



# **Village of Oil Springs**

## **Water Distribution**

### **Annual Summary Report**

**2016**

This summary report has been prepared by CH2M/OMI for the Village of Oil Springs. The purpose of the report is to meet the requirements of the Safe Drinking Water Act, 2002 and Ontario Regulation 170/03, Schedule 22, which requires that a Summary Report be prepared each year no later than March 31<sup>st</sup> and given to the municipal council in the case of a drinking water system owned by a municipality. Schedule 22-2(1)

The report summarizes the water quality information for the Oil Springs Water Distribution System, Water Works number 60046761 for the period of **January 1 2016 to December 31 2016**. The Oil Springs Water Distribution System is categorized as a Large Municipal Residential Drinking Water System.

The summary Report must list the requirements of the ACT, the Regulations, the system's approval and any order that the system failed to meet at any time during the period covered by the report and specify the duration of the failure. It must also, for each failure referred to, describe the measures that were taken to correct the failure. Schedule 22-2 (2) There were no emergency or upset conditions in the distribution system during the year of 2016

The annual MOECC inspection for the Oil Springs Distribution System was completed on Dec 7<sup>th</sup> 2016

### **Statement of compliance.**

The Oil Springs Water Distribution System is operated and maintained by the Township of Enniskillen on behalf of the Village of Oil Springs. The water supplied to the consumers serviced by the system was in compliance with the requirements of the Safe Drinking Water Act, all applicable regulations made in accordance with that Act, the Drinking Water Works Permit Number: 251-201 Issue Number: 2 and the Municipal Drinking Water License Number: 251-101 Issue Number: 2

CH2M/OMI assumed operations of Oil Springs distribution system Oct 6<sup>th</sup>/16

### **Review of Distribution system**

Oil Springs water distribution system consists of a 50 mm to a 300 mm diameter water main

The Oil Springs system is connected to the Township of Enniskillen Water Distribution System. The water is purchased from & supplied by the Township of Enniskillen.

There are no chemicals added to system by the Village of Oil Springs. Immediately upstream of the system a 12% chlorine solution of sodium hypochlorite is used at the Enniskillen Water Reservoir which feeds the Oil Springs Distribution System

An on-line chlorine analyzer located at the municipal office is used to continuously monitor the residual in the distribution system. The chlorine residual information from the analyzer is stored on a designated computer and a paper copy back up is kept in a binder located at the municipal office.

The distribution system for The Village Oil Springs has qualified for a reduced Lead sampling schedule and is not required to perform Lead sampling until 2019.

As per O, Reg 170/03, Schedule 13-6.1 (1) - Starting in July 2017 Oil Springs will now have to sample for HAA's (Haloacetic Acids) each quarter.

### Repairs & Maintenance

- Dec 29<sup>th</sup> – The blow off on Richmond Street was repaired
- Nov 8<sup>th</sup> – A new regulator was installed on the East end flow meter (Oil Springs Line)
- There were 4 new residential services added to system at Meadowview Estates (not on-line yet)
- All hydrants were flushed June 28<sup>th</sup> and on Nov 23<sup>rd</sup> just the hydrants East of the Main sewage pump station

### Health Samples

The health samples include tests for the presence of E.coli, Total coliforms and HPC (Heterotrophic Plate Count) Any presence of E.coli or Total coliforms would be considered adverse and must be reported. They are taken on a weekly basis at 2 locations within the Village of Oil Springs:

1. Oil Springs Municipal office
2. Oil Springs Petrocan (until Sept then collected at Post office)

Free chlorine samples were also analyzed at each site when collecting the health samples. Sample results less than 0.25 mg/L are of concern and results less than 0.05 mg/L are considered adverse and must be reported.

Chlorine residuals collected during sampling ranged from 0.69 mg/L to 2.04 mg/L

Health samples for HPC (Heterotrophic plate count) ranged from <10 cfu/mL to 90 cfu/mL

THM samples were collected on Jan 4<sup>th</sup>, April 11<sup>th</sup>, July 4<sup>th</sup>, and Oct 11th

Lead sampling was conducted on March 31<sup>st</sup> and August 25<sup>th</sup>

### 2016 Water purchased from Enniskillen (m3)

Month	Oil Heritage Road	Oil Springs Line	Monthly Total
January	3949	111	4060
February	4254	102	4356
March	3972	71	4043
April	3602	83	3685
May	3879	81	3960
June	2893	2113	5006
July	5103	92	5195
August	4940	75	5015
September	4174	66	4240
October	3637	49	3686
November	2417	1530	3947
December	1261	2297	3558
<b>Total</b>	<b>44,081</b>	<b>6,670</b>	
<b>2016 Annual Total</b>			<b>50,751</b>
<b>Monthly Average</b>			<b>4,229</b>
<b>Daily Average</b>			<b>139</b>

The annual total amount purchased includes water sold to customers in the Oil Springs distribution system and other water uses including hydrant flushing, fire flows, new watermain construction, repairs to watermain etc...

**Previous Annual water (m3) purchased from Enniskillen**

Year	Amount Purchased (m3)
2015	50,959
2014	49,823
2013	49,230
2012	48,657
2011	60,678
2010	63,392
2009	55,811
2008	56,480

The agreement with the Township of Enniskillen provides for the supply of water for an ultimate population of 1200 in the Village of Oil Springs. The estimates of water consumption is based on a 66 imp. gallons/capita/day (0.3 m3/capita/day) for a population of 1200, the average daily consumption is 79,000 imp. gallons/day (359 m3/day) with an average flow rate of 55 imp. gpm (0.25 m3/min) . Maximum daily flow rate of 138 imp gpm (0.63 m3/min) and a peak hourly flow rate of 206 imp gpm (0.94 m3/min)

**The water loss factor (%) for 2016 is 7.58 %**

**Previous water loss factor**

Year	Factor (%)
2015	6.64
2014	8.61
2013	3.91
2012	2.06
2011	17.01
2010	8.21
2009	8.81
2008	6.63
2007	11.00