

## Analysis of Filters Report # 122812492

### Objective:

Analyze KDF-55, LIFE Ionizers Fluoride Super Filter AR-100F, LIFE Ionizers Super Filter AR-100, and Activated Alumina filters using challenge water spiked with various analytes of interest. Test 1 introduced 10 gallons of challenge water spiked with 4.0 mg/L of Fluoride into the Activated Alumina filter and the LIFE Ionizers Fluoride Super Filer AR-100F. Test 2 introduced 10 gallons of challenge water into the KDF-55 filter and LIFE Ionizers Super Filter AR-100 spiked with Lead, Mercury, Chromium, Copper, and Chloroform at the following concentrations: 0.150 mg/L, 0.004 mg/L, 0.0002 mg/L, 1.30 mg/L, and 0.050 mg/L respectively. A test sample was collected at the end of the 10 gallon throughput for each of the filters.

### Results:

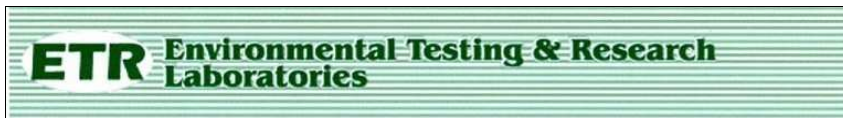
Test 1 for the analysis of Fluoride was conducted using a spectrophotometer. The results of which showed that the Activated Alumina filter removed all but 0.20 mg/L of Fluoride while the LIFE Ionizers Fluoride Super Filter AR-100F removed all 4.0 mg/L of Fluoride.

Test 2 for the analysis of Lead, Mercury, Chromium, and Copper were analyzed using an ICP-MS. The results showed that the KDF-55 filter removed all of the Chromium and Mercury from the challenge water but failed to remove 0.053 mg/L of Copper and 0.010 mg/L of Lead. The results for the LIFE Ionizers Super Filter AR-100 removed all of the Chromium, Copper, Mercury, and Lead from the challenge water.

The analysis for Chloroform in Test 2 was analyzed using a GC-MS. The results indicate that Chloroform was completely removed by both filters.

<sup>1</sup> Additional information regarding the organism(s) detected in this analysis can be attained using resources such as the Internet, local libraries, or by consulting your physician.

*The integrity of the sample and results are dependent on the quality of the sampling. The results apply only to the actual sample tested. ETR Labs Inc. shall be held harmless from any liability arising out of the use of such results.*



Report #: 122812494

Matrix: Filters

Client: Life Ionizers

Life Ionizers  
6352 Corte Del Abeto, Suite-H  
Carlsbad, CA 92011-

Sample  
Location

. Point of collection: Test #2-AR100

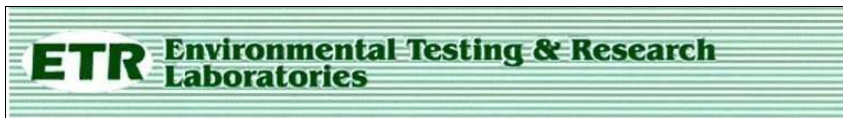
## VOC Scan Report

### Results

#### Organic Analysis

Benzene	Not Detected
Bromobenzene	Not Detected
Bromochloromethane	Not Detected
Bromodichloromethane	Not Detected
Bromoform	Not Detected
Bromomethane	Not Detected
n-Butylbenzene	Not Detected
sec-Butylbenzene	Not Detected
tert-Butylbenzene	Not Detected
Carbon-Tetrachloride	Not Detected
Chlorodibromomethane	Not Detected
Chloroethane	Not Detected
Chloroform	Not Detected
Chloromethane	Not Detected
1,2-Chlorotoluene	Not Detected
1,4-Chlorotoluene	Not Detected
1,2-Dibromo-3-chloropropane	Not Detected
Dibromomethane	Not Detected
1,2-Dibromomethane	Not Detected
1,3-Dichlorobenzene	Not Detected
1,2-Dichlorobenzene	Not Detected
1,4-Dichlorobenzene	Not Detected
Dichlorodifluoromethane	Not Detected
1,1-Dichloroethane	Not Detected
1,2-Dichloroethane	Not Detected
1,1-Dichloroethylene	Not Detected
cis-1,2-Dichloroethene	Not Detected
trans-1,2-dichloroethene	Not Detected
1,2-Dichloropropane	Not Detected
1,3-Dichloropropane	Not Detected
2,2-Dichloropropane	Not Detected
1,1-Dichloropropene	Not Detected
1,3-Dichloropropene	Not Detected
trans-1,3-Dichloropropene	Not Detected
Ethylbenzene	Not Detected

The integrity of the sample and results are dependent on the quality of sampling. The results apply only to the actual sample tested.  
Environmental Testing and Research Laboratories shall be held harmless from any liability arising out of the use of such results.



Report #: 122812494

Matrix: Filters

Client: Life Ionizers

Life Ionizers  
6352 Corte Del Abeto, Suite-H  
Carlsbad, CA 92011-

Sample  
Location

. Point of collection: Test #2-AR100

## VOC Scan Report

### Results

Fluorotrichloromethane	Not Detected	
Hexachlorobutadiene	Not Detected	
Isopropylbenzene	Not Detected	
Methyl-t-Butyl Ether (MTBE)	Not Detected	Massachusetts DEP Limit
p-Isopropyltoluene	Not Detected	
Methylene Chloride	Not Detected	
p-Isopropylbenzene	Not Detected	
Monochlorobenzene	Not Detected	
Napthalene	Not Detected	
n-Propylbenzene	Not Detected	
Styrene	Not Detected	
1,1,1,2-Tetrachloroethane	Not Detected	
1,1,2,2-Tetrachloroethane	Not Detected	
Tetrachloroethylene	Not Detected	
Toluene	Not Detected	
1,2,3-Trichlorobenzene	Not Detected	
1,2,4-Trichlorobenzene	Not Detected	
1,1,1-Trichloroethane	Not Detected	
1,1,2-Trichloroethane	Not Detected	
Trichloroethylene	Not Detected	
1,2,3-Trichloropropane	Not Detected	
1,2,4-Trimethylbenzene	Not Detected	
1,3,5-Trimethylbenzene	Not Detected	
Vinyl Chloride	Not Detected	
o-Xylene	Not Detected	
m+p Xylenes	Not Detected	

### Misc. Tests

Chromium	Not Detected	An Inorganic Chemical
Copper	Not Detected	Indicates Plumbing Corrosion
Mercury	Not Detected	An Inorganic Chemical
Lead	Not Detected	Lead

The integrity of the sample and results are dependent on the quality of sampling. The results apply only to the actual sample tested.  
Environmental Testing and Research Laboratories shall be held harmless from any liability arising out of the use of such results.