



Responder™-S Product and Performance Specifications



The Responder™-S features an integrated solar system to collect and store enough energy to efficiently run the unit. This means that although it can use an external 12-Volt battery source, it is not required. AC power can be utilized through a DC/AC Converter. The system contains a self-priming pump that pulls water from any available source of non-salinated water, such as surface water, wells, swamps, etc. The Responder™-S produces 1 gallon per minute of cleaner, safer, purified drinking water.

The solar panel attaches to the back of the wheeled military-spec carrying case and just plugs into the on-board battery (lower center of the unit). A ten foot intake hose is then lowered into the available water supply, and the water is drawn through a sediment filter in the left canister that provides water clarity and removes suspended debris and contaminants. The water is then sent through a 0.5 micron carbon block filter that is an excellent water "polishing" filter, capable of reducing Giardia Lamblia, Cyst,

Cryptosporidium, bad taste, odors, color, chlorine, THMs (trihalalomethanes), certain VOCs (volatile organic compounds), pesticides and many other harmful contaminants. The clear "polished" water is then saturated with high strength ultraviolet light (UV) through a patented "double-pass" process, effectively neutralizing harmful biological contaminants.

Water that has been saturated in this patented process neutralizes biological contaminants that can cause diseases such as Typhoid Fever, Dysentery, Cholera, Infectious Jaundice, Hepatitis, Influenza, and Enteric Fever. The combination of filtration and UV disinfection consistently produces cleaner, safer drinking water.

PERFORMANCE SPECIFICATIONS

Rate of water production	1 Gallon per minute / 4.16 Liters per minute
Ditch Filter/Strainer	Pleated
Pre-filter	Sediment - 5.0 micron
Post-filter	Carbon Block 0.5 micron with heavy metals reduction
Ultraviolet Light	16,000 MW seconds per cm sq.
Pump	Self Priming, on-board
Inlet and Outlet water lines	3/8" flexible tubing with spray nozzle for decon. use
12 Volt extension cord length	10 feet / 3 m
Plug adapter	Cigarette Lighter Plug/Battery Cable Clip On
Weight	45 lbs / 20.4 kg
Height	9" / 228 mm
Length	20" / 1508 mm
Width	17" / 431 mm

Summary Results from Metro Vancouver Municipal Laboratory

Metro Vancouver
Quality Control Division - Microbiology
2775 Production Way, Burnaby BC V5A 3G7
Phone: (604) 444-8490 Fax: (604) 420-2683



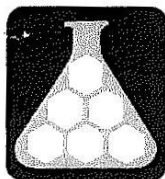
Municipal Water Quality Monitoring Program

Project Number: 104358
Project Date: 11/08/2008
Project Notes:

Reported: 18/08/2008
Reported By: Lab Clerk

Sample Name	Sample Description	Sampled Date	Sample Type	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
UMDSp-01	Minoru Pool Before	11/08/2008 8:00	SPECIAL	1.9	<1		26	<1		0.15
UMDSp-02	Minoru Pool After	11/08/2008 8:10	SPECIAL	0.06	<1		26	<1		0.1
UMDSp-03	Fire Hall #4 Before	11/08/2008 8:40	SPECIAL		CGC			CG		0.84
UMDSp-04	Fire Hall #4 After	11/08/2008 8:40	SPECIAL		<1			<1		0.2
UMDSp-05	Richmond Lakes Before	11/08/2008 9:10	SPECIAL			250			>2100	29
UMDSp-06	Richmond Lakes After	11/08/2008 9:10	SPECIAL		<1			<1		1.4

Summary Results From Independent Laboratory 2



RESEARCH & ANALYTICAL
LABORATORIES, INC.

Analytical/Process Consultations



September 28, 2007

Piazza Investment Holdings, LLC
2150 Country Club Road Suite 221
Winston-Salem, NC 27104
Attention: Tom Costello

Re: Bacteriological Testing

Sample Source:	Hondouras
Sample Date:	09/26/07
Sample Time:	0800
Sample Received:	09/27/07
Sample Analyzed:	09/27/07
Sample Number:	600217

<u>Parameter</u>	<u>Method</u>	<u>Results</u>
Total Coliform	Colitag	Absent
Fecal Coliform	Colitag	Absent

Analyst: L.P.

Summary Results From Independent Laboratory 3

367 South Commerce Loop
Orem, Utah 84057
(801) 226-8822

AQUA SUN INC. WATER PURIFICATION SYSTEM, TEST RESULTS

PROTOCOL:

Test was conducted under the direction of Ford Chemical (an EPA approved lab in Salt Lake City, Utah) and samples were sent to Ford Chemicals for analysis. Equipment was sterilized before each test run as recommended by Ford. The water was prepared by drawing water from stagnant ponds in horse pastures and then incubated for 24 or more hours. The goal was to challenge the equipment with unknown bacteria rather than strictly with E coli which is killed with a lower UV dosage than most bacteria require. The challenge water most likely contained with a wide variety of micro-organisms and would be more representative of real life conditions. All analysis was done using standard plate counts (SPC) which will reveal any living micro-organisms.

The samples were sent to Ford in care of the Utah County Health Department to ensure proper handling procedures. All sample bottles were numbered with conditions of each numbered sample recorded. Ford Chemical then returned the results of each numbered sample. The data below represents the results found by Ford and the conditions under which each sample was drawn.

Bacteriological Analyses Results

SAMPLE ID: Single unit (UF/20 I) with dip tube insert.

CERTIFICATE OF ANALYSIS

The unit was tested at flow rates (outlet) of 5 gallons/minute, 8 gallons/minute and 10 gallons/minute using water drawn from a pond in a horse pasture. The unit was sterilized with chlorine between each run to avoid carry-over contamination.

Test Model UVB1 GC: Rated Flow: 1

Bacteria count input: 48000 SPC Date of Test 12/15/88

Actual Flow: 1 GPM Count Out 0.001 Percent Kill 99.9999

Test Model: UVCCL1 CBC-10: Rated Flow: 2

Bacteria count input: 48000 SPC Date of Test 12/15/84

Actual Flow: 1 GPM Count Out 0.001 Percent Kill 99.9999

I verify that the above information is true and accurate to the best of my knowledge.

Elvis Anderson, Chemtech