. above bottom of wt.
Rating used _____ Spin test before meas. _____ ; after _____
Meas. plots _____ % diff. from rating no. _____ Indicated shift _____

GAGE READINGS					
Time		IG	OG	Inside	Outside
		<u>CR10</u>	<u>CORRYA</u>		
<u>16:20</u>		<u>1.86</u>	<u>1.81</u>	<u>1.83</u>	<u>0.81</u>
	Start				
	Finish				
<u>18:00</u>		<u>1.90</u>	<u>1.76</u>	<u>1.80</u>	<u>0.76</u>
	Weighted MGH				
	GH correction				
	Correct MGH				

Samples collected: water quality,
sediment, biological, other _____
Measurements documented on
separate sheets: water quality,
aux./base gage, other _____
Rain gage serviced/calibrated _____
Weather: 100% cloud, stratocumulus; wind 10-15 mph
Air Temp. _____ °C at _____
Water Temp. 5.5 °C at 17:55
Check bar/chain found _____
Changed to _____ at _____
Correct _____

Wading, cable, ice, boat, upstr., downstr., side bridge, _____ ft., mi. upstr., downstr. of gage.
Measurement rated excellent (2%), good (5%), fair (8%), poor (> 8%); based on following
conditions: Flow: _____
Cross section: _____

Gage operating: yes Record Removed _____
Battery voltage: 14.47 Intake/Orifice cleaned/purged: _____
Bubble-gage pressure, psi: Tank 1200, Line 11; Bubble-rate 48 /min.
Extreme-GH indicators: max _____, min _____
CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____
HWM inside/outside: _____
Control: Looks good - clean

Remarks: Ran LEVELS

GH of zero flow = GH _____ - depth at control _____ = _____ ft., rated _____
Sheet No. _____ of _____ sheets

	Time	IG	OG	Time	IG	OG
Cond	17:55	22.61 μS	20.3 μS	WT ~ 16:20	6.28 °C	—
AT	16:20	N/A	30 F	17:55	5.947 °C	5.5 °C

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Meas. No. _____
Comp. by F. Lume
Checked by _____

Sta. No. _____
Sta. Name Canada
Date Jan 8, 2003 Party PAS, KAC, JDG
Width _____ Area _____ Vel. _____ G. H. _____ Disch. _____
Method _____ No. secs. _____ G. H. change _____ in _____ hrs.
Method coef. _____ Horiz. angle coef. _____ Susp. _____ Tags checked _____
Meter Type _____ Meter No. _____ Meter _____ ft. above bottom of wt.
Rating used _____ Spin test before meas. _____ ; after _____
Meas. plots _____ % diff. from rating no. _____ Indicated shift _____

GAGE READINGS					
Time				Inside	Outside
1620				1.83	0.81
	Start				
	Finish				
1800				1.80	0.76
Weighted MGH					
GH correction					
Correct MGH					

Samples collected: water quality,
sediment, biological, other _____
parms

Measurements documented on
separate sheets: water quality,
aux./base gage, other _____

Rain gage serviced/calibrated _____

Weather: overcast, light snow

Air Temp. 30 F °C at 1620

Water Temp. 6.0 °C at 1700

Check bar/chain found _____

Changed to _____ at _____

Correct _____

Wading, cable, ice, boat, upstr., downstr., side bridge, _____ ft., mi. upstr., downstr. of gage.
Measurement rated excellent (2%), good (5%), fair (8%), poor (> 8%); based on following
conditions: Flow: _____
Cross section: _____

Gage operating: yes Record Removed _____

Battery voltage: _____ Intake/Orifice cleaned/purged: _____

Bubble-gage pressure, psi: Tank 1200, Line 2; Bubble-rate 48 /min.

Extreme-GH indicators: max _____, min _____

CSG checked: _____ HWM height on stick _____ Ref. elev. _____ HWM elev. _____

HWM inside/outside: _____

Control: looks good - clear

Remarks: Ran levels

GH of zero flow = GH _____ - depth at control _____ = _____ ft., rated _____

Sheet No. _____ of _____ sheets

Gauge:

FI
1 - CANADA

Date	08 - Jan - 03		16 - Jan - 03
time of visit (start & finish)	16:20		19:20
party	PAS, JDG, KDC		PAS
cloud cover (% , type)	100% , stratocumulus		0%
wind (spd, dir)	10-15 mph		Light - 5 mph
air temp			~ 35 F°
surveying?	yes		No
photo? (#, which camera)			
to do items? (y/n)	7 terminal connectors		
which field notebook?	KDC		
Flow measurements (times)	16:20		19:20
condition of control, probes			good - clear
method (meter, flume, visual)			flume rating
discharge (units)			↓
outside stage (staff or top down)	0.81		0.70
CR10 stage reading			1.72
Inside Box	~16:20 17:55		
CR10 Channels (times)			
Ch. 1 stage	1.86	1.80	1.72
Ch. 2 water temp	6.28°C	5.947	6.00
Ch. 3 sp conductivity	22.89	22.61	22.1
Ch. 4 battery voltage	14.27	14.43	14.9
air temp	—		—
Year, Day, Time	03 ✓, 08 ✓, 16:28 ✓		03, 14, 19:25
settings o.k?			
*0?			
N2 tank pressure (psi)	1200		1000
N2 feed pressure (psi)	~11		11
purge?			
conoflow bubble rate (per min)	48		48
Stream Chemistry (times)	17:55		
water temp. (units)	5.5°C		5.4
sp. cond. (units)	5.5°C, SC = 20.3 μS (flash), C = 12.7 μS (flash)		8.3 (not flash), 13.4 (flash)
pH and temp of probe			
instrument notes (i.e. cal. time)			
water samples collected?			yes @ 19:30

LEVEL NOTES

Stream Fl - Canada

Locality _____

Party JG, KDCDate Jan 8, 2003

STATION	B. S. (A)	HT. INST. (B) = A + (D)	F. S. (C)	ELEVA- TION (E)	REMARKS
RM3	1.655	9.058		7.403	bolt, 60 ft SE of wall, flat rock GIVEN ELEV
RM4			2.115	6.943	bolt, 113-ft SSE of wall, rounded rock
RPI			6.558	2.500	bolt on staff plate
flume			8.098	0.960	upstream bottom center
orifice			8.140	0.918	top of nut
flume			5.570	3.488	downstr top west
PZF			7.290	1.768	over-flow
RM3	1.650			7.403	0.005
Turning point					
RM3	1.641		9.044	7.403	GIVEN ELEV
RPI			6.550	2.494	0.006 avg = 2.497
flume			5.578	3.466	avg = 3.466
flume			8.084	0.960	0 avg = 0.960
orifice			8.124	0.920	0.002 avg = 0.919
flume			5.554	3.490	0.002 avg = 3.489
PZF			7.298	1.746	0.022 avg = 1.757
RM3	1.642			7.403	0.001

upstr
top east -
upstr
bot ctr -dst
top west -

No. _____ of _____ sheets Comp. by _____ Chk. by _____

FI - CANADA

LEVELS

1/8/03

	BS	HI	FS	Elev		BS	HI	FS	Elev
					Orifice			7.621	0.967
RM3	1.655 1.655	9.058		7.403	60' SSE of wall at back			5.058	3.533 DS top west
RM4			2.115	6.943 11.773	113' SSE of wall, rounded back			6.780 7.	1.808 overflow
RPI			6.558	2.500 15.618	bolt on stayed plate	RM3	1.185	1.185	7.403
Flume			1.570	7.468	US Top East	turning pt			
Flump			8.098	0.960	US bottom	RM3	1.641	9.044	7.403
Orifice			8.140	0.918	top of wall	RM4		2.098 2.148	6.946
flume			5.570 5.571	3.488	DS Top west	RPI		6.550	2.494
PZF			7.290	1.768	overflow	flume		5.578	3.466 US Top East
RPI			—	—		Flume		8.084 8.084	0.960 US bottom
RM4	1.650 1.650		1.590	7.403		Orifice		8.124	0.920 top of wall
RM3	1.650		—	7.403		Flume		5.554	3.490 DS top west
turning pt						PZF		7.298 7.3	1.746
RM3	1.185	8.588		7.403		RPI			
RM4	1.590			6.998		RM3	1.642 1.641	1.6	7.403
RPI				2.546					
flume				3.518	US Top East				
flume				1.013	US bottom				

LWR VG PERMAFROST

1/8/03

TO DO					Start/Stop Time	23:55 / 24:52
Came back w/ post connectors					0	6 ± 1
					1.5	25 ± 1
turning pt					3	25 ± 1
	BS	HI	FS	Elev	4.5	17 ± 2
RM3	1.865	9.268		7.403	60' SSE	6 20 18 ± 2
RM4	2.1		2.326	6.942	113' SSE	7.5 18 23
RP1			6.765	2.503	bolt on stump plate	9 24
Flume			5.800 ¹	3.467	US Top East	10.5 19
Flume			8.300	0.968	US Bottom center	12 24, 24
orifice			8.348	0.920	Top of nut	13.5 25 ± 1
flume			5.785	3.483	DS Top West	15 23 ± 1
PZF			7.495	1.773	overflow	16.5 24 ± 1
RM3	1.860 ²			7.403		18 20 ± 2 @ 1:15
						(19.5) 21 ± 2, 16 ± 2, 20 ± 2, 20 ± 2
						21 13 ± 2, 19 ± 2
						22.5 15 ± 2, 17 ± 2
						24 18 ± 2, 17.5 ± 2