



Public Water System Annual Report

Dauphin Public Water System

It is the City of Dauphin's belief that the public has a right to access information related to the drinking water they consume. To that end the following report has been prepared for the City of Dauphin water system.

3/12/2012

Water System Information

Name of Public Water System: Dauphin Public Water System

Name of the Legal Owner: City of Dauphin

Contact Person: Bill Brenner C.E.T., Water Treatment and Technology Manager

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Emergency Phone Number: 204.648.3295

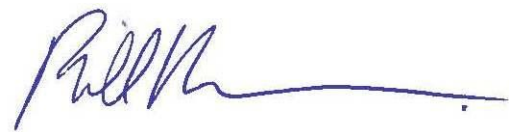
Names of Water Treatment Plant Operators:

Randy Hlady

Bryan Adcock

Water Treatment Plant Phone Number: 204.622.3287

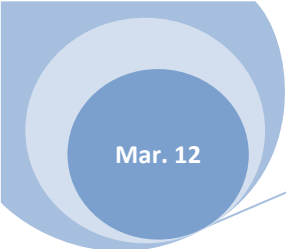
Date Completed: March 15, 2011



Bill Brenner, C.E.T.

Water Treatment and Technology Manager

City of Dauphin



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Introduction

The 2011 Annual Report for the City of Dauphin summarized the Water Utility's ability to produce safe potable water and meet the requirements of all provincial regulations

Description of Water System

The City of Dauphin Public Water System (PWS) provides potable drinking water to a population of 8251 residents (2011 Census). Dauphin's PWS also supplies potable water to 3 private water systems in the RM of Dauphin those being the Lockville Water Coop, Eclipse Water Coop and the Dauphin Airport. Treated water produced from the water treatment plant meets all health and aesthetic objectives as stated in the *Guidelines for Canadian Drinking Water Quality*.

Water Supply Source

The City of Dauphin (City) obtains surface water from the Vermillion River Reservoir. The intake structure is located approximately 6.5 km from the water treatment plant (WTP) site. Raw water is pumped from the reservoir via the Vermillion Raw Water Pumping Station to the Lower Reservoir located at the WTP site via 300 mm diameter pipe. It is then pumped into the WTP via the Low-lift Pumping Station via 300 mm diameter pipe.

Edwards Creek is used as a back-up water source when required. The intake structure is located just south of the southern tip of the Lower Reservoir. Due to raw water quality concerns (variable composition, high manganese levels), Edwards Creek is only used in emergency situations.

Intake Structures

The Vermillion Raw Water Reservoir is operated by Manitoba Water Stewardship. The intake structure consists of approximately 45 m of 400 mm diameter cast iron pipe. The pipe opening is screened by a stainless steel mesh. The Vermillion Pumping Station consists of two alternating 50 hp pumps. Raw water is pumped from the Vermillion Reservoir 4 to 5 days per week to the Lower Reservoir at the WTP site via approximately 6 km of 300 mm diameter pipe.

On an as needed basis raw water is also sourced from Edwards Creek. Edwards Creek is controlled by Parks Canada. The intake structure is located at the southeast shore of the Lower Reservoir at the WTP site.

Water Treatment Process

The source water for the WTP is the Vermillion River and, if necessary, Edwards Creek. Raw water is drawn from Vermillion River by pumps and stored in the Lower Reservoir at the WTP site. Raw water is pumped from the Lower Reservoir via the Low Lift Pumping Station and enters the facility on the north side of the building and is split to feed the two process trains. Treated water is stored in three reservoirs: the WTP Reservoir, the Jackson Street Reservoir and the

Brown Avenue Reservoir and distributed to the consumers via watermains. The PRV/Booster Station located along Hwy #5 aids in the transfer of the treated water to the City of Dauphin (City) distribution system.

The existing treatment process consists of the following:

- Flash Mixing/Flocculation/Sedimentation, using aluminium sulphate (alum), caustic soda and polymer.
- Ozonation, for primary disinfection.
- Filtration, polishing step using sand and anthracite rapid gravity filters.
- Chloramination, using chlorine and ammonia for secondary disinfection.
- Fluoridation, using hydrofluosilic acid (HFSA) for consumers' dental health.

These processes are designed to clarify the water and remove microbial contaminants, such as bacteria, and organic materials that are naturally found in surface waters.

Distribution System

The existing water distribution network is made up of pipes of various, age, size and material. The distribution network is made up of pipe ranging from 100 mm to 300 mm diameter, with the majority of the pipe being 150 mm in diameter.

The City has a very detailed procedure for swabbing and flushing their watermain network. Between 2002 and 2007 the entire distribution network was flushed annually and one quarter of the network was swabbed annually.

Storage Reservoirs

The water storage system incorporates one (1) raw water and three (2) treated water reservoirs. The table below summarizes their capacities.

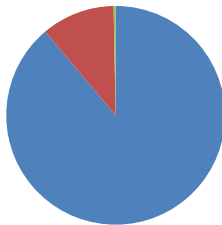
Capacity of Reservoirs

	Imperial Units (Imp. Gallons)	Metric Units (ML)	Year Constructed
Edwards Reservoir (Raw)	11,300,000	51.4	
WTP (Treated)	792,000	3.6	1999 & 2001
Brown Avenue (Treated)	1,000,000	4.54	1981

Number of Connections, Population Served and Types of Water Users

The Dauphin distribution system is comprised of 3301 active service connections servicing a population of 8251 residents (2011 Census). All service connections are metered with 88.8% being residential services, 10.8% being commercial services and 0.4% being rural services.

Active Service Connections



Classification and Certification

The water system facility classifications for the 2011 year:

Class 4 Water Treatment Facility Classification

Class 2 Water Distribution Facility Classification

The water system staff and certification levels for the 2011 year:

Staff Member	Water Treatment	Water Distribution
William P. Brenner, C.E.T.	Class IV	Class II
Randy A. Hlady	Class IV (conditional)	Class II
Bryan C. Adcock	Class III (conditional)	
Kevin J. Komarnicki, C.E.T.	Class II	Class II
Lyle R. Stokotelnny, C.E.T.		Class II
Dwight E. Olsen		Class II
Jeff J. Weselowski		Class II
Brian L. Harvey		Class II
Ronald E. Paziuk		Class II
John Sochan	Class II	Class II
Gary Burla		Class I
Curtis Flett		Class I

Disinfection System in Use

The final step in the treatment of safe water is disinfection. Disinfection is the selective destruction or inactivation of potential disease causing organisms in water. As per the Drinking Water Safety Act the Dauphin PWS is required to ensure a disinfectant residual of at least:

- 0.5 mg of free chlorine per litre of water entering the distribution system following a minimum contact time of 20 minutes
- 0.3 mg of monochloramine per litre of water at all times at any point in the water distribution system

Type of Disinfection system used

Secondary disinfection of the filtered water is accomplished using chlorine gas and aqua-ammonia. Chlorine and ammonia are added to the treated water to produce chloramines. Chlorine gas is added to the water using a Wallace and Tiernan V-Notch gas feeder system. Ammonia is added to the water using a Wallace and Tiernan positive displacement pump.

For one month in the fall of 2011, the Dauphin PWS switched to free chlorination in the distribution system. The Dauphin PWS will continue to use free chlorination in the distribution system for one month annually.

Equipment Redundancy and Monitoring Requirements

Chlorine gas is stored in a separate room in 68 kg cylinders. Two banks of two cylinders are connected to the chlorine feed system at all times and an automatic transfer system is in place.

Each of the two banks of cylinders is capable of supplying the full amount of chlorine required for disinfection at peak demand. Parts and maintenance kits for all chlorination equipment are kept at the WTP at all times.

Spare ammonia pumps as well as pump parts are stored at the WTP at all times.

Disinfectant Residual Overall Performance/Results

For 2011, the Dauphin PWS has met all regulatory requirements in regard to monitoring and reporting disinfection residuals in the water leaving the water treatment plant as well as in the distribution system.

List of Water Quality Standards

The Province of Manitoba has adopted a number of water quality standards from the *Guidelines for Canadian Drinking Water Quality*, developed by Health Canada. The parameters are health-based and they express the maximum acceptable concentration for a surface water supply source. Concentration values in excess constitute a health-related issue and require corrective actions.

Parameter	Quality Standard	Frequency	Performance
Total Coliform and <i>E.coli</i>	• Zero <i>E.coli</i> and total coliform bacteria detectable per 100 mL in all treated and distributed water.	Bi-weekly	100% Compliance
Chlorine Residual	• A free chlorine residual of at least 0.5 mg/L in water entering the distribution system following a minimum contact time of 20 minutes.	Daily	100% Compliance

Parameter	Quality Standard	Frequency	Performance
	• Report Submissions	Monthly	100% Compliance
Monochloramine	• A monochloramine residual of at least 0.3 mg/L at all times at any point in the water distribution system.	Bi-weekly	100% Compliance
Turbidity	• Less than or equal to 0.3 NTU in 95% of the measurements in a month of the effluent from each operating particulate filter.	Continuous	100% Compliance
	• Not exceed 0.3 NTU for more than 12 consecutive hours of filter operation.	Continuous	100% Compliance
	• Not exceed 1.0 NTU for any continuous measurement.	Continuous	100% Compliance
	• Report Submissions	Monthly	100% Compliance
Total Trihalomethanes (to include: bromodichloromethane, bromoform, chloroform, dibromochloromethane)	• Total Trihalomethane less than or equal to 0.10 mg/L • Bromodichloromethane less than or equal to 0.016 mg/L.	Quarterly	100% Compliance

Water System Failures and Corrective Actions

In 2011, there were no water system failures or associated corrective actions required.

Additional Records Required

As part of Manitoba Health's fluoridation program, water samples are collected on a daily basis at the WTP and City Hall and tested on site. Daily fluoride results are recorded and a 14 day composite sample is submitted by-weekly for analysis. The Dauphin PWS strives to maintain a 0.70 mg/L fluoride level. The operating range for fluoride, as identified by Manitoba Health, is 0.50-0.90 mg/L. In 2011, fluoride levels never exceeded the 0.90 mg/L recommended limit. (See Appendix "B" – Certificate of Commendation)

Drinking Water Safety Orders and Actions Taken in Response

In 2011, no Drinking Water Safety Orders were issued for the Dauphin Public Water System.

Boil Water Advisories and Actions Taken in Response

In 2011, no Boil Water Advisories were issued for the Dauphin Public Water System.

Warnings Issued or Charges Laid on the System in Accordance with the Drinking Water Safety Act

In 2011, no Warnings were issued for the Dauphin Public Water System.

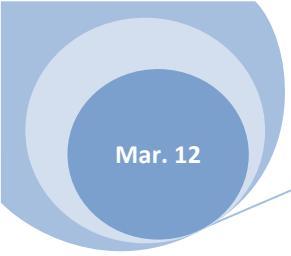
Major Expenses Incurred

- Replace 1' of filter coal in one filter \$15,000.00
- Replace ozone generator modules \$ 9,000.00
- Watermain Replacement – 4th Ave SE \$172,000.00

Future System Expansion and/or Increased Production

The City of Dauphin currently has the ability to provide 200% of our average daily flows; therefore, there is currently no need to look at ways to increase water production.

As part of the City's ongoing effort to control operation costs at the water treatment plant, we are currently exploring the possibility of converting our primary disinfection system from ozone to ultraviolet (UV) disinfection. Initial information indicates that a significant reduction in operational costs could be realized by the conversion. The city will explore this option in 2013.



Appendix

Appendix A – Bacteriological Sample Results

Collection Date	Sample Identification	Total Coliforms	E. Coli
4-Jan-11	DAUPHIN 1-RAW	45	0
4-Jan-11	DAUPHIN 2-TTD	0	0
4-Jan-11	DAUPHIN 3-DIST@CITY SHOP	0	0
4-Jan-11	DAUPHIN 3-DIST@BOOSTER STATION CHLORINATING BLDG	0	0
4-Jan-11	DAUPHIN 3-DIST@CIVIC OFFICE	0	0
4-Jan-11	261 BROWN AVE EAST	0	0
11-Jan-11	DAUPHIN 1 RAW	34	0
11-Jan-11	DAUPHIN 2 TTD	0	0
11-Jan-11	DAUPHIN 3 DIST CIVIC OFFICE 4	0	0
11-Jan-11	DAUPHIN Brown RES EAST CELL 5	0	0
11-Jan-11	DAUPHIN TUXEDO DR 6	0	0
11-Jan-11	DAUPHIN COOP BULK GAS 7	0	0
18-Jan-11	DAUPHIN 1-RAW	21	0
18-Jan-11	DAUPHIN 2-TTD	0	0
18-Jan-11	DAUPHIN 3-DIST@CITY SHOP	0	0
18-Jan-11	DAUPHIN 3-DIST@BOOSTER STN CHLORINATING BLDG	0	0
18-Jan-11	DAUPHIN 3-DIST@CIVIC OFFICE	0	0
18-Jan-11	DAUPHIN 3-DIST@34 MACNEILL PLACE	0	0
1-Feb-11	DAUPHIN 1 RAW	36	0
1-Feb-11	DAUPHIN 1 RAW	36	0
1-Feb-11	DAUPHIN 2 TTD	0	0
1-Feb-11	DAUPHIN 2 TTD	0	0
1-Feb-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
1-Feb-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
1-Feb-11	DAUPHIN 3 DIST @ BOOSTER STN CHLORINATING BLDG	0	0
1-Feb-11	DAUPHIN 3 DIST @ BOOSTER STN CHLORINATING BLDG	0	0
1-Feb-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
1-Feb-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
1-Feb-11	DAUPHIN 3 DIST @ 261 BROWN AVE EAST	0	0
1-Feb-11	DAUPHIN 3 DIST @ 261 BROWN AVE EAST	0	0
15-Feb-11	DAUPHIN 1 RAW	16	0
15-Feb-11	DAUPHIN 2 TTD	0	0
15-Feb-11	DAUPHIN #4 DIST.@ CIVIC OFFICE	0	0
15-Feb-11	DAUPHIN #5 BRAUN RES WEST CELL	0	0
15-Feb-11	DAUPHIN #6 TUXEDO DR.	0	0
15-Feb-11	DAUPHIN #7 COOP BULK GAS	0	0
22-Feb-11	DAUPHIN 1 RAW	6	0

Collection Date	Sample Identification	Total Coliforms	E. Coli
22-Feb-11	DAUPHIN 2 TTD	0	0
22-Feb-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
22-Feb-11	DAUPHIN 3 DIST@ BOOSTER STN CHLORINATING BLDG	0	0
22-Feb-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
22-Feb-11	DAUPHIN 3 DIST @261 BROWN AVE EAST	0	0
8-Mar-11	DAUPHIN 1-RAW	5	0
8-Mar-11	DAUPHIN 2-TTD	0	0
8-Mar-11	DAUPHIN 3-DIST @ CITY SHOP	0	0
8-Mar-11	DAUPHIN 3-DIST @ BOOSTER STN CHLORINATING BLDG	0	0
8-Mar-11	DAUPHIN 3-DIST @ CIVIC OFFICE	0	0
8-Mar-11	DAUPHIN 261 BROWN AVE EAST	0	0
15-Mar-11	DAUPHIN 1 RAW	10	0
15-Mar-11	DAUPHIN 2 TTD	0	0
15-Mar-11	DAUPHIN 4 DIST @ CIVIC OFFICE	0	0
15-Mar-11	DAUPHIN 5 BRAUN RES EAST CELL	0	0
15-Mar-11	DAUPHIN 6 TUXEDO DR	0	0
15-Mar-11	DAUPHIN 7 COOP BULK GAS	0	0
22-Mar-11	DAUPHIN 1-RAW	3	0
22-Mar-11	DAUPHIN 2-TTD	0	0
22-Mar-11	DAUPHIN 3-DIST@CITY SHOP	0	0
22-Mar-11	DAUPHIN 3-DIST@BOOSTER STN CHLORINATING BLDG	0	0
22-Mar-11	DAUPHIN 3-DIST@CIVIC OFFICE	0	0
22-Mar-11	DAUPHIN 3-DIST@261 BROWN AVE EAST	0	0
5-Apr-11	DAUPHIN 1-RAW	56	0
5-Apr-11	DAUPHIN 2-TTD	0	0
5-Apr-11	DAUPHIN 3-DIST@CITY SHOP	0	0
5-Apr-11	DAUPHIN 3-DIST@BOOSTER STN CHLORINATION BLDG	0	0
5-Apr-11	DAUPHIN 3-DIST@CIVIC OFFICE	0	0
5-Apr-11	DAUPHIN 3-DIST@261 BROWN AVE EAST	0	0
12-Apr-11	DAUPHIN 1 RAW	36	0
12-Apr-11	DAUPHIN 2 TTD	0	0
12-Apr-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
12-Apr-11	DAUPHIN 4 BROWN RES WESTFALL	0	0
12-Apr-11	DAUPHIN 5 TUXEDO DRIVE	0	0
12-Apr-11	DAUPHIN 6 COOP BULK GAS	0	0
19-Apr-11	DAUPHIN 1 RAW		27
19-Apr-11	DAUPHIN 2 TTD	0	0
19-Apr-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
19-Apr-11	DAUPHIN 3 DIST @ BOOSTER STN CHLORINATING BLDG	0	0
19-Apr-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
19-Apr-11	DAUPHIN 3 DIST 261 BROWN AVE EAST	0	0

Collection Date	Sample Identification	Total Coliforms	E. Coli
3-May-11	DAUPHIN 1-RAW	70	6
3-May-11	DAUPHIN 2-TTD	0	0
3-May-11	DAUPHIN 3 DIST @BROWN AVE EAST	0	0
3-May-11	DAUPHIN 4 DIST @CITY SHOP	0	0
3-May-11	DAUPHIN 5 DIST @BOOSTER STN CHLORINATING BLDG	0	0
3-May-11	DAUPHIN 6 DIST @CIVIC OFFICE	0	0
10-May-11	DAUPHIN 1-RAW	78	3
10-May-11	DAUPHIN 2-TTD	0	0
10-May-11	DAUPHIN 4-DIST @CIVIC OFFICE	0	0
10-May-11	DAUPHIN 5-DIST RES EAST WELL	0	0
10-May-11	DAUPHIN 6-DIST TUXEDO DR	0	0
10-May-11	DAUPHIN 7-DIST COOP BULK GAS	0	0
24-May-11	DAUPHIN 1 - RAW	70	0
24-May-11	DAUPHIN 2 - TTD	0	0
24-May-11	#4 DAUPHIN 3 - DIST @ CITY SHOP	0	0
24-May-11	#5 DAUPHIN 3 - DIST @ BOOSTER STN CHLORINATING BLDG	0	0
24-May-11	#6 DAUPHIN 3 - DIST @ CIVIC OFFICE	0	0
24-May-11	#7 34 MACNEILL PLACE	0	0
7-Jun-11	DAUPHIN 1-RAW	144	9
7-Jun-11	DAUPHIN 2-TTD	0	0
7-Jun-11	DAUPHIN 4-DIST @CITY SHOP	0	0
7-Jun-11	DAUPHIN 5-DIST @BOOSTER STN CHLORINATING BLDG	0	0
7-Jun-11	DAUPHIN 6-DIST @CIVIC OFFICE	0	0
7-Jun-11	DAUPHIN 3-DIST @34 MARNEILL PLACE	0	0
14-Jun-11	DAUPHIN 1 - RAW	130	12
14-Jun-11	DAUPHIN 2 - TTD	0	0
14-Jun-11	#4 DAUPHIN 3 - DIST @ CIVIC OFFICE	0	0
14-Jun-11	#5 BROWN AVE RES WEST CELL	0	0
14-Jun-11	#6 TUXEDO DR.	0	0
14-Jun-11	#7 CO-OP BULK GAS	0	0
21-Jun-11	DAUPHIN 1 - RAW		21
21-Jun-11	DAUPHIN 2 - TTD	0	0
21-Jun-11	#4 DAUPHIN 3 - DIST @ CITY SHOP	0	0
21-Jun-11	#5 DAUPHIN 3 - DIST @ BOOSTER STN CHLORINATING BLDG	0	0
21-Jun-11	#6 DAUPHIN 3 - DIST @ CIVIC OFFICE	0	0
21-Jun-11	#3 34 MACNEILL PLACE	0	0
5-Jul-11	DAUPHIN 1 - RAW		5
5-Jul-11	DAUPHIN 2 - TTD	0	0
5-Jul-11	#4 DAUPHIN 3 - DIST @ CITY SHOP	0	0
5-Jul-11	#5 DAUPHIN 3 - DIST @ BOOSTER STN CHLORINATING BLDG	0	0
5-Jul-11	#6 DAUPHIN 3 - DIST @ CIVIC OFFICE	0	0

Collection Date	Sample Identification	Total Coliforms	E. Coli
5-Jul-11	#3 DAUPHIN 3 - DIST @ 261 BROWN AVE. EAST	0	0
12-Jul-11	DAUPHIN 1 - RAW		2
12-Jul-11	DAUPHIN 2 - TTD	0	0
12-Jul-11	#4 DAUPHIN 3 - DIST @ CIVIC OFFICE	0	0
12-Jul-11	#5 BROWN AVE RES EAST CELL	0	0
12-Jul-11	#6 TUXEDO DR.	0	0
12-Jul-11	#7 COOP BULK GAS	0	0
19-Jul-11	DAUPHIN 1 - RAW		0
19-Jul-11	DAUPHIN 2 - TTD	0	0
19-Jul-11	#4 DAUPHIN 3 - DIST @ CITY SHOP	0	0
19-Jul-11	#5 DAUPHIN 3 - DIST @ BOOSTER STN CHLORINATING BLDG	0	0
19-Jul-11	#6 DAUPHIN 3 - DIST @ CIVIC OFFICE	0	0
19-Jul-11	#3 261 BROWN AVE EAST	0	0
2-Aug-11	DAUPHIN 1-RAW	200	2
2-Aug-11	DAUPHIN 2-TTD	0	0
2-Aug-11	DAUPHIN 3-DIST@BROWN AVE	0	0
2-Aug-11	DAUPHIN 4-DIST @CITY SHOP	0	0
2-Aug-11	DAUPHIN 5-DIST @BOOSTER STN CHLORINATING BLDG	0	0
2-Aug-11	DAUPHIN 6-DIST @CIVIC OFFICE	0	0
16-Aug-11	DAUPHIN 1-RAW	>200	1
16-Aug-11	DAUPHIN 2-TTD	0	0
16-Aug-11	DAUPHIN 4-DIST @CIVIC OFFICE	0	0
16-Aug-11	DAUPHIN 5-DIST @BROWN AVE RES WEST CELL	0	0
16-Aug-11	DAUPHIN 6-DIST @TUXEDO DR	0	0
16-Aug-11	DAUPHIN 7-DIST @CO-OP BULK GAS	0	0
16-Aug-11	DAUPHIN 1-RAW	>200	1
16-Aug-11	DAUPHIN 2-TTD	0	0
16-Aug-11	DAUPHIN 4-DIST @CIVIC OFFICE	0	0
16-Aug-11	DAUPHIN 5-DIST @BROWN AVE RES WEST CELL	0	0
16-Aug-11	DAUPHIN 6-DIST @TUXEDO DR	0	0
16-Aug-11	DAUPHIN 7-DIST @CO-OP BULK GAS	0	0
23-Aug-11	DAUPHIN 1-RAW	165	3
23-Aug-11	DAUPHIN 2-TTD	0	0
23-Aug-11	DAUPHIN 4-DIST @CITY SHOP	0	0
23-Aug-11	DAUPHIN 5-DIST @BOOSTER STN CHLORINATING BLDG	0	0
23-Aug-11	DAUPHIN 6-DIST @CIVIC OFFICE	0	0
23-Aug-11	DAUPHIN 3-34 MACNEILL PLACE	0	0
6-Sep-11	DAUPHIN 1 RAW	>200	3
6-Sep-11	DAUPHIN 2 TTD	0	0
6-Sep-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
6-Sep-11	DAUPHIN 3 DIST @ BOOSTER STN CHLORINATIN BLDG	0	0

Collection Date	Sample Identification	Total Coliforms	E. Coli
6-Sep-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
6-Sep-11	34 MACNEILL PLACE	0	0
13-Sep-11	DAUPHIN 1 RAW	>200	3
13-Sep-11	DAUPHIN 2 TTD	0	0
13-Sep-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
13-Sep-11	BROWN AVE RES EAST CELL	0	0
13-Sep-11	TUXEDO DRIVE	0	0
13-Sep-11	CO OP BULK GAS	0	0
20-Sep-11	DAUPHIN 1 RAW	200	3
20-Sep-11	DAUPHIN 2 TTD	0	0
20-Sep-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
20-Sep-11	DAUPHIN 3 DIST @ BOOSTER STN CHLORINATING BLDG	0	0
20-Sep-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
20-Sep-11	DAUPHIN 3 DIST @ 34 MACNEILL PLACE	0	0
4-Oct-11	DAUPHIN 1 RAW	>200	38
4-Oct-11	DAUPHIN 2 TTD	0	0
4-Oct-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
4-Oct-11	DAUPHIN 4 DIST @ BOOSTER STN CHLORINATING BLDG	0	0
4-Oct-11	DAUPHIN 5 DIST @ CIVIC OFFICE	0	0
4-Oct-11	DAUPHIN 6 DIST @ 34 MACNEILL PLACE	0	0
11-Oct-11	DAUPHIN 1 - RAW	200	200
11-Oct-11	DAUPHIN 2 - TTD	0	0
11-Oct-11	DAUPHIN 3 - DIST @ CIVIC OFFICE	0	0
11-Oct-11	DAUPHIN 3 - DIST @ BROWN AVE	0	0
11-Oct-11	DAUPHIN 3 - DIST @ 23 TUXEDO DR	0	0
11-Oct-11	DAUPHIN 3 - DIST @ CO-OP	0	0
18-Oct-11	DAUPHIN 1 RAW	165	41
18-Oct-11	DAUPHIN 2 TTD	0	0
18-Oct-11	DAUPHIN 3 DIST. @ CITY SHOP	0	0
18-Oct-11	DAUPHIN 3 DIST. @ BOOSTER STN CHLORINATING BLDG	0	0
18-Oct-11	DAUPHIN 3 DIST. @ CIVIC OFFICE	0	0
18-Oct-11	DAUPHIN 3 DIST. @ MACNEILL PLACE	0	0
1-Nov-11	DAUPHIN 1 RAW	74	3
1-Nov-11	DAUPHIN 2 TTD	0	0
1-Nov-11	DAUPHIN 3 DIST.@ CITY SHOP	0	0
1-Nov-11	DAUPHIN 3 DIST.@ BOOSTER STN CHLORINATING BLDG	0	0
1-Nov-11	DAUPHIN 3 DIST.@ CIVIC OFFICE	0	0
1-Nov-11	DAUPHIN 261 BROWN AVE EAST	0	0
15-Nov-11	DAUPHIN 1-RAW	74	1
15-Nov-11	DAUPHIN 2-TTD	0	0
15-Nov-11	DAUPHIN 4-DIST@CIVIC OFFICE	0	0

Collection Date	Sample Identification	Total Coliforms	E. Coli
15-Nov-11	DAUPHIN 5-DIST@BROWN AVE RES EAST WELL	0	0
15-Nov-11	DAUPHIN 6-DIST@TUXEDO DRIVE	0	0
15-Nov-11	DAUPHIN 7-DIST@COOP BULK GA	0	0
22-Nov-11	DAUPHIN 1-RAW	83	0
22-Nov-11	DAUPHIN 2-TTD	0	0
22-Nov-11	DAUPHIN 4-DST CITY SHOP	0	0
22-Nov-11	DAUPHIN 5-DST BOOSTER STN CHLORINATING BLDG	0	0
22-Nov-11	DAUPHIN 6-DST CIVIC OFFICE	0	0
22-Nov-11	DAUPHIN 3-DST BROWN AVE EAST	0	0
6-Dec-11	DAUPHIN 1 RAW	101	4
6-Dec-11	DAUPHIN 3 DIST 261 BROWN AVE EAST	0	0
6-Dec-11	DAUPHIN 2 TTD	0	0
6-Dec-11	DAUPHIN 3 DIST @ CITY SHOP	0	0
6-Dec-11	DAUPHIN 3 DIST @ BOOSTER STN CHLORINATED BLDG	0	0
6-Dec-11	DAUPHIN 3 DIST @ CIVIC OFFICE	0	0
13-Dec-11	DAUPHIN 1-RAW	56	1
13-Dec-11	DAUPHIN 2-TTD	0	0
13-Dec-11	DAUPHIN 4-DIST @ CIVIC OFFICE	0	0
13-Dec-11	DAUPHIN 5-DIST @ BROWN AVE RES WESTCELL	0	0
13-Dec-11	DAUPHIN 6-DIST @ TUXEDO DR.	0	0
13-Dec-11	DAUPHIN 7-DIST @ COOP BULK GAS	0	0

Appendix B – Fluoridation Certificate of Commendation

Certificate of Commendation

Water Treatment Plant Staff

Personnel des installations de traitement des eaux

In recognition of achieving a high standard of operating efficiency with respect to the Community Water Fluoridation Program as administered by Manitoba Health.

En reconnaissance de la grande efficacité de son installation de traitement des eaux, dans le cadre du Programme de fluoruration de l'eau dans les localités qui relèvent de Santé Manitoba.

We award this certificate of commendation to:

Nous décernons ce certificat de mérite à :

Staff of the DAUPHIN Water Treatment Plant

this/le **28**

day of/jour de

November

2011



Associate Deputy Minister
Public Health and Primary Health Care
Sous-ministre associé
Santé publique et Soins de santé primaires



Minister of Health
Ministre de la Santé

