

Drinking-Water System Number:	220000460
Drinking-Water System Name:	North Bay Water Drinking Water System
Drinking-Water System Owner:	The Corporation of the City of North Bay
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2017 to December 31, 2017

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [] No []

Is your annual report available to the public at no charge on a web site on the Internet? Yes [] No []

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

The Corporation of the City of North Bay
P.O. Box 360
200 McIntyre Street East
North Bay, ON P1B 8H8

Complete for all other Categories.

Number of Designated Facilities served:

Did you provide a copy of your annual report to all Designated Facilities you serve? Yes [] No []

Number of Interested Authorities you report to:

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility? Yes [] No []

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 []

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 a newspaper
 Describe your Drinking-Water System

The City of North Bay water treatment plant (WTP), water distribution facilities and water distribution piping system are owned and operated by the Corporation of the City of North Bay.

The City of North Bay Water Treatment System is classified as a "Large Municipal Residential" Drinking-Water System, Class 3 Water Treatment Plant and Class 4 Water Distribution System with Drinking-Water System Number: 220000460. The WTP, located at 248 Lakeside Drive in North Bay, treats water from Trout Lake which is part of the Mattawa River watershed. The WTP services a population of approximately 54,000, the permit to take water permits consumption up to 79,500 cubic meters per day.

The water distribution facilities consist of the following:

Ellendale Reservoir, High lift Pump Station & Re-chlorination Facility;

CFB Reservoir;

Canadore Pumping Station;

Cedar Heights Booster pumping station (not in service);

Judge Avenue Valve Chamber;

Birches Road Standpipe and Re-chlorination Station; and

Airport Road Standpipe, Booster Pumping Station and Re-chlorination Facility.

The membrane filtration water treatment plant has the design capacity of 79,500 cubic meters per day. The plant is a SCADA controlled membrane filtration system with ultraviolet and chlorine disinfection. The plant also includes fluoride addition along with caustic pH adjustment prior to delivery to the distribution system.

The membrane filtration plant meets the Ontario Drinking Water Standards requirements for the removal/disinfection of 3-log *Giardia Lambia*, 2-log *Cryptosporidium* and 4-log Viruses. The membrane filtration Primary Barrier provides for a 3- log *Giardia* removal, 2-log *Cryptosporidium* removal. The chlorine/UV disinfection Secondary Barrier provides for a 0.5 *Giardia* removal, 0.5-log *Cryptosporidium* removal and chlorine addition giving a 4- log virus removal.

In general the North Bay WTP can be described as follows:

Intake

A 1200mm diameter 45 series polyethylene intake pipe, with a capacity of 80,000 cubic meters per day. The pipe, constructed in 1973, extends approximately 300 meters into Delaney Bay of Trout Lake and includes an intake structure consisting of a steel inlet bell mouth with fiber reinforced plastic (FRP) cage and is in approximately 21.5 meters of water at low water level.

Membrane Feed Pump Well/Prescreening

Two (2) parallel sub-surface well chambers with level monitoring containing, two (2) 6mm mesh manual prescreen in series, five (5) vertical turbine pumps (4 duty and one standby) rated at 20 m³/d feeding the primary membrane system.

Membrane Feed Strainers

Five (5) 300 micron automatic membranes feed strainers (four duties and one standby).

Treatment Plant Process Areas

A building housing the following process components:

- primary and secondary membrane filtration system;
- primary and secondary UV disinfection system;
- split chlorine contact tank;
- split high lift pump well
- three (3) chemical storage and delivery rooms housing membrane cleaning and neutralization chemical systems, pre-chlorination system, primary disinfection chemical system, secondary chlorination chemical system, alkalinity adjustment system, and fluoride addition system. Also includes;
- high lift pumping;
- Generator room;
- Electrical room.
- compressor/blower room

Administration Area

Two floor administrative area including laboratory/control room, server room, multipurpose training room, offices, washrooms, women's and men's locker rooms, janitor room, building mechanical room and storage room.

Membrane Filtration

Eleven (11) pressurized primary membrane racks treating water from the membrane feed strainers, two(2) pressurized secondary membrane racks treating non-chemical backwash water from the primary membrane racks. The primary racks have a maximum production flow rate of 78.7 MLD based on raw water flow rate of 79.5 MLD, Ancillary systems including backwash pumps, instrument air for operating valves and integrity testing membranes, process blowers, and chemical cleaning and neutralization systems.

UV Disinfection Systems

Three (3) 600mm primary UV reactors (two duty and one standby) treating water from the eleven (11) pressurized primary membrane racks and two (2) secondary membrane racks. Each reactor contains medium pressure high intensity lamps housed in quartz sleeves; units equipped with self-cleaning mechanism and intensity sensors.

Chemical systems for:

Primary disinfection

Secondary (residual) disinfection

Fluoride Dosing

pH Adjustment

Corrosion Control

Membrane cleaning

Membrane cleaning solutions neutralization

Chlorine Contact Tank #1 and #2

Two (2) baffled chlorine contact tanks in series with storage volumes of 688 cubic meters (tank #1) and 502 cubic meters (tank #2).

High Lift Pump Well #1 and #2

High lift pump well #1 has a capacity of approximately 240 cubic meters and is equipped with one (1) variable speed and two (2) constant speed vertical turbine high lift pumps each rated at 20 MLD. High lift pump well #2 has a capacity of approximately 240 cubic meters and is equipped with one (1) variable speed and one (1) constant speed vertical turbine high lift pump each rated at 20 MLD.

Generator Room

One (1) dual fuel generator set (NG/Diesel) with a rating of 2050KW, to provide power during peak hours and emergency situations.

Wastewater Disposal System

Primary Membrane Backwash Tank

Tank with a volume of approximately 310 cubic meters,
Two (2) membranes feed pumps supplying water to the Secondary Membrane System.

Secondary Waste Tank

Tank with a volume of approximately 130 cubic meters,
Two (2) pumps, one duty and one standby, to deliver water to the sanitary sewer.

Neutralization Tank #1 and #2

Two (2) tanks each with a volume of 150 cubic meters, pH and Chlorine Residual analyzers. To dechlorinate and adjust pH to suitable levels for wastewater plant.

Sanitary Sewage Disposal

One sump with two (2) submersible pumps in the Administration Area and two (2) sumps and two (2) submersible pumps in the Process Area discharging to the sanitary sewer along Lakeside Drive

The treated water is pumped to the distribution system.

The water distribution facilities can be described as follows:

Ellendale Reservoir, High lift Pumping Station and Re-chlorination Facility

The facility is a reinforced concrete at-grade, double cell, un-baffled, treated water reservoir, located at

the east end of Ellendale Drive. The reservoir has an approximate capacity of 18,200 cubic meters, with dimensions of 71 meters by 38 meters by 7 meters. The facility is equipped with a sodium hypochlorite re-chlorination system, on-line continuous water quality analyzers for free chlorine and turbidity. Standby power is available with a generator to operate the facility during power outages.

Birch's Road Standpipe and Re-chlorination Station

The facility consists of one (1) 39 meter high, 19 meter diameter, 11,775 cubic meter capacity, steel, mixer pax system, treated water standpipe located near the southwest corner of Birch's Road and Booth Road. The facility is equipped with sodium hypochlorite re-chlorination system, on-line continuous water quality analyzers for free chlorine and turbidity and fixed 7.5kW, 120/240 Volt single phase, diesel powered generator to power the re-chlorination and SCADA communications during prolonged power outages.

Judge Avenue Valve Chamber

The facility consists of a valve and is located near the northeast corner of Judge Avenue and Lakeshore Drive. The facility is equipped with a fixed 7.5kW 120.240 Volt single phase, diesel powered generator to power the valve and SCADA communications during prolonged power outages. Valve control for pressure or tower level integrated with Birches Standpipe. The equipment for a re-chlorination station is located at the facility however not currently in use.

CFB North Bay Reservoir and Re-chlorination Facility

The facility consists of a double cell 1820 cubic meter capacity, un-baffled reservoir and a re-chlorination facility located at the north end of Manston Crescent. The facility is equipped with on line continuous water quality analyzer for free chlorine and standby power.

Canadore Pumping Station

The facility is equipped with high lift pumps and pressurized cushion tanks to maintain pressure in the pressurized zone of the distribution system servicing Canadore College and Nipissing University. There is an on-line continuous water quality analyzer to monitor free chlorine residual and a 200kW, 347/600 Volt, 3 phase diesel generator to provide power and SCADA communications during prolonged power outages.

Airport Standpipe, Booster Pumping Station

This 4,000 cubic meter water storage standpipe, booster pumping station and re-chlorination facility was constructed in 2009. With the standpipe, high lift pumps, pressurized cushion tanks and a 500kW back-up diesel generator. This facility maintains pressure in the pressurized zone of the distribution system servicing the Airport and Carmichael Drive areas. The overall system consists of pressure zones 4 and 5 which accommodate a total of nine pumps; including three booster pumps (2 duty and 1 standby) for Zone 4, four booster pumps (3 duty and 1 standby) and two fire pumps for Zone 5. The water standpipe is connected to the zone 4 distribution header to provide

zone 4 fire flow and peak hour demand. It is also connect to the zone 5 fire pumps suction header to provide zone 5 fire demands. Zone 5 is equipped with four (4) pneumatic tanks connected to the Zone 5 discharge header to mitigate minor pressure fluctuations within the distribution system, and to provide some volume of available storage during power interruptions before the standby power system engages. This will mitigate the potential for negative pressure in the distribution system.

List all water treatment chemicals used over this reporting period

Sodium Hydroxide
Sodium Hypochlorite
Hydrofluosilicic Acid
Control Max

Were any significant expenses incurred to?

- [X] Install required equipment
- [X] Repair required equipment
- [X] Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred treatment and distribution of water to Major repair and replacement to ensure reliable the water system.

The major capital repairs and replacements include:

- Replaced Air Compressor at WTP with Ingersoll Rand compressor
- Replaced Air Dryer on Compressed air system
- Replace Wiper System in Primary UV #3
- Had technician on site and rebuilt Primary UV units
- Replaced VFD on Secondary Filter feed pump
- Replaced Expansion couplings on high lift pumps
- Replaced 375m of 200mm water main on Metcalf St.
- Looped Knocks Cr. To Palmer Court with 2" poly to eliminate two dead ends
- Replaced the 2" galvanized feeder main on Herman Cr.
- Installed 14m of 150mm services and 20m of 150mm Hydrant lead to Hospice

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
July 12, 2017	Primary Disinfection, Turb. Analyzer left in calibration			Reported to MOE as required. Investigated and put analyzer back on-line meeting Ontario Drinking Water Quality Standards. AWQI# 134120	July 14, 2017
May, 15 2017	Cl2 Residual	0.02	mg/L	Failed to meet secondary disinfection. Free chlorine residual of 0.02mg/L at 16 Duxford St. Flushed and resampled. Results met Ontario Drinking Water Quality Standards. AWQI # 133075	May 15, 2017
June 22, 2017	Cl2 Residual	0.00	mg/L	Low chlorine residual of 0.00 mg/L detected at 338 Carmichael Dr.. Flushed and resampled. Results met Ontario Drinking Water Quality Standards. AWQI # 133524	June 22, 2017
July 27, 2017	Cl2 Residual	0.00	mg/L	Failed to meet secondary disinfection. Free chlorine residual of 0.00mg/L at 358 Lakeshore Dr. Flushed and resampled. Results met Ontario Drinking Water Quality Standards. AWQI # 134667	July 27, 2017
August 16, 2017	Cl2 Residual	0.02	mg/L	Failed to meet secondary disinfection. Free chlorine residual of 0.02mg/L at 1466 Pinegrove Crecent. Flushed and resampled. Results met Ontario Drinking Water Quality Standards. AWQI # 135557	August 16, 2017
August 28, 2017	Cl2 Residual	0.00	mg/L	Failed to meet secondary disinfection. Free chlorine residual of 0.00mg/L at 23 Duxford St. Flushed and resampled. Results met Ontario Drinking Water Quality Standards. AWQI # 136069	August 29, 2017

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 (#)-(#)	Range of Total Coliform Results (#)-(#)	Number of samples Background Colony Counts	Range of Back-ground Colony Counts	Number of HPC Samples	Range of HPC Results (#)-(#)
Raw	52	0-4	0-73	52	10 ->200	N/A	N/A
Treated	52	0-0	0-0	52	0-3	52	0-10
Distribution Fixed Sites	364	0-0	0-0	364	0-1	104	0-30
Distribution Random Sites	520	0-0	0-0	520	0-14	156	0-43

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

POE Grab Samples	Number of Grab Samples	Range of Results (min #)-(max #)	ODWQS/Operational Requirement
Turbidity	232	0.065 – 0.87 NTU	1.0 NTU max
Chlorine	245	0.76 – 1.55 mg/L	0.5 mg/L min
Fluoride (If the DWS provides fluoridation)	52	0.02 – 0.76 mg/L	1.5 mg/L max

Distribution Free Chlorine Grab Samples	Number of Grab Samples	Range of Results (min #)-(max #)	ODWQS Requirement
Chlorine Fixed Sites	3701	0.22 – 1.82 mg/L	0.05mg/L min
Chlorine Random Sites	520	0.10-1.28 mg/L	0.05 mg/L min

POE on-line Continuous Analyzers	Number of Grab Samples	Range of Results (min #)-(max #)	ODWQS/Operational Requirement
Turbidity	8760	0.02 – 1.509 NTU	5.0 NTU max
Chlorine	8760	0.76 – 1.55 mg/L	0.05 mg/L min
Fluoride (If the DWS provides fluoridation)	8760	0.02 - 0.757 mg/L	1.5 mg/L max

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

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	12 Jul 17	0.0010	mg/L	no
Arsenic	12 Jul 17	<0.001	mg/L	no
Barium	12 Jul 17	0.010	mg/L	no
Boron	12 Jul 17	<0.01	mg/L	no
Cadmium	12 Jul 17	<0.0001	mg/L	no
Chromium	12 Jul 17	<0.001	mg/L	no
Mercury	12 Jul 17	<0.1	mg/L	no
Selenium	12 Jul 17	<0.001	mg/L	no
Sodium	12 Jul 17	11.3	mg/L	no
Fluoride	12 Jul 17	0.646	mg/L	no
Uranium	12 Jul 17	<0.0001	mg/L	no
Nitrite	11 Jan 17 05 Apr 17 10 Jul 17 04 Oct 17	<MDL <MDL <MDL <0.1(RDL)	mg/L mg/L mg/L mg/L	no
Nitrate	11 Jan 17 05 Apr 17 10 Jul 17 04 Oct 17	0.162 0.235 0.176 <1.0 (RDL)	mg/L mg/L mg/L 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
Round 1 Dec 15 2015 to Apr 15 2016	Plumbing	44	<0.001 – 0.0081	mg/L	1
	Distribution	8	<0.0001 – 0.006	mg/L	0
Round 2 June 15 2013 to Oct 15 2013	Plumbing	44	<0.001 – 0.0126	mg/L	1
	Distribution	8	<0.001 – 0.0044	mg/L	0

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	12 Jul 17	<0.0005	mg/L	no
Atrazine + N-dealkylated metabolites	12 Jul 17	<0.0002	mg/L	no
Azinphos-methyl	12 Jul 17	<0.002	mg/L	no
Benzene	22 Aug 17	<0.0005	mg/L	no
Benzo(a)pyrene	12 Jul 17	<0.00001	mg/L	no
Bromoxynil	12 Jul 17	<0.0005	mg/L	no
Carbaryl	12 Jul 17	<0.005	mg/L	no
Carbofuran	12 Jul 17	<0.005	mg/L	no
Carbon Tetrachloride	22 Aug 17	<0.0002	mg/L	no
Chlorpyrifos	12 Jul 17	<0.001	mg/L	no
Diazinon	12 Jul 17	<0.001	mg/L	no
Dicamba	12 Jul 17	<0.001	mg/L	no
1,2-Dichlorobenzene	22 Aug 17	<0.0004	mg/L	no
1,4-Dichlorobenzene	22 Aug 17	<0.0004	mg/L	no
1,2-Dichloroethane	22 Aug 17	<0.0002	mg/L	no
1,1-Dichloroethylene (vinylidene chloride)	22 Aug 17	<0.0005	mg/L	no
Dichloromethane	22 Aug 17	<0.004	mg/L	no
2-4 Dichlorophenol	12 Jul 17	<0.0005	mg/L	no
2,4-Dichlorophenoxy acetic acid (2,4-D)	12 Jul 17	<0.0005	mg/L	no
Diclofop-methyl	12 Jul 17	<0.0009	mg/L	no

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Dimethoate	12 Jul 17	<0.0025	mg/L	no
Diquat	12 Jul 17	<0.005	mg/L	no
Diuron	12 Jul 17	<0.01	mg/L	no
Glyphosate	12 Jul 17	<0.01	mg/L	no
Malathion	12 Jul 17	<0.005	mg/L	no
Metolachlor	12 Jul 17	<0.001	mg/L	no
Metribuzin	12 Jul 17	<0.005	mg/L	no
Monochlorobenzene	22 Aug 17	<0.0002	mg/L	no
Paraquat	12 Jul 17	<0.001	mg/L	no
Pentachlorophenol	12 Jul 17	<0.0005	mg/L	no
Phorate	12 Jul 17	<0.0005	mg/L	no
Picloram	12 Jul 17	<0.005	mg/L	no
Polychlorinated Biphenyls(PCB)	12 Jul 17	<0.0001	mg/L	no
Prometryne	12 Jul 17	<0.00025	mg/L	no
Simazine	12 Jul 17	<0.001	mg/L	no
THM (NOTE: show latest annual average)	7 Dec 17	68.02	ug/L	no
Terbufos	12 Jul 17	<0.0004	mg/L	no
Tetrachloroethylene	22 Aug 17	<0.0003	mg/L	no
2,3,4,6-Tetrachlorophenol	12 Jul 17	<0.0005	mg/L	no
Triallate	12 Jul 17	<0.001	mg/L	no
Trichloroethylene	22 Aug 17	<0.0003	mg/L	no
2,4,6-Trichlorophenol	12 Jul 17	<0.0005	mg/L	no
Trifluralin	12 Jul 17	<0.001	mg/L	no
Vinyl Chloride	22 Aug 17	<0.0002	mg/L	no
2 Methyl-4-Chlorophenoxyacetic acid (MCPA)	12 Jul 17	<0.01	mg/L	no

THM Dist. Sample Location 55 Aviation Ave & 201 Pinewood Park	1 st Quarter Result Value	2 nd Quarter Result Value	3 rd Quarter Result Value	4 th Quarter Result Value	Unit of Measure	Exceed- ance
Date Sampled	Jan 18 – Mar. 8, 2017	Apr.26 – June. 14, 2017	Aug.16 – Sept.14, 2017	Oct.4 – Dec. 7, 2017	ug/L	No
Bromodichloromethane (Average)	3.0 2.9	4.0 4.0	5.3 5.1	2.8 2.9	ug/L	No
Bromoform(Average)	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	ug/L	No
Chloroform(Average)	62.26 63.46	82.0 88.9	112.7 124.4	65.5 70.3	ug/L	No

THM Dist. Sample Location 55 Aviation Ave & 201 Pinewood Park	1st Quarter Result Value	2nd Quarter Result Value	3rd Quarter Result Value	4th Quarter Result Value	Unit of Measure	Exceed- dance
Dibromochloromethane (Average)	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	ug/L	No
Total Trihalomethanes	57.3	73.2	97.1	77.3	ug/L	No
THM Distribution Random Sample Location & HLPS	1st Quarter Result Value	2nd Quarter Result Value	3rd Quarter Result Value	4th Quarter Result Value	Unit of Measure	Exceed- dance
Sample Period	Jan 18 – Mar. 8, 2017	Apr.26 – June. 14, 2017	Sep.11, 2017	Oct.3 – Dec.4, 2017	ug/L	No
Bromodichloromethane	2.3	2.6	2.3	2.4	ug/L	No
Bromoform	<0.5	<0.5	<0.5	<0.5	ug/L	No
Chloroform	48.21	54.3	56.6	64.3	ug/L	No
Dibromochloromethane	<0.5	<0.5	<0.5	<0.5	ug/L	No
Total Trihalomethanes	50.5	56.8	59.0	66.7	ug/L	No
Total Trihalomethanes 4 Quarter Average (Random & Fixed Sites Included)				68.02	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	½ MAC VALUE	MAC VALUE	Date of Sample
THM	80.9	ug/L	50	100	Jan.18,2017
THM	77.8	ug/L	50	100	Jan.18,2017
THM	60.1	ug/L	50	100	Jan.18,2017
THM	63.5	ug/L	50	100	Jan.18,2017
THM	68.5	ug/L	50	100	Feb.8, 2017
THM	70.6	ug/L	50	100	Feb.8, 2017
THM	56.0	ug/L	50	100	Feb.8, 2017
THM	50.7	ug/L	50	100	Mar.8,2017
THM	75.3	ug/L	50	100	Apr.26,2017
THM	86.4	ug/L	50	100	Apr.26,2017
THM	65.7	ug/L	50	100	Apr.26,2017

Parameter	Result Value	Unit of Measure	½ MAC VALUE	MAC VALUE	Date of Sample
THM	68.1	ug/L	50	100	Apr.26,2017
THM	118.0	ug/L	50	100	May 31, 2017
THM	115.0	ug/L	50	100	May 31, 2017
THM	78.1	ug/L	50	100	May 31, 2017
THM	60.3	ug/L	50	100	May 31, 2017
THM	95.5	ug/L	50	100	May 31, 2017
THM	64.3	ug/L	50	100	Jun.14,2017
THM	77.8	ug/L	50	100	Jun.14,2017
THM	145.0	ug/L	50	100	Aug.16,2017
THM	163.0	ug/L	50	100	Aug.16,2017
THM	87.0	ug/L	50	100	Aug.17,2017
THM	85.0	ug/L	50	100	Aug.17,2017
THM	57.2	ug/L	50	100	Sept.11,2017
THM	65.7	ug/L	50	100	Sept.11,2017
THM	50.2	ug/L	50	100	Sept.11,2017
THM	81.0	ug/L	50	100	Sept.11,2017
THM	91.4	ug/L	50	100	Sept.14,2017
THM	95.4	ug/L	50	100	Sept.14,2017
THM	57.2	ug/L	50	100	Sept.14,2017
THM	52.7	ug/L	50	100	Sept.14,2017
THM	69.5	ug/L	50	100	Oct.3, 2017
THM	52.4	ug/L	50	100	Oct.3, 2017
THM	60.7	ug/L	50	100	Oct.3, 2017
THM	56.6	ug/L	50	100	Oct.3, 2017
THM	52.3	ug/L	50	100	Oct.3, 2017
THM	73.5	ug/L	50	100	Oct.3, 2017
THM	102.0	ug/L	50	100	Oct.3, 2017
THM	81.7	ug/L	50	100	Oct.3, 2017
THM	54.7	ug/L	50	100	Oct.3, 2017
THM	75.2	ug/L	50	100	Oct.4,2017
THM	70.4	ug/L	50	100	Oct.4,2017
THM	53.8	ug/L	50	100	Oct.4,2017
THM	56.0	ug/L	50	100	Oct.4,2017
THM	82.6	ug/L	50	100	Nov.6,2017
THM	88.4	ug/L	50	100	Nov.6,2017
THM	102.0	ug/L	50	100	Nov.6,2017
THM	91.6	ug/L	50	100	Nov.6,2017
THM	95.3	ug/L	50	100	Nov.6,2017
THM	85.5	ug/L	50	100	Nov.6,2017
THM	103.0	ug/L	50	100	Nov.6,2017
THM	117.0	ug/L	50	100	Nov.6,2017
THM	124.0	ug/L	50	100	Nov.6,2017
THM	134.0	ug/L	50	100	Nov.6,2017

Parameter	Result Value	Unit of Measure	½ MAC VALUE	MAC VALUE	Date of Sample
THM	72.7	ug/L	50	100	Nov.14,2017
THM	94.5	ug/L	50	100	Nov.14,2017
THM	55.6	ug/L	50	100	Nov.14,2017
THM	50.4	ug/L	50	100	Dec.4,2017
THM	53.4	ug/L	50	100	Dec.4,2017
THM	69.9	ug/L	50	100	Dec.4,2017
THM	53.5	ug/L	50	100	Dec.4,2017
THM	76.3	ug/L	50	100	Dec.7,2017
THM	79.2	ug/L	50	100	Dec.7,2017
THM	56.9	ug/L	50	100	Dec.7,2017
THM	57.1	ug/L	50	100	Dec.7,2017

*In all the cases marked with * the analysis result value was less than the lab detection limit. However the lab detection limit