



OPTIONAL ANNUAL REPORT TEMPLATE

Drinking-Water System Number:	220000059
Drinking-Water System Name:	Palmerston Drinking Water System
Drinking-Water System Owner:	Town of Minto
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2020 to December 31, 2020

<p><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [] No [<input checked="" type="checkbox"/>]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [<input checked="" type="checkbox"/>] No []</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Town of Minto 5941 Hwy #89 R.R. #1 Harriston, ON NOG 1Z0</p> </div>	<p><u>Complete for all other Categories.</u></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">N/A</div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []</p> <p>Number of Interested Authorities you report to:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">N/A</div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [<input checked="" type="checkbox"/>] No []</p>
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Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
Palmerston Drinking Water System	220000059

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? Yes [] No []



Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web** Town of Minto Website
- Public access/notice via Government Offices**
- Public access/notice via a newspaper** Advertisements in Local Newspapers
- Public access/notice via Public Request**
- Public access/notice via a Public Library**
- Public access/notice via other method** Tax Letter

Describe your Drinking-Water System

Palmerston is serviced by a waterworks that consists of: four drilled bedrock wells, two pumphouses, an elevated 2500 m3 steel storage tank and a distribution network of watermains, ranging in diameter from 100 mm to 250 mm. In the event of a prolonged power outage, a portable generator is available to either pumphouse to supply back-up power.

The bedrock wells are equipped with submersible pumps that discharge directly into the William Street pumphouse (Wells #1 and #2) or the Whites Road pumphouse (Well #3 and #4). In the pumphouse, the raw water supply is injected with 12% sodium hypochlorite for disinfection and the chemical PW1680, for iron sequestering. The treated water leaves the pumphouse and enters an underground contact pipe and is discharged into the distribution system after adequate contact time is achieved.

The wells are controlled (start/stop) automatically based on elevated storage tank liquid levels and pressures in the distribution system. Each pumphouse is equipped with alarms for free chlorine low and high residuals (and corresponding lockout of well pumps), low water level and intrusion. Each pumphouse has continuous monitoring analyzers for chlorine with lockouts and alarms.

SCADA provides continuous monitoring to this system.

List all water treatment chemicals used over this reporting period

- 12% Sodium Hypochlorite (disinfectant)
- PW1680 (sequestering agent)

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment



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

To meet the requirements of O. Reg. 170/03, upgrades, installations and replacement of various system components have been completed. However, maintaining the system includes repair and replacement of individual components as required.

In 2020 \$43,150 was spent upgrading SCADA Panels, \$96,037 was spent installing a watermain loop to Henry Street, \$20,158 on engineering for Whites Road watermain upgrades, \$6,593 on the water tower inspection and \$6,000 replacing a Chlorine Analyzer.

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	Unit of Measure	Corrective Action	Corrective Action Date
2020/08/26	Total Coliform	1	cfu/100mL	Resample	2020/08/31
2020/08/26	Total Coliform	2	Cfu/100mL	Resample	2020/08/31

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

		Number of Samples	Range of Total Coliform Results (min #)-(max #)	Range of E.Coli Or Fecal Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	Well 1	52	0 - 0	0 - 0	N/A	N/A
	Well 2	52	0 - 1	0 - 0	N/A	N/A
	Well 3	52	0 - 0	0 - 0	N/A	N/A
	Well 4	52	0 - 1	0 - 0	N/A	N/A
Treated	Well 1	52	0 - 0	0 - 0	52	< 10 - 10
	Well 2	52	0 - 0	0 - 0	52	< 10 - 240
	Well 3	52	0 - 0	0 - 0	52	< 10 - 50
	Well 4	52	0 - 0	0 - 0	52	< 10 - 210
Distribution		220	0 - 2	0 - 0	220	< 10 - 130

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

		Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Turbidity Raw	Well 1	61	0.32 - 0.95	NTU
	Well 2	61	0.23 - 0.84	NTU
	Well 3	63	0.18 - 0.84	NTU
	Well 4	62	0.15 - 0.91	NTU
Chlorine	Well 1	369	1.06 - 1.82	mg/L
	Well 2	368	0.67 - 1.60	mg/L
	Well 3	368	0.76 - 1.88	mg/L
	Well 4	369	0.97 - 1.88	mg/L
Distribution		572	0.66 - 1.41	mg/L
Fluoride (If the DWS provides fluoridation)				

NOTE: For continuous monitors use 8760 as the number of samples.



Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure
N/A	N/A	N/A	N/A	N/A

Summary of Inorganic parameters tested during this reporting period or the most recent sample results

Palmerston Well #1

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	14/05/19	<0.6	ug/L	6
Arsenic	14/05/19	4.1	ug/L	10
Barium	14/05/19	96	ug/L	1000
Boron	14/05/19	<50	ug/L	5000
Cadmium	14/05/19	<0.1	ug/L	5
Chromium	14/05/19	<1.0	ug/L	50
Mercury	14/05/19	<0.1	ug/L	1
Selenium	14/05/19	<5.0	ug/L	50
Sodium	09/05/17	17.4	mg/L	20
Uranium	14/05/19	<5.0	ug/L	20
Fluoride	09/05/17	0.23	mg/L	1.5
Nitrite	18/02/20	< 0.003	mg/L	1
Nitrite	19/05/20	< 0.003	mg/L	1
Nitrite	04/08/20	< 0.003	mg/L	1
Nitrite	23/11/20	< 0.003	mg/L	1
Nitrate	18/02/20	0.315	mg/L	10
Nitrate	19/05/20	0.317	mg/L	10
Nitrate	04/08/20	0.318	mg/L	10
Nitrate	23/11/20	0.324	mg/L	10

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Palmerston Well #2

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	14/05/19	<0.6	ug/L	6
Arsenic	14/05/19	3.3	ug/L	10
Barium	14/05/19	98	ug/L	1000
Boron	14/05/19	<50	ug/L	5000
Cadmium	14/05/19	<0.1	ug/L	5
Chromium	14/05/19	<1.0	ug/L	50
Mercury	14/05/19	<0.1	ug/L	1
Selenium	14/05/19	<5.0	ug/L	50
Sodium	09/05/17	19.6	mg/L	20
Uranium	14/05/19	<5.0	ug/L	20
Fluoride	09/05/17	0.21	mg/L	1.5
Nitrite	18/02/20	< 0.003	mg/L	1
Nitrite	19/05/20	< 0.003	mg/L	1



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Nitrite	04/08/20	< 0.003	mg/L	1
Nitrite	23/11/20	< 0.003	mg/L	1
Nitrate	18/02/20	0.326	mg/L	10
Nitrate	19/05/20	0.319	mg/L	10
Nitrate	04/08/20	0.336	mg/L	10
Nitrate	23/11/20	0.413	mg/L	10

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Palmerston Well #3

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	14/05/19	<0.6	ug/L	6
Arsenic	14/05/19	1.4	ug/L	10
Barium	14/05/19	102	ug/L	1000
Boron	14/05/19	<50	ug/L	5000
Cadmium	14/05/19	<0.1	ug/L	5
Chromium	14/05/19	<1.0	ug/L	50
Mercury	14/05/19	<0.1	ug/L	1
Selenium	14/05/19	<5.0	ug/L	50
Sodium	09/05/17	15	mg/L	20
Uranium	14/05/19	<5.0	ug/L	20
Fluoride	09/05/17	0.21	mg/L	1.5
Nitrite	18/02/20	< 0.003	mg/L	1
Nitrite	19/05/20	< 0.003	mg/L	1
Nitrite	04/08/20	< 0.003	mg/L	1
Nitrite	23/11/20	< 0.003	mg/L	1
Nitrate	18/02/20	0.258	mg/L	10
Nitrate	19/05/20	0.274	mg/L	10
Nitrate	04/08/20	0.272	mg/L	10
Nitrate	23/11/20	0.282	mg/L	10

Palmerston Well #4

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	14/05/19	<0.6	ug/L	6
Arsenic	14/05/19	<1.0	ug/L	10
Barium	14/05/19	95	ug/L	1000
Boron	14/05/19	<50	ug/L	5000
Cadmium	14/05/19	<0.1	ug/L	5
Chromium	14/05/19	<1.0	ug/L	50
Mercury	14/05/19	<0.1	ug/L	1
Selenium	14/05/19	<5.0	ug/L	50
Sodium	09/05/17	12.7	mg/L	20
Uranium	14/05/19	<5.0	ug/L	20
Fluoride	09/05/17	0.21	mg/L	1.5
Nitrite	18/02/20	< 0.003	mg/L	1
Nitrite	19/05/20	< 0.003	mg/L	1



Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Nitrite	04/08/20	< 0.003	mg/L	1
Nitrite	23/11/20	< 0.003	mg/L	1
Nitrate	18/02/20	0.226	mg/L	10
Nitrate	19/05/20	0.234	mg/L	10
Nitrate	04/08/20	0.245	mg/L	10
Nitrate	23/11/20	0.247	mg/L	10

*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

Summary of lead testing under Schedule 15.1 during this reporting period

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems, and non-municipal year-round residential systems)

Location Type	Date	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Limit
Plumbing	Dec. 2013 – Apr. 2014	22	< 1.0 – < 1.0	ug/L	10
Distribution	Winter Dec. 15 – Apr. 15, 2020	2	0.19 – 0.68	ug/L	10
Distribution	Summer Jun. 15 – Oct. 15, 2020	2	0.10 – 0.12	ug/L	10

No adverse results were identified.

Reduced Sampling

Town of Minto is now exempt from plumbing sampling for lead due to less than 10% of plumbing results exceeded 10 ug/L.

Distribution sampling is still required every “winter” and “summer” period.

- each year for pH and alkalinity
- once every 3 years for lead

	Sample Date	Number of Samples	Max Result	Unit of Measure	Limit
Winter Alkalinity	23/01/20	2	276	mg/L	30-500
Winter pH	23/01/20	2	7.77		
Summer Alkalinity	06/12/20	2	276	mg/L	30-500
Summer pH	06/12/20	2	7.76		

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Palmerston Well #1

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Alachlor	14/05/19	<0.1	ug/L	5
alpha-Chlordane	14/05/19	<0.1	ug/L	
Aroclor 1242	14/05/19	<0.02	ug/L	
Aroclor 1254	14/05/19	<0.02	ug/L	



Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Aroclor 1260	14/05/19	<0.02	ug/L	
Atrazine	14/05/19	<0.1	ug/L	
Atrazine Desethyl	14/05/19	<0.1	ug/L	
Atrazine & Metabolites	14/05/19	<0.2	ug/L	5
Azinphos-methyl	14/05/19	<0.1	ug/L	20
Benzene	14/05/19	<0.5	ug/L	1
Benzo(a)pyrene	14/05/19	<0.005	ug/L	0.01
Bromoxynil	14/05/19	<0.2	ug/L	5
Carbaryl	14/05/19	<0.2	ug/L	90
Carbofuran	14/05/19	<0.2	ug/L	90
Carbon Tetrachloride	14/05/19	<0.2	ug/L	2
Chlorpyrifos	14/05/19	<0.1	ug/L	90
Diazinon	14/05/19	<0.1	ug/L	20
Dicamba	14/05/19	<0.2	ug/L	120
1,2-Dichlorobenzene	14/05/19	<0.5	ug/L	200
1,4-Dichlorobenzene	14/05/19	<0.5	ug/L	5
1,2-Dichloroethane	14/05/19	<0.5	ug/L	5
1,1-Dichloroethylene (vinylidene chloride)	14/05/19	<0.5	ug/L	14
Dichloromethane	14/05/19	<5.0	ug/L	50
2-4 Dichlorophenol	14/05/19	<0.3	ug/L	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	14/05/19	<0.2	ug/L	100
Diclofop-methyl	14/05/19	<0.2	ug/L	9
Dimethoate	14/05/19	<0.1	ug/L	20
Diquat	14/05/19	<1.0	ug/L	70
Diuron	14/05/19	<1.0	ug/L	150
Ethylbenzene	14/05/19	<0.5	ug/L	140
gamma-Chlordane	14/05/19	<0.1	ug/L	
Glyphosate	14/05/19	<5.0	ug/L	280
m/p-xylene	14/05/19	<1.0	ug/L	
Malathion	14/05/19	<0.1	ug/L	190
MCPA	14/05/19	<0.2	ug/L	100
Metolachlor	14/05/19	<0.1	ug/L	50
Metribuzin	14/05/19	<0.1	ug/L	80
Monochlorobenzene	14/05/19	<0.5	ug/L	80
o,p-DDT	14/05/19	<0.1	ug/L	
o-xylene	14/05/19	<0.5	ug/L	
Oxychlordane	14/05/19	<0.1	ug/L	
p,p-DDD	14/05/19	<0.1	ug/L	
p,p-DDE	14/05/19	<0.1	ug/L	
p,p-DDT	14/05/19	<0.1	ug/L	
Paraquat	14/05/19	<1.0	ug/L	10
Pentachlorophenol	14/05/19	<0.5	ug/L	60
Phorate	14/05/19	<0.1	ug/L	2
Picloram	14/05/19	<0.2	ug/L	190
Polychlorinated Biphenyls (PCB)	14/05/19	<0.035	ug/L	3
Prometryne	14/05/19	<0.1	ug/L	1
Simazine	14/05/19	<0.1	ug/L	10
Terbufos	14/05/19	<0.2	ug/L	1
Tetrachloroethylene (perchloroethylene)	14/05/19	<0.5	ug/L	10



Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
2,3,4,6-Tetrachlorophenol	14/05/19	<0.5	ug/L	100
Toluene	14/05/19	<0.5	ug/L	60
Triallate	14/05/19	<0.1	ug/L	230
Trichloroethylene	14/05/19	<0.5	ug/L	5
2,4,6-Trichlorophenol	14/05/19	<0.5	ug/L	5
Trifluralin	14/05/19	<0.1	ug/L	45
Vinyl Chloride	14/05/19	<0.2	ug/L	1
Xylenes (Total)	14/05/19	<1.5	ug/L	90

Palmerston Well #2

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Alachlor	14/05/19	<0.1	ug/L	5
alpha-Chlordane	14/05/19	<0.1	ug/L	
Aroclor 1242	14/05/19	<0.02	ug/L	
Aroclor 1254	14/05/19	<0.02	ug/L	
Aroclor 1260	14/05/19	<0.02	ug/L	
Atrazine	14/05/19	<0.1	ug/L	
Atrazine Desethyl	14/05/19	<0.1	ug/L	
Atrazine & Metabolites	14/05/19	<0.2	ug/L	5
Azinphos-methyl	14/05/19	<0.1	ug/L	20
Benzene	14/05/19	<0.5	ug/L	1
Benzo(a)pyrene	14/05/19	<0.005	ug/L	0.01
Bromoxynil	14/05/19	<0.2	ug/L	5
Carbaryl	14/05/19	<0.2	ug/L	90
Carbofuran	14/05/19	<0.2	ug/L	90
Carbon Tetrachloride	14/05/19	<0.2	ug/L	2
Chlorpyrifos	14/05/19	<0.1	ug/L	90
Diazinon	14/05/19	<0.1	ug/L	20
Dicamba	14/05/19	<0.2	ug/L	120
1,2-Dichlorobenzene	14/05/19	<0.5	ug/L	200
1,4-Dichlorobenzene	14/05/19	<0.5	ug/L	5
1,2-Dichloroethane	14/05/19	<0.5	ug/L	5
1,1-Dichloroethylene (vinylidene chloride)	14/05/19	<0.5	ug/L	14
Dichloromethane	14/05/19	<5.0	ug/L	50
2-4 Dichlorophenol	14/05/19	<0.3	ug/L	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	14/05/19	<0.2	ug/L	100
Diclofop-methyl	14/05/19	<0.2	ug/L	9
Dimethoate	14/05/19	<0.1	ug/L	20
Diquat	14/05/19	<1.0	ug/L	70
Diuron	14/05/19	<1.0	ug/L	150
Ethylbenzene	14/05/19	<0.5	ug/L	140
gamma-Chlordane	14/05/19	<0.1	ug/L	
Glyphosate	14/05/19	<5.0	ug/L	280
m/p-xylene	14/05/19	<1.0	ug/L	
Malathion	14/05/19	<0.1	ug/L	190
MCPA	14/05/19	<0.2	ug/L	100
Metolachlor	14/05/19	<0.1	ug/L	50
Metribuzin	14/05/19	<0.1	ug/L	80



Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Monochlorobenzene	14/05/19	<0.5	ug/L	80
o,p-DDT	14/05/19	<0.1	ug/L	
o-xylene	14/05/19	<0.5	ug/L	
Oxychlorthane	14/05/19	<0.1	ug/L	
p,p-DDD	14/05/19	<0.1	ug/L	
p,p-DDE	14/05/19	<0.1	ug/L	
p,p-DDT	14/05/19	<0.1	ug/L	
Paraquat	14/05/19	<1.0	ug/L	10
Pentachlorophenol	14/05/19	<0.5	ug/L	60
Phorate	14/05/19	<0.1	ug/L	2
Picloram	14/05/19	<0.2	ug/L	190
Polychlorinated Biphenyls (PCB)	14/05/19	<0.035	ug/L	3
Prometryne	14/05/19	<0.1	ug/L	1
Simazine	14/05/19	<0.1	ug/L	10
Terbufos	14/05/19	<0.2	ug/L	1
Tetrachloroethylene (perchloroethylene)	14/05/19	<0.5	ug/L	10
2,3,4,6-Tetrachlorophenol	14/05/19	<0.5	ug/L	100
Toluene	14/05/19	<0.5	ug/L	60
Triallate	14/05/19	<0.1	ug/L	230
Trichloroethylene	14/05/19	<0.5	ug/L	5
2,4,6-Trichlorophenol	14/05/19	<0.5	ug/L	5
Trifluralin	14/05/19	<0.1	ug/L	45
Vinyl Chloride	14/05/19	<0.2	ug/L	1
Xylenes (Total)	14/05/19	<1.5	ug/L	90

Palmerston Well #3

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Alachlor	14/05/19	<0.1	ug/L	5
alpha-Chlordane	14/05/19	<0.1	ug/L	
Aroclor 1242	14/05/19	<0.02	ug/L	
Aroclor 1254	14/05/19	<0.02	ug/L	
Aroclor 1260	14/05/19	<0.02	ug/L	
Atrazine	14/05/19	<0.1	ug/L	
Atrazine Desethyl	14/05/19	<0.1	ug/L	
Atrazine & Metabolites	14/05/19	<0.2	ug/L	5
Azinphos-methyl	14/05/19	<0.1	ug/L	20
Benzene	14/05/19	<0.5	ug/L	1
Benzo(a)pyrene	14/05/19	<0.005	ug/L	0.01
Bromoxynil	14/05/19	<0.2	ug/L	5
Carbaryl	14/05/19	<0.2	ug/L	90
Carbofuran	14/05/19	<0.2	ug/L	90
Carbon Tetrachloride	14/05/19	<0.2	ug/L	2
Chlorpyrifos	14/05/19	<0.1	ug/L	90
Diazinon	14/05/19	<0.1	ug/L	20
Dicamba	14/05/19	<0.2	ug/L	120
1,2-Dichlorobenzene	14/05/19	<0.5	ug/L	200
1,4-Dichlorobenzene	14/05/19	<0.5	ug/L	5
1,2-Dichloroethane	14/05/19	<0.5	ug/L	5



Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
1,1-Dichloroethylene (vinylidene chloride)	14/05/19	<0.5	ug/L	14
Dichloromethane	14/05/19	<5.0	ug/L	50
2-4 Dichlorophenol	14/05/19	<0.3	ug/L	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	14/05/19	<0.2	ug/L	100
Diclofop-methyl	14/05/19	<0.2	ug/L	9
Dimethoate	14/05/19	<0.1	ug/L	20
Diquat	14/05/19	<1.0	ug/L	70
Diuron	14/05/19	<1.0	ug/L	150
Ethylbenzene	14/05/19	<0.5	ug/L	140
gamma-Chlordane	14/05/19	<0.1	ug/L	
Glyphosate	14/05/19	<5.0	ug/L	280
m/p-xylene	14/05/19	<1.0	ug/L	
Malathion	14/05/19	<0.1	ug/L	190
MCPA	14/05/19	<0.2	ug/L	100
Metolachlor	14/05/19	<0.1	ug/L	50
Metribuzin	14/05/19	<0.1	ug/L	80
Monochlorobenzene	14/05/19	<0.5	ug/L	80
o,p-DDT	14/05/19	<0.1	ug/L	
o-xylene	14/05/19	<0.5	ug/L	
Oxychlordane	14/05/19	<0.1	ug/L	
p,p-DDD	14/05/19	<0.1	ug/L	
p,p-DDE	14/05/19	<0.1	ug/L	
p,p-DDT	14/05/19	<0.1	ug/L	
Paraquat	14/05/19	<1.0	ug/L	10
Pentachlorophenol	14/05/19	<0.5	ug/L	60
Phorate	14/05/19	<0.1	ug/L	2
Picloram	14/05/19	<0.2	ug/L	190
Polychlorinated Biphenyls (PCB)	14/05/19	<0.035	ug/L	3
Prometryne	14/05/19	<0.1	ug/L	1
Simazine	14/05/19	<0.1	ug/L	10
Terbufos	14/05/19	<0.2	ug/L	1
Tetrachloroethylene (perchloroethylene)	14/05/19	<0.5	ug/L	10
2,3,4,6-Tetrachlorophenol	14/05/19	<0.5	ug/L	100
Toluene	14/05/19	<0.5	ug/L	60
Triallate	14/05/19	<0.1	ug/L	230
Trichloroethylene	14/05/19	<0.5	ug/L	5
2,4,6-Trichlorophenol	14/05/19	<0.5	ug/L	5
Trifluralin	14/05/19	<0.1	ug/L	45
Vinyl Chloride	14/05/19	<0.2	ug/L	1
Xylenes (Total)	14/05/19	<1.5	ug/L	90

Palmerston Well #4

Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Alachlor	14/05/19	<0.1	ug/L	5
alpha-Chlordane	14/05/19	<0.1	ug/L	
Aroclor 1242	14/05/19	<0.02	ug/L	
Aroclor 1254	14/05/19	<0.02	ug/L	
Aroclor 1260	14/05/19	<0.02	ug/L	



Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Atrazine	14/05/19	<0.1	ug/L	
Atrazine Desethyl	14/05/19	<0.1	ug/L	
Atrazine & Metabolites	14/05/19	<0.2	ug/L	5
Azinphos-methyl	14/05/19	<0.1	ug/L	20
Benzene	14/05/19	<0.5	ug/L	1
Benzo(a)pyrene	14/05/19	<0.005	ug/L	0.01
Bromoxynil	14/05/19	<0.2	ug/L	5
Carbaryl	14/05/19	<0.2	ug/L	90
Carbofuran	14/05/19	<0.2	ug/L	90
Carbon Tetrachloride	14/05/19	<0.2	ug/L	2
Chlorpyrifos	14/05/19	<0.1	ug/L	90
Diazinon	14/05/19	<0.1	ug/L	20
Dicamba	14/05/19	<0.2	ug/L	120
1,2-Dichlorobenzene	14/05/19	<0.5	ug/L	200
1,4-Dichlorobenzene	14/05/19	<0.5	ug/L	5
1,2-Dichloroethane	14/05/19	<0.5	ug/L	5
1,1-Dichloroethylene (vinylidene chloride)	14/05/19	<0.5	ug/L	14
Dichloromethane	14/05/19	<5.0	ug/L	50
2-4 Dichlorophenol	14/05/19	<0.3	ug/L	900
2,4-Dichlorophenoxy acetic acid (2,4-D)	14/05/19	<0.2	ug/L	100
Diclofop-methyl	14/05/19	<0.2	ug/L	9
Dimethoate	14/05/19	<0.1	ug/L	20
Diquat	14/05/19	<1.0	ug/L	70
Diuron	14/05/19	<1.0	ug/L	150
Ethylbenzene	14/05/19	<0.5	ug/L	140
gamma-Chlordane	14/05/19	<0.1	ug/L	
Glyphosate	14/05/19	<5.0	ug/L	280
m/p-xylene	14/05/19	<1.0	ug/L	
Malathion	14/05/19	<0.1	ug/L	190
MCPA	14/05/19	<0.2	ug/L	100
Metolachlor	14/05/19	<0.1	ug/L	50
Metribuzin	14/05/19	<0.1	ug/L	80
Monochlorobenzene	14/05/19	<0.5	ug/L	80
o,p-DDT	14/05/19	<0.1	ug/L	
o-xylene	14/05/19	<0.5	ug/L	
Oxychlordane	14/05/19	<0.1	ug/L	
p,p-DDD	14/05/19	<0.1	ug/L	
p,p-DDE	14/05/19	<0.1	ug/L	
p,p-DDT	14/05/19	<0.1	ug/L	
Paraquat	14/05/19	<1.0	ug/L	10
Pentachlorophenol	14/05/19	<0.5	ug/L	60
Phorate	14/05/19	<0.1	ug/L	2
Picloram	14/05/19	<0.2	ug/L	190
Polychlorinated Biphenyls (PCB)	14/05/19	<0.035	ug/L	3
Prometryne	14/05/19	<0.1	ug/L	1
Simazine	14/05/19	<0.1	ug/L	10
Terbufos	14/05/19	<0.2	ug/L	1
Tetrachloroethylene (perchloroethylene)	14/05/19	<0.5	ug/L	10
2,3,4,6-Tetrachlorophenol	14/05/19	<0.5	ug/L	100



Parameter	Sample Date	Result Value	Unit of Measure	ODWS Criteria
Toluene	14/05/19	<0.5	ug/L	60
Triallate	14/05/19	<0.1	ug/L	230
Trichloroethylene	14/05/19	<0.5	ug/L	5
2,4,6-Trichlorophenol	14/05/19	<0.5	ug/L	5
Trifluralin	14/05/19	<0.1	ug/L	45
Vinyl Chloride	14/05/19	<0.2	ug/L	1
Xylenes (Total)	14/05/19	<1.5	ug/L	90

Palmerston Distribution System

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value RAA	Unit of Measure	ODWS Criteria
THM (NOTE: latest quarterly average shown)	18/02/20	11.75	ug/L	100
	19/05/20	12.65		
	04/08/20	13.15		
	23/11/20	13.40		

Parameter	Sample Date	Result Value RAA	Unit of Measure	ODWS Criteria
HAA (NOTE: latest quarterly average shown)	18/02/20	4.6	ug/L	80
	19/05/20	5.3		
	04/08/20	5.3		
	23/11/20	5.3		

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

Parameter	Result Value	Unit of Measure	Date of Sample