



TEST REPORT

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Report Number: 2295-20543 **Project No.:** 34608

Report Issued: September 1st, 2020

Reported To: ASSE International

Tested For: Quest Technologies Inc dba Crystal Quest Water Filters
55 Chastin Road, Suite 100
Kennesaw Georgia 30144

Source of Samples: The units were shipped to IAPMO R&T Lab from Quest Technologies and were received in good condition on 08/25/2020

Location of Testing: IAPMO R&T Lab, 5001 East Philadelphia Street, Ontario CA 91761

Dates of Evaluation: August 31st, 2020

Product Description: Point of Use units, model number CQE-CT-00100

Primary Standard: NSF/ANSI 42-2019

Scope of Evaluation: Samples were evaluated for Seal Verification (Chlorine Section) based on NSF/ANSI 42-2019

Conclusion: The samples described in the “Product Description” were evaluated for Seal Verification based on NSF/ANSI 42 2019 7.3.3 Chlorine reduction. Please refer to the following pages for details.

Report Status: COMPLIED

Tested By,

Reviewed By,

Kaitlin Rommelfanger, Senior Lab Analyst

Sal Aridi - Director

Requirements for Compliance: The system shall reduce an inflent challenge concentration of 2.0 mg/L of free available chlorine by a minimum of 50%

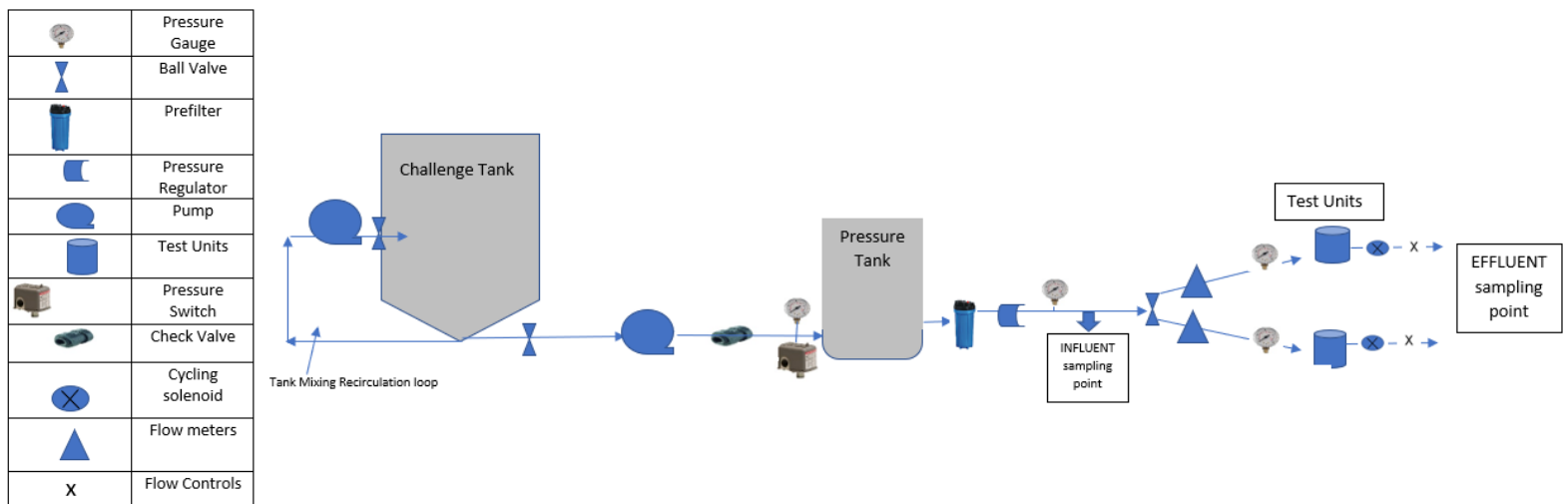
Table 1- Specifications of testing

Number of Units	2
Cycle	A 50/50 cycle was used
Rated Capacity	50 gallons
Conditioning	Units were flushed for 6 minutes prior to testing
Prefilter	A 0.45 micron prefilter was used for this testing
Flowrate	Flowrate was controlled at 0.3 gpm
Sampling	Both units were sampled at startup, 25 and 50 gallons
Deviations from standard	None

Influent water was prepared per the specifications in NSF/ANSI 42 Section 7.3.3.6.1 Those specifications are shown below.

pH	7.5 +/- 0.05
Temperature	20 +/- 3 degrees C
Test Average Free available Chlorine (FAC)	2.0 +/- 0.2 mg/L
Allowable Single Influent Point Free available Chlorine (FAC)	2.0 +/- 0.4 mg/L
Total dissolved solids	200-250 mg/L
Total organic carbon TOC	≥ 1.0 mg/L
Turbidity	< 1 NTU

Samples were setup according to manufacturers instructions. A diagram of a standard point of use reduction test setup is shown below



Findings:

Table 3- Influent and Effluent free available chlorine levels

Sample Point (gallons)	Influent FAC (mg/L)	Effluent Sample #1 FAC (mg/L)	Effluent Sample #2 FAC (mg/L)	Flowrate Sample #1 (gpm)	Flowrate Sample #2 (gpm)
10 UV	2.01	<RL	<RL	0.32	0.30
25	2.01	0.07	0.05	0.28	0.28
50	2.03	<RL	0.1	0.30	0.28

Note: <RL (less than Reporting Limit) Reporting Limit for chlorine is 0.05mg/L, FAC (free available chlorine) Any bolded effluents are higher than the max allowable effluent outlined by the standard

Table 4- Chlorine Average influent, effluent and percent reduction

	Results	Standard Requirements
Ave Influent (Inf) mg/L	2.02	2mg/L +/- 0.2

Pictures:

Figure 1- Units tested

