



**OPTIONAL ANNUAL REPORT TEMPLATE**

<b>Drinking-Water System Number:</b>	<b>260034918</b>
<b>Drinking-Water System Name:</b>	RKY Camp Well Supply
<b>Drinking-Water System Owner:</b>	RKY Camp
<b>Drinking-Water System Category:</b>	Small Non-Municipal Non-Residential
<b>Period being reported:</b>	01/01/2017 – 12/31/2017

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></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 [x] 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><a href="http://rkycamp.org/about/camp-facilities-and-features.html">http://rkycamp.org/about/camp-facilities-and-features.html</a></p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served:</p> <div style="border: 1px solid black; width: 100px; text-align: center; margin: 5px;">0</div> <p>Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [ ] No [ x ]</p> <p>Number of Interested Authorities you report to:</p> <div style="border: 1px solid black; width: 100px; text-align: center; margin: 5px;">0</div> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [ ] No [ x ]</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
RKY Camp Well Supply	260034918

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 [ x ]



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**

See Appendices

These locations are:

- The RKY Camp Homestead (Year Round)
  - o Kitchen
  - o Bathrooms
  - o Showers
- Abenaki (Director's Private Residence) (Year Round)
- Composters – Hand Washing (Spring, Summer, Fall)
- Camper Showers (Spring, Summer, Fall)
- Camper Hand washing Station/Trough - (Spring, Summer, Fall)
- Two Drinking Fountains
  - o Archery Area - (Spring, Summer, Fall)
  - o Nature Shed - (Spring, Summer, Fall)
- Wellness Centre/Cottage - (Spring, Summer, Fall)

Wastewater is then diverted to the RKY Camp septic systems which are located:

- Homestead/Poti Law Bed
- Archery Field Bed
- Wellness Centre Bed



List all water treatment chemicals used over this reporting period

- Javex 12

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

Bulbs and sleeve replacement – approx \$900

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

AWQI #	Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
					-	
					-	

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: RKY Camp Well #1					
	12	0	0	12	0 – 1
Distribution: Trough					
	6	0	0	6	0 - 2
Distribution: Kitchen					
	12	0	0	12	0 – 5
Distribution: Wellness Centre					
	6	0	0	6	0 - 6
Distribution: Compoosters					
	6	0	0	6	0 - 2
Treated: Post UV					
	4	N02/N03 - <0.10			



**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	59	0.00 – 0.08	NTU
Chlorine Residual Distribution System (Kitchen)	110	0.28-0.79	mg/L
Chlorine Treated Water System (Trough - Seasonal)	44	0.27– 0.83	mg/L
Chlorine Treated Water (Composters – Seasonal)	23	0.23 – 0.77	mg/L

*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

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

**TREATED WATER – RKY KITCHEN**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	2013/07/18	0.0005	mg/L	No
Arsenic	2013/07/18	0.001	mg/L	No
Barium	2013/07/18	0.01	mg/L	No
Boron	2013/07/18	0.01	mg/L	No
Cadmium	2013/07/18	0.0001	mg/L	No
Chromium	2013/07/18	0.001	mg/L	No
*Lead	2016/07/06	<0.001	mg/L	No
Mercury	2013/07/18	0.001	mg/L	No
Selenium	2013/07/18	0.001	mg/L	No
Sodium	2013/07/25	146	mg/L	Yes
Sodium	2013/08/02	30	mg/L	Yes
Uranium	2013/07/18	0.001	mg/L	No
Fluoride	2013/07/18	0.10	mg/L	No
Nitrite	2014/11/10	<0.10	mg/L	No
Nitrate	2014/11/10	<0.10	mg/L	No



\*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
Plumbing	1	<0.001	mg/L	None
Distribution	1	<0.001	mg/L	None

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

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	2013/07/18	1.0	ug/L	No
Aldicarb	2013/07/18	9	ug/L	No
Aldrin + Dieldrin	2013/07/18	0.012	ug/L	No
Atrazine + N-dealkylated metabolites	2013/07/18	0.2	ug/L	No
Azinphos-methyl	2013/07/18	2	ug/L	No
Bendiocarb	2013/07/18	2	ug/L	No
Benzene	2013/07/18	0.5	ug/L	No
Benzo(a)pyrene	2013/07/18	0.01	ug/L	No
Bromoxynil	2013/07/18	0.5	ug/L	No
Carbaryl	2013/07/18	5	ug/L	No
Carbofuran	2013/07/18	5	ug/L	No
Carbon Tetrachloride	2013/07/18	0.2	ug/L	No
Chlordane (Total)	2013/07/18	0.018	ug/L	No
Chlorpyrifos	2013/07/18	1	ug/L	No
Cyanazine	2013/07/18	1	ug/L	No
Diazinon	2013/07/18	1	ug/L	No
Dicamba	2013/07/18	1	ug/L	No
1,2-Dichlorobenzene	2013/07/18	0.4	ug/L	No
1,4-Dichlorobenzene	2013/07/18	0.4	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	2013/07/18	0.024	ug/L	No
1,2-Dichloroethane	2013/07/18	0.5	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	2013/07/18	0.5	ug/L	No
Dichloromethane	2013/07/18	4.0	ug/L	No
2-4 Dichlorophenol	2013/07/18	0.5	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	2013/07/18	1	ug/L	No
Diclofop-methyl	2013/07/18	1.0	ug/L	No
Dimethoate	2013/07/18	2.5	ug/L	No



Dinoseb	2013/07/18	1	ug/L	No
Diquat	2013/07/18	5	ug/L	No
Diuron	2013/07/18	10	ug/L	No
Glyphosate	2013/07/18	10	ug/L	No
Heptachlor + Heptachlor Epoxide	2013/07/18	0.012	ug/L	No
Lindane (Total)	2013/07/18	0.006	ug/L	No
Malathion	2013/07/18	5	ug/L	No
Methoxychlor	2013/07/18	0.006	ug/L	No
Metolachlor	2013/07/18	1.0	ug/L	No
Metribuzin	2013/07/18	5	ug/L	No
Monochlorobenzene	2013/07/18	0.2	ug/L	No
Paraquat	2013/07/18	5	ug/L	No
Parathion	2013/07/18	1	ug/L	No
Pentachlorophenol	2013/07/18	0.5	ug/L	No
Phorate	2013/07/18	1.0	ug/L	No
Picloram	2013/07/18	5	ug/L	No
Polychlorinated Biphenyls(PCB)	2013/07/18	0.1	ug/L	No
Prometryne	2013/07/18	1.0	ug/L	No
Simazine	2013/07/18	1	ug/L	No
THM (NOTE: show latest annual average)	-	-	-	-
Temephos	2013/07/18	10	ug/L	No
Terbufos	2013/07/18	1.0	ug/L	No
Tetrachloroethylene	2013/07/18	0.3	ug/L	No
2,3,4,6-Tetrachlorophenol	2013/07/18	0.5	ug/L	No
Triallate	2013/07/18	1	ug/L	No
Trichloroethylene	2013/07/18	0.3	ug/L	No
2,4,6-Trichlorophenol	2013/07/18	0.5	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	2013/07/18	1	ug/L	No
Trifluralin	2013/07/18	1.0	ug/L	No
Vinyl Chloride	2013/07/18	0.2	ug/L	No

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

## 2.1 Drinking Water System

The Water Well Record (ID No. 2208523, Ontario Well Tag No. A148564) indicates that the well was advanced to a depth of 101 feet (30.78 m) on November 15<sup>th</sup> 1978, and was completed in green-grey granite (Appendix A). The well is cased with a nominal 6.25-inch diameter steel casing to a depth of 22 feet (6.71m) below ground surface. The wellhead is located approximately 10 m south of the Homestead building, and approximately 50 m north of the nearest waterbody (Eagle Lake). As part of recent upgrades, the well casing was extended from just below the ground surface to approximately 0.5m above existing grade and equipped with a new pitless adapter and vermin proof cap.

The raw water supply for RKY Camp is obtained from the drilled well via a 4-inch Franklin-Electric ¾ HP submersible pump controlled by an Franklin Electric quick disconnect control box. The well pump's on/off control is achieved with two Signature 2000 SR1135-01 pressure tanks, which appear to be set to operate between pressures of 40 to 60 psi. Consequently, the combined available drawdown from the pressure tanks is approximately 232 litres.

Water enters the RKY Camp's Homestead building via a buried poly line, approximately 12 meters in length, and is directed to the pump control box and pressure tanks which are located in the building's basement. The water is then directed through a sediment filter unit followed by a Petwa Ltd. ion exchange water softener connected to a single brine tank. The water softener valve is rated for a design flow of more than 20 US-gpm (76 L/min) for continuous use.

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R.K.Y. Camp Inc.

Engineering Evaluation Report

The softened water then discharges through two 8-inch high flow cartridge filter housings installed in series, the first fitted with 5-micron (nominal) cartridge type sediment filter and the second fitted with a 1-micron (nominal) cartridge type sediment filter. The filters are located ahead of two Trojan UVMax™ Pro20S ultraviolet disinfection units, plumbed in parallel.

The Trojan UVMax™ Pro20S ultraviolet disinfection units have been certified by NSF International against NSF/ANSI Standard 55 for Disinfection Performance, Class A at a flow rate of 20 U.S. gallons (75.7 litres) per minute. Construction of the Trojan UVMax™ Pro20S incorporates an integrate dynamic flow restrictor to limit the maximum flow through the unit to rated capacity as well as a solenoid valve to stop water flow in the event that water treatment is compromised.

After ultraviolet (UV) disinfection a G.H. Stenner & Co. Inc. peristaltic pump is used to supply sufficient sodium hypochlorite solution to the chlorine injection port to achieve a free chlorine residual of 0.2 milligrams per litre at all locations within the distribution system. The chlorine injection pump is controlled through the well's pump controller. Following the chlorine injection port, water is directed to the RKY Camp's water distribution system.