

REPORT N°. 2559

November 8, 2024

To: Wendy Li

NexTrans Consulting Engineers 520 Industrial Parkway South

Suite 201

Aurora ON 14G 6W8

RE: Hydrant Flow Test - 3650 Eglinton Ave W, Mississauga

Please find the Report for the following works

**Scope:** Conducted Hydrant Flow Test as per NFPA291 Recommended Practices for Water Flow Testing and Marking of Hydrants.





## **HYDRANT FLOW TEST**

MISSISSAUGA TEST 1

DATE: October 31, 2024 TIME: 12:50 PM

R -TEST HYDRANT 3890 EGLINTON AVE W HYDRANT No. HYD-R1

HYDRANT MODEL: CENTURY COLOUR: BLUE

STATIC PRESSURE psi (hr-20^0.54): 71 VARIANCE: 4.23%

Q - FLOW HYDRANT 45-3900 EGLINTON AVE W HYDRANT No. HYD-F1

HYDRANT MODEL: CENTURY COLOUR: BLUE

No.	Residual Pressure	Orifice Dia	Coefficient	Nozzle PSI	Q = Flow (USGPM)
Outlets	(hf-R^0.54)	Dia. (in.) $(d^2)$		$(\sqrt{psi})$	$Q = 29.83 (c) (d2) (\sqrt{psi})$
1	69	2.5	0.9	45	1126
2	68	2.5	0.9	25	839
			$Q_E = \text{Total Flow (USGPM)}$		1678

 $Q_R$  = flow predicted @ 20 psi

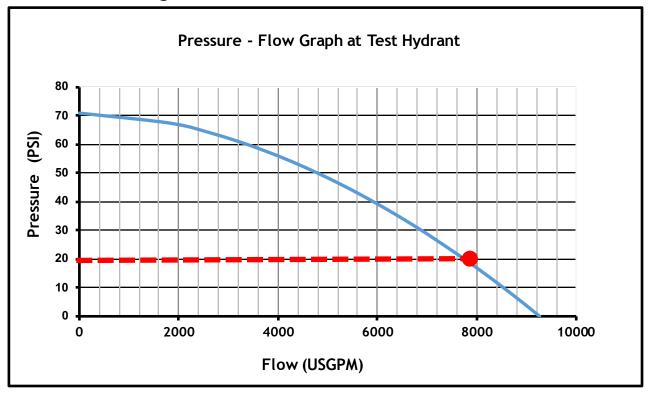
 $Q_R = Q_F * (H_r - 20^{0.54}) / (H_f - R^{0.54})$ 

7749 489

USGPM L/s

NFPA Rating:

**CLASS AA - BLUE** 





## **HYDRANT FLOW TEST**

MISSISSAUGA TEST 2

DATE: October 31, 2024 TIME: 1:15 PM

R -TEST HYDRANT 3890 EGLINTON AVE W HYDRANT No. HYD-R1

HYDRANT MODEL: CENTURY COLOUR: BLUE

STATIC PRESSURE psi (hr-20^0.54): 71 VARIANCE: 8.45%

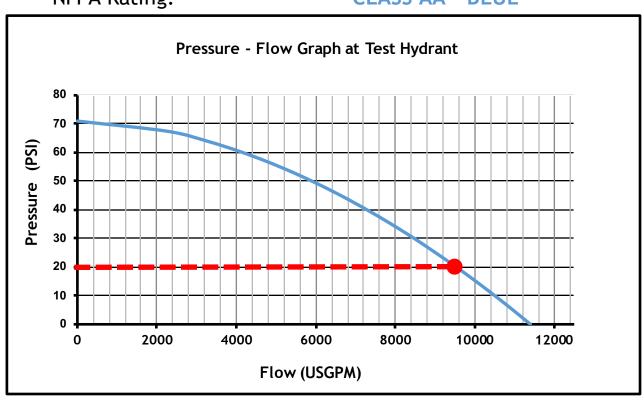
HYDRANT MODEL: CENTURY COLOUR: BLUE

No.	Residual Pressure	Orifice Dia	Coefficient	Nozzle PSI	Q = Flow (USGPM)
Outlets	(hf-R^0.54)	Dia. (in.) $(d^2)$		$(\sqrt{psi})$	$Q = 29.83 (c) (d2) (\sqrt{psi})$
1	69	2.5	0.9	20	750
2	67	2.5	0.9	20	750
3	68	2.5	0.9	20	750
4	65	2.5	0.9	20	750
			$O_F$ = Total Flow (USGPM)		3002

 $Q_R$  = flow predicted @ 20 psi  $Q_R = Q_F * (H_r - 20^{^{^{0}/54}}) / (H_f - R^{^{^{0}/54}})$  9533 USGPM 601 L/s

NFPA Rating:

**CLASS AA - BLUE** 



## **Test Conclusion**

The system at the time of testing produced a theorectical projected flow rate of:

LOCATION	Total USGPM	USGPM at 20 psi	lps at 20 psi	Test #
EGLINTON AVE W	1678	7749	489	1
EGLINTON AVE W	3002	9533	601	2

Hydrants are classified in accordance with their rated capacities as per NFPA291.

COLOUR	CLASS	Available Flow @ 20psi
BLUE	AA	1500 GPM or more
GREEN	Α	1000 - 1499 GPM
ORANGE	В	500 - 999 GPM
RED	С	Below 500 GPM

We strongly feel that all attempts have been made to ensure that the required data as stipulated was captured, stored and presented in an accurate, efficient and timely manner for the required period.

We look forward to working with you in the future.

Please feel free to contact the undersigned should you require any further information.

Best Regards

Rob Gamache E.P Manager of Operations Hydrant Testing Ontario

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