



February 17, 2022

Municipality of West Perth  
169 St. David Street  
Mitchell, Ontario  
N0K 1N0

**ATTENTION: Mr. Jeff Brick  
CAO**

**REFERENCE: Municipality of West Perth  
2021 Drinking Water Annual Report and Summary  
Report**

Please find enclosed the 2021 Drinking Water Annual Report and Summary Report for the Mitchell Drinking Water System. The reports are prepared in accordance with O. Reg 170/03 of the Safe Drinking Water Act.

Under O. Reg 170/03 the Annual Report must cover the period from January 1 to December 31 in a year and must be prepared by February 28 of the following year. The annual report is to be made available free of charge to anyone who requests a copy.

O. Reg 170/03 also requires the preparation of a Summary Report for the preceding year which must be presented to council no later than March 31.

A copy of the reports will be available at the Municipal Office, the West Perth Public Library and on the Municipality's website.

Any questions or concerns regarding the reports can be directed towards the Environmental Services Department.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. W. J.", is placed below the word "Sincerely,".

Environmental Services  
Municipality of West Perth

**Part 1 - ANNUAL REPORT** (as required by O. Reg. 170/03, Section 11)

<b>Drinking-Water System Number:</b>	210000577
<b>Drinking-Water System Name:</b>	Mitchell Drinking Water System
<b>Drinking-Water System Owner:</b>	Municipality of West Perth
<b>Drinking-Water System Category:</b>	Large Municipal Residential
<b>Period being reported:</b>	January 1, 2021 to December 31, 2021

Complete if your Category is Large Municipal Residential or Small Municipal Residential	Complete for all other Categories
<p><i>Does your Drinking-Water System serve more than 10,000 people?</i></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><i>Number of Designated Facilities served:</i></p>
<p><i>Is your annual report available to the public at no charge on a web site on the Internet?</i></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><i>Did you provide a copy of your annual report to all Designated Facilities you serve?</i></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><i>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</i></p> <p>Municipal Office, West Perth Public Library and Municipality of West Perth Website</p>	<p><i>Number of Interested Authorities you report to:</i></p> <p><i>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?</i></p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>

<b>List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:</b>	
<b>Drinking Water System Name</b>	<b>Drinking Water System Number</b>
N/A	

<b>Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?</b>
N/A

Indicate how you notified system users that your annual report is available and is free of charge.		
<input checked="" type="checkbox"/> Public access/notice via the web	<input checked="" type="checkbox"/> Public access/notice via Government Office	<input type="checkbox"/> Public access/notice via a newspaper
<input checked="" type="checkbox"/> Public access/notice via Public Request	<input checked="" type="checkbox"/> Public access/notice via a Public Library	<input type="checkbox"/> Public access/notice via Other Method _____

### Describe your Drinking Water System

The Mitchell Drinking Water System is a Class II Distribution and Supply sub-system owned and operated by the Municipality of West Perth. The system consists of four drilled groundwater wells.

Well #1, contained within Well-house #1, is 23.2m deep and has a 200mm steel liner inserted into the original 305mm well casing. Raw water from this well is pumped through piping past Well-house #2 where, when required, it is combined with raw water from Well #2 and directed to Distribution Center 123.

Well #2 is 30.2m deep and has a 200mm steel liner inserted into the original 305mm well casing. Raw water is combined with raw water from Well #1 when required and directed to Distribution Center 123.

Well #3 is the main well for Distribution Center 123. The well is 54.7m deep with a 200mm steel liner inserted into the original 305mm well casing. Water from this well is conveyed through piping to Distribution Center 123.

Well #4, located within Distribution Center 4, was drilled to a final depth of 71.6m with a 300mm steel casing. Raw water from this well is treated within Distribution Center 4. Raw water from all four wells is typically free from any bacteriological activity. The water is hard and naturally has elevated levels of fluoride. The turbidity of the raw water ranges from 0 to 1 NTU.

Other than the normal increase in usage during the summer months, there are no major operational challenges due to event-driven fluctuations.

Distribution Center 123 is located on the west side of St. George St. The storage reservoir is located adjacent to the eastern limit of the plant. It has a baffled section with a capacity of 155m<sup>3</sup> and an unbaffled section with a capacity of 243m<sup>3</sup>. Raw water from Wells 1, 2 and 3 is conveyed into the plant, after which treatment chemicals are injected; sodium silicate for iron sequestering, and sodium hypochlorite for disinfection. The treated water is directed into the reservoir for contact time and then through the high lift pumps into the distribution system. The disinfection system at Distribution Center 123 has been designed with backup chemical pumps.

Distribution Center 4 is located near the NW corner of Arthur and Herbert streets. The plant includes a disinfection system and a 305m<sup>3</sup> baffled, below grade reservoir. Primary disinfection is achieved using liquid sodium hypochlorite. Sodium silicate is injected for iron sequestering. As in Distribution Center 123, the treated water is directed into the reservoir for contact time and then through the high lift pumps into

the distribution system. The disinfection system at Distribution Center 4 has been designed with backup chemical pumps.

The Mitchell Standpipe is located at 97 Arthur Street. It is approximately 46m high and approximately 11m wide. The standpipe control building houses a series of water pipes and valves used to regulate the level of the standpipe. A diesel-powered fire pump is also connected to the piping system.

The Mitchell Water Tower is located at 125 Clarke Street. It is approximately 41m high and has a capacity of 1,000 m<sup>3</sup>. The control room has pipes and valves, level and flow monitoring equipment, and re-chlorination equipment.

The works currently service a population of approximately 4,000. There is approximately 42 km of distribution piping of various diameters and materials contained within the Mitchell Drinking Water System. There are approximately 1950 service connections and 233 fire hydrants. Flow varies across the grid, with lower flow volumes in the most remote and dead-end parts of the grid. Pressure within the distribution system is maintained by the level of the standpipe and water tower. If required, the distribution system pressure can be controlled by the high lift pump at Distribution Center 4.

**List all water treatment chemicals used over this reporting period**

- Liquid Chlorine 12% - NSF certified
- Liquid Chlorine 6% - NSF certified
- Sodium Silicate - NSF certified

**Please provide a brief description and a breakdown of monetary expenses incurred**

- Nelson St Reconstruction
- New pump, motor and transmitter installed at Well 1
- New chlorine board installed at D123
- VFD's installed at Wells 1,2 and 4

**Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre**

Incident Date	Parameter	Result	Corrective Action Date	Corrective Action
Apr 1 2021	Lead	0.016mg/L	Apr 7 2021	Resample

<b>Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period</b>					
	<b>Number of Samples</b>	<b>Range of E. Coli Results (Min-Max)</b>	<b>Range of Total Coliform Results (Min-Max)</b>	<b>Number of HPC Samples</b>	<b>Range of HPC Results (Min-Max)</b>
Raw Well #1	49*	0-0	0-1	N/A	N/A
Raw Well #2	52	0-0	0-0	N/A	N/A
Raw Well #3	52	0-0	0-0	N/A	N/A
Raw Well #4	52	0-0	0-0	N/A	N/A
POE #123	52	0-0	0-0	52	0-1
POE #4	52	0-0	0-0	52	0-2
Distribution	208	0-0	0-0	52	0-10

\*Value due to Well Inspection

<b>Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report</b>					
	<b>Continuous Monitoring</b>	<b>Number of Grab Samples</b>	<b>Range of Results Continuous (Min-Max)</b>	<b>Range of Results Grab Samples (Min-Max)</b>	<b>Units</b>
Turbidity Raw Well #1	N/A	47*	N/A	0.05-0.19	NTU
Turbidity Raw Well #2	N/A	52	N/A	0.04-0.22	NTU
Turbidity Raw Well #3	N/A	52	N/A	0.04-0.19	NTU
Turbidity Raw Well #4	N/A	52	N/A	0.04-0.19	NTU
Chlorine - POE 123	8760	558	0.00** – 1.60	1.08-1.57	mg/L
Chlorine - POE 4	8760	555	0.00** – 1.87	1.04-1.67	mg/L
Distribution	N/A	365	N/A	0.67-1.40	mg/L

\*Value due to Well Inspection

\*\*Value due to operational maintenance on analyzer

<b>Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument</b>				
<b>Date of legal instrument issued</b>	<b>Parameter</b>	<b>Date Sampled</b>	<b>Result</b>	<b>Unit of Measure</b>
N/A				

### **Distribution Center 123**

<b>Summary of Inorganic parameters tested during this reporting period or the most recent sample results</b>				
<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
Antimony	Apr 12 2021	ND	µg/L	No
Arsenic	Apr 12 2021	3.3	µg/L	No
Barium	Apr 12 2021	68	µg/L	No
Boron	Apr 12 2021	120	µg/L	No
Cadmium	Apr 12 2021	ND	µg/L	No
Chromium	Apr 12 2021	ND	µg/L	No
Lead - see results below				
Mercury	Apr 12 2021	ND	µg/L	No
Selenium	Apr 12 2021	ND	µg/L	No
Sodium	Apr 12 2021	40	mg/L	Yes
Uranium	Apr 12 2021	ND	µg/L	No
Fluoride	Dec 18 2017	1.9	mg/L	Yes
Nitrite	Jan 4 2021	ND	µg/L	No
Nitrate	Jan 4 2021	ND	µg/L	No
Nitrite	Apr 6 2021	ND	µg/L	No
Nitrate	Apr 6 2021	ND	µg/L	No
Nitrite	Jul 5 2021	ND	µg/L	No
Nitrate	Jul 5 2021	ND	µg/L	No
Nitrite	Oct 4 2021	ND	µg/L	No
Nitrate	Oct 4 2021	ND	µg/L	No

ND = Not detected

## Distribution Center 4

Summary of Inorganic parameters tested during this reporting period or the most recent sample results				
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	Dec 2 2019	ND	µg/L	No
Arsenic	Dec 2 2019	1.8	µg/L	No
Barium	Dec 2 2019	59	µg/L	No
Boron	Dec 2 2019	120	µg/L	No
Cadmium	Dec 2 2019	ND	µg/L	No
Chromium	Dec 2 2019	ND	µg/L	No
Lead - see results below				
Mercury	Dec 2 2019	ND	µg/L	No
Selenium	Dec 2 2019	ND	µg/L	No
Sodium	Dec 2 2019	47	mg/L	Yes
Uranium	Dec 2 2019	0.19	µg/L	No
Fluoride	Dec 18 2017	1.8	mg/L	Yes
Nitrite	Jan 4 2021	ND	µg/L	No
Nitrate	Jan 4 2021	ND	µg/L	No
Nitrite	Apr 6 2021	ND	µg/L	No
Nitrate	Apr 6 2021	ND	µg/L	No
Nitrite	Jul 5 2021	ND	µg/L	No
Nitrate	Jul 5 2021	ND	µg/L	No
Nitrite	Oct 4 2021	ND	µg/L	No
Nitrate	Oct 4 2021	ND	µg/L	No

ND = Not detected

## Lead Testing Results

Summary of Lead Results during this reporting period (Winter: Dec 15 – April 15; Summer: June 15 - Oct 15)				
Sampling Period	Location	Distribution System Lead (ug/L)	Distribution System Alkalinity (mg/L)	Any Adverse Water Quality Incidents?
Apr 1 2021	Well #3 SS	ND	200	No
Apr 1 2021	Hydrant #61	0.64	210	No
Apr 1 2021	Hydrant #135	16	210	Yes
Apr 7 2021	Hydrant #135	0.79	N/A	No
Jun 21 2021	Well #3 SS	0.58	220	No
Jun 21 2021	Hydrant #122	ND	220	No
Jun 21 2021	Hydrant #60	ND	210	No

ND = Not detected

## Point of Entry 123

Summary of Organic parameters tested during this reporting period or the most recent sample results				
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Semivolatile Organics				
2,3,4,6- Tetrachlorophenol	Apr 12 2021	ND	µg/L	No
2,4,6-Trichlorophenol	Apr 12 2021	ND	µg/L	No
2,4-D	Apr 12 2021	ND	µg/L	No
2,4-Dichlorophenol	Apr 12 2021	ND	µg/L	No
Alachlor	Apr 12 2021	ND	µg/L	No
Atrazine	Apr 12 2021	ND	µg/L	No
Des-ethyl atrazine	Apr 12 2021	ND	µg/L	No
Atrazine+Desethyl-atrazine	Apr 12 2021	ND	µg/L	No
Bromoxynil	Apr 12 2021	ND	µg/L	No
Carbaryl	Apr 12 2021	ND	µg/L	No
Carbofuran	Apr 12 2021	ND	µg/L	No
Chlorpyrifos(Dursban)	Apr 12 2021	ND	µg/L	No
Diazinon	Apr 12 2021	ND	µg/L	No
Dicamba	Apr 12 2021	ND	µg/L	No
Diclofop-methyl	Apr 12 2021	ND	µg/L	No
Dimethoate	Apr 12 2021	ND	µg/L	No
Malathion	Apr 12 2021	ND	µg/L	No
MCPA	Apr 12 2021	ND	µg/L	No
Metolachlor	Apr 12 2021	ND	µg/L	No
Metribuzin(Sencor)	Apr 12 2021	ND	µg/L	No
Pentachlorophenol	Apr 12 2021	ND	µg/L	No
Phorate	Apr 12 2021	ND	µg/L	No
Picloram	Apr 12 2021	ND	µg/L	No
Prometryne	Apr 12 2021	ND	µg/L	No
Simazine	Apr 12 2021	ND	µg/L	No
Terbufos	Apr 12 2021	ND	µg/L	No
Triallate	Apr 12 2021	ND	µg/L	No
Trifluralin	Apr 12 2021	ND	µg/L	No
Benzo(a)pyrene	Apr 12 2021	ND	µg/L	No
Volatile Organics				
1,1-Dichloroethylene	Apr 12 2021	ND	µg/L	No
1,2-Dichlorobenzene	Apr 12 2021	ND	µg/L	No
1,2-Dichloroethane	Apr 12 2021	ND	µg/L	No
1,4-Dichlorobenzene	Apr 12 2021	ND	µg/L	No
Benzene	Apr 12 2021	ND	µg/L	No
Carbon Tetrachloride	Apr 12 2021	ND	µg/L	No
Chlorobenzene	Apr 12 2021	ND	µg/L	No



<b>Summary of Organic parameters tested during this reporting period or the most recent sample results</b>				
Methylene Chloride (Dichloromethane)	Apr 12 2021	ND	µg/L	No
Ethylbenzene	Apr 12 2021	ND	µg/L	No
Tetrachloroethylene	Apr 12 2021	ND	µg/L	No
Toluene	Apr 12 2021	ND	µg/L	No
Trichloroethylene	Apr 12 2021	ND	µg/L	No
Vinyl Chloride	Apr 12 2021	ND	µg/L	No
o-Xylene	Apr 12 2021	ND	µg/L	No
p+m-Xylene	Apr 12 2021	ND	µg/L	No
Total Xylenes	Apr 12 2021	ND	µg/L	No
<b>PCBs</b>				
Total PCB	Apr 12 2021	ND	µg/L	No
<b>Pesticides &amp; Herbicides</b>				
Glyphosate	Apr 12 2021	ND	µg/L	No
Diquat	Apr 12 2021	ND	µg/L	No
Diuron	Apr 12 2021	ND	µg/L	No
Guthion (Azinphos-methyl)	Apr 12 2021	ND	µg/L	No
Paraquat	Apr 12 2021	ND	µg/L	No

ND = Not detected

## Point of Entry 4

<b>Summary of Organic parameters tested during this reporting period or the most recent sample results</b>				
<b>Parameter</b>	<b>Sample Date</b>	<b>Result Value</b>	<b>Unit of Measure</b>	<b>Exceedance</b>
<b>Semivolatile Organics</b>				
2,3,4,6- Tetrachlorophenol	Dec 2 2019	ND	µg/L	No
2,4,6-Trichlorophenol	Dec 2 2019	ND	µg/L	No
2,4-D	Dec 2 2019	ND	µg/L	No
2,4-Dichlorophenol	Dec 2 2019	ND	µg/L	No
Alachlor	Dec 2 2019	ND	µg/L	No
Atrazine	Dec 2 2019	ND	µg/L	No
Des-ethyl atrazine	Dec 2 2019	ND	µg/L	No
Atrazine+Desethyl-atrazine	Dec 2 2019	ND	µg/L	No
Bromoxynil	Dec 2 2019	ND	µg/L	No
Carbaryl	Dec 2 2019	ND	µg/L	No
Carbofuran	Dec 2 2019	ND	µg/L	No
Chlorpyrifos(Dursban)	Dec 2 2019	ND	µg/L	No
Diazinon	Dec 2 2019	ND	µg/L	No
Dicamba	Dec 2 2019	ND	µg/L	No

<b>Summary of Organic parameters tested during this reporting period or the most recent sample results</b>				
Diclofop-methyl	Dec 2 2019	ND	µg/L	No
Dimethoate	Dec 2 2019	ND	µg/L	No
Malathion	Dec 2 2019	ND	µg/L	No
MCPA	Dec 2 2019	ND	µg/L	No
Metolachlor	Dec 2 2019	ND	µg/L	No
Metribuzin(Sencor)	Dec 2 2019	ND	µg/L	No
Pentachlorophenol	Dec 2 2019	ND	µg/L	No
Phorate	Dec 2 2019	ND	µg/L	No
Picloram	Dec 2 2019	ND	µg/L	No
Prometryne	Dec 2 2019	ND	µg/L	No
Simazine	Dec 2 2019	ND	µg/L	No
Terbufos	Dec 2 2019	ND	µg/L	No
Triallate	Dec 2 2019	ND	µg/L	No
Trifluralin	Dec 2 2019	ND	µg/L	No
Benzo(a)pyrene	Dec 2 2019	ND	µg/L	No
Volatile Organics				
1,1-Dichloroethylene	Dec 2 2019	ND	µg/L	No
1,2-Dichlorobenzene	Dec 2 2019	ND	µg/L	No
1,2-Dichloroethane	Dec 2 2019	ND	µg/L	No
1,4-Dichlorobenzene	Dec 2 2019	ND	µg/L	No
Benzene	Dec 2 2019	ND	µg/L	No
Carbon Tetrachloride	Dec 2 2019	ND	µg/L	No
Chlorobenzene	Dec 2 2019	ND	µg/L	No
Methylene Chloride (Dichloromethane)	Dec 2 2019	ND	µg/L	No
Ethylbenzene	Dec 2 2019	ND	µg/L	No
Tetrachloroethylene	Dec 2 2019	ND	µg/L	No
Toluene	Dec 2 2019	ND	µg/L	No
Trichloroethylene	Dec 2 2019	ND	µg/L	No
Vinyl Chloride	Dec 2 2019	ND	µg/L	No
o-Xylene	Dec 2 2019	ND	µg/L	No
p+m-Xylene	Dec 2 2019	ND	µg/L	No
Total Xylenes	Dec 2 2019	ND	µg/L	No
PCBs				
Total PCB	Dec 2 2019	ND	µg/L	No
Pesticides & Herbicides				
Glyphosate	Dec 2 2019	ND	µg/L	No
Diquat	Dec 2 2019	ND	µg/L	No
Diuron	Dec 2 2019	ND	µg/L	No
Guthion (Azinphos-methly)	Dec 2 2019	ND	µg/L	No
Paraquat	Dec 2 2019	ND	µg/L	No

ND = Not detected

## Distribution System

Summary of Organic parameters tested during this reporting period or the most recent sample results				
Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM (Running Annual Average)	Q1-Q4 2021	20.03	µg/L	No
HAA (Running Annual Average)	Q1-Q4 2021	19.00	µg/L	No

## Point of Entry 123

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.				
Parameter	Sample Date	Result Value	Unit of Measure	ODWS Standard
Fluoride	Dec 18 2017	1.9	mg/L	1.5

## Point of Entry 4

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.				
Parameter	Sample Date	Result Value	Unit of Measure	ODWS Standard
Fluoride	Dec 18 2017	1.8	mg/L	1.5

**Note:** Fluoride is naturally occurring in Mitchell's Drinking Water Supply. For more information on fluoride visit Huron Perth Public Health Unit at:

<https://www.hpph.ca/en/health-matters/water.aspx>

## Part 2 – SUMMARY REPORT (as required by O. Reg. 170/03, Schedule 22)

### Non-Compliance with Legislations, Regulations, Approvals & Orders

Raw water flow rates exceed the maximum L/min flow rates as below:

August 29, 2021 – Well #2

Staff replaced a gate valve in Well-house #2. Upon restarting the well pump, the flow rate (L/min) specified in the Permit To Take Water (PTTW) was exceeded. The maximum daily volume did not exceed the PTTW limit.

August 30, 2021 – Well #1

Staff replaced a gate valve in Well-house #1. Upon restarting the well pump, the flow rate (L/min) specified in the Permit To Take Water (PTTW) was exceeded. The maximum daily volume did not exceed the PTTW limit.

October 25, 2021 – Well #1

The flow rate (L/min) exceeded the PTTW limit during initial start up after the well inspection. The maximum daily volume did not exceed the PTTW limit.

November 1, 2021 – Well #4

The flow rate (L/min) was exceeded due to annual flow meter testing. The maximum daily volume did not exceed the PTTW limit.

November 29, 2021 – Well #2

The flow rate (L/min) specified in the PTTW was briefly exceeded during routine sampling. The maximum daily volume did not exceed the PTTW limit.

December 1, 2021 – Well #3

The flow rate (L/min) specified in the PTTW was briefly exceeded during routine sampling. The maximum daily volume did not exceed the PTTW limit.

December 15, 2021 – Well #2

The flow rate (L/min) specified in the PTTW was exceeded. The flow rate was adjusted accordingly in SCADA. The maximum daily volume did not exceed the PTTW limit.

## Well #1

<b>System Capability Assessment</b>			
Comparison of Flow Rates (raw flow; m <sup>3</sup> ):			
<b>Month</b>	<b>Average Daily Flow</b>	<b>Maximum Daily Flow</b>	<b>*Max Flow (L/min)</b>
January	171.13	796.00	1,654.2
February	124.96	865.00	1,704.0
March	196.35	1,032.00	1,812.6
April	258.23	1,293.02	1,746.6
May	253.32	1,072.99	1,781.4
June	226.57	1,199.00	1,741.2
July	211.26	1,189.01	1,739.4
August	243.45	1,224.00	1,861.2*
September	104.10	1,176.01	1,693.2
October	67.32	1,231.00	1,841.4*
November	225.23	1,241.00	1,751.4
December	205.22	1,173.00	1,771.2
<b>MAXIMUM</b>	<b>N/A</b>	<b>1,293.02</b>	<b>1,861.2</b>
<b>AVERAGE</b>	<b>190.60</b>	<b>1,124.34</b>	<b>1,758.15</b>
<b>PTTW</b>	<b>N/A</b>	<b>2,617.92</b>	<b>1,818</b>
<b>% of PTTW MAX</b>	<b>-</b>	<b>49%</b>	<b>102%</b>
<b>% of PTTW AVG</b>	<b>-</b>	<b>43%</b>	<b>97%</b>

\*PTTW exceedance; see page 12

## Well #2

<b>System Capability Assessment</b>			
Comparison of Flow Rates (raw flow; m <sup>3</sup> ):			
<b>Month</b>	<b>Average Daily Flow</b>	<b>Maximum Daily Flow</b>	<b>Max Flow (L/min)</b>
January	334.35	1,549.58	1,851.6
February	388.64	1,606.82	1,911.0
March	319.72	1,484.60	2,072.4
April	341.29	2,012.41	2,074.8
May	431.31	2,013.69	2,074.8
June	432.68	2,031.89	2,059.8
July	404.85	2,181.43	2,038.2
August	379.10	2,081.29	2,110.2*
September	619.54	2,159.29	1,928.4
October	730.35	2,282.82	2,037.6
November	425.71	2,017.62	2,156.4*
December	433.49	1,844.70	2,214.6*
<b>MAXIMUM</b>	<b>N/A</b>	<b>2,282.82</b>	<b>2,214.6</b>
<b>AVERAGE</b>	<b>436.75</b>	<b>1,938.85</b>	<b>2,044.15</b>
<b>PTTW</b>	<b>N/A</b>	<b>3,024</b>	<b>2,100</b>
<b>% of PTTW MAX</b>	<b>-</b>	<b>75%</b>	<b>105%</b>
<b>% of PTTW AVG</b>	<b>-</b>	<b>64%</b>	<b>97%</b>

\*PTTW exceedance; see page 12

### Well #3

<b>System Capability Assessment</b>			
Comparison of Flow Rates (raw flow; m <sup>3</sup> ):			
<b>Month</b>	<b>Average Daily Flow</b>	<b>Maximum Daily Flow</b>	<b>Max Flow (L/min)</b>
January	819.71	2,122.99	2,827.2
February	813.04	2,233.98	2,820.6
March	808.90	2,284.03	2,829.0
April	901.33	2,571.03	2,826.0
May	1,013.00	2,437.98	2,830.8
June	963.00	2,580.02	2,825.4
July	919.58	2,607.00	2,836.2
August	940.39	2,481.00	2,825.4
September	1,020.93	2,572.01	2,821.8
October	1,015.13	2,934.02	2,824.8
November	961.10	2,540.00	2,874.0
December	945.74	2,304.97	2,883.6*
<b>MAXIMUM</b>	<b>N/A</b>	<b>2,934.02</b>	<b>2,883.6</b>
<b>AVERAGE</b>	<b>926.82</b>	<b>2,472.42</b>	<b>2,835.40</b>
<b>PTTW</b>	<b>N/A</b>	<b>3,900</b>	<b>2,880</b>
<b>% of PTTW MAX</b>	<b>-</b>	<b>75%</b>	<b>100%</b>
<b>% of PTTW AVG</b>	<b>-</b>	<b>63%</b>	<b>98%</b>

\*PTTW exceedance; see page 12

## Well #4

<b>System Capability Assessment</b>			
Comparison of Flow Rates (raw flow; m <sup>3</sup> ):			
<b>Month</b>	<b>Average Daily Flow</b>	<b>Maximum Daily Flow</b>	<b>Max Flow (L/min)</b>
January	1,216.06	3,223	4,205.77
February	1,297.43	3,725	5,293.43
March	1,361.03	3,466	4,235.29
April	1,458.47	4,189	4,239.07
May	1,228.45	4,192	4,262.76
June	1,652.73	4,209	4,321.47
July	1,556.45	4,156	4,340.01
August	1,483.45	3,809	5,359.01
September	1,654.27	4,124	5,360.38
October	1,646.32	5,170	5,372.39
November	1,653.63	3,956	8,736.67*
December	1,455.16	3,635	5,419.43
<b>MAXIMUM</b>	<b>N/A</b>	<b>5,170</b>	<b>8,736.67</b>
<b>AVERAGE</b>	<b>1,471.95</b>	<b>3,988</b>	<b>5,095.47</b>
<b>PTTW</b>	<b>N/A</b>	<b>8,640</b>	<b>6,000</b>
<b>% of PTTW MAX</b>	<b>-</b>	<b>60%</b>	<b>146%</b>
<b>% of PTTW AVG</b>	<b>-</b>	<b>46%</b>	<b>85%</b>

\*PTTW exceedance; see page 12



### Distribution Center 123

<b>System Capability Assessment</b>		
Comparison of Flow Rates (total treated flow; m <sup>3</sup> /d):		
<b>Month</b>	<b>Average Flow</b>	<b>Maximum Daily Flow</b>
January	1,202.20	3,071.49
February	1,157.82	3,126.00
March	1,175.39	3,345.58
April	1,360.90	3,932.63
May	1,516.99	3,537.84
June	1,439.44	3,836.01
July	1,361.67	3,835.72
August	1,404.06	3,752.76
September	1,462.60	3,743.19
October	1,477.24	4,074.71
November	1,436.42	3,804.57
December	1,426.37	3,543.40
<b>AVERAGE</b>	<b>1,368.43</b>	<b>N/A</b>
<b>MAXIMUM</b>	<b>N/A</b>	<b>4,074.71</b>
<b>SYSTEM CAPACITY</b>	<b>8,640</b>	<b>8,640</b>
<b>% CAPACITY</b>	<b>16%</b>	<b>47%</b>

## Distribution Center 4

<b>System Capability Assessment</b>		
Comparison of Flow Rates (total treated flow; m <sup>3</sup> /d):		
<b>Month</b>	<b>Average Flow</b>	<b>Maximum Daily Flow</b>
January	1,190.97	3,144
February	1,269.54	3,626
March	1,330.45	3,412
April	1,424.03	4,096
May	1,199.71	4,092
June	1,613.13	4,092
July	1,518.45	4,054
August	1,447.77	3,719
September	1,614.70	4,053
October	1,594.32	5,033
November	1,610.20	3,892
December	1,419.00	3,529
<b>AVERAGE</b>	<b>1,436.02</b>	<b>N/A</b>
<b>MAXIMUM</b>	<b>N/A</b>	<b>5,033</b>
<b>SYSTEM CAPACITY</b>	<b>8,640</b>	<b>8,640</b>
<b>% CAPACITY</b>	<b>17%</b>	<b>58%</b>