## **Memorial University Water Quality Testing Results**

Updated Oct. 6, 2015

#### Legend:

ND: non detect (no detectable lead)

Test results exceed the maximum allowable concentration (MAC) of 10 micrograms per litre, as published by Health Canada

First-draw samples collected from stagnant water for diagnostic purposes. Not indicative of overall drinking water quality.

#### Testing dates: July 30 - Aug. 4

The testing protocol for this round of testing involved taking three samples at each of three locations per building; three at the water entry point to the building (most often a mechanical room); three at a faucet midway through the building; and three at a faucet at a far point in the building.

The below results show ug/L.

The below results show ug/t.		Entry Point			Mid Tap			Far Tap		
Location	1	2	3	1	2	3	1	2	3	
1 Clark Place	0.60	ND	ND	Only	1 Tap in Bu	ilding	Only	1 Tap in Bu	ilding	
202 Elizabeth Avenue (CE)	ND	ND	0.50	ND	ND	ND	Only	2 Taps in Bu	ilding	
208 Elizabeth Avenue (BP)	ND	ND	ND	0.70	ND	0.60	0.70	0.70	0.70	
4 Clark Place	ND	ND	ND	0.60	ND	ND	Only	2 Taps in Bu	ilding	
6 Clark Place (CM)	ND	ND	ND	Only 1 Tap in Building				1 Tap in Bu		
Alumni Affairs (LL)	0.58	0.57	0.57	0.63	0.85	3.60	0.73	ND	ND	
Aquarena	ND	ND	1.30	ND	ND	ND	ND	ND	ND	
Arts & Administration - OLD (A)	0.70	0.94	1.00	ND	ND	ND	ND	ND	ND	
Arts & Administration - NEW (A)	71.00	12.00	22.00	0.94	0.91	0.97	ND	ND	ND	
Biotechnology (BT) (1003)	16.00	5.00	53.00	1.30	2.90	1.10	ND	ND	ND	
BP - Baltimore (BM)	0.75	0.80	0.65	ND	0.51	0.52	ND	ND	ND	
BP - Cabot (CT)	2.00	2.10	2.00	ND	ND	ND	ND	ND	ND	
BP - Corte Real (CA)	0.87	1.80	1.80	1.90	1.90	1.90	1.70	1.70	1.70	
BP - Gilbert (GB)	3.20	1.90	2.30	1.10	0.85	0.85	0.57	0.59	1.30	
BP - Guy (GY)	1.10	0.94	1.50	0.57	0.64	0.57	0.73	0.84	0.74	
Bruneau Centre (IIC)	1.50	2.50	1.20	ND	ND	ND	ND	ND	ND	
Business (BN)	1.10	0.93	0.92	ND	ND	ND	ND	ND	ND	
C-CORE (North)	24.00	3.10	630.00	1.40	1.80	2.30	3.70	3.60	3.60	
Chemistry-Physics (C)	9.40	6.70	6.80	1.50	1.60	1.80	16.00	15.00	15.00	
Computing Services (CS)	14.00	52.00	27.00	1.20	1.20	1.30	0.76	0.64	0.70	
Coughlan College	ND	ND	ND	1.10	1.10	1.20	1.70	2.00	1.70	
Earth Sciences (ER)	1.70	1.90	1.90	ND	ND	ND	0.67	0.60	0.63	
Education (ED)	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Facilities Management (FM)	860.00	380.00	220.00	ND	ND	ND	ND	ND	0.59	
Feild Hall	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Field House (FH1000)	3.00	18.00	2.50	11.00	10.00	10.00	1.10	1.10	1.10	
Field House (FH2000)	3.00	18.00	2.50	11.00	10.00	10.00	1.10	1.10	1.10	
Field House (FH2006)	3.00	18.00	2.50	11.00	10.00	10.00	1.10	1.10	1.10	
Hatcher House	3.80	3.70	3.80	1.00	0.78	0.84				
Health Sciences Centre	6.20	5.30	4.50		Only entry	point samp	oled using th	nis protocol		
Library (L)	12.00	15.00	9.30	ND	ND	ND	0.60	0.61	0.61	
Mathematics (HH)	1.30	1.30	3.40	ND	ND	ND	0.64	0.62	0.55	
Paton - Barnes (BA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Paton - Blackhall (BL)	ND	0.88	ND	1.20	1.20	1.10	1.60	1.40	1.50	
Paton - Bowater (BO)	23.00	23.00	22.00	ND	ND	ND	ND	ND	ND	
Paton - Burke (BU)	1.10	0.98	0.66	ND	ND	ND	ND	ND	ND	
Paton - Curtis (CU)	3.40	1.80	4.20	0.87	1.10	1.10	ND	ND	ND	
Paton - Doyle (DO)	0.68	1.60	11.00	0.73	0.69	0.61	2.30	1.50	1.90	
Paton - Rothermere (RO)	ND	ND	ND	ND	ND	ND	0.67	0.77	0.75	
Paton - Squires (SQ)	0.99	0.85	0.88	ND	ND	ND	ND	ND	ND	
Physical Ed (PE)	ND	ND	ND	1.00	1.00	0.99	3.20	3.50	3.00	
Printing Services (PS)	0.64	0.85	0.83	4.50	3.50	3.40	1.70	1.80	1.70	
Queen's College (QC)	83.00	220.00	120.00	1.30	1.20	0.90	2170	2.00	2.70	
Queen's College Garden Tap****	and the second s	om Queen's		1.10	1.30	1.10	1 Tan fr	om Queen's	College	
R. Gushue Hall (DH)	ND	ND	ND	ND	ND	ND	0.67	0.77	0.75	
Science (SN)	82.00	21.00	34.00	ND	1.40	ND	ND	ND	ND	
South Campus Boiler Plant	13.00	31.00	37.00	ND ND	1.40 ND	ND ND	ND	ND	ND ND	
	1.90	0.57	0.63	3.60	3.40	3.60		5.40		
Spencer Hall (SP)							5.20		5.00	
St. John's College (J)		der Renova			der Renova			der Renovat		
Tower - Cluett Hall	1.60	2.10	4.30	0.58	0.06	0.06	2.30	2.30	2.30	
Tower - Shiwak Hall	1.50	77.00	1.30	1.00	1.00	1.10	2.20	2.20	2.30	
Utilities Annex (UA)	3.20	11.00	3.00	ND	ND	ND				

Queen's College will remain on bottled water due to previously identified water quality issues.

### **Memorial University Water Quality Testing Results**

Updated Oct. 6, 2015

Testing date: August 4 - present

The testing protocol for this round of testing involved collecting drinking water samples at faucets and fountains where drinking water may be consumed in a building. This testing protocol involves flushing the water for minimum of 15 minutes at each faucet or fountain, and then blocking off access to the outlet so the water stagnates for 8-24 hours. Four samples are then collected at each location at zero minutes, five minutes, 10 minutes and 15 minutes. The first column ('initial samples') refers to the samples that were initially collected in various locations using this modified sampling method. The second column ('investigation samples') refers to samples taken from the at the same location where initial test results exceeded the Health Canada guideline. The same flushing, stagnation, and timed sampling intervals were used in the investigation samples.

	Initial samples				Investigation samples			
Location	0 Min	5 Min	10 Min	15 Min	0 Min	5 Min	10 Min	15 Min
1 Clark Place	Not	required.	Initial tests	clear.	Not	required.	Initial tests o	lear.
202 Elizabeth Avenue (CE)			Initial tests				. Initial tests o	
208 Elizabeth Avenue (BP)			Initial tests				. Initial tests o	
4 Clark Place			Initial tests				Initial tests of	
6 Clark Place (CM)			Initial tests				Initial tests of	
Alumni Affairs (LL)			Initial tests				. Initial tests o	
Aquarena			Initial tests				. Initial tests o	
Arts & Administration - OLD (A)			Initial tests				. Initial tests o	
Arts & Administration - NEW (A)	4.3	ND	ND	ND			. Initial tests o	
	370	17	15	15	1600	17	16	23
Biotechnology (BT) (1003)								
BP - Baltimore (BM)			Initial tests				Initial tests o	
BP - Cabot (CT)			Initial tests				Initial tests o	
BP - Corte Real (CA)			Initial tests				Initial tests o	
BP - Gilbert (GB)			Initial tests				Initial tests o	
BP - Guy (GY)			Initial tests				Initial tests o	
Bruneau Centre (IIC)			Initial tests				Initial tests of	
Business (BN)			Initial tests				Initial tests of	
C-CORE (North)	5.6	1.2	1.2	ND	Not	required.	. Initial tests o	clear.
Chemistry-Physics (C )	6.3	ND	ND	ND	16	1.4	1.3	1.3
Computing Services (CS)	66	1.8	1.2	1.1	62	2.2	1.9	1.8
Coughlan College	Not	required.	<b>Initial tests</b>	clear.	Not	required.	Initial tests of	lear.
Earth Sciences (ER)	Not	required.	Initial tests	clear.	Not	required.	. Initial tests o	lear.
Education (ED)	Not	required.	Initial tests	clear.	Not	required.	. Initial tests o	lear.
Facilities Management (FM)	3.3	ND	ND	ND			. Initial tests o	
Feild Hall	Not	reauired.	Initial tests	clear.			. Initial tests o	
Field House (FH1000)	0.93	ND	ND	ND			Initial tests of	
Field House (FH2000)	ND	ND	ND	ND			Initial tests of	
Field House (FH2006)	1.7	0.55	ND	ND			Initial tests of	
Hatcher House			Initial tests				Initial tests of	
Health Sciences Centre			Initial tests				. Initial tests o	
Library (L)	45	0.68	ND	ND	13	0.93	0.89	0.66
Mathematics (HH)			Initial tests	·			. Initial tests o	
		7.2		5.3				
Mt. Scio Media Services (MS-1100)	9.2		6.4				Initial tests o	
Mt. Scio Media Services (MS-1024)	3.2	2.4	2.4	3.5			Initial tests o	
Mt. Scio Media Services (MS-1C01)	37	2.6	1.9	3	35	12	13	13
Medical Education Centre (M2M100)	2.1	ND	ND	ND			Initial tests of	
Medical Education Centre (M5M115)	3.8	ND	ND	ND			Initial tests of	
Paton - Barnes (BA)			Initial tests				Initial tests o	
Paton - Blackhall (BL)			Initial tests				Initial tests o	
Paton - Bowater (BO)	1.2	ND	ND	ND			Initial tests of	
Paton - Burke (BU)	Not	required.	Initial tests	clear.			. Initial tests o	
Paton - Curtis (CU)	Not	required.	Initial tests	clear.	Not	required.	. Initial tests o	clear.
Paton - Doyle (DO)	1	ND	ND	ND	Not	required.	Initial tests of	clear.
Paton - Rothermere (RO)	Not	required.	Initial tests	clear.	Not	required.	Initial tests o	lear.
Paton - Squires (SQ)	Not	required.	Initial tests	clear.	Not	required.	Initial tests o	lear.
Physical Ed (PE)	Not	required.	Initial tests	clear.	Not	required.	Initial tests of	lear.
Printing Services (PS)			Initial tests				. Initial tests o	
Queen's College (QC)	1.9	ND	ND	ND			. Initial tests o	
R. Gushue Hall (DH)		required.	Initial tests				. Initial tests o	
Science (SN)	4.8	ND	ND	ND			Initial tests of	
South Campus Boiler Plant	7.6	0.81	0.71	0.65			Initial tests of	
Spencer Hall (SP)			Initial tests				. Initial tests o	
St. John's College (J)	1400		Renovation	c.cur.	NOC		Renovation	cur.
Tower - Cluett Hall	4.2	0.98	0.89	0.62	Not		. Initial tests of	lear
Tower - Shiwak Hall	5	1.1	0.97	0.79			Initial tests o	
Utilities Annex (UA)	ND	ND	ND	ND	Not	required.	. Initial tests o	lear.

Queen's College will remain on bottled water due to previously identified water quality issues.

# **Memorial University Water Quality Testing Results**

Updated Sept. 25, 2015

The testing protocol used during the following three rounds of testing was developed to investigate possible sources of lead in areas that had previously shown higher than acceptable levels of lead in drinking water. It involved flushing the water for a minimum of 15 minutes at each drinking water outlet, then blocking off access to the outlet so the water stagnates for 8-24 hours. The results at the 20 or 30 second mark represent stagnant water and are not indicative of the overall drinking water quality from these outlets. This data is used to identify localized issues within the plumbing system requiring remediation. These buildings remained under water restrictions while this testing and remediation was underway. Based on the remediation work stemming from these results, Biotechnology, Chemistry-Physics, Computing Services and the QEII Library have had all restrictions lifted. See http://www.mun.ca/health\_safety/waterqualityupdate.php for further details.

Testing dates: Aug. 11-21, 2015				
Location & sample collection date	30 Sec	5 Min	10 Min	15 Min
Biotechnology (BT) (1003) Aug. 21/15	310	3.2	2.7	2.4
Biotechnology (BT) (1003) Aug. 14/15	3400	5.8	4.7	4.2
Biotechnology (BT) (1002) Aug.21/15	240	8.1	7.6	7.2
Biotechnology (BT) (1002) Aug.11/15	430	7	4.6	3.8
Biotechnology (BT) (Water Filling Station)	0.59	ND	ND	ND
Chemistry-Physics (C ) (5C01) Aug 21./15	18	0.92	0.79	0.74
Computing Services (CS) (1012)Aug.21/15	65	2	1.8	1.7
Library (L) Aug 21./15	18	0.72	ND	ND

Testing date: Aug. 26, 2015		
Location & sample collection date	20 Sec	55 Sec
Library (L) (L1010) Aug. 26/15	0.63	0.54
Chemistry-Physics (C ) (5C01) Aug. 26/15	14	3.2
Biotechnology (BT) (1002) Aug. 26/15	9	7.3
Biotechnology (BT) (1003) Aug. 26/15	11	7.6
Computing Services (CS) (1012)Aug.26/15	3.3	1.6

Testing date: Sept. 7, 2015				
Location & sample collection date	30 Sec	5 Min	10 Min	15 Min
Biotechnology (BT) (1003) Sept. 7/15	12	5.8	5.2	4.9
Biotechnology (BT) (1002) Sept. 7/15	4.9	2.6	2.2	2.1
Computing Services (CS) (1012)Sept.7/15	5.9	4.1	1	0.97
Library (L) (L1010) Sept. 7/15	0.57	ND	ND	ND
Chemistry-Physics (C ) (5C01) Sept.7/15	13	1.2	0.8	0.78