



Bureau de normalisation  
du Québec

**CAN/BNQ 3680-600/2009**

**On-site residential wastewater treatment technologies**

**Basic Treatment, Class B-IV**

**Model: Enviro-Septic**

**Manufacturer: DBO Expert**

Ref/No.: 20180615-DBO-062A

Performance Report in accordance with Annex A, Class B-IV

Prepared by:

A handwritten signature in blue ink that reads "Jean Couture".

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## TABLE OF CONTENTS

	Page
1. INTRODUCTION .....	1
2. BACKGROUND .....	2
3. PRINCIPLE OF OPERATION .....	3
4. PERFORMANCE EVALUATION.....	4
4.1 Description of the installation Evaluated During Testing.....	4
4.2 Test Protocol .....	4
4.3 Sampling Protocol (Influent).....	5
4.4 Sampling Protocol (Effluent) .....	6
4.5 quality control of laboratory.....	7
5. INTERVENTIONS AND SPECIAL CONDITIONS.....	8
6. ANALYTICAL RESULTS.....	9
6.1 SUMMARY.....	9
6.2 FLOW-RATE, PH AND TEMPERATURE .....	10
6.2.1 Flow-rate.....	10
6.2.2 pH.....	10
6.2.3 Temperature: Influent .....	11
6.3 BOD <sub>5</sub> AND CBOD <sub>5</sub> .....	12
6.3.1 BOD <sub>5</sub> : Influent.....	12
6.3.2 CBOD <sub>5</sub> : Effluent .....	12
6.4 TOTAL SUSPENDED SOLIDS (TSS).....	14
6.4.1 TSS: Influent.....	14
6.4.2 TSS: Effluent .....	14
6.5 COLOR, ODOR, OILY FILM AND FOAM .....	16
6.6 NOISE.....	16
7. CONCLUSION.....	18

## LIST OF APPENDICES

- Appendix 1: Drawings and Specifications
- Appendix 2: Interventions and Special Conditions
- Appendix 3: Test Site Outdoor Temperatures
- Appendix 4: Analytical Results of Unit: Influent
- Appendix 5: Analytical Results of Unit: Effluent

## **1. INTRODUCTION**

The purpose of this report is to present the results and tests used within the certification program of the Bureau de normalisation du Québec (BNQ) from its test site at Lac-Saint-Charles (commonly known as the “testing facility”) whose aim is to determine, under controlled conditions, the performance of onsite residential wastewater treatment system used to treat wastewater from isolated dwellings (test method – Annex A). This certification program is based on the requirements of the standard CAN/BNQ 3680-600 published by the BNQ.

To begin the certification process, the manufacturer's request for certification is analysed by a *comité d'évaluation technique* (CET) [technical evaluation committee] comprising the program leader for certification of onsite residential wastewater treatment systems from the BNQ, a representative from a regulatory authority on wastewater treatment, a university representative and, if necessary, another person from a government authority, and this committee will decide which models to verify.

After installation of the models chosen by the committee, the onsite residential treatment system is fed each day according to the flow-rate of its design and depending on flow-periods. The system undergoes performance tests as described in Chapter A.3 of the standard CAN/BNQ 3680-600 during a 6-month period.

The tests comprise the following loads:

- Design load: 16 weeks
- Stress load: 7 weeks
- Design load: 3 weeks

The stress loads imposed during the 7 weeks are:

- Wash-day period
- Working-parent period
- Power or equipment failure period
- Vacation period

Once the tests have been carried out, the BNQ analyses the results and determines whether the onsite residential treatment system installed in the testing facility meets the performance requirements for the treatment class intended in accordance with the standard CAN/BNQ 3680-600 in effect during the tests. If such is the case, the BNQ authorizes further work in accordance with the test method described in Annex B of the standard CAN/BNQ 3680-600.

## **2. BACKGROUND**

The Enviro-Septic system tested at the Bureau de normalisation du Québec's testing facility located at Lac-Saint-Charles in Québec included septic tank with an effluent pump that start on demand followed by low pressure distribution system and Enviro-Septic system.

The basic treatment was fed with a hydraulic loading capacity designed for 378 litres per day with influent wastewater at a controlled temperature of  $11\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$  to ensure a minimum temperature of  $10\text{ }^{\circ}\text{C}$ .

The test protocol followed was that of the standard CAN/BNQ 3680-600 in effect during the tests.

Annex A performance evaluation tests began on July 2, 2017. The stress test sequence started on October 30, 2017 and ended on December 23, 2017. All Annex A performance evaluation tests were completed on January 12, 2018.

Influent pH values ranged from 7.4 to 8.4 with an average value of 7.9.

Effluent pH values ranged from 6.6 to 7.5 with an average value of 7.1.

Influent temperature values ranged from  $10.0\text{ }^{\circ}\text{C}$  to  $16.4\text{ }^{\circ}\text{C}$  with an average value of  $13.7\text{ }^{\circ}\text{C}$ .

Weekly effluent  $\text{CBOD}_5$  concentrations ranged from 2 mg/L to 11 mg/L with a six-month average concentration of 5 mg/L. Weekly influent  $\text{BOD}_5$  concentrations ranged from 111 mg/L to 331 mg/L with a six-month arithmetic average concentration of 258 mg/L.

Weekly effluent total suspended solids (TSS) concentrations ranged from 1 mg/L to 9 mg/L with a six-month average concentration of 3 mg/L. Weekly influent TSS concentrations ranged from 120 mg/L to 401 mg/L with a six-month arithmetic average concentration of 293 mg/L.

Average monthly flow-rate of the treatment system ranged from 373 litres per day to 374 litres per day with a six-month average flow-rate of 374 litres per day excluding the end of the power failure stress test, and the start and end of the vacation stress test.

The average apparent colour of the effluent was 45 ACU (apparent colour units). No visible presence of oily film or foam was observed. For odours, the results of the three tests carried out by five people indicated that three out of three samples presented an odour detected by 2 people. The noise level measurement taken of the mechanical components of the system on December 11, 2017 was  $< 60\text{ dB}$  at a distance of 6 metres from the stand-alone treatment system.

### **3. PRINCIPLE OF OPERATION**

Domestic wastewater leaving the testing site went into the septic tank and then the effluent flowed by gravity to the first pump chamber that operated on a frequency-duration timed basis by a float switch that doses effluent from the pump vault out. At the exit of the pump, the effluent flows into the low pressure distribution system, that evenly spreading through 5 calibrated orifices the effluent to Enviro-Septic #1, Enviro-Septic #2 and the second pump chamber. Effluent from the Enviro-Septic #2 flows into the sampling device 062A. Schematic drawing of the installation is presented in Appendix 1.

## 4. **PERFORMANCE EVALUATION**

### 4.1 **DESCRIPTION OF THE INSTALLATION EVALUATED DURING TESTING**

The main components of the treatment process tested at the BNQ testing facility consisted of:

- **Septic tank:**
  - One tank, including prefilter, with nominal capacity of 3.9 m<sup>3</sup> (effective capacity 3.4 m<sup>3</sup>) from Aubert & Marois
- **PC-5 pump vault:**
  - Chamber of 1.5 m height, 60 cm diameter,
  - One (1) 1/3 hp submersible pump Little Giant 115 Volts operated on a frequency-duration timed basis by a float switch that doses effluent from the pump vault out
- **Low pressure distribution system**
  - PVC pipe of 50.8 mm with 5 calibrated orifices of 1/4 in. diameter
- **Enviro-Septic:**
  - One row of three Enviro-Septic pipes installed in series
  - Length of the box: 9.75 m (i.e. 3 × 3.05 plus 0.3 m at each end)
  - Width of the box: 0.6 m (the minimum center-to-center spacing between rows of pipes)
  - The box is placed on a 0.5% slope towards the exit
  - Layers of materials from the bottom to the top of the box:
    - 7.5 to 12.5 cm of crushed stone with a 7.5 cm collection drain in the center
    - Geogrid
    - 30 cm of filter sand below AES pipe
    - 30 cm of filter sand with an AES pipe in the center
    - 10 cm of filter sand above AES pipe
    - 20 cm of sand or backfill
  - Usable height of the box 85 cm
  - The upstream end is equipped with a 1-port adapter that receives a 100 mm pipe from the distribution system # 1. A vent pipe is connected from above
  - The downstream end is equipped with a 2-port adapter that receives the vent pipe in the top port and a piezometer in the bottom port
  - The evacuation pipe leaves from the bottom of the box on the downstream side and arrives at sampling device 062A

After installation at the BNQ testing site, the basic treatment system was fed at a rate of 378 litres per day. Small pump chamber (model PC-5) received the septic tank's daily raw sewage flow rate of 1890 L/day and spread it to the low pressure distribution systems of Enviro-Septic #1 and Enviro-Septic #2 as well as to the second pump chamber.

### 4.2 **TEST PROTOCOL**

Start-up of the treatment system was carried out by filling the septic tank, serving as the primary reactor, two-thirds full with clean water and the remaining third with wastewater. The Enviro-Septic #2 system was then fed at the design load rate of 378 litres per day.

Feeding was carried out according to three (3) flow-periods, as follows:

- From 6 a.m. to 9 a.m.: 35% of design load rate
- From 11 a.m. to 2 p.m.: 25% of design load rate
- From 5 p.m. to 8 p.m.: 40% of design load rate

The manufacturer chose a controlled temperature such that influent wastewater was at  $11^{\circ}\text{C} \pm 1^{\circ}\text{C}$  to ensure a minimum temperature of  $10^{\circ}\text{C}$ .

After a start-up period, the system was subjected to the following load sequence:

- Design load: 16 weeks
- Stress load: 7 weeks
- Design load: 3 weeks

During the design load period, composite samples proportional to the flow were collected from the system's influent and effluent five times a week, from Monday to Friday. The samples were analyzed based on the following parameters:  $\text{BOD}_5$ ,  $\text{CBOD}_5$ , TSS, pH, and temperature.

During the stress tests, composite samples were collected before and after each dosing sequence. Laboratory analyses were the same as described for the design load tests.

Each stress test was followed by a week of design load dosing before beginning the next stress test. Sampling for the wash-day stress and working parent stress remains the same as for the design load, namely 5 days a week. Sampling for the power/equipment failure stress test began 24 hours after the stress test. Sampling began 48 hours after the vacation stress test, to allow the unit to recover from the stress.

All parameters were analyzed by the AGAT Laboratory in Sainte-Foy (Québec).

The installation of the basic treatment system was completed on April 28, 2017 under the manufacturer's supervision. The system was filled two-thirds full with clean water and the remaining third with wastewater. The Annex A performance evaluation tests were begun on July 2, 2017. The sequence of stress tests was begun on October 30, 2017 and completed on December 23, 2017. All Annex A performance evaluation tests were completed on January 12, 2018.

One week was retrieved because of system problem at the BNQ testing site.

At the end of the Annex A, it was necessary to prolong the test period by one week to ensure that the arithmetic mean concentration of all parameters met the requirements of the standard for influent wastewater.

#### 4.3 SAMPLING PROTOCOL (INFLUENT)

The composite samples were collected using a Sigma Model 900 portable sampler. The sampler was programmed to take samples proportional to the flow.

During the design load, samples were collected as follows:

- From 6 a.m. to 9 a.m.: 17 samples
- From 11 a.m. to 2 p.m.: 12 samples
- From 5 p.m. to 8 p.m.: 20 samples

The sampler's strainer was placed in the wastewater mixing tank, near the mixer and the intake source of the recirculation pump which fed the dosing chamber. The volume of water per sample was 170 mL for a total volume of the composite sample of approximately 8.3 litres. The composite samples were kept in the dark, on ice or refrigerated during collection.

The composite sample was used to analyze BOD<sub>5</sub>, TSS and pH.

Due to logistic considerations, sampling began during the evening period between 5:00 p.m. and 8:00 p.m. and ended the following day during the afternoon period between 11:00 a.m. and 2:00 p.m., with the exception of the Mondays of power/equipment failure and vacation stress tests for which sampling began at 6:00 a.m.

As soon as the flow-period ended and pending transport to the laboratory, all samples collected were kept in a refrigerator at 4 °C. During transport, the samples were kept in the dark on ice. For each sample sent to the laboratory, an analysis request form was duly completed and signed.

Preservation, transport and storage of samples were carried out in accordance with the requirements of Clause 5.4 of the standard ISO 5667-10.

All analyses were performed by the laboratories with the exception of the pH level and temperature, which were measured on site using a calibrated, portable YSI Model 60 pH meter. In addition, the temperature was measured continuously using a temperature sensor connected to the controller within the inlet wastewater basin.

#### **4.4 SAMPLING PROTOCOL (EFFLUENT)**

The composite samples were collected using a Sigma Model 900 or HACH AS950 portable samplers. The samplers were programmed to take samples proportional to the flow. During the design load, samples were collected as follows:

- From 6:15 a.m. to 9:15 a.m.: 18 samples
- From 11:15 a.m. to 2:15 p.m.: 13 samples
- From 5:15 p.m. to 8:15 p.m.: 21 samples

A 15-minute delay between the beginning of a flow-period and the first sample taken was implemented to compensate for the time required for water to flow to the effluent of the treatment system.

The effluent water, from the Enviro-Septic #2, flows in free fall through a watertight conduit to a sampling chamber. The sampler's strainer was placed in a container of approximately 1.0 litre, where composite samples were collected. The volume of water per sample was 150 mL for a total volume of composite sample of approximately 7.8 litres.

The composite sample, kept in the dark and refrigerated at 4 °C, was used to analyze CBOD<sub>5</sub>, TSS and pH.

Due to logistic considerations, sampling began during the evening period, namely between 5:15 p.m. and 8:15 p.m., and ended the following day during the afternoon period, namely between 11:15 a.m. and 2:15 p.m. with the exception of the Mondays of power/equipment failure and vacation stress tests for which sampling began at 6:15 a.m.

As soon as the flow-period ended and pending transport to the laboratory, all samples collected were kept in a refrigerator at 4 °C. During transport, the samples were kept in the dark on ice. For each sample sent to the laboratory, an analysis request form was duly completed and signed.

Preservation, transport and storage of samples were carried out in accordance with the requirements of Clause 5.4 of the standard ISO 5667-10.

All analyses were performed by the laboratories with the exception of the pH level and temperature, which were measured on site using a calibrated, portable YSI Model 60 pH meter. In addition, the temperature was measured continuously using a temperature sensor connected to the controller within the inlet wastewater basin.

#### **4.5     QUALITY CONTROL OF LABORATORY**

For each sample analysis sequence, the laboratories carried out quality checks for the various parameters by analysing a blank and a standard addition.

All signed analytical results are presented in the confidential Annex A performance report.

## 5. **INTERVENTIONS AND SPECIAL CONDITIONS**

All interventions and special conditions pertaining to the implementation of the Annex A performance evaluation tests are shown in a compilation table in Appendix 2. The data indicate interventions made to the system by the manufacturer from the end of its installation until the end of the Annex A tests, as well as stress test dates and problems that occurred at the site during the Annex A performance evaluation tests.

The test site outdoor temperatures are shown in Appendix 3.

Data on outdoor temperatures cover the period from the beginning of the installation on April 25, 2017, until the end of the Annex A performance evaluation tests on January 12, 2018.

The test site outdoor temperatures are summarized in Table 1, including the minimum, maximum and average monthly measurements.

**Table 1**  
**Test site outdoor temperatures**

Months	Temperature, in °C		
	Minimum	Maximum	Average
April 2017	-8	18	4
May 2017	1	27	11
June 2017	7	27	17
July 2017	7	27	19
August 2017	8	30	18
September 2017	3	29	16
October 2017	-1	21	11
November 2017	-14	13	-1.3
December 2017	-29	5	-11
January 2018	-31	10	-12

## 6. ANALYTICAL RESULTS

### 6.1 SUMMARY

Sample analyses were carried out in accordance with the methods specified in the standard CAN/BNQ 3680-600. The results from laboratory analyses and those obtained on site are presented in Appendices 4 and 5.

For the influent, eight  $BOD_5$  analyses were performed on a frozen portion of the samples. For the effluent, seven  $CBOD_5$  were performed on a frozen portion of the samples. The identification of these samples is presented in Appendices 4 and 5 and in the tables provided in the *Confidential Report* (report containing all certificates of analysis).

If an analytical result for a given sampling day, either at the influent or the effluent, was considered invalid, the results were registered in the tables provided in the *Confidential Report*, but not included when calculating averages.

If, for the parameters analyzed, analytical deadlines were exceeded, the results were rejected.

During calculation of weekly, monthly or six-month average concentrations of  $BOD_5$ ,  $CBOD_5$  and TSS for all concentrations below the analytical limit, the values were registered as the analytical limit.

Table 2 shows a summary of the analytical results and field measurements.

**Table 2**  
**Summary of analytical results and field measurements**

Parameters	Number of samples retained	Arithmetic average	Standard deviation	Minimum value	Maximum value
Temperature (°C) Influent	NA	13.7	1.8	10.0	16.4
pH Influent Effluent	121 121	7.9 7.1	0.1 0.1	7.4 6.6	8.4 7.5
$BOD_5$ (mg/L) Influent	121	258	59	75	382
$CBOD_5$ (mg/L) Effluent	121	5	2.8	<2	15
TSS (mg/L) Influent Effluent	121 121	293 3	66 2.0	44 <1	574 12

N/A = Not applicable.

## 6.2 FLOW-RATE, PH AND TEMPERATURE

### 6.2.1 Flow-rate

The flow-rate was calculated by multiplying the volume of the dosing chamber by the number of times the chamber was drained during the three flow-periods.

According to the standard CAN/BNQ 3680-600, the monthly average of the volume dispensed shall not exceed  $\pm 10\%$  of the 100% of the design hydraulic capacity of the system. Thus, for the dispensed volume of the treatment system, 378 litres per day, the monthly average shall not be lower than 340 litres per day or higher than 416 litres per day.

Table 3 shows the monthly average flow-rates with the minimum and maximum volumes for the month in question during the Annex A performance evaluation tests.

During the Annex A performance evaluation tests, the average monthly flow-rate of the treatment system ranged from 373 litres per day to 374 litres per day with a six-month average flow-rate of 374 litres per day, excluding the end of the power/equipment failure stress test and the start and end of the vacation stress test.

### 6.2.2 pH

The pH was measured on site using a portable, calibrated YSI Model 60 pH meter. Measurements were taken from the composite samples. Values are provided in Appendix 4.

Table 4 shows the monthly average influent pH results with the minimum and maximum values.

Table 5 shows the monthly average effluent pH results with the minimum and maximum values.

**6.2.2.1 pH Influent:** — During the Annex A performance evaluation tests, the influent pH values ranged from 7.4 to 8.4 with a six-month average of 7.9.

**6.2.2.2 pH Effluent:** — During the Annex A performance evaluation tests, the effluent pH values ranged from 6.6 to 7.5 with a six-month average of 7.1.

**Table 3**  
**Monthly flow-rate**

Month	Monthly flow-rate, in L/d		
	Average	Minimum	Maximum
1	374	374	374
2	374	374	374
3	373	349	374
4	374	374	374
5	374	360	374
6	374	374	374

**Table 4**  
**Monthly influent pH values**

Month	pH		
	Average	Minimum	Maximum
1	7.8	7.4	8.1
2	7.9	7.5	8.1
3	8.0	7.5	8.3
4	8.0	7.7	8.4
5	8.0	7.9	8.1
6	7.9	7.7	8.1

**Table 5**  
**Monthly effluent pH values**

Month	pH		
	Average	Minimum	Maximum
1	7.2	7.0	7.4
2	7.1	6.8	7.3
3	7.1	6.9	7.2
4	7.2	7.0	7.5
5	7.2	6.9	7.5
6	7.0	6.6	7.2

### 6.2.3 Temperature: Influent

The influent temperature was measured continuously using a temperature probe connected to the controller within the dosing chamber, except during the last week where influent temperature were taken due to automate system problem at the testing site. The values retained, shown in Appendix 4, are the values of each day. The values do not take into account wash-day water temperature during the stress test period.

Note that standard requirements for wash-cycle temperature are between 20 °C and 30 °C.

Table 6 shows the monthly average influent temperatures with the minimum and maximum values taken during the Annex A performance evaluation tests.

During the Annex A performance evaluation tests, the influent temperature ranged from 10.0 °C to 16.4 °C with an average of 13.7 °C.

Influent temperature values are presented in Appendix 4.

**Table 6**  
**Monthly average influent temperature values**

Month	Average temperature, in °C		
	Average	Minimum	Maximum
1	13.6	12.6	14.3
2	14.9	14.5	15.3
3	15.5	14.8	16.4
4	15.0	13.9	15.6
5	12.9	12.0	13.9
6	10.9	10.0	11.7

### 6.3 BOD<sub>5</sub> AND CBOD<sub>5</sub>

The results of the BOD<sub>5</sub> analysis are presented in Appendix 4 for influent wastewater and CBOD<sub>5</sub> analysis are presented in Appendix 5 for effluent wastewater.

#### 6.3.1 BOD<sub>5</sub>: Influent

During the Annex A performance evaluation tests, the influent BOD<sub>5</sub> weekly average concentrations ranged from 111 mg/L to 331 mg/L with a six-month arithmetic average concentration of 258 mg/L, for values retained. Monthly arithmetic average concentrations ranged from 200 mg/L to 292 mg/L.

The standard CAN/BNQ 3680-600 requires arithmetic average BOD<sub>5</sub> concentrations measured at the influent must be:

- between 100 mg/L and 300 mg/L for the monthly (30-day) average
- greater or equal to 200 mg/L for the six-months average

#### 6.3.2 CBOD<sub>5</sub>: Effluent

During the Annex A performance evaluation tests, the effluent CBOD<sub>5</sub> weekly average concentrations ranged from 2 mg/L to 11 mg/L while monthly arithmetic average concentrations ranged from 3 mg/L to 8 mg/L. The number of composite samples used for the Annex A performance evaluation tests was 121 for the influent and the effluent out of a possible total of 123.

Table 7 presents the results of the influent BOD<sub>5</sub> and effluent CBOD<sub>5</sub> weekly average concentrations with the weekly standard deviation and coefficient of variation.

Table 8 shows the influent BOD<sub>5</sub> and effluent CBOD<sub>5</sub> monthly average concentrations.

The standard CAN/BNQ 3680-600 requires arithmetic average CBOD<sub>5</sub> concentrations measured at the effluent to be smaller or equal to:

- 15 mg/L for the weekly (7-day) average
- 10 mg/L for the monthly (30-day) average

During the Annex A performance evaluation tests, the maximum arithmetic average CBOD<sub>5</sub> concentrations measured at the effluent ranged from:

- 2 mg/L to 11 mg/L for 7 days
- 3 mg/L to 8 mg/L for 30 days

Consequently, the requirements of the standard CAN/BNQ 3680-600 for CBOD<sub>5</sub> of the Class B-IV basic treatment were met for the Annex A performance evaluation tests. No value exceeded these requirements.

**Table 7**

**Influent BOD<sub>5</sub> and effluent CBOD<sub>5</sub> weekly average concentrations**

Month	Week	BOD <sub>5</sub> Influent, in mg/L			CBOD <sub>5</sub> Effluent, in mg/L		
		Average	Standard deviation	Coefficient of variation	Average	Standard deviation	Coefficient of variation
1	1	222	23	0.102	2	0.00	0.000
	2	306	23	0.075	8	3.90	0.500
	3	325	22	0.068	5	1.14	0.211
	4	308	26	0.084	4	0.84	0.220
2	5	272	47	0.172	2	0.45	0.203
	6	305	24	0.079	2	0.45	0.203
	7	243	24	0.098	2	0.45	0.203
	8	301	22	0.073	4	1.41	0.354
3	9	255	22	0.088	2	0.50	0.222
	10	250	20	0.078	7	3.00	0.429
	11	293	24	0.083	7	0.84	0.123
	12	328	38	0.114	6	2.55	0.425
	13	331	35	0.107	7	0.89	0.136
4	14	289	12	0.043	11	4.04	0.395
	15	186	10	0.055	9	1.52	0.176
	16	213	78	0.364	11	4.21	0.376
	17	111	30	0.275	2	0.00	0.000
5	18	116	27	0.233	2	0.00	0.000
	19	244	32	0.132	8	3.96	0.483
	20	224	7	0.032	2	0.58	0.247
	21	238	17	0.073	3	1.53	0.458
6	22	248	26	0.105	2	0.00	0.000
	23	206	84	0.407	3	0.58	0.217
	24	282	64	0.227	5	1.15	0.217
	25	307	30	0.096	5	1.52	0.330
	26	302	47	0.155	2	0.00	0.000

**Table 8**

**Influent BOD<sub>5</sub> and effluent CBOD<sub>5</sub> monthly average concentrations**

Month	Influent BOD <sub>5</sub> , in mg/L	Effluent CBOD <sub>5</sub> , in mg/L
1	290	5
2	280	3
3	292	6
4	200	8
5	206	4
6	269	3

## **6.4 TOTAL SUSPENDED SOLIDS (TSS)**

Results of the total suspended solids (TSS) analyses are shown in Appendix 4 for influent wastewater and Appendix 5 for effluent wastewater.

### **6.4.1 TSS: Influent**

During the Annex A performance evaluation tests, the influent TSS weekly average concentrations ranged from 120 mg/L to 401 mg/L with a six-month arithmetic average concentration of 293 mg/L, for values retained. Monthly arithmetic average concentrations ranged from 231 mg/L to 337 mg/L.

The standard CAN/BNQ 3680-600 requires arithmetic average TSS concentrations measured at the influent must be:

- between 100 mg/L and 350 mg/L for the monthly (30-day) average
- greater or equal to 200 mg/L for the bi-annual (6 months) average

### **6.4.2 TSS: Effluent**

During the Annex A performance evaluation tests, the effluent TSS weekly average concentrations ranged from 1 mg/L to 9 mg/L while monthly arithmetic average concentrations ranged from 2 mg/L to 5 mg/L, for values retained.

The number of composite samples used for the Annex A performance evaluation tests was 121 for the influent and for the effluent out of a possible total of 123.

Table 9 presents the influent and effluent TSS weekly average concentration values with the standard deviations and coefficients of variation.

Table 10 presents the influent and effluent TSS monthly average concentrations.

The standard CAN/BNQ 3680-600 requires arithmetic average TSS concentrations measured at the effluent to be smaller or equal to:

- 15 mg/L for the weekly (7-day) average
- 10 mg/L for the monthly (30-day) average

During the Annex A performance evaluation tests, the TSS arithmetic average of the maximum average concentrations measured at the effluent ranged from:

- 1 mg/L to 9 mg/L for 7 days
- 2 mg/L to 5 mg/L for 30 days

Consequently, the requirements of the standard CAN/BNQ 3680-600 for TSS of the Class B-IV basic treatment were met for the Annex A performance evaluation tests. No value exceeded these requirements.

**Table 9**

**Influent and effluent TSS weekly average concentrations**

Month	Week	TSS					
		Influent, in mg/L			Effluent, in mg/L		
		Average	Standard deviation	Coefficient of variation	Average	Standard deviation	Coefficient of variation
1	1	278	18	0.065	1	0.55	0.391
	2	314	46	0.146	5	2.39	0.497
	3	346	83	0.239	4	0.55	0.152
	4	355	36	0.100	2	0.55	0.228
2	5	286	27	0.096	2	0.55	0.342
	6	292	36	0.123	1	0.00	0.000
	7	235	54	0.232	1	0.00	0.000
	8	336	43	0.127	3	0.84	0.299
3	9	262	26	0.098	2	1.41	0.707
	10	304	17	0.056	5	2.07	0.451
	11	342	21	0.062	5	0.71	0.141
	12	336	40	0.119	4	2.07	0.471
	13	401	97	0.242	4	0.71	0.177
4	14	318	16	0.050	9	3.51	0.413
	15	231	34	0.149	5	1.79	0.344
	16	255	95	0.371	6	2.86	0.462
	17	120	43	0.361	2	0.71	0.354
5	18	160	47	0.296	2	0.84	0.465
	19	257	103	0.401	5	2.07	0.451
	20	219	100	0.458	1	0.00	0.000
	21	291	51	0.176	1	0.58	0.433
6	22	377	92	0.243	1	0.00	0.000
	23	262	118	0.450	1	0.50	0.400
	24	327	26	0.079	4	1.00	0.250
	25	367	37	0.100	2	1.14	0.475
	26	350	63	0.181	1	0.50	0.400

**Table 10**  
**TSS monthly average concentrations**

Month	TSS	
	Influent, in mg/L	Effluent, in mg/L
1	323	3
2	287	2
3	329	4
4	231	5
5	232	2
6	337	2

## 6.5 COLOR, ODOR, OILY FILM AND FOAM

The analytical results of the apparent color, the presence of odors, oily film and foam are shown in Table 11, as described in the standard CAN/BNQ 3680-600.

The effluent had an average apparent color of 45 ACU and no visible presence of an oily film or foam.

For the presence of odors, the 3 tests carried out by 5 people showed that 3 out of 3 samples presented an odor detected by 2 people.

## 6.6 NOISE

In accordance with the standard CAN/BNQ 3680-600, one reading of the noise level at a distance of 6 m from the stand-alone wastewater treatment system taken 1.2 m above the ground at each of the four axes of the system (90°, 180°, 270° and 360°) shall be carried out during Annex A performance evaluation tests.

The reading was taken on December 11, 2017 at 11: 30 a.m. and results are shown in Table 12.

The equipment used for the measurements was a calibrated integrating sound level meter, Model "LxT1" from Larson Davis. The results indicate sound levels below 60 dB in the four axes of noise propagation.

According to the standard CAN/BNQ 3680-600, the basic treatment complies with the requirements pertaining to a maximum noise level of 60 dB for Annex A tests.

**Table 11**

**Analytical results for apparent color, odor, oily film and foam**

Week	Date	Apparent color (ACU*)	Odor**	Foam	Oily film
12	2017-09-28	66	2	absence	absence
20	2017-11-22	36	2	absence	absence
26	2018-01-04	32	2	absence	absence

\* ACU = apparent color unit.

\*\* Out of a total of 5 people, the value represents the number of people who perceived an odor.

**Table 12**

**Sound level measurement results**

Direction	Sound level in dB
90°	51.9
180°	50.6
270°	54.1
360°	56.1
Background noise	46.8

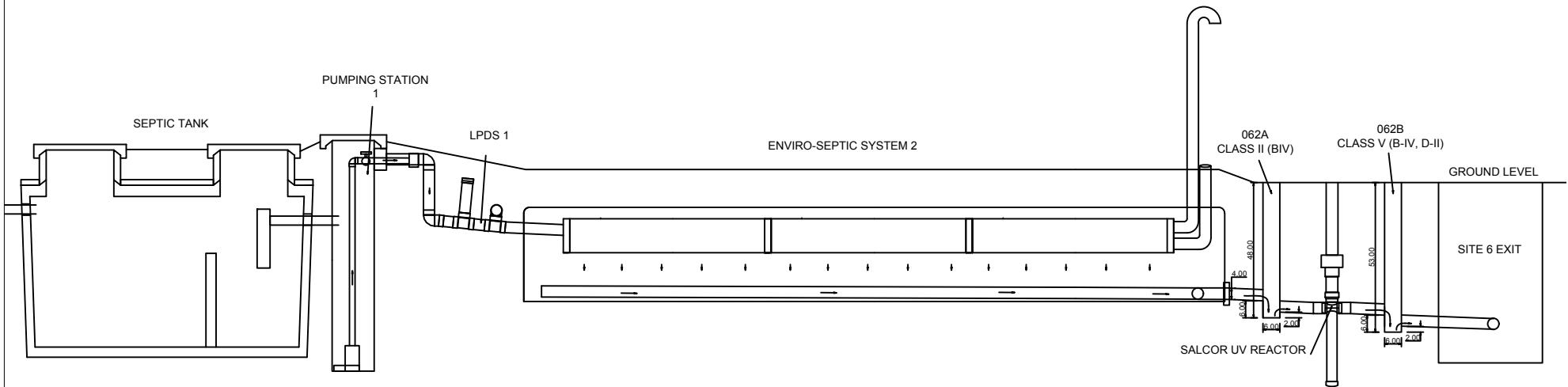
**7. CONCLUSION**

The basic treatment comprising septic tank followed by Enviro-Septic system #2 meets the requirements of Annex A performance evaluation tests of the standard CAN/BNQ 3680-600 for a basic treatment system (Class B-IV). The BNQ authorizes continuation of the work in accordance with the method described in Annex B of the standard CAN/BNQ 3680-600.

## **APPENDIX 1 – DRAWINGS AND SPECIFICATIONS**

**Figure 1. Side view – Installation of EnviroSEPTIC #2**

## Line #2



## **APPENDIX 2 – INTERVENTIONS AND SPECIAL CONDITIONS**

## INTERVENTIONS AND SPECIAL OPERATING CONDITIONS

Date	Description
2016-10-17	Start of the installation of the treatment systems at Site 6 (2016-10-17 to 2016-10-21).
2016-10-25	Installation of the treatment systems at Site 6 (continued).
2016-11-01	Installation of the treatment systems at Site 6 (continued) (2016-11-01 to 2016-11-04).
2016-11-07	Installation of the treatment systems at Site 6 (continued).
2016-11-11	Installation of the treatment systems at Site 6 (continued).
2016-11-30	Validate the routing of the pipes, inversion of two pipes.
2016-12-02	Correcting the routing of the pipes, inversion during installation.
2017-04-25	Installation of the treatment systems at Site 6 (continued) (2017-04-25 to 2017-04-27).
2017-04-28	End of the installation of the treatment systems at Site 6.
2017-04-30	Start-up of the system with water. Start of dosing at 6:00 a.m. with a daily flowrate of 1,890 litres at a controlled temperature of $11^{\circ}\text{C} \pm 1^{\circ}\text{C}$ .
2017-05-02	Control boxes in alarm, reprogramming PC2 and PC4.
2017-05-04	Reprogramming of PC2 and PC4 control boxes.
2017-05-05	Reprogramming of the pumping time on the PC2 and PC3 control boxes.
2017-05-06	Standby of the system, PP1 pumping station in alarm, septic tank full.
2017-05-08	PC1 switch remains in the OFF position (visit 2017-05-05), turn the switch back to the ON position.
2017-05-12	Start heating elements in the denitrification units. Sealing leak in PP3 pumping station.
2017-06-01	Use bypass line to bypass phosphorus removal unit on line # 3. Restriction at the exit on treatment chain # 4 after denitrification unit, clean the bottom of the filter.
2017-06-06	Dilution in mixing tank with clear water, 1.5 liters per minute.
2017-06-07	Change the configuration of the phosphorus removal unit installed above ground at the beginning of installation, digging for installation in the ground. (2017-06-07 to 2017-06-09).
2017-06-19	Change the configuration of the phosphorus removal unit installed with double tank, installation in a single tank. (2017-06-19 to 2017-06-22).
2017-06-22	Stopping the dilution in mixing tank.
2017-06-26	Validate the flow path at point 064D. Verification of the PC5 control box. Start the sampling.
2017-06-28	Remove the media from phosphorus removal unit in order to seal the manhole. Install waterproof membrane to seal the manhole. Putting back the media.
2017-06-30	Clean sampling ports. Install containers to facilitate sampling. Put crushed stone on the ground in sampling shed.
2017-07-02	Start of Annex A tests.
2017-07-05	Validation of the proper functioning of the system. Possible leak at sampling point 064D.
2017-07-06	Correction of the leak at sampling point 064D.
2017-07-17	Modification of the programming of the PC1, PC3, PC4 and PC5 control boxes.
2017-07-21	Problem with membrane waterproof membrane of the phosphorus removal unit installed at site 063, correction of the problem.
2017-08-28	First noise test carried out for certification purposes.
2017-10-18	EnviroSeptic lines inspection by camera.
2017-10-23	Installation of devices to facilitate sampling in manholes. Not conclusive.
2017-10-24	Installation of new devices to facilitate sampling.
2017-10-25	High level in pumping station, probably due to the weather.
2017-10-30	Start of wash-day week (first stress test).
2017-11-13	Start of working-parent week (second stress test).
2017-11-29	Start of equipment failure week (third stress test).
2017-12-08	Pictures of the installations (samplers, jugs, sampling ports). EnviroSeptic lines inspection by camera. Cleaning sampling ports. Samples taken by the client.
2017-12-11	Second noise test carried out for certification purposes.
2017-12-11	Start of vacation week (fourth stress test).
2017-12-12	Power failure at the site from 17:30 to 20:30, lack of dosing.
2017-12-21	Freezing problem at sampling port 064B.
2018-01-12	End of Annex A.

### **APPENDIX 3 – TEST SITE OUTDOOR TEMPERATURES**

### FOLLOW-UP OF FORECASTS FOR OUTDOOR TEMPERATURES AND ATMOSPHERIC CONDITIONS

April 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Saturday	1	-2	0	Cloudy, snow trace
Sunday	2	-4	6	Sunny
Monday	3	-8	6	Sunny
Tuesday	4	-3	2	Cloudy, rain end PM, snow 10-15 cm
Wednesday	5	0	3	Snow 5-10 cm, Drizzle
Thursday	6	2	3	Sunny and cloudy AM, rain PM 10-15 mm
Friday	7	3	3	Rain
Saturday	8	1	5	Light snow AM, cloudy
Sunday	9	-3	12	Sunny
Monday	10	2	16	Sunny
Tuesday	11	2	8	Light rain 5 mm
Wednesday	12	2	4	Cloudy, Drizzle
Thursday	13	1	7	Mostly cloudy
Friday	14	-2	8	Sunny AM, sunny and cloudy PM
Saturday	15	1	14	Sunny
Sunday	16	7	8	Drizzle, rain 2-4 mm
Monday	17	0	3	Cloudy, light snow 4 cm
Tuesday	18	-2	8	Cloudy AM, sunny and cloudy PM
Wednesday	19	-2	9	Sunny and cloudy AM
Thursday	20	4	10	Alternating sun and clouds
Friday	21	1	5	Alternating sun and clouds
Saturday	22	2	5	Intermittent rain
Sunday	23	-1	14	Sunny AM, evening rain 5 mm
Monday	24	-4	5	Mostly sunny
Tuesday	25	-2	10	Mostly sunny
Wednesday	26	6	11	Intermittent rain
Thursday	27	9	13	Intermittent drizzle
Friday	28	7	18	Cloudy
Saturday	29	8	15	Alternating sun and clouds
Sunday	30	-1	11	Sunny

May 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Monday	1	3	6	Rain 25-35 mm
Tuesday	2	6	14	Cloudy AM, rain PM
Wednesday	3	7	11	Alternating sun and clouds
Thursday	4	2	13	Sunny
Friday	5	7	11	Rain 15 mm
Saturday	6	6	15	Rain 5-10 mm
Sunday	7	11	14	Rain AM, cloudy PM
Monday	8	4	6	Intermittent rain
Tuesday	9	1	11	Rain and snow AM, cloudy PM
Wednesday	10	2	9	Intermittent rain 2 mm
Thursday	11	3	10	Drizzle and rain AM, cloudy PM
Friday	12	7	13	Cloudy AM, clearing PM
Saturday	13	6	14	Becoming cloudy AM, sunny and cloudy PM
Sunday	14	8	10	Intermittent rain
Monday	15	5	15	Mostly cloudy
Tuesday	16	4	19	Sunny
Wednesday	17	9	19	Rain AM, clearing PM, thunderstorms during the night
Thursday	18	13	27	Alternating sun and clouds, thunderstorms during the evening
Friday	19	12	15	Cloudy, sunny and cloudy PM
Saturday	20	4	16	Sunny
Sunday	21	4	17	Sunny
Monday	22	8	17	Rain AM, cloudy PM, rain during the evening
Tuesday	23	8	19	Alternating sun and clouds
Wednesday	24	9	22	Sunny AM, sunny and cloudy PM
Thursday	25	10	20	Sunny AM, becoming cloudy PM
Friday	26	10	15	Intermittent rain
Saturday	27	5	18	Alternating sun and clouds
Sunday	28	8	14	Alternating sun and clouds
Monday	29	10	19	Mostly cloudy
Tuesday	30	12	17	Showers
Wednesday	31	13	18	Showers, thunderstorms end during the night

June 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Thursday	1	11	21	Showers 5-10 mm
Friday	2	7	15	Sunny AM, cloudy PM, rain during the night 5 mm
Saturday	3	8	16	Alternating sun and clouds
Sunday	4	9	21	Alternating sun and clouds
Monday	5	12	16	Cloudy
Tuesday	6	11	24	Sunny
Wednesday	7	12	26	Sunny
Thursday	8	12	27	Sunny
Friday	9	14	24	Cloudy
Saturday	10	16	22	Sunny
Sunday	11	18	23	Sunny
Monday	12	19	24	Cloudy
Tuesday	13	11	26	Sunny
Wednesday	14	9	20	Sunny
Thursday	15	9	19	Sunny
Friday	16	12	17	Rain 15-20 mm
Saturday	17	14	23	Cloudy AM, sunny and cloudy PM
Sunday	18	17	25	Sunny and cloudy, rain during the evening 10-15 mm
Monday	19	19	23	Rain 5-10 mm
Tuesday	20	17	21	Cloudy, showers during the evening 15-20 mm
Wednesday	21	15	20	Rain 10-15 mm
Thursday	22	10	23	Sunny, rain during the night 5 mm
Friday	23	14	19	Rain AM 5-10 mm
Saturday	24	17	24	Alternating sun and clouds
Sunday	25	13	22	Alternating sun and clouds
Monday	26	12	26	Sunny
Tuesday	27	12	17	Rain AM, cloudy PM
Wednesday	28	13	22	Alternating sun and clouds
Thursday	29	13	24	Sunny and cloudy AM, cloudy PM
Friday	30	16	21	Sunny AM, sunny and cloudy PM

July 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Saturday	1	15	23	Mostly cloudy
Sunday	2	17	23	Sunny and cloudy, strong showers 10-15 mm
Monday	3	15	26	Sunny
Tuesday	4	15	24	Cloudy AM, sunny and cloudy PM
Wednesday	5	12	26	Sunny
Thursday	6	15	27	Sunny
Friday	7	17	20	Cloudy, rain 5 mm
Saturday	8	16	22	Sunny and cloudy
Sunday	9	13	20	Sunny and cloudy, showers
Monday	10	13	22	Mostly cloudy, few showers
Tuesday	11	16	23	Cloudy, partially clear
Wednesday	12	11	20	Cloudy
Thursday	13	14	23	Sunny
Friday	14	12	24	Sunny
Saturday	15	15	25	Sunny
Sunday	16	15	25	Alternating sun and clouds
Monday	17	19	25	Sunny
Tuesday	18	19	26	Sunny and cloudy
Wednesday	19	17	25	Sunny and cloudy
Thursday	20	16	26	Sunny and cloudy
Friday	21	12	23	Sunny and cloudy
Saturday	22	10	22	
Sunday	23	8	24	
Monday	24	10	20	
Tuesday	25	13	24	Cloudy
Wednesday	26	18	26	Sunny
Thursday	27	16	21	Cloudy
Friday	28	9	22	Sunny
Saturday	29	7	24	Sunny
Sunday	30	11	27	Sunny
Monday	31	11	25	Sunny

August 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Tuesday	1	10	26	Sunny
Wednesday	2	15	30	Sunny
Thursday	3	17	28	Sunny, cloudy end of the day
Friday	4	18	27	Sunny
Saturday	5	19	23	Rain 15-20 mm
Sunday	6	16	20	Cloudy, rain 5 mm
Monday	7	9	20	Sunny
Tuesday	8	11	24	Sunny AM, Alternating sun and clouds
Wednesday	9	12	22	Cloudy, rain 2 mm
Thursday	10	12	24	Sunny
Friday	11	16	26	Alternating sun and clouds
Saturday	12	16	22	Showers 5-10 mm
Sunday	13	16	24	Cloudy AM, sunny PM
Monday	14	11	23	Sunny AM, rain end PM, 5 mm
Tuesday	15	14	24	Sunny and cloudy, rain end PM, 5 mm
Wednesday	16	11	20	Sunny
Thursday	17	10	22	Sunny
Friday	18	12	19	Rain, 5 mm
Saturday	19	16	20	Alternating sun and clouds, showers 2 mm
Sunday	20	17	23	Cloudy
Monday	21	13	27	Cloudy
Tuesday	22	16	27	Alternating sun and clouds, rain during the evening, 15-20 mm
Wednesday	23	17	20	Cloudy AM, sunny and cloudy PM
Thursday	24	14	18	Cloudy
Friday	25	8	17	Alternating sun and clouds
Saturday	26	10	20	Sunny
Sunday	27	9	21	Sunny
Monday	28	9	23	Sunny
Tuesday	29	11	25	Sunny
Wednesday	30	8	23	Alternating sun and clouds, rain during the night, 5 mm
Thursday	31	14	17	Cloudy

September 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Friday	1	7	13	Cloudy, rainny
Saturday	2	5	20	Sunny
Sunday	3	5	20	Showers, cloudy, rain PM 10-25 mm
Monday	4	12	18	Intermittent rain
Tuesday	5	13	22	Cloudy AM, partially sunny
Wednesday	6	11	20	Cloudy AM
Thursday	7	14	16	Rainny
Friday	8	13	16	Cloudy, rainny
Saturday	9	12	18	Alternating sun and clouds
Sunday	10	7	21	Sunny
Monday	11	9	24	Sunny
Tuesday	12	11	23	Sunny
Wednesday	13	12	24	Sunny
Thursday	14	13	25	Sunny
Friday	15	12	24	Sunny
Saturday	16	13	26	Sunny
Sunday	17	13	22	Sunny
Monday	18	14	24	Sunny
Tuesday	19	15	25	Sunny AM, cloudy PM
Wednesday	20	16	20	Cloudy
Thursday	21	10	20	Sunny
Friday	22	14	23	Sunny
Saturday	23	12	27	Alternating sun and clouds
Sunday	24	15	28	Sunny
Monday	25	12	29	Sunny
Tuesday	26	19	28	Sunny
Wednesday	27	15	26	Cloudy AM, rain during the evening 10 mm
Thursday	28	10	12	Cloudy AM, sunny and cloudy PM
Friday	29	4	13	Sunny
Saturday	30	3	15	Sunny

October 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Sunday	1	3	14	Sunny
Monday	2	3	12	Sunny
Tuesday	3	3	19	Mostly sunny
Wednesday	4	10	18	Cloudy, 5 mm rain
Thursday	5	10	18	Sunny
Friday	6	8	15	Alternating sun and clouds
Saturday	7	5	17	intermittent rain
Sunday	8	14	21	2 mm rain
Monday	9	10	20	Cloudy AM, rain PM 5 mm
Tuesday	10	10	19	Sunny
Wednesday	11	3	14	Sunny
Thursday	12	2	15	Sunny
Friday	13	2	16	Sunny
Saturday	14	12	17	Cloudy AM, rain end of afternoon 2 mm
Sunday	15	9	17	Rain 20-25 mm
Monday	16	6	9	Sunny
Tuesday	17	-1	9	Cloudy
Wednesday	18	4	13	Clearing AM, Sunny
Thursday	19	7	17	Sunny
Friday	20	5	14	Sunny
Saturday	21	2	15	Sunny
Sunday	22	7	15	Alternating sun and clouds
Monday	23	10	18	Sunny
Tuesday	24	9	18	Sunny AM, rain end of evening 15 mm
Wednesday	25	13	16	Cloudy, rain 10 mm
Thursday	26	9	12	Rain 5-10 mm
Friday	27	8	11	Rain AM 2 mm, cloudy PM
Saturday	28	2	10	Sunny
Sunday	29	9	14	Rain 15 mm
Monday	30	12	16	Rain 25-30 mm
Tuesday	31	5	7	Drizzle AM, cloudy PM

November 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Wednesday	1	-3	5	Sunny, rain during the night 5-10 mm
Thursday	2	5	13	Rain 25-30 mm, rain during the night 20-25 mm
Friday	3	12	12	Rain 5 mm AM, cloudy PM
Saturday	4	-1	5	Mostly cloudy
Sunday	5	-1	7	Cloudy AM, rain during evening and night 40-50 mm
Monday	6	2	13	Rain 5 mm AM, cloudy PM
Tuesday	7	-6	2	Sun
Wednesday	8	-5	4	Alternating sun and clouds
Thursday	9	-2	5	Cloudy
Friday	10	-7	-7	Snow trace, cloudy
Saturday	11	-7	-2	Sunny
Sunday	12	-8	-2	Cloudy
Monday	13	-4	2	Sunny AM, Cloudy end of afternoon
Tuesday	14	-4	2	Alternating sun and clouds
Wednesday	15	-8	2	Sunny
Thursday	16	-5	3	Sunny
Friday	17	-1	3	Sunny
Saturday	18	-10	0	Sunny
Sunday	19	-5	2	intermittent rain 10-15 mm
Monday	20	-7	-3	Sunny
Tuesday	21	-9	2	Cloudy
Wednesday	22	1	3	Freezing rain, Rain 5 mm, Cloudy
Thursday	23	-11	-3	Sunny, snow 5 cm in the evening
Friday	24	-7	0	Cloudy
Saturday	25	1	2	Cloudy, intermittent rain 5 mm
Sunday	26	-5	-4	Alternating sun and clouds
Monday	27	-10	-6	Sunny
Tuesday	28	-14	-3	Cloudiness, Rain 2 mm during the night
Wednesday	29	-1	3	Cloudy
Thursday	30	-13	-3	Sunny

December 2017				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Friday	1	-2	2	Cloudy
Saturday	2	-8	1	Cloudy
Sunday	3	-6	0	Cloudy, light snow PM
Monday	4	-7	-1	Sunny
Tuesday	5	-1	5	Snow 2 cm AM, rain 15-20 mm PM
Wednesday	6	-1	1	Sunny, snow trace during the night
Thursday	7	-3	-1	Mostly cloudy, snow 5 cm during the night
Friday	8	-5	-2	Sunny AM
Saturday	9	-4	-2	Cloudy
Sunday	10	-6	-5	Cloudy, snow 5 cm
Monday	11	-16	-11	Sunny AM, cloudiness PM
Tuesday	12	-16	-6	Cloudy, snow 10-15 cm
Wednesday	13	-5	-5	Snow 5-10 cm
Thursday	14	-16	-11	Mostly cloudy
Friday	15	-23	-15	Sunny
Saturday	16	-15	-8	Light snow 2 cm
Sunday	17	-26	-14	Sunny
Monday	18	-23	-12	Cloudy
Tuesday	19	-12	-4	Light snow 10 cm
Wednesday	20	-7	-6	Alternating sun and clouds
Thursday	21	-21	-13	Sunny
Friday	22	-28	-13	Sunny AM, cloudiness PM
Saturday	23	-12	-7	Snow 15-20 cm
Sunday	24	-13	-8	Sunny
Monday	25	-17	-13	Snow 15-20 cm
Tuesday	26	-22	-12	Sunny
Wednesday	27	-18	-19	Mostly sunny
Thursday	28	-26	-17	Snow trace AM, cloudy
Su	29	-29	-19	Sunny
Saturday	30	-26	-19	Sunny
Sunday	31	-25	-18	Sunny

January 2018				
Day		Minimum temperature	Maximum temperature	Conditions, precipitation
Monday	1	-28	-20	Cloudy
Tuesday	2	-29	-18	Cloudy , snow trace PM
Wednesday	3	-25	-16	Light snow 10 cm
Thursday	4	-15	-7	Cloudy, snow 10-15 cm end PM
Friday	5	-13	-13	Cloudy
Saturday	6	-22	-19	Light snow 2-4 cm
Sunday	7	-27	-19	Sunny
Monday	8	-19	-8	Snow 15-20 cm
Tuesday	9	-12	-6	Light snow 5 cm
Wednesday	10	-17	-8	Sunny AM, cloudiness PM
Thursday	11	-7	6	intermittent rain 5 mm
Friday	12	8	10	Rain 15-20 mm, snow 10 cm end PM
Saturday	13	-7	-7	Snow 20-25 cm
Sunday	14	-24	-16	Sunny
Monday	15	-31	-15	Sunny
Tuesday	16	-20	-11	Cloudy, snow trace 1 cm
Wednesday	17	-14	-7	Light snow 2 cm
Thursday	18	-11	-6	Snow 5 cm AM
Friday	19	-10	-4	Light snow 2-4 cm
Saturday	20	-4	-2	Snow 5-10 cm
Sunday	21	-12	-4	Sunny
Monday	22	-14	-10	Sunny AM, snow 5-10 cm evening
Tuesday	23	-10	-7	Snow 10-15 cm, sleet 5 cm, Freezing rain
Wednesday	24	-6	-9	Sunny
Thursday	25	-20	-14	Sunny
Friday	26	-26	-13	Sunny
Saturday	27	-13	-2	Cloudiness, snow trace PM
Sunday	28	-8	0	Alternating sun and clouds
Monday	29	-22	-10	Sunny
Tuesday	30	-18	-9	snow trace AM, 2 cm, cloudy
Wednesday	31	-20	-10	Sunny, snow 5-10 cm during the night

#### **APPENDIX 4 – ANALYTICAL RESULTS OF UNIT: INFLUENT**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD5 <sub>total</sub>		TSS		Laboratory request
	Date				influent	L/d	Average (°C)	Preparation date	influent (mg/L)	Preparation date	influent (mg/L)	
2	2017-07-16	Sunday				374						
	2017-07-17	Monday	00-671-3155	17:00-14:00	7,4	374	13,3					17Q238157
							13,2					
	2017-07-18	Tuesday	00-671-3156	17:00-14:00	7,8	374	13,5					17Q238956
							13,3	2017-07-20	284	2017-07-19	350	
							13,5					
	2017-07-19	Wednesday	00-671-3157	17:00-14:00	7,8	374	13,4					17Q239209
							13,3	2017-07-20	303	2017-07-21	336	
	2017-07-20	Thrusday	00-671-3158	17:00-14:00	7,6	374	13,5					17Q239954
							13,6					
	2017-07-21	Friday	00-671-3159	17:00-14:00	7,8	374	13,6					17Q240338
							13,4	2017-07-22	285	2017-07-24	236	
	2017-07-22	Saturday				374						
Average					7,7	374	13,4		306			314
SD					0,2	0	0,3		23			46
Variation					0,023	0,000	0,026		0,075			0,146

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	<b>BOD<sub>5</sub> total</b>		<b>TSS</b>		Laboratory request	
								Average (°C)	Preparation date	influent (mg/L)	Preparation date		
6	2017-08-13	Sunday			influent	L/d							
						374							
	2017-08-14	Monday	00-675-3177	17:00-14:00	8,0	374	15,0						
							14,7	2017-08-16	304	2017-08-16	268	17Q248651	
	2017-08-15	Tuesday	00-675-3178	17:00-14:00	7,7	374	15,0						
							14,8	2017-08-16	265	2017-08-16	246	17Q249175	
	2017-08-16	Wednesday	00-675-3179	17:00-14:00	8,1	374	15,0						
							14,8	2017-08-17	309	2017-08-17	298	17Q249672	
	2017-08-17	Thursday	00-675-3180	17:00-14:00	8,0	374	14,9						
							14,7	2017-08-18	316	2017-08-18	338	17Q250223	
	2017-08-18	Friday	00-675-3181	17:00-14:00	7,7	374	15,0						
							14,7	2017-08-19	329	2017-08-21	310	17Q250712	
	2017-08-19	Saturday				374							
<b>Average</b>					7,9	374	14,9		305			292	
<b>SD</b>					0,2	0	0,1		24			36	
<b>Variation</b>					0,024	0,000	0,008		0,079			0,123	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ  
Standard CAN/BNQ 3680-600/2009  
Wastewater Treatment  
Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD5 <sub>total</sub>		TSS		Laboratory request
								Average	Preparation date	influent (mg/L)	Preparation date	
11	2017-09-17	Sunday			influent	L/d	Average (°C)					
						374						
	2017-09-18	Monday	00-680-3206	17:00-14:00	8,1	374	16,1	2017-09-20	274	2017-09-19	334	17Q261405
	2017-09-19	Tuesday	00-680-3207	17:00-14:00	8,0	374	16,0	2017-09-20	289	2017-09-20	374	17Q261863
	2017-09-20	Wednesday	00-680-3208	17:00-14:00	7,9	374	15,6	2017-09-21	321	2017-09-21	348	17Q262367
	2017-09-21	Thursday	00-680-3209	17:00-14:00	7,9	374	15,8	2017-09-22	267	2017-09-22	316	17Q262817
	2017-09-22	Friday	00-680-3210	17:00-14:00	8,0	374	15,9	2017-09-23	316	2017-09-25	338	17Q263446
2017-09-23		Saturday				374						
<b>Average</b>					8,0	374	15,9		293		342	
<b>SD</b>					0,1	0	0,2		24		21	
<b>Variation</b>					0,010	0,000	0,012		0,083		0,062	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD5 total		TSS		Laboratory request			
								Date	influent	L/d	Average (°C)	Preparation date	influent (mg/L)	Preparation date	influent (mg/L)
14	2017-10-08	Sunday				374									
	2017-10-09	Monday	a	17:00-14:00	a	374	a		a				a	a	
	2017-10-10	Tuesday	00-683-3222	17:00-14:00	7,9	374	15,6	2017-10-11	296	2017-10-11	312				17Q269854
	2017-10-11	Wednesday	00-683-3223	17:00-14:00	8,0	374	15,5	2017-10-12	272	2017-10-12	338				17Q270361
	2017-10-12	Thursday	00-683-3224	17:00-14:00	8,1	374	15,5	2017-10-13	288	2017-10-13	300				17Q271004
	2017-10-13	Friday	00-683-3225	17:00-14:00	8,0	374	15,4	2017-10-14	300	2017-10-16	320				17Q271528
	2017-10-14	Saturday				374									
	Average				8,0	374	15,5		289		318				
	SD				0,1	0	0,1		12		16				
<b>Variation</b>													0,043	0,050	

**Comments :**

- (a) Site problem
- (b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD <sub>5</sub> total		TSS		Laboratory request	
								influent	L/d	Average (°C)	Preparation date		
15	2017-10-15	Sunday				374							
	2017-10-16	Monday	00-684-3226	17:00-14:00	8.1	374	15.4	2017-10-18	173	2017-10-17	206	17Q272146	
	2017-10-17	Tuesday	00-684-3227	17:00-14:00	8.2	374	15.2	2017-10-18	180	2017-10-18	188	17Q272653	
	2017-10-18	Wednesday	00-684-3228	17:00-14:00	8.1	374	15.2	2017-10-19	184	2017-10-19	232	17Q273285	
	2017-10-19	Thursday	00-684-3229	17:00-14:00	7.9	374	15.1	2017-10-20	194	2017-10-20	270	17Q273732	
	2017-10-20	Friday	00-684-3230	17:00-14:00	8.1	374	15.2	2017-10-26	198	2017-10-23	258	17Q274368	
	2017-10-21	Saturday				374							
<b>Average</b>					8.1	374	15.2		186		231		
<b>SD</b>					0.1	0	0.1		10		34		
<b>Variation</b>					0,014	0,000	0,007		0,055		0,149		

**Comments :**

(a) Site problem

(b) Analytical problems

00-684-3230: BOD<sub>5</sub> analysis performed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD <sub>5 total</sub>		TSS		Laboratory request
	Date				influent	L/d	Average (°C)	Preparation date	influent (mg/L)	Preparation date	influent (mg/L)	
17	2017-10-29	Sunday				374						
	2017-10-30	Monday	00-686-3236	17:00-14:00	7.7	374	14.7	2017-11-01	136	2017-10-31	142	17Q277997
	2017-10-31	Tuesday	00-686-3237	17:00-14:00	7.8	374	14.4	2017-11-01	81	2017-11-01	126	17Q278576
	2017-11-01	Wednesday	00-686-3238	17:00-14:00	8.0	374	14.3	2017-11-02	123	2017-11-03	136	17Q279062
	2017-11-02	Thursday	00-686-3239	17:00-14:00	8.1	374	14.4	2017-11-03	138	2017-11-03	150	17Q279732
	2017-11-03	Friday	00-686-3240	17:00-14:00	7.8	374	13.9	2017-11-04	75	2017-11-06	44	17Q280265
	2017-11-04	Saturday				374						
<b>Average</b>					7.9	374	14.3		111		120	
<b>SD</b>					0.2	0	0.3		30		43	
<b>Variation</b>					0,021	0,000	0,020		0,275		0,361	

**Comments :**

(a) Site problem

(b) Analytical problems

**Wash-day stress week**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILED INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD5 <sub>total</sub>		TSS		Laboratory request
	Date				influent	L/d	Average (°C)	Preparation date	influent (mg/L)	Preparation date	influent (mg/L)	
19	2017-11-12	Sunday		17:00-14:00		374						
	2017-11-13	Monday	00-688-3247	17:00-14:00	8,0	376	13,4	2017-11-15	246	2017-11-14	282	17Q283411
	2017-11-14	Tuesday	00-688-3248	17:00-14:00	7,9	376	13,2	2017-11-15	241	2017-11-15	314	17Q283840
	2017-11-15	Wednesday	00-688-3249	17:00-14:00	8,0	376	13,3	2017-11-16	255	2017-11-16	314	17Q284348
	2017-11-16	Thrusday	00-688-3250	17:00-14:00	7,9	376	12,8	2017-11-17	195	2017-11-17	74	17Q284918
	2017-11-17	Friday	00-688-3251	17:00-14:00	8,0	376	13,2	2017-11-18	284	2017-11-20	302	17Q285464
	2017-11-18	Saturday				374						
	Average				8,0	375	13,2		244		257	
	SD				0,1	1	0,2		32		103	
	Variation				0,007	0,003	0,017		0,132		0,401	

**Comments :**

- (a) Site problem
  - (b) Analytical prob

### **Working-parent stress week**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD5 <sub>total</sub>		TSS		Laboratory request
	Date				influent	L/d	Average (°C)	Preparation date	influent (mg/L)	Preparation date	influent (mg/L)	
22	2017-12-03	Sunday	00-691-3264	17:00-14:00	7,7	374	11,2	2017-12-06	264	2017-12-05	352	17Q291334
	2017-12-04	Monday	00-691-3265	17:00-14:00	7,9	374	11,2	2017-12-06	248	2017-12-05	322	17Q291334
	2017-12-05	Tuesday	00-691-3266	17:00-14:00	7,9	374	11,2	2017-12-06	273	2017-12-06	386	17Q291755
	2017-12-06	Wednesday	00-691-3267	17:00-14:00	7,8	374	10,7	2017-12-07	186	2017-12-07	256	17Q292223
	2017-12-07	Thursday	00-691-3268	17:00-14:00	7,9	374	10,5	2017-12-08	142	2017-12-08	172	17Q292783
	2017-12-08	Friday	00-691-3269	17:00-14:00	8,1	374	11,0	2017-12-09	191	2017-12-11	215	17Q293288
	2017-12-09	Saturday				374						

**Comments :**

- (a) Site problem .....  
(b) Analytical problems ..... 00-691-3264: BOD<sub>5</sub> analysis performed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

## **COMPILATION OF INFLUENT RESULTS**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	<b>BOD5 total</b>		<b>TSS</b>		Laboratory request
								Average (°C)	Preparation date	influent (mg/L)	Preparation date	
25	2017-12-24	Sunday	00-694-3281	17:00-14:00	7,8	374	10,0					17Q298066
							10,3					
	2017-12-25	Monday	00-694-3282	17:00-14:00	8,0	374	10,2					17Q298066
							11,0					
	2017-12-26	Tuesday	00-694-3283	17:00-14:00	7,7	374	10,1					17Q298066
							10,9					
	2017-12-27	Wednesday	00-694-3284	17:00-14:00	7,9	374	10,3					17Q298256
							11,5					
	2017-12-28	Thrusday	00-694-3285	17:00-14:00	7,9	374	10,6					17Q298533
							11,3					
	2017-12-29	Friday	00-694-3286	17:00-14:00	7,8	374	10,5					17Q298757
							11,2					
	2017-12-30	Saturday				374						
Average					7,9	374	10,8			307		367
SD					0,1	0	0,4			30		37
Variation					0,0	0,00	0,0			0,096		0,100

**Comments :**

(a) Site problem

00-694-3281: BOD5 analysis perfomed on frozen portion sample

00-694-3282: BOD5 analysis perfomed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD5 total		TSS		Laboratory request	
								Average (°C)	Preparation date	influent (mg/L)	Preparation date		
26		2017-12-31	Sunday	17:00-14:00	influent	374	L/d	10.5	2018-01-03	255	2018-01-03	333	
		2018-01-01	Monday	00-695-3287	17:00-14:00	7,9	374	11,0	2018-01-03	255	2018-01-03	333	
		2018-01-02	Tuesday	00-695-3288	17:00-14:00	7,8	374	11,0	2018-01-03	286	2018-01-04	340	
		2018-01-03	Wednesday	00-695-3289	17:00-14:00	8,0	374	11,1	2018-01-04	287	2018-01-05	300	
		2018-01-04	Thursday	00-695-3290	17:00-14:00	7,8	374	11,0	2018-01-05	302	2018-01-05	318	
		2018-01-05	Friday	00-695-3291	17:00-14:00	7,9	374	11,1	2018-01-06	380	2018-01-08	460	
<b>Average</b>					7,9	374	11,1		302		350		
<b>SD</b>					0,1	0	0,4		47		63		
<b>Variation</b>					0,0	0,00	0,0		0,155		0,181		

**Comments :**

(a) Site problem

(b) Analytical problems

**End of Annex A**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF INFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	Flow	Temperature	BOD <sub>5</sub> total		TSS		Laboratory request	
								influent	L/d	Average (°C)	Preparation date		
27	2018-01-07	Sunday		17:00-14:00		374							
	2018-01-08	Monday	00-696-3292	17:00-14:00	8,0	374	10,8					18Q300341	
							11,1	2018-01-10	313	2018-01-09	428		
	2018-01-09	Tuesday	00-696-3293	17:00-14:00	7,9	374	10,9					18Q300665	
							11,7	2018-01-10	314	2018-01-10	340		
	2018-01-10	Wednesday	00-696-3294	17:00-14:00	7,9	374	10,9					18Q301032	
							11,2	2018-01-11	301	2018-01-12	370		
	2018-01-11	Thursday	00-696-3295	17:00-14:00	8,0	374	10,9					18Q301434	
							11,2	2018-01-12	329	2018-01-12	452		
	2018-01-12	Friday	00-696-3296	17:00-14:00	8,1	374	11,0					18Q301757	
							11,0	2018-01-13	288	2018-01-15	310		
	2018-01-13	Saturday				374	12,0						
<b>Average</b>					8,0	374	11,3		309		380		
<b>SD</b>					0,1	0	0,4		15		59		
<b>Variation</b>					0,0	0,00	0,0		0,050		0,156		

**Comments :**

(a) Site problem

(b) Analytical problems

Supplementary week

## **APPENDIX 5 – ANALYTICAL RESULTS OF UNIT: EFFLUENT**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
1	2017-07-09	Sunday								17Q235674
	2017-07-10	Monday	062A-03-011	17:15-14:15	7,2	2017-07-12	< 2	2017-07-12	2	
	2017-07-11	Tuesday	062A-03-012	17:15-14:15	7,3	2017-07-13	< 2	2017-07-14	< 1	17Q236252
	2017-07-12	Wednesday	062A-03-013	17:15-14:15	7,3	2017-07-14	< 2	2017-07-17	< 1	17Q236361
	2017-07-13	Thursday	062A-03-014	17:15-14:15	7,3	2017-07-14	< 2	2017-07-18	2	17Q237082
	2017-07-14	Friday	062A-03-015	17:15-14:15	7,3	2017-07-15	< 2	2017-07-19	1	17Q237496
	2017-07-15	Saturday								
<b>Average</b>						7,3	2		1	
<b>SD</b>						0,04	0,00		0,55	
<b>Variation</b>						0,01	0,000		0,391	

**Comments :**

(a) Site problem

(b) Analytical problems

Start of Annex A

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						effluent	Preparation date	effluent (mg/L)	Preparation date	
2	2017-07-16	Sunday								
	2017-07-17	Monday	062A-04-016	17:15-14:15	7,3	2017-07-19	< 2	2017-07-19	2	17Q238293
	2017-07-18	Tuesday	062A-04-017	17:15-14:15	7,3	2017-07-20	12	2017-07-20	8	17Q238961
	2017-07-19	Wednesday	062A-04-018	17:15-14:15	7,0	2017-07-20	9	2017-07-21	5	17Q239175
	2017-07-20	Thursday	062A-04-019	17:15-14:15	7,2	2017-07-21	10	2017-07-21	6	17Q239979
	2017-07-21	Friday	062A-04-020	17:15-14:15	7,4	2017-07-23	6	2017-07-24	3	17Q240296
	2017-07-22	Saturday								
Average					7,2		8		5	
SD					0,15		3,90		2,39	
Variation					0,02		0,500		0,497	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
3	2017-07-23	Sunday								
	2017-07-24	Monday	062A-05-021	17:15-14:15	7,3	2017-07-26	6	2017-07-27	4	17Q241108
	2017-07-25	Tuesday	062A-05-022	17:15-14:15	7,2	2017-07-26	4	2017-07-28	4	17Q241525
	2017-07-26	Wednesday	062A-05-023	17:15-14:15	7,2	2017-07-27	5	2017-07-31	3	17Q242054
	2017-07-27	Thursday	062A-05-024	17:15-14:15	7,1	2017-07-28	7	2017-07-31	4	17Q242573
	2017-07-28	Friday	062A-05-025	17:15-14:15	7,1	2017-07-29	5	2017-08-01	3	17Q243017
	2017-07-29	Saturday								
Average					7,2		5		4	
SD					0,08		1,14		0,55	
Variation					0,01		0,211		0,152	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						effluent	Preparation date	effluent (mg/L)	Preparation date	
4	2017-07-30	Sunday								
	2017-07-31	Monday	062A-06-026	17:15-14:15	7,1	2017-08-02	5	2017-08-01	3	17Q243692
	2017-08-01	Tuesday	062A-06-027	17:15-14:15	7,1	2017-08-03	4	2017-08-02	3	17Q244243
	2017-08-02	Wednesday	062A-06-028	17:15-14:15	7,1	2017-08-03	3	2017-08-04	2	17Q244719
	2017-08-03	Thursday	062A-06-029	17:15-14:15	7,1	2017-08-04	3	2017-08-07	2	17Q245275
	2017-08-04	Friday	062A-06-030	17:15-14:15	7,1	2017-08-05	4	2017-08-08	2	17Q245797
	2017-08-05	Saturday								
Average					7,1		4		2	
SD					0,00		0,84		0,55	
Variation					0,00		0,220		0,228	

<b>Comments :</b>
(a) Site problem
(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Date	effluent	Preparation date	effluent (mg/L)	
5	2017-08-06	Sunday								
	2017-08-07	Monday	062A-07-031	17:15-14:15	7,1	2017-08-09	< 2	2017-08-09	2	17Q246395
	2017-08-08	Tuesday	062A-07-032	17:15-14:15	7,1	2017-08-09	2	2017-08-10	2	17Q246724
	2017-08-09	Wednesday	062A-07-033	17:15-14:15	7,1	2017-08-10	2	2017-08-11	1	17Q247125
	2017-08-10	Thursday	062A-07-034	17:15-14:15	7,2	2017-08-11	< 2	2017-08-14	< 1	17Q247663
	2017-08-11	Friday	062A-07-035	17:15-14:15	7,0	2017-08-12	3	2017-08-15	2	17Q248095
	2017-08-12	Saturday								
Average					7,1		2		2	
SD					0,07		0,45		0,55	
Variation					0,01		0,203		0,342	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
6	2017-08-13	Sunday								17Q248652
	2017-08-14	Monday	062A-08-036	17:15-14:15	7,1	2017-08-16	< 2	2017-08-16	< 1	
	2017-08-15	Tuesday	062A-08-037	17:15-14:15	7,1	2017-08-16	3	2017-08-17	1	
	2017-08-16	Wednesday	062A-08-038	17:15-14:15	7,2	2017-08-17	< 2	2017-08-17	1	
	2017-08-17	Thursday	062A-08-039	17:15-14:15	7,0	2017-08-18	2	2017-08-18	< 1	
	2017-08-18	Friday	062A-08-040	17:15-14:15	7,1	2017-08-19	< 2	2017-08-21	< 1	
	2017-08-19	Saturday								
	Average				7,1		2		1	
	SD				0,07		0,45		0,00	
	Variation				0,01		0,203		0,000	

Comments :

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
7	2017-08-20	Sunday								17Q251336
	2017-08-21	Monday	062A-09-041	17:15-14:15	7,0	2017-08-23	3	2017-08-22	1	
	2017-08-22	Tuesday	062A-09-042	17:15-14:15	7,0	2017-08-23	< 2	2017-08-23	1	
	2017-08-23	Wednesday	062A-09-043	17:15-14:15	7,3	2017-08-24	2	2017-08-24	< 1	
	2017-08-24	Thursday	062A-09-044	17:15-14:15	7,0	2017-08-25	< 2	2017-08-25	< 1	
	2017-08-25	Friday	062A-09-045	17:15-14:15	7,0	2017-08-26	< 2	2017-08-28	< 1	
	2017-08-26	Saturday								
	Average				7,1		2		1	
	SD				0,13		0,45		0,00	
	Variation				0,02		0,203		0,000	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
8	2017-08-27	Sunday								17Q253867
	2017-08-28	Monday	062A-10-046	17:15-14:15	7,1	2017-08-30	< 2	2017-08-29	2	
	2017-08-29	Tuesday	062A-10-047	17:15-14:15	6,8	2017-08-30	5	2017-08-30	3	
	2017-08-30	Wednesday	062A-10-048	17:15-14:15	7,0	2017-08-31	5	2017-08-31	3	
	2017-08-31	Thursday	062A-10-049	17:15-14:15	7,1	2017-09-01	5	2017-09-01	4	
	2017-09-01	Friday	062A-10-050	17:15-14:15	7,1	2017-09-02	3	2017-09-05	2	
	2017-09-02	Saturday								
	Average				7,0		4		3	
	SD				0,13		1,41		0,84	
	Variation				0,02		0,354		0,299	

Comments :

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
9	2017-09-03	Sunday								
	2017-09-04	Monday	a	17:15-14:15	a		a		a	
	2017-09-05	Tuesday	062A-11-052	17:15-14:15	7,1	2017-09-06	3	2017-09-06	4	17Q256566
	2017-09-06	Wednesday	062A-11-053	17:15-14:15	7,3	2017-09-07	< 2	2017-09-07	2	17Q256934
	2017-09-07	Thursday	062A-11-054	17:15-14:15	7,1	2017-09-08	< 2	2017-09-08	< 1	17Q257570
	2017-09-08	Friday	062A-11-055	17:15-14:15	7,1	2017-09-09	< 2	2017-09-11	1	17Q258049
	2017-09-09	Saturday								
	Average				7,2		2		2	
	SD				0,10		0,50		1,41	
	Variation				0,01		0,222		0,707	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
10	2017-09-10	Sunday								
	2017-09-11	Monday	062A-12-056	17:15-14:15	7,0	2017-09-13	< 2	2017-09-12	3	17Q258739
	2017-09-12	Tuesday	062A-12-057	17:15-14:15	7,1	2017-09-14	10	2017-09-13	8	17Q259161
	2017-09-13	Wednesday	062A-12-058	17:15-14:15	7,0	2017-09-14	8	2017-09-14	5	17Q259705
	2017-09-14	Thursday	062A-12-059	17:15-14:15	7,2	2017-09-15	8	2017-09-15	3	17Q260333
	2017-09-15	Friday	062A-12-060	17:15-14:15	7,2	2017-09-16	7	2017-09-18	4	17Q260745
	2017-09-16	Saturday								
Average					7,1		7		5	
SD					0,10		3,00		2,07	
Variation					0,01		0,429		0,451	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
11	2017-09-17	Sunday								
	2017-09-18	Monday	062A-13-061	17:15-14:15	7,2	2017-09-20	8	2018-09-19	6	17Q261406
	2017-09-19	Tuesday	062A-13-062	17:15-14:15	7,1	2017-09-20	7	2017-09-20	5	17Q261851
	2017-09-20	Wednesday	062A-13-063	17:15-14:15	7,1	2017-09-21	6	2017-09-21	5	17Q262376
	2017-09-21	Thursday	062A-13-064	17:15-14:15	7,2	2017-09-22	6	2017-09-22	5	17Q262966
	2017-09-22	Friday	062A-13-065	17:15-14:15	7,1	2017-09-23	7	2017-09-25	4	17Q263460
	2017-09-23	Saturday								
Average					7,1		7		5	
SD					0,05		0,84		0,71	
Variation					0,01		0,123		0,141	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						effluent	Preparation date	effluent (mg/L)	Preparation date	
12	2017-09-24	Sunday								
	2017-09-25	Monday	062A-14-066	17:15-14:15	7,2	2017-09-27	2	2017-09-27	1	17Q264080
	2017-09-26	Tuesday	062A-14-067	17:15-14:15	7,1	2017-09-27	9	2017-09-27	6	17Q264524
	2017-09-27	Wednesday	062A-14-068	17:15-14:15	7,1	2017-09-28	6	2017-09-28	5	17Q264960
	2017-09-28	Thursday	062A-14-069	17:15-14:15	7,2	2017-09-29	7	2017-09-29	6	17Q265587
	2017-09-29	Friday	062A-14-070	17:15-14:15	7,1	2017-09-30	6	2017-10-02	4	17Q266254
	2017-09-30	Saturday								
Average					7,1		6		4	
SD					0,05		2,55		2,07	
Variation					0,01		0,425		0,471	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
13	2017-10-01	Sunday								
	2017-10-02	Monday	062A-15-071	17:15-14:15	7,0	2017-10-04	6	2017-10-03	4	17Q266903
	2017-10-03	Tuesday	062A-15-072	17:15-14:15	6,9	2017-10-04	7	2017-10-04	5	17Q267414
	2017-10-04	Wednesday	062A-15-073	17:15-14:15	6,9	2017-10-12	6	2017-10-05	4	17Q267922
	2017-10-05	Thursday	062A-15-074	17:15-14:15	7,0	2017-10-06	6	2017-10-06	4	17Q268553
	2017-10-06	Friday	062A-15-075	17:15-14:15	7,1	2017-10-07	8	2017-10-10	3	17Q269128
	2017-10-07	Saturday								
Average					7,0		7		4	
SD					0,08		0,89		0,71	
Variation					0,01		0,136		0,177	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
14	2017-10-08	Sunday								
	2017-10-09	Monday	a	17:15-14:15	a		a		a	
	2017-10-10	Tuesday	062A-16-077	17:15-14:15	7,1	2017-10-11	14	2017-10-11	12	17Q269832
	2017-10-11	Wednesday	062A-16-078	17:15-14:15	7,2	2017-10-12	14	2017-10-12	11	17Q270378
	2017-10-12	Thursday	062A-16-079	17:15-14:15	7,1	2017-10-18	7	2017-10-13	6	17Q270974
	2017-10-13	Friday	062A-16-080	17:15-14:15	7,2	2017-10-14	7	2017-10-16	5	17Q271305
	2017-10-14	Saturday								
	Average				7,2		11		9	
	SD				0,06		4,04		3,51	
	Variation				0,01		0,385		0,413	

Comments :

(a) Site problem

(b) Analytical problems

062A-16-079: CBOD5 analysis performed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
15	2017-10-15	Sunday								
	2017-10-16	Monday	062A-17-081	17:15-14:15	7,2	2017-10-18	9	2017-10-17	3	17Q272036
	2017-10-17	Tuesday	062A-17-082	17:15-14:15	7,2	2017-10-18	11	2017-10-18	8	17Q272650
	2017-10-18	Wednesday	062A-17-083	17:15-14:15	7,3	2017-10-19	8	2017-10-19	5	17Q273214
	2017-10-19	Thursday	062A-17-084	17:15-14:15	7,2	2017-10-20	8	2017-10-20	5	17Q273743
	2017-10-20	Friday	062A-17-085	17:15-14:15	7,2	2017-10-25	7	2017-10-23	5	17Q274218
	2017-10-21	Saturday								
Average					7,2		9		5	
SD					0,04		1,52		1,79	
Variation					0,01		0,176		0,344	

<b>Comments :</b>
(a) Site problem
(b) Analytical problems
062A-17-085: CBOD5 analysis performed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
16	2017-10-22	Sunday								
	2017-10-23	Monday	062A-18-086	17:15-14:15	7,5	2017-10-25	13	2017-10-14	10	17Q275036
	2017-10-24	Tuesday	062A-18-087	17:15-14:15	7,4	2017-10-25	15	2017-10-25	6	17Q275534
	2017-10-25	Wednesday	062A-18-088	17:15-14:15	7,5	2017-10-26	12	2017-10-26	4	17Q276076
	2017-10-26	Thursday	062A-18-089	17:15-14:15	7,3	2017-10-27	12	2017-10-27	8	17Q276697
	2017-10-27	Friday	062A-18-090	17:15-14:15	7,0	2017-10-28	4	2017-10-30	3	17Q276877
	2017-10-28	Saturday								
	Average				7,3		11		6	
	SD				0,21		4,21		2,86	
	Variation				0,03		0,376		0,462	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
17	2017-10-29	Sunday								
	2017-10-30	Monday	062A-19-091	17:15-14:15	7,2	2017-11-01	2	2017-10-31	2	17Q277950
	2017-10-31	Tuesday	062A-19-092	17:15-14:15	7,2	2017-11-01	2	2017-11-01	3	17Q278432
	2017-11-01	Wednesday	062A-19-093	17:15-14:15	7,3	2017-11-02	2	2017-11-02	2	17Q279043
	2017-11-02	Thursday	062A-19-094	17:15-14:15	7,2	2017-11-03	<2	2017-11-03	<1	17Q279721
	2017-11-03	Friday	062A-19-095	17:15-14:15	7,2	2017-11-04	2	2017-11-06	2	17Q280268
	2017-11-04	Saturday								
Average					7,2		2		2	
SD					0,04		0,00		0,71	
Variation					0,01		0,000		0,354	

**Comments :**

(a) Site problem

(b) Analytical problems

**Wash-day stress week**

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
18	2017-11-05	Sunday		17:15-14:15						
	2017-11-06	Monday	062A-20-097	17:15-14:15	7,4	2017-11-08	< 2	2017-09-07	3	17Q280816
	2017-11-07	Tuesday	062A-20-098	17:15-14:15	7,4	2017-11-08	< 2	2017-11-08	2	17Q281354
	2017-11-08	Wednesday	062A-20-099	17:15-14:15	7,5	2017-11-09	< 2	2017-11-09	2	17Q281830
	2017-11-09	Thursday	062A-20-100	17:15-14:15	7,5	2017-11-10	< 2	2017-11-10	< 1	17Q282395
	2017-11-10	Friday	062A-20-101	17:15-14:15	7,3	2017-11-11	< 2	2017-11-13	< 1	17Q282935
	2017-11-11	Saturday								
Average					7,4		2		2	
SD					0,08		0,00		0,84	
Variation					0,01		0,000		0,465	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
19	2017-11-12	Sunday			effluent					
	2017-11-13	Monday	062A-21-102	17:15-14:15	7,4	2017-11-14	5	2017-11-14	4	17Q283414
	2017-11-14	Tuesday	062A-21-103	17:15-14:15	7,1	2017-11-15	15	2017-11-15	8	17Q283838
	2017-11-15	Wednesday	062A-21-104	17:15-14:15	7,3	2017-11-16	8	2017-11-16	3	17Q284350
	2017-11-16	Thursday	062A-21-105	17:15-14:15	7,2	2017-11-17	7	2017-11-17	3	17Q284920
	2017-11-17	Friday	062A-21-106	17:15-14:15	7,3	2017-11-18	6	2017-11-20	5	17Q285453
	2017-11-18	Saturday								
	Average				7,3		8		5	
	SD				0,11		3,96		2,07	
	Variation				0,02		0,483		0,451	

**Comments :**

(a) Site problem

(b) Analytical problems

Working-parent stress week

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILATION OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
20	2017-11-19	Sunday		17:15-14:15						
	2017-11-20	Monday	062A-22-108	17:15-14:15	7,2	2017-11-21	2	2017-11-21	1	17Q286141
	2017-11-21	Tuesday	062A-22-109	17:15-14:15	7,2	2017-11-22	2	2017-11-22	1	17Q286537
	2017-11-22	Wednesday	062A-22-110	17:15-14:15	7,2	2017-11-23	3	2017-11-23	< 1	17Q287035
	2017-11-23	Thursday	062A-22-111	17:15-14:15	7,1	2017-11-24	< 2	2017-11-24	< 1	17Q287553
	2017-11-24	Friday	062A-22-112	17:15-14:15	7,1	2017-11-25	3	2017-11-27	1	17Q288103
	2017-11-25	Saturday								
<b>Average</b>						7,2	2		1	
<b>SD</b>						0,00	0,58		0,00	
<b>Variation</b>						0,00	0,247		0,000	

**Comments :**

(a) Site problem

(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						effluent	Preparation date	effluent (mg/L)	Preparation date	
21	2017-11-26	Sunday		17:15-14:15						
	2017-11-27	Monday	062A-23-113	17:15-14:15	6,9	2017-11-29	5	2017-11-29	2	17Q288557
	2017-11-28	Tuesday		17:15-14:15						
	2017-11-29	Wednesday		17:15-14:15						
	2017-11-30	Thursday		17:15-14:15						
	2017-12-01	Friday	062A-23-114	17:15-14:15	6,9	2017-12-02	< 2	2017-12-04	< 1	17Q290712
	2017-12-02	Saturday	062A-23-115	17:15-14:15	7,0	2017-12-05	< 2	2017-12-04	< 1	17Q290946
<b>Average</b>					7		3		1	
<b>SD</b>					0,1		1,53		0,58	
<b>Variation</b>					0,02		0,458		0,433	

**Comments :**

(a) Site problem

(b) Analytical problems

Power failure or equipment stress week

062A-23-115: CBOD5 analysis performed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
22	2017-12-03	Sunday	062A-24-116	17:15-14:15	7,1	2017-12-05	< 2	2017-12-05	1	17Q291347
	2017-12-04	Monday	062A-24-117	17:15-14:15	7,1	2017-12-05	< 2	2017-12-05	< 1	17Q291347
	2017-12-05	Tuesday	062A-24-118	17:15-14:15	7,0	2017-12-06	2	2017-12-06	1	17Q291719
	2017-12-06	Wednesday	062A-24-119	17:15-14:15	7,0	2017-12-07	3	2017-12-07	1	17Q292268
	2017-12-07	Thursday	062A-24-120	17:15-14:15	7,1	2017-12-08	2	2017-12-08	1	17Q292733
	2017-12-08	Friday	062A-24-121	17:15-14:15	7,2	2017-12-09	3	2017-12-11	1	17Q293277
	2017-12-09	Saturday		17:15-14:15						
Average					7,0		2		1	
SD					0,1		0,00		0,00	
Variation					0		0,000		0,000	

<b>Comments :</b>
(a) Site problem
(b) Analytical problems

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
23	2017-12-10	Sunday		17:15-14:15						
	2017-12-11	Monday	062A-25-122	17:15-14:15	6.9	2017-12-12	<2	2017-12-12	2	17Q293773
	2017-12-12	Tuesday		17:15-14:15						
	2017-12-13	Wednesday		17:15-14:15						
	2017-12-14	Thursday		17:15-14:15						
	2017-12-15	Friday		17:15-14:15						
	2017-12-16	Saturday		17:15-14:15						
Average					7,1		3		1	
SD					0,13		0,58		0,50	
Variation					0,018		0,217		0,400	

<b>Comments :</b>
(a) Site problem
(b) Analytical problems
Vacation stress week

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
24		Date			effluent					
	2017-12-17	Sunday		17:15-14:15						
	2017-12-18	Monday		17:15-14:15						
	2017-12-19	Tuesday		17:15-14:15						
	2017-12-20	Wednesday		17:15-14:15						
	2017-12-21	Thursday		17:15-14:15						
	2017-12-22	Friday	062A-26-123	17:15-14:15	7,1	2017-12-28	6	2017-12-27	4	17Q297884
	2017-12-23	Saturday	062A-26-124	17:15-14:15	7,0	2017-12-28	6	2017-12-27	5	17Q298060
	Average				7,1		5		4	
	SD				0,1		1,15		1,00	
	Variation				0,008		0,217		0,250	

**Comments :**

(a) Site problem

(b) Analytical problems

062A-26-123: CBOD5 analysis performed on frozen portion sample

062A-26-124: CBOD5 analysis performed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
25	2017-12-24	Sunday	062A-27-125	17:15-14:15	7,1	2017-12-28	4	2017-12-27	3	17Q298067
	2017-12-25	Monday	062A-27-126	17:15-14:15	6,8	2017-12-28	7	2017-12-27	4	17Q298067
	2017-12-26	Tuesday	062A-27-127	17:15-14:15	6,8	2017-12-29	4	2017-12-28	2	17Q298067
	2017-12-27	Wednesday	062A-27-128	17:15-14:15	7,0	2017-12-29	5	2017-12-28	2	17Q298247
	2017-12-28	Thursday	062A-27-129	17:15-14:15	6,7	2017-12-29	4	2017-12-29	3	17Q298519
	2017-12-29	Friday	062A-27-130	17:15-14:15	6,7	2017-12-30	3	2018-01-03	1	17Q298800
	2017-12-30	Saturday		17:15-14:15						
Average					6,8		5		2	
SD					0		1,52		1,14	
Variation					0		0,330		0,475	

**Comments :**

(a) Site problem

(b) Analytical problems

062A-27-125: CBOD5 analysis performed on frozen portion sample

062A-27-128: CBOD5 analysis performed on frozen portion sample

062A-27-126: CBOD5 analysis performed on frozen portion sample

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
	Date				effluent	Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
26	2017-12-31	Sunday		17:15-14:15						
	2018-01-01	Monday	062A-28-131	17:15-14:15	7,1	2018-01-03	< 2	2018-01-04	1	18Q298906
	2018-01-02	Tuesday	062A-28-132	17:15-14:15	6,9	2018-01-03	< 2	2018-01-04	< 1	18Q299107
	2018-01-03	Wednesday	062A-28-133	17:15-14:15	6,9	2018-01-04	< 2	2018-01-05	2	18Q299225
	2018-01-04	Thursday	062A-28-134	17:15-14:15	6,6	2018-01-05	2	2018-01-05	1	18Q299646
	2018-01-05	Friday	062A-28-135	17:15-14:15	6,8	2018-01-05	< 2	2018-01-08	< 1	18Q299905
	2018-01-06	Saturday		17:15-14:15						
Average					6,9		2		1	
SD					0,18		0,00		0,50	
Variation					0,03		0,000		0,400	

<b>Comments :</b>
(a) Site problem
(b) Analytical problems
<b>End of Annex A</b>

**BNQ**  
**Standard CAN/BNQ 3680-600/2009**  
**Wastewater Treatment**  
**Onsite Residential Wastewater Treatment Technologies**

**COMPILED OF EFFLUENT RESULTS**

Week	Sampling	Day	Code	Hour	Composite pH	CBOD5		TSS		Laboratory request
						Preparation date	effluent (mg/L)	Preparation date	effluent (mg/L)	
27	2018-01-07	Sunday								
				17:15-14:15						
	2018-01-08	Monday	062A-29-136	17:15-14:15	7,1	2018-01-09	5	2018-01-09	3	18Q300336
	2018-01-09	Tuesday	062A-29-137	17:15-14:15	6,9	2018-01-10	3	2018-01-10	2	18Q300652
	2018-01-10	Wednesday	062A-29-138	17:15-14:15	6,7	2018-01-11	2	2018-01-11	2	18Q301033
	2018-01-11	Thursday	062A-29-139	17:15-14:15	6,7	2018-01-12	< 2	2018-01-12	1	18Q301403
	2018-01-12	Friday	062A-29-140	17:15-14:15	6,7	2018-01-13	< 2	2018-01-15	< 1	18Q301759
	2018-01-13	Saturday		17:15-14:15						
Average					6,8		3		2	
SD					0,18		2		1	
Variation					0,03		0		0	

**Comments :**

(a) Site problem

(b) Analytical problems

Supplementary week

## **APPENDIX 6 – REFERENCES**

## REFERENCES

**BNQ (Bureau de normalisation du Québec)** [[www.bnq.qc.ca/en/](http://www.bnq.qc.ca/en/)]

CAN/BNQ 3680-600/2009-05-01 M2 (2017-07-18). *Onsite Residential Wastewater Treatment Technologies*  
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ISO 5667-2: 1991. *Water Quality – Sampling – Part 2: Guidance on Sampling Techniques*.  
(Qualité de l'eau – Échantillonnage – Partie : Guide général sur les techniques d'échantillonnage.)

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