



Water and Waste Department • Service des eaux et des déchets

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April 7, 2015

Our File: 040-18-18-55-00

Melanie Betsill  
Office of Drinking Water  
Manitoba Conservation and Water Stewardship  
1007 Century Street  
Winnipeg, Manitoba  
R3H 0W4

Dear Ms. Betsill:

**RE: MARCH 2015 WATER QUALITY COMPLIANCE  
SUBMISSION FOR THE CITY OF WINNIPEG WATER SUPPLY SYSTEM**

Please find attached on-line and grab turbidity summary reports, on-line and grab chlorine summary reports and the UV summary report for the Water Treatment Plant for March 2015. We have included one corrective action report for a low free chlorine residual in the distribution system.

The March on-line and grab sampling turbidity reports include results obtained for the Water Treatment Plant raw water and the eight filters. The turbidity results for the effluent from the filters are in compliance with the licence requirements. We continue to have filter 8 out of service for maintenance issues. There is currently no impact on any of the treatment process at this time.

The March on-line and grab sampling chlorine reports include results obtained for the Deacon Booster Pumping Station at the Water Treatment Plant. The free chlorine results at the Water Treatment Plant have met the licence requirements. On March 5, a distribution system low free chlorine result was reported during resampling for a high HPC result [REDACTED]. As corrective actions to the low free chlorine result, we sampled various locations around the area, flushed the area, and checked the infrastructure for possible closed and broken valves. Chlorine levels were monitored until results for free chlorine were reported acceptable. Please see the attached corrective action report for additional details.

The UV submission includes the summary report for March 2015 in accordance with Section 4.13, Table 2 of the Operating Licence. The UV licence requirement has been met for March.

Please let me know of any concerns or questions respecting this submission. I may be reached by telephone at 204-986-8359 or by e-mail at [rgrosselle@winnipeg.ca](mailto:rgrosselle@winnipeg.ca).

Thanks for your ongoing cooperation and understanding in this matter.

Yours sincerely,

*Original Signed by:*

R. Grosselle  
Manager of Environmental Standards  
Attachments

c:(e-mail)

Dr. L. Richards, Winnipeg Regional Health Authority  
Dr. H. Chang, Winnipeg Regional Health Authority  
Dr. S. Roberecki, Manitoba Health  
D.P. Sacher, P.Eng.  
G. Patton, P.Eng.  
T. Shanks, P.Eng.  
A. J. Weremy, P.Eng.  
C. Diduck

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**CITY OF WINNIPEG**  
**WATER AND WASTE DEPARTMENT**  
**WATER SERVICES**

Water System Code: 252.00  
 Licence Number: PWS-09-412 AA

**WATER TREATMENT PLANT TURBIDITY ON-LINE MONITORING REPORT**

March 2015 Turbidity (NTU)

Date	Raw	Filter #1		Filter #2		Filter #3		Filter #4		Filter #5		Filter #6		Filter #7		Filter #8	
	Avg	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
1/03/2015	0.65	0.04	0.10	0.05	0.10	0.08	0.15	0.05	0.10	0.03	0.07	0.04	0.08	0.07	0.09	OL	OL
2/03/2015	0.66	0.06	0.10	0.07	0.16	0.10	0.18	0.06	0.13	0.05	0.07	0.05	0.11	0.08	0.13	OL	OL
3/03/2015	0.67	0.07	0.13	0.06	0.12	0.10	0.19	0.07	0.10	0.04	0.10	0.05	0.10	0.07	0.14	OL	OL
4/03/2015	0.67	0.03	0.14	0.07	0.12	0.12	0.30	0.07	0.13	0.04	0.09	0.04	0.12	0.07	0.13	OL	OL
5/03/2015	0.66	0.07	0.13	0.07	0.12	0.10	0.20	0.07	0.15	0.05	0.13	0.08	0.10	0.10	0.12	OL	OL
6/03/2015	0.67	0.06	0.12	0.07	0.13	0.10	0.20	0.08	0.20	0.07	0.10	0.08	0.15	0.11	0.18	OL	OL
7/03/2015	0.66	0.06	0.08	0.06	0.11	0.09	0.17	0.06	0.09	0.06	0.12	0.07	0.13	0.09	0.16	OL	OL
8/03/2015	0.67	0.06	0.11	0.06	0.08	0.08	0.18	0.07	0.26	0.06	0.11	0.07	0.14	0.09	0.16	OL	OL
9/03/2015	0.67	0.06	0.12	0.06	0.12	0.10	0.14	0.06	0.13	0.05	0.11	0.06	0.09	0.08	0.16	OL	OL
10/03/2015	0.67	0.05	0.11	0.06	0.12	0.09	0.18	0.06	0.12	0.05	0.07	0.08	0.14	0.10	0.12	OL	OL
11/03/2015	0.67	0.06	0.08	0.06	0.12	0.09	0.18	0.06	0.09	0.07	0.12	0.07	0.14	0.09	0.16	OL	OL
12/03/2015	0.68	0.06	0.12	0.06	0.08	0.09	0.17	0.07	0.14	0.06	0.12	0.07	0.14	0.08	0.15	OL	OL
13/03/2015	0.69	0.05	0.11	0.06	0.15	0.10	0.13	0.06	0.12	0.05	0.11	0.06	0.08	0.08	0.16	OL	OL
14/03/2015	0.68	0.05	0.10	0.05	0.11	0.08	0.15	0.06	0.13	0.05	0.07	0.07	0.13	0.11	0.13	OL	OL
15/03/2015	0.68	0.06	0.08	0.05	0.10	0.08	0.16	0.06	0.12	0.06	0.10	0.07	0.13	0.10	0.19	OL	OL
16/03/2015	0.67	0.05	0.10	0.05	0.07	0.08	0.16	0.06	0.12	0.05	0.10	0.06	0.13	0.09	0.15	OL	OL
17/03/2015	0.66	0.05	0.10	0.04	0.08	0.09	0.12	0.04	0.11	0.05	0.11	0.05	0.08	0.08	0.14	OL	OL
18/03/2015	0.66	0.04	0.08	0.03	0.05	0.06	0.12	0.03	0.07	0.03	0.07	0.05	0.09	0.07	0.09	OL	OL
19/03/2015	0.67	0.04	0.08	0.03	0.07	0.07	0.12	0.03	0.08	0.04	0.06	0.04	0.08	0.08	0.11	OL	OL
20/03/2015	0.67	0.05	0.07	0.03	0.05	0.07	0.12	0.03	0.05	0.04	0.08	0.04	0.09	0.07	0.12	OL	OL
21/03/2015	0.69	0.04	0.08	0.03	0.04	0.07	0.14	0.04	0.07	0.04	0.07	0.04	0.08	0.07	0.12	OL	OL
22/03/2015	0.70	0.05	0.10	0.03	0.07	0.09	0.13	0.04	0.09	0.03	0.07	0.03	0.05	0.06	0.11	OL	OL
23/03/2015	0.71	0.05	0.28	0.04	0.36	0.08	0.40	0.03	0.15	0.03	0.07	0.04	0.09	0.07	0.11	OL	OL
24/03/2015	0.70	0.05	0.07	0.03	0.07	0.08	0.29	0.03	0.09	0.04	0.07	0.03	0.07	0.06	0.11	OL	OL
25/03/2015	0.67	0.04	0.21	0.03	0.16	0.08	0.30	0.03	0.14	0.03	0.14	0.02	0.08	0.04	0.11	OL	OL
26/03/2015	0.68	0.04	0.08	0.02	0.05	0.07	0.11	0.03	0.07	0.03	0.07	0.04	0.05	0.06	0.08	OL	OL
27/03/2015	0.69	0.04	0.06	0.02	0.06	0.07	0.15	0.03	0.08	0.04	0.05	0.03	0.07	0.07	0.10	OL	OL
28/03/2015	0.68	0.05	0.09	0.03	0.05	0.11	0.40	0.03	0.06	0.04	0.08	0.04	0.08	0.06	0.11	OL	OL
29/03/2015	0.67	0.04	0.08	0.03	0.04	0.08	0.22	0.04	0.07	0.04	0.07	0.04	0.08	0.06	0.12	OL	OL
30/03/2015	0.67	0.04	0.08	0.03	0.06	0.09	0.15	0.03	0.07	0.04	0.07	0.04	0.05	0.06	0.11	OL	OL
31/03/2015	0.68	0.04	0.08	0.03	0.06	0.07	0.21	0.03	0.19	0.03	0.05	0.04	0.08	0.07	0.09	OL	OL

Total Number of Measurements Taken, A:	15682	15757	15455	14416	16793	16674	15100	OL
Turbidity Standard for Monitoring Location (NTU):	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Number of Measurements Meeting Standard, B:	15682	15742	15426	14416	16793	16674	15100	OL
Compliance with Turbidity Standard, C = B/A X 100%:	100.00%	99.91%	99.81%	100.00%	100.00%	100.00%	100.00%	OL

OL: Offline

Note: Filter 8 is offline for maintenance

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Submitted By (Print) M.Szmon for A.Weremy

Signature Original signed by M.Szmon for A.Weremy



CITY OF WINNIPEG  
 WATER AND WASTE DEPARTMENT  
 ENVIRONMENTAL STANDARDS DIVISION

**WATER TREATMENT PLANT TURBIDITY GRAB MONITORING REPORT**

Water System Code: 252.00	Turbidity (NTU)								
Licence No. PWS-09-412 AA	Raw Water	Filter 1	Filter 2	Filter 3	Filter 4	Filter 5	Filter 6	Filter 7	Filter 8
01-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
02-Mar-2015	0.59	0.09	0.09	0.18	0.06	0.08	0.12	0.09	OL
03-Mar-2015	0.56	0.11	0.11	0.12	0.17	0.12	0.08	0.17	OL
04-Mar-2015	0.57	0.17	0.11	0.15	0.13	0.07	0.07	0.10	OL
05-Mar-2015	0.53	0.13	0.13	0.17	0.12	0.11	0.18	0.12	OL
06-Mar-2015	0.55	0.12	0.20	0.22	0.12	0.17	0.23	0.13	OL
07-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
08-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
09-Mar-2015	0.82	0.18	0.18	0.14	0.16	0.14	0.13	0.18	OL
10-Mar-2015	0.58	0.10	0.14	0.16	0.15	0.19	0.13	0.18	OL
11-Mar-2015	0.75	0.17	0.10	0.13	0.15	0.13	0.13	0.14	OL
12-Mar-2015	0.52	0.12	0.09	0.11	0.16	0.15	0.12	0.10	OL
13-Mar-2015	0.66	0.13	0.14	0.16	0.16	0.18	0.18	0.14	OL
14-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
15-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
16-Mar-2015	0.54	0.09	0.08	0.14	0.24	0.23	0.20	0.15	OL
17-Mar-2015	0.54	0.12	0.09	0.10	0.17	0.09	0.13	0.08	OL
18-Mar-2015	0.55	0.15	0.09	0.11	0.06	0.13	0.08	0.18	OL
19-Mar-2015	0.58	0.07	0.07	0.12	0.09	0.08	0.11	0.08	OL
20-Mar-2015	0.56	0.14	0.08	0.07	0.14	0.08	0.10	0.12	OL
21-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
22-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
23-Mar-2015	0.67	0.09	0.08	0.12	0.17	0.13	0.18	0.19	OL
24-Mar-2015	0.66	0.10	0.08	0.19	0.06	0.09	0.09	0.18	OL
25-Mar-2015	0.76	0.12	0.12	0.18	0.12	0.15	0.13	0.08	OL
26-Mar-2015	0.53	0.06	0.08	0.09	0.07	0.07	0.07	0.06	OL
27-Mar-2015	0.63	0.09	0.19	0.11	0.14	0.16	0.11	0.08	OL
28-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
29-Mar-2015	NS	NS	NS	NS	NS	NS	NS	NS	OL
30-Mar-2015	0.53	0.14	0.12	0.24	0.08	0.08	0.08	0.07	OL
31-Mar-2015	0.51	0.07	0.07	0.13	0.09	0.08	0.08	0.09	OL
<b>Total number of measurements taken, A:</b>	22	22	22	22	22	22	22	22	0
<b>Turbidity Standard for Monitoring Location (NTU):</b>	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
<b>Number of measurements meeting standard, B:</b>	22	22	22	22	22	22	22	22	0
<b>Compliance with Turbidity Standard, C= B/A X 100%:</b>	100%	100%	100%	100%	100%	100%	100%	100%	OL

NS: No Sample NA: Not Analyzed OL: Off-Line

**Comments:**

Effective, December 22, 2014, filter 8 has been put offline for maintenance issues.

Report Compiled By: H.Demchenko

Approved in LIMS By: C.Diduck

Date Approved: 1-Apr-15



**WATER TREATMENT PLANT FREE CHLORINE ON-LINE MONITORING REPORT**  
Deacon Booster Pumping Station

Water System Code: **252.00**  
Licence Number: **PWS-09-412 AA**  
Report Created: 01 April 2015

Report Period: March 2015

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
1/03/2015	1.04	0.99	1.01	0.96
2/03/2015	1.02	0.95	1.01	0.96
3/03/2015	1.01	0.92	0.98	0.94
4/03/2015	1.06	0.97	1.05	0.95
5/03/2015	1.05	0.96	1.14	1.05
6/03/2015	1.06	1.00	1.16	1.11
7/03/2015	1.05	1.01	1.13	1.08
8/03/2015	1.00	0.94	1.07	1.02
9/03/2015	0.98	0.95	1.05	1.01
10/03/2015	0.96	0.91	1.02	0.96
11/03/2015	0.98	0.92	1.02	0.88
12/03/2015	1.00	0.94	1.00	0.90
13/03/2015	1.00	0.95	0.96	0.88
14/03/2015	1.05	0.98	1.11	0.99
15/03/2015	1.04	0.98	1.10	1.04
16/03/2015	1.05	1.01	1.09	1.06
17/03/2015	1.02	0.96	0.99	0.92
18/03/2015	1.07	0.97	1.06	0.97
19/03/2015	1.07	1.01	1.17	1.06
20/03/2015	1.02	0.98	1.18	1.10
21/03/2015	1.05	0.96	1.18	1.07
22/03/2015	1.07	1.01	1.19	1.12
23/03/2015	1.05	0.77	1.06	0.86
24/03/2015	1.02	0.96	1.15	1.07
25/03/2015	0.95	0.63	1.05	0.72
26/03/2015	0.93	0.87	1.28	1.15
27/03/2015	0.96	0.87	1.17	1.03
28/03/2015	1.00	0.94	1.10	1.04
29/03/2015	0.99	0.94	1.08	1.01
30/03/2015	0.96	0.91	1.06	1.01
31/03/2015	1.00	0.95	1.02	0.92

Total Number of Measurements, A:	21571	21568
Minimum Free Chlorine Standard:	0.50	0.50
Number of Measurements Meeting Standard, B:	21571	21568
COMPLIANCE, C = B/A X 100%:	100	100

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Submitted By (Print): M.Szmon for A.Weremy

Signature: Original signed by M.Szmon for A.Weremy



**WATER TREATMENT PLANT CHLORINE GRAB MONITORING REPORT**

Water System Code: 252.00	Deacon Booster Pumping Station Branch 1		Deacon Booster Pumping Station Branch 2	
Licence No. PWS-09-412 AA	Free Chlorine (mg/L)	Total Chlorine (mg/L)	Free Chlorine (mg/L)	Total Chlorine (mg/L)
Date				
01-Mar-2015	NS	NS	NS	NS
02-Mar-2015	1.05	1.21	1.07	1.22
03-Mar-2015	1.10	1.21	1.02	1.19
04-Mar-2015	1.02	1.21	1.07	1.21
05-Mar-2015	1.11	1.26	1.16	1.60
06-Mar-2015	1.13	1.31	1.15	1.36
07-Mar-2015	NS	NS	NS	NS
08-Mar-2015	NS	NS	NS	NS
09-Mar-2015	1.02	1.15	1.13	1.28
10-Mar-2015	1.02	1.20	1.06	1.26
11-Mar-2015	0.98	1.17	0.96	1.14
12-Mar-2015	1.09	1.23	1.08	1.29
13-Mar-2015	1.11	1.24	1.06	1.20
14-Mar-2015	NS	NS	NS	NS
15-Mar-2015	NS	NS	NS	NS
16-Mar-2015	1.03	1.20	1.14	1.27
17-Mar-2015	1.09	1.25	1.04	1.21
18-Mar-2015	1.02	1.17	1.01	1.17
19-Mar-2015	1.08	1.24	1.11	1.27
20-Mar-2015	1.10	1.23	1.15	1.30
21-Mar-2015	NS	NS	NS	NS
22-Mar-2015	NS	NS	NS	NS
23-Mar-2015	1.12	1.26	1.13	1.32
24-Mar-2015	1.01	1.17	1.12	1.30
25-Mar-2015	0.92	1.12	0.99	1.21
26-Mar-2015	1.07	1.18	1.13	1.29
27-Mar-2015	1.00	1.19	1.10	1.28
28-Mar-2015	NS	NS	NS	NS
29-Mar-2015	NS	NS	NS	NS
30-Mar-2015	0.99	1.18	1.02	1.24
31-Mar-2015	1.06	1.20	1.07	1.19
<b>Total number of measurements taken, A:</b>	22		22	
<b>Chlorine Standard for Monitoring Location (mg/L):</b>	0.50		0.50	
<b>Number of measurements meeting standard, B:</b>	22		22	
<b>Compliance with Chlorine Standard, C= B/A X 100%:</b>	100%		100%	

NS: No Sample NA: Not Analyzed OL: Off-Line

Comments:

Report Compiled By: H.Demchenko

Approved in LIMS By: C.Diduck

Date Approved: 1-Apr-15



CITY OF WINNIPEG  
WATER AND WASTE DEPARTMENT  
WATER SERVICES

Water System Code: 252.00  
Licence Number: PWS-09-412 AA

WATER TREATMENT PLANT UV REPORT

Report Period: March 2015

Report Created: Wednesday, April 01, 2015

Date	Transmittance %	UVR-D100A Water Volume [ML]				UVR-D200A Water Volume [ML]				UVR-D300A Water Volume [ML]				UVR-D400A Water Volume [ML]				UVR-D500A Water Volume [ML]				UVR-D600A Water Volume [ML]				Total Water Volume [ML]				% Volume Treated To Dose
		Untreated	Below T	o	Total	Untreated	Below	To	Total	Untreated	Below	To	Total	Untreated	Below	To	Total	Untreated	Below	To	Total	Untreated	Below	To	Total	Untreated	Below	To	Total	
		01/03/2015	92.96	0.00	0.00	63.02	63.02	0.00	0.00	0.00	0.00	0.00	0.00	60.06	60.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	69.93	69.98	0.00	0.05	
02/03/2015	92.52	0.00	0.00	63.00	63.00	0.00	0.00	0.00	0.00	0.00	0.00	60.09	60.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.94	69.94	0.00	0.00	193.03	193.03	100.00
03/03/2015	92.46	0.00	0.00	63.19	63.19	0.00	0.00	0.00	0.00	0.00	0.00	60.17	60.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	70.13	70.13	0.00	0.00	193.49	193.49	100.00
04/03/2015	92.43	0.00	0.00	64.61	64.61	0.00	0.00	0.00	0.00	0.00	0.00	61.08	61.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.71	40.71	0.00	0.00	197.00	197.00	100.00
05/03/2015	92.00	0.00	0.45	64.69	65.14	0.00	0.00	0.00	0.00	0.00	0.00	60.22	60.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	195.99	196.44	99.77
06/03/2015	91.90	0.00	0.39	62.62	63.01	0.00	0.00	1.19	1.19	0.00	0.00	59.68	59.68	0.00	0.00	1.37	1.37	0.00	0.00	68.74	68.74	0.00	0.00	0.00	0.00	0.00	0.39	193.61	194.00	99.80
07/03/2015	92.29	0.00	0.00	61.00	61.00	0.00	0.00	0.00	0.00	0.00	0.00	60.50	60.50	0.00	0.00	0.00	0.00	0.00	0.00	72.52	72.52	0.00	0.00	0.00	0.00	0.00	0.00	194.02	194.02	100.00
08/03/2015	92.27	0.00	0.00	59.99	59.99	0.00	0.00	0.00	0.00	0.00	0.00	60.84	60.84	0.00	0.00	0.00	0.00	0.00	0.00	73.10	73.10	0.00	0.00	0.00	0.00	0.00	0.00	193.94	193.94	100.00
09/03/2015	92.24	0.00	0.13	59.87	59.99	0.00	0.00	0.00	0.00	0.00	0.00	61.04	61.04	0.00	0.00	0.00	0.00	0.00	0.00	72.96	72.96	0.00	0.00	0.00	0.00	0.00	0.13	193.86	193.99	99.93
10/03/2015	92.24	0.07	0.20	38.00	38.26	0.00	0.00	24.02	24.02	0.00	0.00	60.42	60.42	0.00	0.00	0.00	0.00	0.00	0.00	71.26	71.26	0.00	0.00	0.00	0.00	0.07	0.20	193.71	193.97	99.86
11/03/2015	92.22	0.00	0.00	0.00	0.00	0.00	0.00	66.51	66.51	0.00	0.00	58.85	58.85	0.00	0.00	0.00	0.00	0.00	0.00	67.52	67.52	0.00	0.02	1.08	1.11	0.00	0.02	193.97	194.00	99.99
12/03/2015	92.23	0.00	0.00	0.00	0.00	0.00	0.00	69.71	69.71	0.00	0.00	55.03	55.03	0.00	0.00	0.00	0.00	0.00	0.00	45.95	45.95	0.00	0.00	26.07	26.07	0.00	0.00	196.76	196.77	100.00
13/03/2015	92.54	0.00	0.00	0.00	0.00	0.00	0.00	72.45	72.45	0.00	0.00	25.09	25.09	0.00	0.03	26.27	26.30	0.00	0.00	0.00	0.00	0.00	0.00	73.15	73.15	0.00	0.03	196.95	196.98	99.98
14/03/2015	92.49	0.00	0.00	0.00	0.00	0.00	0.00	69.59	69.59	0.00	0.00	0.00	0.00	0.00	0.00	60.25	60.25	0.00	0.00	47.97	47.97	0.00	0.05	19.12	19.17	0.00	0.05	196.92	196.97	99.98
15/03/2015	92.55	0.00	0.00	0.00	0.00	0.00	0.00	69.40	69.40	0.00	0.00	0.00	0.00	0.00	0.00	60.19	60.19	0.00	0.00	66.86	66.86	0.00	0.00	0.00	0.00	0.00	0.00	196.45	196.45	100.00
16/03/2015	92.68	0.00	0.00	0.00	0.00	0.00	0.00	69.20	69.20	0.00	0.00	0.00	0.00	0.00	0.00	60.17	60.17	0.00	0.00	66.62	66.62	0.00	0.00	0.00	0.00	0.00	0.00	195.99	195.99	100.00
17/03/2015	92.78	0.00	0.00	0.00	0.00	0.00	0.00	64.51	64.51	0.00	0.00	0.00	0.00	0.00	0.00	62.08	62.08	0.00	0.00	10.25	10.25	0.00	0.03	51.39	51.42	0.00	0.03	188.23	188.26	99.98
18/03/2015	93.32	0.00	0.00	0.00	0.00	0.00	0.00	67.01	67.01	0.00	0.00	0.00	0.00	0.00	0.00	65.81	65.81	0.00	0.00	0.00	0.00	0.00	0.00	64.13	64.13	0.00	0.00	196.95	196.95	100.00
19/03/2015	93.10	0.00	0.00	0.00	0.00	0.00	0.00	67.14	67.14	0.00	0.00	0.00	0.00	0.00	0.00	65.78	65.78	0.00	0.00	34.65	34.65	0.00	0.00	30.88	30.88	0.00	0.00	198.44	198.44	100.00
20/03/2015	93.02	0.00	0.00	0.00	0.00	0.00	0.00	69.06	69.06	0.00	0.00	0.00	0.00	0.00	0.00	65.93	65.93	0.00	0.00	68.57	68.57	0.00	0.00	0.00	0.00	0.00	0.00	203.57	203.57	100.00
21/03/2015	93.07	0.00	0.00	0.00	0.00	0.00	0.00	66.43	66.43	0.00	0.00	0.00	0.00	0.00	0.00	63.83	63.83	0.00	0.00	65.84	65.84	0.00	0.00	0.00	0.00	0.00	0.00	196.11	196.11	100.00
22/03/2015	93.05	0.00	0.00	0.00	0.00	0.00	0.00	66.22	66.22	0.00	0.00	0.00	0.00	0.00	0.00	64.22	64.22	0.00	0.00	65.56	65.56	0.00	0.00	0.00	0.00	0.00	0.00	196.00	196.00	100.00
23/03/2015	92.92	0.00	0.00	0.00	0.00	0.02	0.02	66.93	66.98	0.00	0.00	0.00	0.00	0.01	0.01	50.50	50.53	0.01	0.01	60.58	60.60	0.00	0.00	0.00	0.00	0.05	0.05	178.01	178.11	99.95
24/03/2015	93.09	0.00	0.00	0.00	0.00	0.00	0.00	27.08	27.08	0.00	0.00	35.24	35.24	0.00	0.00	53.77	53.77	0.00	0.00	80.04	80.04	0.00	0.00	0.00	0.00	0.00	0.00	196.13	196.13	100.00
25/03/2015	92.63	0.00	0.00	0.00	0.00	0.00	0.06	29.21	29.27	0.01	0.01	17.45	17.47	0.20	0.20	46.47	46.87	0.09	0.13	52.01	52.23	0.00	0.00	0.00	0.01	0.31	0.41	145.14	145.85	99.51
26/03/2015	93.19	0.00	0.00	0.00	0.00	0.00	0.00	63.09	63.09	0.00	0.00	0.00	0.00	0.00	0.00	62.73	62.73	0.00	0.00	60.11	60.11	0.00	0.00	0.00	0.00	0.00	0.00	185.94	185.94	100.00
27/03/2015	93.12	0.00	0.00	0.00	0.00	0.00	0.00	65.81	65.81	0.00	0.00	0.00	0.00	0.00	0.00	65.63	65.63	0.00	0.00	62.43	62.43	0.00	0.00	0.00	0.00	0.00	0.00	193.86	193.86	100.00
28/03/2015	92.98	0.00	0.00	0.00	0.00	0.00	0.00	78.73	78.73	0.00	0.00	0.00	0.00	0.00	0.00	57.28	57.28	0.00	0.00	61.99	61.99	0.00	0.00	0.00	0.00	0.00	0.00	198.00	198.00	100.00
29/03/2015	93.07	0.00	0.00	0.00	0.00	0.00	0.00	75.26	75.26	0.00	0.00	0.00	0.00	0.00	0.00	54.81	54.81	0.00	0.00	63.03	63.03	0.00	0.00	0.00	0.00	0.00	0.00	193.10	193.10	100.00
30/03/2015	93.21	0.00	0.00	0.00	0.00	0.00	0.00	69.10	69.10	0.00	0.00	0.00	0.00	0.00	0.00	57.99	57.99	0.00	0.00	66.10	66.10	0.00	0.00	0.00	0.00	0.00	0.00	193.19	193.19	100.00
31/03/2015	93.22	0.00	0.00	0.00	0.00	0.00	0.00	48.29	48.29	0.00	0.00	38.45	38.45	0.00	0.00	37.75	37.75	0.13	0.13	62.75	63.00	0.00	0.05	8.52	8.58	0.13	0.18	195.76	196.07	99.84
		0.07	1.17	599.98	601.22	0.02	0.09	1365.94	1366.05	0.01	0.01	834.21	834.24	0.21	0.24	1082.84	1083.29	0.22	0.27	1569.09	1569.59	0.01	0.21	525.05	525.27	0.55	1.99	5977.11	5979.66	

Water Volume [%]:  
Untreated: 0.01 %  
Below Dose: 0.03 %  
To Dose: 99.96 %

Submitted By (Print): M.Szman for A.Weremy

Signature: Original signed by M.Szman for A.Weremy



Water and Waste Department • Service des eaux et des déchets

Tuesday, March 31, 2015

**Our Incident/Report No: 02-2015**  
LIMS Reference No: **41862**

Ms. Melanie Betsill  
Drinking Water Officer  
Manitoba Water Stewardship, Office of Drinking Water  
1007 Century Street  
Winnipeg MB R3H 0W4

## **RE: CORRECTIVE ACTION REPORT**

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<b>WATER SYSTEM</b>	Winnipeg Public Water System
<b>WATER SYSTEM CODE</b>	252.00
<b>LOCATION OF NON-COMPLIANT INCIDENT</b>	<b>Winnipeg 3-Dist WC05</b>
<b>OPERATOR IN CHARGE</b>	NA
<b>INCIDENT REPORTED BY</b>	Courtney Diduck, Analytical Services Branch Head
<b>TYPE OF NON-COMPLIANT INCIDENT</b>	Low disinfection residual in the distribution system, 22(1) MR 40/2007
<b>INCIDENT DATE</b>	March 5, 2015
<b>DESCRIPTION OF CORRECTIVE ACTIONS</b>	IMMEDIATELY: Re-sampled original location and tested additional samples upstream and downstream for free/total chlorine, bacteria, and temperature, and contacted the ODW. Water Services Division was contacted and the area was checked for closed valves and spot flushed. All closed valves were located and opened and free chlorine residuals were re-established to acceptable levels.
<b>TEST RESULTS</b>	See Attached

### NOTES/COMMENTS:

1. All microbiological tests performed by contract laboratory.
2. UP/DOWN STREAM testing performed when EC is >0 /100mL, TC is >10 /100mL or when resample/consecutive sample is positive for EC or TC or as directed by the Manager of Environmental Standards Division and/or the Office of Drinking Water
3. INITIAL chlorine, turbidity and temperature only tested at the required 39 sampling locations.
4. NR-No Result due to laboratory/analyst error.
5. NA-Not Analyzed.

**EMERGENCY REPORTING IS REQUIRED WHERE A POTENTIAL HEALTH RISK IS INVOLVED. FOLLOW THE INSTRUCTIONS OF YOUR DRINKING WATER OFFICER ON SITUATIONS REQUIRING IMMEDIATE REPORTING**

### **DISTRIBUTION**

FORWARD THE ORIGINAL TO THE DRINKING WATER OFFICER WITH THE MONTHLY COMPLIANCE SUBMISSIONS.

**Contact the Drinking Water Officer for any comments, questions or concerns**

REFERENCE: ODW-RF-016

*Embrace the spirit • Vivez l'esprit*

Environmental Standards Division • Division des normes environnementales  
2230 Main Street • 2230, rue Main • Winnipeg • Manitoba R2V 4T8  
fax/télé. (204) 339-2147 • [www.winnipeg.ca](http://www.winnipeg.ca)



Sample Name	Sample Number	Date Sampled	bacColiEsch-QT (MPNU/100mL)	bacColiTotal-QT (MPNU/100mL)	bacHPC (cfu/mL)	Chlorine, Free (mg/L)	Chlorine, Total (mg/L)	Temperature (°C)	Turbidity (ntu)	Time Sampled (hrs)
WC05	425812	05-Mar-15	<1	<1	>3000	0.09	0.17	6.9	0.50	11:56
WC05	425821	05-Mar-15	<1	<1	>3000	0.05	0.15	4.7	0.52	12:57
WC05	425822	05-Mar-15	<1	<1	<10	0.04	0.17	4.0	0.64	12:33
WC05	426404	06-Mar-15	NA	NA	NA	0.53	0.68	5.6	NA	14:01
WC05	426405	06-Mar-15	NA	NA	NA	0.59	0.76	4.1	NA	14:22
WC05	426406	06-Mar-15	NA	NA	NA	0.54	0.72	6.5	NA	14:12