



***THE MUNICIPALITY OF
OLIVER
PAIPOONGE/ROSSLYN
VILLAGE

DRINKING WATER SYSTEM
ANNUAL SUMMARY REPORT
FOR THE YEAR 2016***

**RE: TERMS AND CONDITIONS OF
THE SAFE DRINKING WATER ACT 2002
REGULATION 170/03**

**Prepared by:
Completed
Submitted to Council**

**Water Quality Service
February 28th, 2017
March, 2017**

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ANNUAL SUMMARY REPORT

This report combines the requirements of O. Reg. 170/03 Section 11 "Annual Reports" and Schedule 22 "Summary Reports for Municipalities". A copy of this report is available at:

Municipality of Oliver Paipoonge Office
4569 Oliver Road
Murillo, ON P0T 2G0

System users will be notified of the reports availability by:
Notice at the Oliver Paipoonge Municipal Office.

SYSTEM INFORMATION

Drinking Water System Number:	260001081
Drinking Water System Name:	Rosslyn Village Subdivision Well Supply
Drinking Water System Owner:	Municipality of Oliver Paipoonge
Drinking Water System Category:	Small Municipal Residential
Drinking Water System Permit to Take Water Number:	3684-65WJW8
Reporting Period	January 1 st , 2016 to December 31 st , 2016
Drinking Water Permit Number:	293-201
Municipal Drinking Water Works Licence Number:	293-101

SYSTEM DESCRIPTION

Rosslyn Village receives its raw water supply from two drilled wells. The first has a depth of 34.5 metres and the second has a depth of 38.7 meters. Sodium hypochlorite is used for disinfection. Two spin-down filters (a 100 micron and a 20 micron) filter the water before going into the contact tanks. Five 454 litre tanks are located in the water treatment facility to provide storage and retention time. Two pressure tanks which maintain the discharge pressure are located adjacent to the storage tanks. In-line monitors record continuous flows, turbidity and chlorine readings. Information on the in-line monitoring data base is accessed on line using Endress Houser Field Data Manager Software program. The equipment allows off-site monitoring complete with the capability of providing reports and alarms. A stand-by diesel generator provides emergency hydro in the event of power failure

SUMMARY OF NON-COMPLIANCE

1. All continuous monitoring equipment utilized for sampling and testing required by O. Reg. 170/03, or Municipal Drinking Water Licence or Drinking Water Works Permit or order, were not equipped with alarms or shut-off mechanisms that satisfy the standards described in Schedule 6.
At the time of inspection there was no continuous monitoring equipment equipped with a feature that ensures that no water is directed to users if a parameter is above the maximum alarm set point or below the minimum alarm set points.
2. All continuous analysers were not calibrated, maintained, and operated, in accordance with the manufacturer's instructions or the regulation.
At the time of inspection there were no indications that the chlorine contact simulator was being checked on a monthly basis as required by Schedule E, Sed. 1.03 of the new Municipal Drinking Water Licence #293-101 dated the 17th day of May, 2016, to ensure that it adequately simulates chlorine contact time in the chlorine contact pipe under maximum flow conditions.
3. All water quality monitoring requirements imposed by the Municipal Drinking Water Licence and/or Drinking Water Works Permit were not being met.
At the time of inspection, there were no indications or records that a manual grab sample was being collected and tested on a daily basis to ensure adequate free chlorine residuals as stated in the new Municipal Drinking Water Licence #293-101 dated 17th day of May 2016 Pathogen Log Removal/Inactivation Credits Schedule E1.0.4.

NOTIFICATIONS (as required by the Act.reg.170/03, C of A and orders)

The following notification was submitted to the Ministry of the Environment via The Spills Action Centre, The Ministry of Health via the Medical Officer of Health Office.

January 22, 2016 the sample result taken for sodium was 101 mg/L. Re-samples were taken on January 24 and the result was 104 mg/L. Thunder Bay District Health Unit issued a 'Drinking Water Advisory Notice' regarding sodium levels shown to exceed 20 mg/L. These notices were delivered to the consumers on Feb. 3, 2016.

On December 21, 2016 a 'Boil Water' advisory was put in place. A new main valve and T were installed on Maple Street. System pressure dropped to an unsafe level. A saddle jacket failed during the installation causing the drop in pressure. The system was disinfected and flushed. Three sets of distribution samples twenty-four hours apart were taken with good results. On December 24, 2016 the 'Boil Water' advisory was lifted.

RESULTS OF TESTS

Ontario Regulation 170/03 requires Small Municipal Residential Systems to submit 1 raw water sample monthly from each well and one distribution sample bi-weekly.

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

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results(min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	41	Absent	Absent		
Treated					
Distribution	34	Absent	Absent	25	0 – <300 CFU/ml

Nitrate/Nitrite

Treated water is tested for nitrate and nitrite concentrations on a quarterly basis in accordance with Schedule 13 of Ontario Regulation 170/03. All results were below the associated Ontario Drinking Water Quality Standards.

Nitrate and Nitrite Sampling Results:

Sample Date	Nitrate Result	Nitrite Result	Nitrate & Nitrite
Result	mg/L	mg/L	mg/L
2016			
Jan 17/16	<0.020	<0.010	<0.040
May 3/16	0.291	<0.010	0.291
July 28/16	0.043	<0.010	0.043

Sodium is naturally occurring in the area. A Drinking Water Advisory issued by the Thunder Bay District Health Unit is in place.

Summary for Organic and Inorganic parameters – Schedule 23 & 24, sodium and fluoride are attached at the end of this Report and the next Schedule 23 & 24 is due in 2021.

Lead Sampling

The Rosslyn Village Drinking Water System is now exempt from plumbing samples. In the Winter Sampling Period of 2016 there were pH and alkalinity samples taken. In the Summer Sampling Period there were pH and alkalinity samples taken.

Lead Sampling Results

Sample Date	pH	Alkalinity mg/L as CaCO₃	Lead Result ug/L
April 15/16	7.6	76.6	
Oct. 12/16	7.6	79.6	

Chlorine

Regulation 170/03 requires that two distribution samples be taken weekly and tested for chlorine residuals.

In addition, The Procedure for Disinfection of Drinking Water in Ontario states “The maximum chlorine residual at any time and at any location within the distribution system should not exceed 4.0 mg/L when measured as free chlorine”. There were no reportable instances in 2016 for the maximum free chlorine being exceeded.

Specifically regulation 170/03 says the following with respect to reporting chlorine residuals measured in the distribution system

16-3. (1)

4. If the drinking water system is required to take free chlorine residual tests under clause 7 (2) (a) or to provide secondary disinfection in accordance with section 1-5 of Schedule 1 or section 2-5 of Schedule 2, the system provides chlorination, the system does not provide chloramination and a report under subsection 18 (1) of the Act has not been made in respect of free chlorine residual in the preceding 24 hours, a result indicating that the concentration of free chlorine residual is less than 0.05 milligrams per litre in,
 - i. a distribution sample that is a grab sample, or
 - ii. two distribution samples that are tested by continuous monitoring equipment, if the two samples were taken 15 minutes or more apart and the later of the two samples was the first sample that was taken 15 minutes or more after the earlier sample.

The free chlorine analyzer is located in the Water Treatment Plant and records measured values and sends them to the data base. The signal is also connected to an automatic dialer that calls operators in the event chlorine residuals drop below or rise above alarm set points.

There were no reportable instances in 2016 for failure to meet the minimum chlorine concentration

Turbidity

Turbidity measurement is essentially the measurement of how clean the water is. The standard is not based on an aesthetic value but instead on a value that ensures the disinfection process within the treatment plant is effective. The turbidity in the drinking water system is monitored continuously by an in-line monitor. The turbidity level must not exceed 4.0 NTU. The highest reading in 2016 was 3.83 NTU.

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03

	Number of Grab Samples	Range of Results (min #)-(max #)	Unit of Measure
Turbidity	8760	0.29 – 3.83	NTU
Chlorine	8760	0.33 – 1.57	mg/L
Fluoride (If the DWS provides fluoridation)			

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

EXPENSES

Expenses incurred during this reporting period include:

\$3,707.11	NWO Well Service – South Well repair
\$52.71	Neebing Lumber – well fence
\$525.08	Signs Now – well signs
\$211.14	Peterson’s Building – capital project supply
\$1,190.59	Cambrian Vacuum Truck – excavation of main valves
\$814.08	Water Quality Service – required sampling
\$651.27	Water Quality Service – operator time
\$1,027.44	Emco Limited – capital supplies
\$3,547.50	Emco Limited – parts
\$752.85	Emco Limited – parts
\$13,825.12	Automation Now – flow meter, chart recorder & installation

\$39,345.35

SUMMARY OF FLOWS

As per the ‘Permit to Take Water’, the rate of taking shall not exceed a maximum of 136 litres/minute from either well; however, the maximum daily rate of taking water from either well shall be 124,378.5 litres per day for a maximum total taking of 248,757 litres per day. There were no exceedances of water taking during the period January 1st 2016 to December 31st, 2016

Monthly Treated Water Flows 2013, 2014 and 2015

(Rated capacity is 249.12 m³ per day)

The unit of measure used is metres cubed (m³).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013											
332.4	305.3	339.0	370.3	413.9	528.2	491.6	540.4	374.3	356.1	326.8	375.0
2014											
333.5	287.6	344.4	344.7	392.5	451.1	386.7	263.1	265.1	328.5	369.6	344.4
2015											
340.5	274.1	341.6	300.4	355.6	473.2	435.1	411.9	388.8	312.1	261.3	282.6
2016											
866.2	479.7	466.6	460.7	551.5	579.9	582.4	622.4	470.9	476.6	435.5	470.2

Daily Average Volumes and Maximum Daily Volumes for Each Month 2016

North Well

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6.66	7.73	8.52	8.40	9.51	15.11	10.89	11.68	9.05	8.9	7.2	8.5
16.8	16.4	10.6	10.8	13.9	32.5	17.3	13.1	12.6	11.4	10.7	12.5

South Well

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
9.17	14.02	8.14	8.63	10.01	6.42	9.84	10.1	8.3	8.1	8.7	7.9
17.1	15.9	12.4	14.9	15.2	14.9	14.8	14.2	11.6	9.9	17.9	19.1

The above tables list daily average volumes on the first line and the maximum daily volumes for each month. The unit of measure used is metres cubed (m³).

**SUMMARY
2016**

Treated Water			Distribution	
Month	Turbidity NTU Minimum	Turbidity NTU Maximum	CL2 mg/L Minimum	CL2 mg/L Maximum
January	0.29	2.07	0.36	1.39
February	0.84	2	0.49	1.25
March	0.44	2.16	0.73	1.22
April	0.56	3.05	0.9	1.4
May	0.71	2.98	0.67	1.13
June	1.01	1.44	0.84	1.1
July	0.74	2.01	0.89	1.32
August	0.86	2.4	0.88	1.1
September	0.86	2.07	0.86	1.57
October	0.44	1.48	0.53	0.94
November	0.84	3.83	0.33	1.19
December	0.68	1.17	0.94	1.27
Range	0.29	3.83	0.33	1.57

COMMENTS BY THE O.R.O.

In 2016, the Rosslyn Village Drinking Water System underwent a few up-grades in order to be compliant with the Ministry of Environment.

The process of new source water has been studied and shown that new shallower wells would be the best option to deal with sodium and iron issues. The current wells will need to stay in commission until new wells could be approved by the MOE.

Any inquiries can be forwarded to wqsjohn@shaw.ca.



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

ANNUAL REPORT

Drinking-Water System Number:	260001081
Drinking-Water System Name:	Rosslin Village Subdivision Well Supply
Drinking-Water System Owner:	Municipality of Oliver Paipoonge
Drinking-Water System Category:	Small Municipal Residential
Period being reported:	January 1 to December 31, 2016

<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 [X]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [] No [X]</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>Oliver Paipoonge Municipal Office</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: 2px; width: 100px;">None</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: <div style="border: 1px solid black; padding: 2px; width: 100px;"></div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] 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
N/A	

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 []



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

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

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method _____

Describe your Drinking-Water System

Rosslyn Village receives its raw water supply from two drilled wells. The first has a depth of 34.5 metres and the second has a depth of 38.7 metres. Sodium hypochlorite is used for disinfection. Five 900 litre tanks are located in the water treatment facility to provide storage and retention time. Two pressure tanks which maintain the discharge pressure are located adjacent to the storage tanks. In-line monitors record continuous flows, turbidity and chlorine readings. Information on the in-line monitoring data base is accessed through dial up using an Endress Houser Field Data Manager Software program. The equipment allows off-site monitoring data acquisition program. The equipment allows off-site monitoring complete with the capability of providing reports and alarms. A stand-by diesel generator provides emergency hydro in the event of power failures.

List all water treatment chemicals used over this reporting period

Sodium Hypochlorite

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

December 21, 2016 – a 6” main valve “T” and a ¾” flushing valve were installed on the south side of Maple St.

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
Feb. 3/16	Sodium	101	mg/L	Re-delivered notices by TBDHU regarding	Feb. 3/16



				sodium levels to exceed 20 mg/L	
Dec. 20/16	0 psi			Restored system pressure, flushed and sampled up-stream and down-stream – 24 hrs. apart. Good results	Dec. 24/16

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

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	41	Absent	Absent		
Treated					
Distribution	34	Absent	Absent	25	0 – <300 CFU/ml

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	<i>NOTE: For continuous monitors use 8760 as the number of samples.</i>
Turbidity	8760	0.29 – 3.83	NTU	
Chlorine	8760	0.33 – 1.57	mg/L	
Fluoride (If the DWS provides fluoridation)				

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

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

- See attached Summary



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony				
Arsenic				
Barium				
Boron				
Cadmium				
Chromium				
*Lead				
Mercury				
Selenium				
Sodium				
Uranium				
Fluoride				
Nitrite	Oct. 13/16	<0.010	mg/L	none
Nitrate	Oct. 13/16	<0.020	mg/L	none

*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	Number of Samples	Range of Lead Results (min#) – (max #)	Unit of Measure	Number of Exceedances

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

- See attached Summary

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor				
Aldicarb				
Aldrin + Dieldrin				
Atrazine + N-dealkylated metabolites				
Azinphos-methyl				
Bendiocarb				
Benzene				
Benzo(a)pyrene				
Bromoxynil				
Carbaryl				
Carbofuran				
Carbon Tetrachloride				
Chlordane (Total)				



Chlorpyrifos				
Cyanazine				
Diazinon				
Dicamba				
1,2-Dichlorobenzene				
1,4-Dichlorobenzene				
Dichlorodiphenyltrichloroethane (DDT) + metabolites				
1,2-Dichloroethane				
1,1-Dichloroethylene (vinylidene chloride)				
Dichloromethane				
2,4 Dichlorophenol				
2,4-Dichlorophenoxy acetic acid (2,4-D)				
Diclofop-methyl				
Dimethoate				
Dinoseb				
Diquat				
Diuron				
Glyphosate				
Heptachlor + Heptachlor Epoxide				
Lindane (Total)				
Malathion				
Methoxychlor				
Metolachlor				
Metribuzin				
Monochlorobenzene				
Paraquat				
Parathion				
Pentachlorophenol				
Phorate				
Picloram				
Polychlorinated Biphenyls(PCB)				
Prometryne				
Simazine				
THM (NOTE: show latest annual average)	Oct. 13/16	10.3	ug/L	None
Temephos				
Terbufos				
Tetrachloroethylene				
2,3,4,6-Tetrachlorophenol				
Triallate				
Trichloroethylene				
2,4,6-Trichlorophenol				
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)				



Ontario Drinking-Water Systems Regulation O. Reg. 170/03

Trifluralin				
Vinyl Chloride				

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

Next Schedule 23 & 24 due 2021



Environmental

CRITERIA REPORT

L1724337 CONTD....

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L1724337-1 ~E1 RV-02							
Sampled By: JG on 17-JAN-16 @ 15:36							
Matrix: TREATED WATER					ON-DWSTANDARD		
NO2-N+NO3-N (O.Reg 170/03)							
Nitrate and Nitrite as N	<0.040		0.040	mg/L	10	20-JAN-16	
Nitrate (as N)	<0.020		0.020	mg/L	10	19-JAN-16	R3376913
Nitrite (as N)	<0.010		0.010	mg/L	1	19-JAN-16	R3376913
Schedule 23 (O.Reg 170/03)							
Drinking Water Metals							
Antimony (Sb)-Total	<0.60		0.60	ug/L	6	21-JAN-16	R3380833
Arsenic (As)-Total	12.9		1.0	ug/L	25	21-JAN-16	R3380833
Barium (Ba)-Total	180		10	ug/L	1000	21-JAN-16	R3380833
Boron (B)-Total	190		50	ug/L	5000	21-JAN-16	R3380833
Cadmium (Cd)-Total	<0.10		0.10	ug/L	5	21-JAN-16	R3380833
Chromium (Cr)-Total	<1.0		1.0	ug/L	50	21-JAN-16	R3380833
Selenium (Se)-Total	<1.0		1.0	ug/L	10	21-JAN-16	R3380833
Sodium (Na)-Total	101		0.50	mg/L	** 20	21-JAN-16	R3380833
Uranium (U)-Total	<2.0		2.0	ug/L	20	21-JAN-16	R3380833
Mercury (Hg)-Total	<0.10		0.10	ug/L	1	19-JAN-16	R3375314
Schedule 24 (O.Reg 170/03)							
Aldicarb	<1.0		1.0	ug/L	9	19-JAN-16	R3377731
Diquat	<1.0		1.0	ug/L	70	21 JAN 16	R3379935
Diuron	<1.0		1.0	ug/L	150	19-JAN-16	R3377734
Glyphosate	<5.0		5.0	ug/L	280	20-JAN-16	R3377774
O.Reg 170/03 Miscellaneous Pesticides							
Atachlor	<0.10		0.10	ug/L	5	25-JAN-16	R3377194
Atrazine	<0.10		0.10	ug/L		25-JAN-16	R3377194
Atrazine Desethyl	<0.10		0.10	ug/L		25-JAN-16	R3377194
Azinphos-methyl	<0.10		0.10	ug/L	20	25-JAN-16	R3377194
Benzo(a)pyrene	<0.010		0.010	ug/L	0.01	25-JAN-16	R3377194
Carbaryl	<0.20		0.20	ug/L	90	25-JAN-16	R3377194
Carbofuran	<0.20		0.20	ug/L	90	25-JAN-16	R3377194
Chlorpyrifos	<0.10		0.10	ug/L	90	25-JAN-16	R3377194
Diazinon	<0.10		0.10	ug/L	20	25-JAN-16	R3377194
Diclofop-methyl	<0.20		0.20	ug/L	9	25-JAN-16	R3377194
Dimethoate	<0.10		0.10	ug/L	20	25-JAN-16	R3377194
Malathion	<0.10		0.10	ug/L	190	25-JAN-16	R3377194
Metribuzin	<0.10		0.10	ug/L	80	25-JAN-16	R3377194
Metolachlor	<0.10		0.10	ug/L	50	25-JAN-16	R3377194
Phorate	<0.10		0.10	ug/L	2	25-JAN-16	R3377194
Prometryne	<0.10		0.10	ug/L	1	25-JAN-16	R3377194
Simazine	<0.10		0.10	ug/L	10	25-JAN-16	R3377194
Terbufos	<0.20		0.20	ug/L	1	25-JAN-16	R3377194
Triallate	<0.10		0.10	ug/L	230	25-JAN-16	R3377194
Trifluralin	<0.10		0.10	ug/L	45	25-JAN-16	R3377194
Atrazine & Metabolites	<0.20		0.20	ug/L	5	25-JAN-16	R3377194
Surr: 2-Fluorobiphenyl	105.2		40-130	%		25-JAN-16	R3377194
O.Reg 170/03 OC Pesticides							
Oxychlorane	<0.10		0.10	ug/L		21-JAN-16	R3376978
gamma-Chlordane	<0.10		0.10	ug/L		21-JAN-16	R3376978

* Detection Limit for result exceeds Criteria Specific Limit. Assessment against Criteria Limit cannot be made.

* Analytical result for this parameter exceeds Criteria Specific Limit listed on this report



CRITERIA REPORT

160001081

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L1724337-1 ~E1 RV-02							
Sampled By: JG on 17-JAN-16 @ 15:36							
Matrix: TREATED WATER					ON-DWSTANDARD		
Schedule 24 (O.Reg 170/03)							
O.Reg 170/03 OC Pesticides							
alpha-Chlordane	<0.10		0.10	ug/L		21-JAN-16	R3376978
p,p-DDE	<0.10		0.10	ug/L		21-JAN-16	R3376978
p,p-DDD	<0.10		0.10	ug/L		21-JAN-16	R3376978
p,p-DDT	<0.10		0.10	ug/L		21-JAN-16	R3376978
o,p-DDT	<0.10		0.10	ug/L		21-JAN-16	R3376978
Surr: d14-Terphenyl	105.1		40-130	%		21-JAN-16	R3376978
Paraquat	<1.0		1.0	ug/L	10	21-JAN-16	R3379835
Individual Analytes							
Fluoride (F)	1.46		0.020	mg/L	1.5	19-JAN-16	R3376913
O.Reg 170/03 Acids							
2,4-Dichlorophenol	<0.30		0.30	ug/L	900	11-FEB-16	R3395433
2,4,6-Trichlorophenol	<0.50		0.50	ug/L	5	11-FEB-16	R3395433
2,3,4,6-Tetrachlorophenol	<0.50		0.50	ug/L	100	11-FEB-16	R3395433
Pentachlorophenol	<0.50		0.50	ug/L	60	11-FEB-16	R3395433
Surr: 2,4,6-Tribromophenol	96.4		40-150	%		11-FEB-16	R3395433
O.Reg 170/03 PCBs							
Aroclor 1242	<0.020		0.020	ug/L		05-FEB-16	R3395926
Aroclor 1254	<0.020		0.020	ug/L		05-FEB-16	R3395926
Aroclor 1260	<0.020		0.020	ug/L		05-FEB-16	R3395926
Total PCBs	<0.035		0.035	ug/L	3	05-FEB-16	R3395926
Surr: d14-Terphenyl	106.8		40-130	%		05-FEB-16	R3395926
L1724337-2 ~D1 DS-A26							
Sampled By: JG on 17-JAN-16 @ 15:22							
Matrix: DISTRIBUTION					STANDARDS GUIDELINES		
Individual Analytes							
Total THMs	8.0		4.0	ug/L	100	20-JAN-16	
Trihalomethanes							
Chloroform	<2.0		2.0	ug/L		20-JAN-16	R3376860
Bromodichloromethane	<2.0		2.0	ug/L		20-JAN-16	R3376860
Dibromochloromethane	<2.0		2.0	ug/L		20-JAN-16	R3376860
Bromoform	8.0		2.0	ug/L		20-JAN-16	R3376860
Surr: 1,4-Difluorobenzene	99.7		50-150	%		20-JAN-16	R3376860

* Detection Limit for result exceeds Criteria Specific Limit. Assessment against Criteria Limit cannot be made.

* Analytical result for this parameter exceeds Criteria Specific Limit listed on this report.



Environmental

CRITERIA REPORT

L1733566 CONTD....

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17-FEB-16 10:20:53

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L1733566-1 -E1 RV-02							
Sampled By: JG on 10-FEB-16 @ 09:55							
Matrix: Treated Water					ON-DWSTANDARD		
Individual Analytes							
Volatile Organics (O.Reg 170/03)							
Vinyl chloride	<0.20		0.20	ug/L	2	17-FEB-16	R3403118
1,1-dichloroethylene (vinylidene chlorid	<0.50		0.50	ug/L	14	17-FEB-16	R3403118
Dichloromethane	<5.0		5.0	ug/L	50	17-FEB-16	R3403118
1,2-dichloroethane	<0.50		0.50	ug/L	5	17-FEB-16	R3403118
Carbon tetrachloride	<0.50		0.50	ug/L	5	17-FEB-16	R3403118
Benzene	<0.50		0.50	ug/L	5	17-FEB-16	R3403118
Trichloroethylene	<0.50		0.50	ug/L	5	17-FEB-16	R3403118
Tetrachloroethylene (perchloroethylene)	<0.50		0.50	ug/L	30	17-FEB-16	R3403118
Monochlorobenzene	<0.50		0.50	ug/L	80	17-FEB-16	R3403118
1,2-Dichlorobenzene	<0.50		0.50	ug/L	200	17-FEB-16	R3403118
1,4-Dichlorobenzene	<0.50		0.50	ug/L	5	17-FEB-16	R3403118
Surr: 1,4-Difluorobenzene	98.0		50-150	%		17-FEB-16	R3403118
Surr: 4-Bromofluorobenzene	93.1		50-150	%		17-FEB-16	R3403118

* Detection Limit for result exceeds Criteria Specific Limit. Assessment against Criteria Limit cannot be made.

* Analytical result for this parameter exceeds Criteria Specific Limit listed on this report.

Rosslyn Village Turbidity & cL2

2016

Treated Water			Distribution	
Month	Turbidity NTU Minimum	Turbidity NTU Maximum	CL2 mg/L Minimum	CL2 mg/L Maximum
January	0.29	2.07	0.36	1.39
February	0.84	2	0.49	1.25
March	0.44	2.16	0.73	1.22
April	0.56	3.05	0.9	1.4
May	0.71	2.98	0.67	1.13
June	1.01	1.44	0.84	1.1
July	0.74	2.01	0.89	1.32
August	0.86	2.4	0.88	1.1
September	0.86	2.07	0.86	1.57
October	0.44	1.48	0.53	0.94
November	0.84	3.83	0.33	1.19
December	0.68	1.17	0.94	1.27
Range	0.29	3.83	0.33	1.57