



# ENVIROTEK LABORATORIES, INC.

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EPA ID # NJ01298 NJ DEP ID # 03048 NY ELAP ID # 12044

## PROPUR PROMAX FULL SPECTRUM FILTER METAL CONTAMINANTS TEST REPORT

Report # 17-03-Metal Contaminants (Propur ProMax Full Spectrum Filter)

Report Date: 03/11/2017

Customer Name: Propur

### EXECUTIVE SUMMARY

One Hundred gallons of tap water was spiked with Metal Contaminants Standard Solution to have a final concentration specified by the NSF Std. 53; the spiked tap water was filtered through the filter element and tested; the Propur ProMax Full Spectrum Filter meets the NSF Metal reduction test, tested following the NSF Std. 53.

### INTRODUCTION

One Hundred gallons of tap water was spiked with Metal Contaminants Standard Solution to have a final concentration specified by the NSF Std. 53, the spiked tap water was filtered through the filter element and tested; the Propur ProMax Full Spectrum Filter meets the NSF Metal reduction test, tested following the NSF Std. 53.

### REAGENTS, MATERIALS, AND LAB EQUIPMENT

Perkin Elmer ICP/MS DRC-e 6100 mass spectrometer.

Inorganic Ventures Metals Standard Solution Catalog # Envirotek-2 (custom made solution)

Perkin Elmer Arsenic Solution 1000 mg/L, Perkin Elmer Cadmium Solution 1000 mg/L, Perkin Elmer Chromium +3 Solution 1000 mg/L. Perkin Elmer Chromium +6 Solution 1000 mg/L.

Propur ProMax Full Spectrum Filter.

### PROCEDURE

One Hundred gallons of tap water was spiked with Metal Contaminants Standard Solution in a tank and mixed well; this solution was tested and adjusted to have a final concentration specified by the NSF Std. 53, the influent water properties are summarized in Table 1 below. The solution was filtered through the ProMax Full Spectrum Filter and tested every 20 gallons following the EPA method 200.8 for Metal Contaminants in drinking water. The results are summarized in Table 2 below.

### RESULTS

**Table 1  
Influent Challenge Water Properties**

Parameter	Influent Challenge Water	Target
pH	6.55	6.25 to 6.75
Temperature	20.5 °C	20 ± 2.5 °C
TDS	75 mg/L	Less than 100 mg/L
Turbidity	0.60 NTU	<1 Nephelometric Turbidity Units

**Table 2  
Filtered Water Metal Contaminants Test Results**

Drinking Water Contaminant Tested	Influent Water Results in µg/L	NSF Max. Limit	% Reduction at 100 gallons
Aluminum	206	200	92.2 %
Arsenic	49.6	10	92.8 %
Cadmium	29.6	5	83.4 %
Chromium +3	299	100	99.6 %
Chromium +6	290	100	99.5 %
Copper	3143	1300	99.5 %
Mercury	5.9	2	99.9+ %
Nickel	263	50	87.7 %
Lead	149	10	99.3 %
Antimony	6.1	6	99.9+ %
Iron	3199	300	97.9 %
Manganese	1060	50	99.9+ %

### CONCLUSION:

The Propur ProMax Full Spectrum Filter meets the NSF Metal reduction test, tested following the NSF Std. 53.



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### **CERTIFICATION OF RESULTS:**

I certify in writing that all analyses, and reporting performed herein, comply with all requirements set forth in N.J.A.C. 7:9E and N.J.A.C. 7:18, and hereby certify that this laboratory is in compliance with all laboratory certification and quality control procedures and requirements as set forth in N.J.A.C. 7:18; the NYCRR Subpart 55-2 and the National Environmental Laboratory Accreditation Conference (NELAC) Institute Standards.

**Disclaimer:** The test results are only related to the filter sample tested.

*Jaime A. Young*

Jaime A. Young  
Lab Director

**Propur™**  
WATER  
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SYSTEMS

The reduction of contaminants or other substances that may be present in your water supply may vary depending on its content. The contaminants or other substances reduced are not necessarily present in all users water. Some contaminants may be more easily filtered than others. Percentage of reduction will vary over the life of the filter based on the level of contaminant(s) found in your water supply, user rate and psi of your water source. Testing was performed under standard laboratory conditions. Actual performance may vary. Do not use with water that is microbiologically unsafe or of unknown water quality with adequate disinfection.