



July 5, 2016

Test Report

Client:

Jerry Bechtold
Automated Pure Water, Inc
4350 5th Street Southwest
Vero Beach, FL 32968

Product Testing Laboratory:

Water Quality Association
4151 Naperville Road
Lisle, IL 60532-3696

Report Number: REP.20160705.02.7639.1501L.V1
Certification Project #: N/A
Test Unit: N/A
Model/Description: Tri-Shaft Chem Activator System
Test Method: Chloride/Baffle Tracer Study

Test Completion Date: June 7, 2016

Test Results: COMPLETE

Dear Jerry Bechtold,

Thank you for having your product tested with the Water Quality Association. We appreciate your business and look forward to working with you on future testing and certification projects. Please see the enclosed analysis report for a review of the data.

Should you have any questions or need additional information, please feel free to contact the WQA Laboratory Senior Manager.

Report Reviewed By:

Lauren Storms, Laboratory Senior Manager

7/5/16

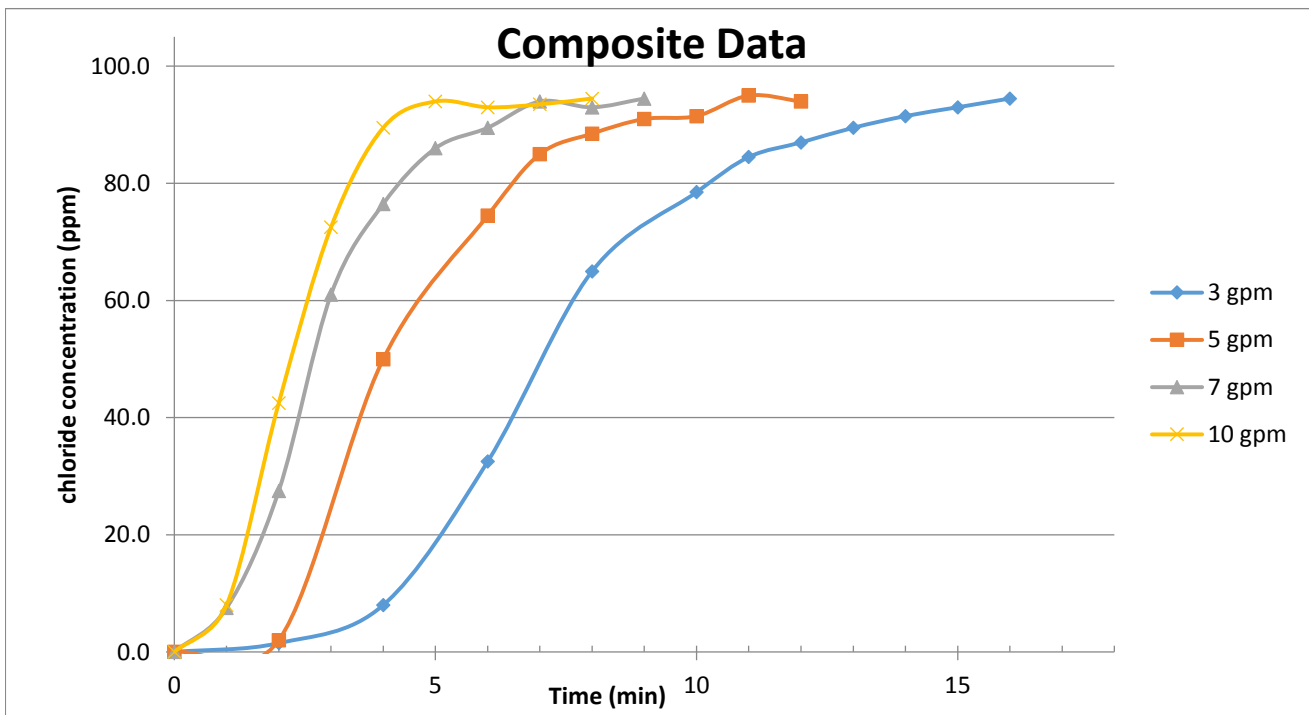
Date

All data for the associated quality control (QC) met EPA, method, or internal laboratory specifications except where noted in the comments. This report may not be reproduced, except in whole, without the written approval of WQA. The test results relate only to the specific items tested and do not indicate the product is certified by WQA or can display the Gold Seal Mark.



Tri-Shaft Chem Activator System Chloride/Baffle Tracer Study

Flow Rate	3 gpm	5 gpm	7 gpm	10 gpm
Inlet/Outlet Cl ⁻ equilibrium (min)	13	9	7	5

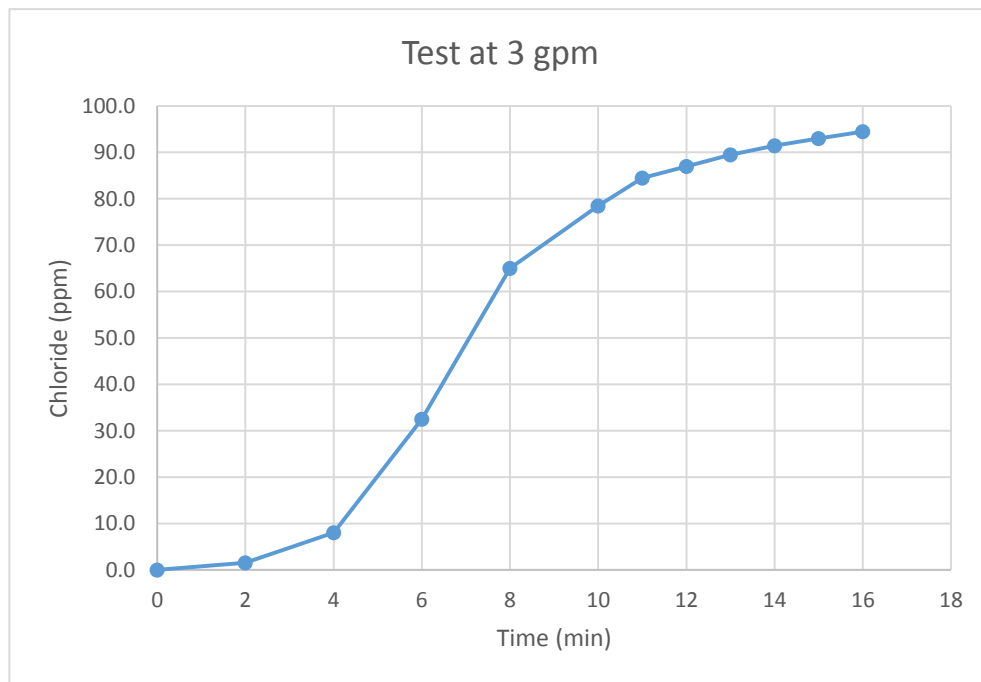


A 264-gallon chloride tank was made with a chloride concentration of 100-104 mg/L and fed into the test unit until the influent and effluent chloride concentration reached equilibrium. The chart above illustrates the length of time (min) it took to reach equilibrium at 4 flow rates. The study was ran at 3 gpm, 5 gpm, 7 gpm and 10 gpm.



Chloride/Baffle Tracer Study - 3 gpm

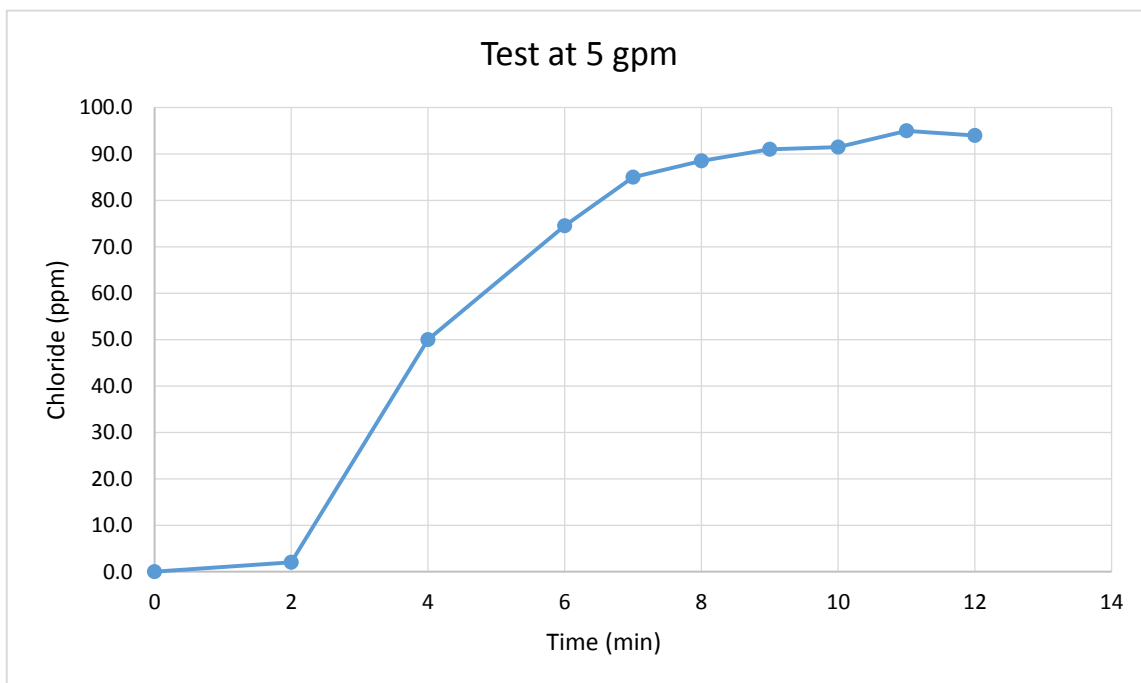
Time (min)	Chloride (ppm)
0	0.0
2	1.5
4	8.0
6	32.5
8	65.0
10	78.5
11	84.5
12	87.0
13	89.5
14	91.5
15	93.0
16	94.5





Chloride/Baffle Tracer Study - 5 gpm

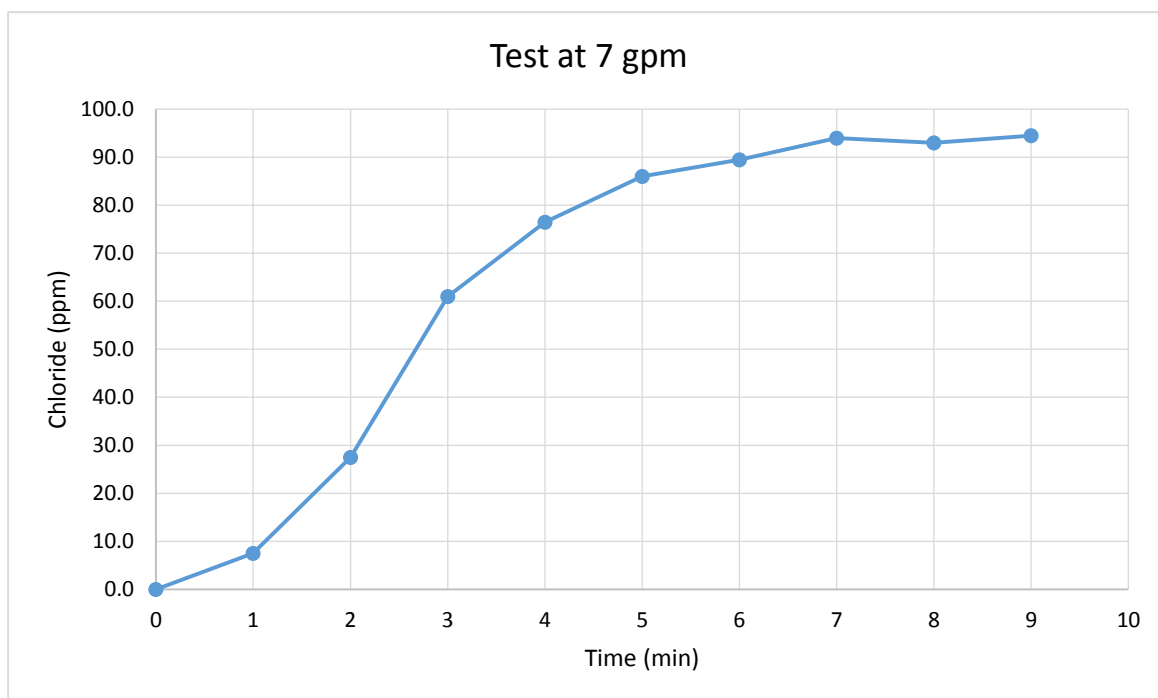
Time (min)	Chloride (ppm)
0	0.0
2	2.0
4	50.0
6	74.5
7	85.0
8	88.5
9	91.0
10	91.5
11	95.0
12	94.0





Chloride/Baffle Tracer Study - 7 gpm

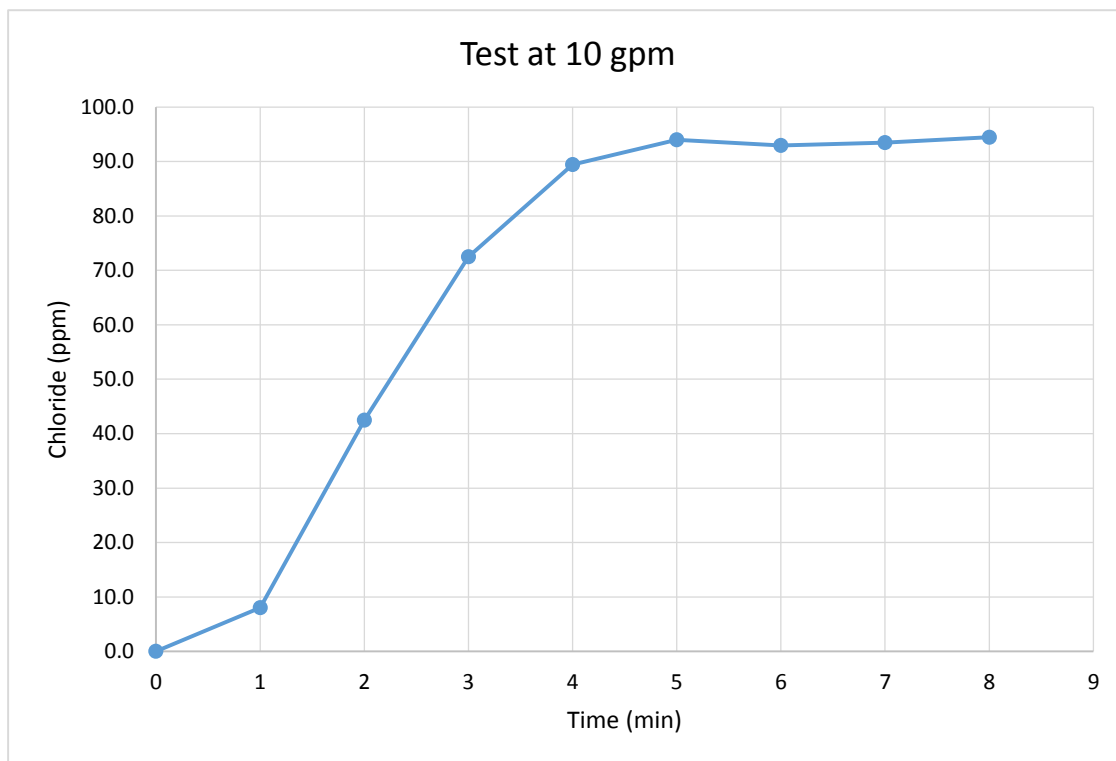
Time (min)	Chloride (ppm)
0	0.0
1	7.5
2	27.5
3	61.0
4	76.5
5	86.0
6	89.5
7	94.0
8	93.0
9	94.5





Chloride/Baffle Tracer Study - 10 gpm

Time (min)	Chloride (ppm)
0	0.0
1	8.0
2	42.5
3	72.5
4	89.5
5	94.0
6	93.0
7	93.5
8	94.5





Automated Pure Water, Inc.

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www.apwinc.com

TRI-SHAFT **HIGH FLO** RETENTION TANK

A smart looking, chemical-mixing retention system that makes sense.

A Unique System....

With **(6) built in mixing chambers** and **(3) swirl chambers**, that reduce a drop of water to hundreds of micro bubbles, allowing the chemical to mix and react 5 times faster than a standard retention tank.

This concept allows us to reduce the overall size of the system substantially. **Only 13 inches of floor space is needed.**

The system is constructed of all polyglass, noryl, and PVC materials. is pre-plumbed, 1 ½ inch throughout and has ¾" drain for blow-down. Should there ever be a need for gas-off, a tapped port is built in and capped off.

- **Out performs a 120 gallon standard retention tank**
- **5 year warranty**

Tank Specifications

- **IN/OUT:** 1-1/2" Threaded
- **CHAMBER SIZE:** 3 – 1" Flow tubes
- **TANK SIZE:** 13" X 44"
- **OVERALL SIZE:** 13" X 54"
- **BLOWDOWN DRAIN SIZE:** ¾" Ball Valve
- **MAX. OPERATING PRESSURE:** 150 P.S.I.
- **FLOW RATE:** 66 GPM



Patent# 7600911