

Microbiological Test Results Outback (FF) and Outback-Plus (NF)

Understanding and Evaluating Product Test Results

When comparing water product test results there are two important considerations to ensure that you are **not** making an "apples to oranges" comparison. First, confirm that the same type of test water was used in all tests. For example, were they all conducted using either distilled water, GTW-1 or an NSF/EPA recommended test water specification such as GTW-3? Changing the chemistry of the test water (increasing pH, TOCs, TDS, and/or temperature extremes) makes contaminant removal more difficult. The GTW-3 testing protocol (used to test Outback products) presents the highest challenge.

The Variety of Test Water Specifications						
Water Type	Temp (°C)	pH	Chlorine (mg/L)	Turbidity (NTU)	TOC (mg/L)	TDS (mg/L)
Distilled	Room	6.8 - 7.0	ND ¹	0	0	0
GTW 1	20 ± 5	6.5 - 8.5	ND	0.1 - 5.0	0.1 - 5.0	50 - 500
GTW 3	4 ± 1	9.0 ± 0.2	ND	>30	≥10	1500 ± 150

¹Non Detected

The second critical testing parameter has to do with flow. Were the products tested (as are the Outback Systems) through a series of on/off cycles (to represent the more challenging 'real world' application) or were they only tested using a simple (and less challenging) continuous flow of test water?

The difference between the Outback-Plus (NF Systems) and other gravity-powered products is that the **Outback-Plus meets all three EPA microbiological requirements of a water purifier** - it's not just a water filtration system. To achieve this distinction a system must meet the following EPA requirements: Bacteria reduction of 99.999%, Cysts reduction of 99.99% and Virus reduction of 99.9%. The Outback-Plus did that and more...

Outback-Plus Test Results*

Contaminant	Reduction
Bacteria Reduction	99.9999%
Cyst Reduction	99.99%
Virus Reduction	99.99%

In areas where virus is not a concern but where other contaminants should be removed from the water, the Outback is the ideal solution. As with the Outback-Plus system, The Outback (FF) is tested using the more stringent GTW-3 protocol (with a cycled flow) and removes contaminants with tremendous results...

Outback Test Results*

Contaminant	Reduction
Bacteria Reduction	>99.9%
Cyst Reduction	>99.999%

*Testing conducted by:

AQUADIAGNOSTICS - Recognized by Water Quality Association - USA, NABL Accredited & KSPCB Empanelled Laboratory

BioVir Laboratories, Inc - Accredited by WQA Drinking Water Treatment Unit, ELAP (California Environmental Laboratory Accreditation), California Drinking Water treatment Unit Approved Testing Facility, EPA LT2 Crypto Approved Status, EPA Information Collection Rule Approval for Virus and Protozoan Testing.

**Copies of individual Test Results are available upon request.

Outback Gravity-Powered RM-200 and RM-300 Organic Chemical Removal Chart

The contaminants listed below are significantly reduced or are removed by the Outback Systems secondary gravity-powered filters. Removal performance will vary based upon the actual percentage of any listed contaminant found in the water supply being treated. Temperature range 40 - 90 degree Fahrenheit.



Acetaldehyde	Hydrogen Selenide*	Simazine
Acetone	Hydrogen Sulfide*	Soap*
Alcohols	Hypochlorous Acid	Sodium Hypochlorite
Amyl Acetate	Insecticides	Solvents
Amyl Alcohol	Iodine	Styrene
Antifreeze	Isopropyl Acetate	Sulphonated Oils
Aluminum	Isopropyl Alcohol	1,1,2,2-Tetrachloroethane
Atrazine	Ketones	Tannins
Benzene	Lactic Acid	Tar Emulsion
Bleach	Lead*	Tartaric Acid
Butyl Alcohol	Lindal, Methoxychlor	Taste (DI Water)
Butyl Acetate	Mercaptans	Taste (From Organics)
Cadmium	Methyl Acetate	THM's
Calcium Hypochlorite	Methyl Alcohol	Toluene
Carbofuran	Methyl Bromide	2,4,5-TP (Silvex)
Carbon Tetrachloride	Methyl Chloride	1,2,4-trichlorobenzene
Chloral	Methyl Ethyl Ketone	1,1,1-trichloroethane
Chloramine	MTBE	1,1,2-trichloroethane
Chlorobenze	Naphtha	Trichloroethylene
Chloroform	Nitrates	Toluidine
Chlorine	Nitric Acid*	Trichlorethylene
Chlorobenzene	Nitrites	Turpentine
Chlorophenol	Nitrobenzene	Vinegar*
Chlorophyll	Nitrotoluene	VOC's
Citric Acid	o-Dichlorobenzene	Xanthophyll
Cresol 2,4-D	Odors (General)	Xylene
Chromium	Oil-Dissolved	o-Xylene
Copper	Organic –Acids	m-Xylene
DBCP	Organic-Esters	p-Xylene
Defoilants	Organic Salts	
Detergents*	Oxalic Acids	
Diesel Fuel	Oxygen	
Dinoseb	Ozone	
Dyes	p-Dichlorobenzene	
Endrin	PCB's	
Ethyl Acetate	Pentachlorophenol	
Ethyl Acrylate	Pesticides	
Ethyl Alcohol	Phenol	
Ethyl Amine	Plastic Taste	
Ethylbenzene	Plating Wastes*	
Ethyl Chloride	Potassium Permanganate	
Ethylene Dibromide (EDB)	Propoic Acid	
Ethyl Ether	Propionaldehyde*	
Gasoline Glycols	Propyl Acetate	
Heavy Metals*	Propyl Alcohol	
Heptachlor	Propyl Chloride	
Heptachlor Epoxide	Radon	
Herbicides	Rubber Hose Taste	
Hexachlorobutodiene	Rust	
Hexachlorocyclopentadiene	Sediment	
Hydrogen Peroxides	Silt	

*Indicates that the Outback secondary filter does a reasonable job of removing these contaminants although in some cases a specific "selective media" may be a more effective method of removal.