



TEST REPORT

Project Title: Aqua Pac™ Virus Challenge

Project No.: P020849

Sponsor: Solar Solutions, LLC

C/O: Frank Husson

Date: June 26, 2002

From: Robert C. Cooper, V.P.

BioVir Laboratories was contracted by Solar Solutions to determine the ability of their Aqua Pac™ solar Water Pasteurization unit to inactivate the MS-2 coliphage when operated as per the product instructions. One test unit was received on June 6, 2002. one virus challenge was conducted. The Aqua Pac™ unit was filled with 2 liters of de-chlorinated City of Benicia, California tap water. The challenge water was seeded with virus to a final concentration of 1×10^5 plaque forming units (Pfu) per mL. The Aqua Pac™ unit was placed outdoors (a sunny day) with the transparent (bubble) side up for a period of time adequate to melt the wax in the WAPI indicator unit.

A water sample was taken before the test unit was placed in the sun (T_0) and about 6 minutes after the WAPI melted. The time to reach this stage was 3 hours and 4 minutes.

The results of the challenge are shown in Table 1 The virus concentration at the end of the exposure time was less than one Pfu per mL. of the test fluid which corresponded to a \log_{10} reduction of greater than 6 orders.

Table 1. Test Results			
Date	MS-2 Recovery (Pfu/mL.)		Log ₁₀ Reduction
	Pre-Exposure	Post Exposure	
06/20/02	1.0×10^6	<1	>6.0