BOROUX

# Water Quality Report

## Substance Reduction Test Report

Detailed performance and contaminant reduction data for the BOROUX Foundation™ Filter

| | |
|---|---|
| Filter Model | BOROUX Foundation Filter |
| Report Number | WFT-01-01 |
| Test Type | Substance Reduction Test |
| Version | 2.0 |
| Report Date | October 28, 2025 |
| Conducted For | BOROUX™, 1981 Aspen Circle, Pueblo, CO 81006 |
| Conducted By | IAPMO R&T® Lab (NJ) |

# Table of Contents

# Certifications

BOROUX is certified by the Water Quality Association to NSF/ANSI/CAN standards. Independently tested to meet NSF/ANSI/CAN standards, the highest level of trust in water filtration. Verified performance to meet strict safety and quality standards.

# NSF/ANSI Standards Overview

NSF/ANSI 42: Drinking Water Treatment Units, Aesthetic Effects:

This standard establishes minimum requirements for systems designed to reduce non-health-related contaminants.

NSF/ANSI/CAN 372: Drinking Water System Components - Lead Content

This standard helps manufacturers meet the “lead free” definition established by the Safe Drinking Water Act (SDWA) and is recognized by the U.S. Environmental Protection Agency (EPA) and state regulations.

NSF/ANSI 401: Drinking Water Treatment Units - Emerging Compounds/Incidental Contaminants:

This standard addresses the ability of a water treatment device to remove up to 15 individual contaminants that have been identified in published studies as occurring in drinking water.

This system has been tested according to the NSF/ANSI 42 and 401 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42 and 401.

| | Substance | Average Influent Concentration | NSF/ANSI Specified Challenge Concentration | Average Percent Reduction | Percent Reduction Requirement |
|---|---|---|---|---|---|
| **NSF/ANSI 42** | Nominal Particulate Class I (Particles ≥0.5 µm to ≤1.0 µm) | 6,500,000 particles/mL | At least 10,000 particles/mL | 98.9% | ≥85% |
| **NSF/ANSI 401** | Microplastics ≥0.5 µm to ≤1.0 µm | 6,500,000 particles/mL | At least 10,000 particles/mL | 98.9% | ≥85% |

# Water Quality Association
# Gold Seal Certificate

## James Enterprise Inc

1981 Aspen Circle

Pueblo, Colorado United States

Facility: Confidential Facility #1

Certification Date: June 02, 2025

Authorized By:

Kelli Fleischmann
Product Certification Director

**Water Quality Association**
**2375 Cabot Drive**
**Lisle, IL 60532, USA**

Products are evaluated according to Product Certification Scheme Type 5, as defined in ISO/IEC 17067 (current version).
This Certificate, or any part thereof, may not be used in a misleading manner and validation of its use is contingent upon the Official WQA web-listing.
Please contact your Account Representative for product expiration terms. All Standards referenced in the Product Certification Schemes by Standard Name.

Revision: 02/27/2024 FORM.12046


# Water Quality Association
# Gold Seal Certificate

## James Enterprise Inc

1981 Aspen Circle

Pueblo, Colorado United States


Facility: Confidential Facility #2

Certification Date: June 03, 2025

Authorized By:


Kelli Fleischmann
Product Certification Director

**Water Quality Association**
**2375 Cabot Drive**
**Lisle, IL 60532, USA**

Products are evaluated according to Product Certification Scheme Type 5, as defined in ISO/IEC 17067 (current version).
This Certificate, or any part thereof, may not be used in a misleading manner and validation of its use is contingent upon the Official WQA web-listing.
Please contact your Account Representative for product expiration terms. All Standards referenced in the Product Certification Schemes by Standard Name.

Revision: 02/27/2024 FORM.12046

# Testing Methodology and Quality Standards Overview

BOROUX Foundation Filters have been tested by International Association of Plumbers and Mechanical Officials, Research and Testing (IAPMO R&T) Lab NJ, an ISO/IEC 17025 accredited laboratory. The International Standard Organization (ISO) standard 17025:2017 specifies the general requirements for the competence, impartiality, and consistent operation of laboratories, adhering to the specifications defined in the National Sanitation Foundation (NSF) and American National Standards Institute (ANSI) standards, 42, 53, and 401.

A test is run by adding a certain amount of a contaminant to a specific volume of water, then letting that mixture flow through the filter, followed by testing the filtered water to measure the remaining amount of that contaminant. A single filter is used for each test, which means that if two filters are used in a system, the results can be doubled. For example, where the report states 4,500 gallons, a set of filters will effectively reduce that contaminant for up to 9,000 gallons.

The water tested after filtration must meet or exceed the NSF standards for each contaminant. This is shown in the report under the column titled “Maximum Allowable Effluent Concentration,” which indicates the accepted contaminant level after filtration.

Gallons of contaminated water is passed through the filter until “failure,” meaning the effluent water matches or exceeds the allowable limit. This indicates that it no longer effectively filters that contaminant at that gallonage.

Influent Challenge Concentration Before Filtration and Maximum Allowable Effluent Concentration adhere to the specifications defined in the NSF/ANSI Standards 42, 53, and 401, except where those standards do not specify parameters for the listed substances.

The testing of Volatile Organic Compounds (VOCs) used Chloroform as a surrogate chemical.

# Glossary

**Contaminant:** Lists the substance that was tested.

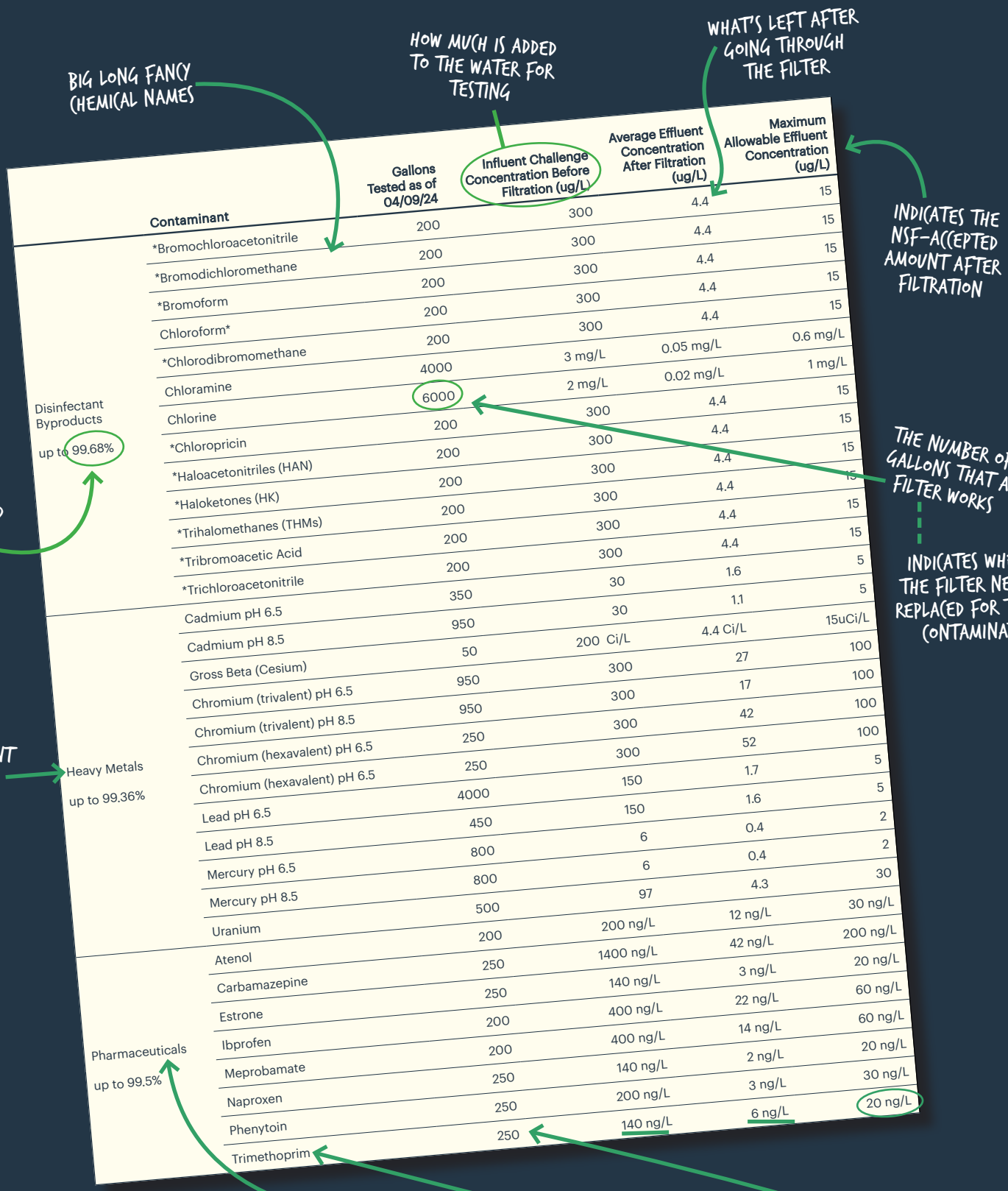
**Gallons Tested:** Indicates the number of gallons that have successfully completed testing as of the listed date.

**Influent Challenge Concentration Before Filtration:** Displays the amount of contaminant in the water before filtration.

**Average Effluent Concentration After Filtration:** Shows the average amount of contaminant in the water after filtration.

**Maximum Allowable Effluent Concentration:** Displays the maximum amount of contaminant allowed by the relevant standard.

# How to Read the Test Report




| | Contaminant | Gallons Tested as of 04/09/24 | Influent Challenge Concentration Before Filtration (ug/L) | Average Effluent Concentration After Filtration (ug/L) | Maximum Allowable Effluent Concentration (ug/L) |
|---|---|---|---|---|---|
| Disinfectant Byproducts up to 99.68% | *Bromochloroacetonitrile | 200 | 300 | 4.4 | 15 |
| | *Bromodichloromethane | 200 | 300 | 4.4 | 15 |
| | *Bromoform | 200 | 300 | 4.4 | 15 |
| | Chloroform* | 200 | 300 | 4.4 | 15 |
| | *Chlorodibromomethane | 200 | 300 | 4.4 | 15 |
| | Chloramine | 4000 | 3 mg/L | 0.05 mg/L | 0.6 mg/L |
| | Chlorine | 6000 | 2 mg/L | 0.02 mg/L | 1 mg/L |
| | *Chloropricin | 200 | 300 | 4.4 | 15 |
| | *Haloacetonitriles (HAN) | 200 | 300 | 4.4 | 15 |
| | *Haloketones (HK) | 200 | 300 | 4.4 | 15 |
| | *Trihalomethanes (THMs) | 200 | 300 | 4.4 | 15 |
| | *Tribromoacetic Acid | 200 | 300 | 4.4 | 15 |
| | *Trichloroacetonitrile | 200 | 30 | 1.6 | 5 |
| Heavy Metals up to 99.36% | Cadmium pH 6.5 | 350 | 30 | 1.1 | 5 |
| | Cadmium pH 8.5 | 950 | 200 Ci/L | 4.4 Ci/L | 15uCi/L |
| | Gross Beta (Cesium) | 50 | 300 | 27 | 100 |
| | Chromium (trivalent) pH 6.5 | 950 | 300 | 17 | 100 |
| | Chromium (trivalent) pH 8.5 | 950 | 300 | 42 | 100 |
| | Chromium (hexavalent) pH 6.5 | 250 | 300 | 52 | 100 |
| | Chromium (hexavalent) pH 6.5 | 250 | 150 | 1.7 | 5 |
| | Lead pH 6.5 | 4000 | 150 | 1.6 | 5 |
| | Lead pH 8.5 | 450 | 6 | 0.4 | 2 |
| | Mercury pH 6.5 | 800 | 6 | 0.4 | 2 |
| | Mercury pH 8.5 | 800 | 97 | 4.3 | 30 |
| | Uranium | 500 | 200 ng/L | 12 ng/L | 30 ng/L |
| Pharmaceuticals up to 99.5% | Atenol | 200 | 1400 ng/L | 42 ng/L | 200 ng/L |
| | Carbamazepine | 250 | 140 ng/L | 3 ng/L | 20 ng/L |
| | Estrone | 250 | 400 ng/L | 22 ng/L | 60 ng/L |
| | Ibprofen | 200 | 400 ng/L | 14 ng/L | 60 ng/L |
| | Meprobamate | 200 | 140 ng/L | 2 ng/L | 20 ng/L |
| | Naproxen | 250 | 200 ng/L | 3 ng/L | 30 ng/L |
| | Phenytoin | 250 | 140 ng/L | 6 ng/L | 20 ng/L |
| | Trimethoprim | 250 | | | |

FOR EXAMPLE: IF WATER CONTAINS 140 NG/L OF THE PHARMACEUTICAL, TRIMETHOPRIM, THE BOROUX FOUNDATION FILTER CAN BLOCK OUT ALL BUT 6 NG/L FOR 250 GALLONS. THE LIMIT ALLOWED IS 20 NG/L.

# Contaminant Filtration Chart

| | Contaminant | Gallons Tested as of 04/09/24 | Influent Challenge Concentration Before Filtration (ug/L) | Average Effluent Concentration After Filtration (ug/L) | Maximum Allowable Effluent Concentration (ug/L) |
|---|---|---|---|---|---|
| Disinfectant Byproducts up to 99.68% | *Bromochloroacetonitrile | 200 | 300 | 4.4 | 15 |
| | *Bromodichloromethane | 200 | 300 | 4.4 | 15 |
| | *Bromoform | 200 | 300 | 4.4 | 15 |
| | Chloroform* | 200 | 300 | 4.4 | 15 |
| | *Chlorodibromomethane | 200 | 300 | 4.4 | 15 |
| | Chloramine | 4000 | 3 mg/L | 0.05 mg/L | 0.6 mg/L |
| | Chlorine | 6000 | 2 mg/L | 0.02 mg/L | 1 mg/L |
| | *Chloropricin | 200 | 300 | 4.4 | 15 |
| | *Haloacetonitriles (HAN) | 200 | 300 | 4.4 | 15 |
| | *Haloketones (HK) | 200 | 300 | 4.4 | 15 |
| | *Trihalomethanes (THMs) | 200 | 300 | 4.4 | 15 |
| | *Tribromoacetic Acid | 200 | 300 | 4.4 | 15 |
| | *Trichloroacetonitrile | 200 | 300 | 4.4 | 15 |
| Heavy Metals up to 99.36% | Cadmium pH 6.5 | 350 | 30 | 1.6 | 5 |
| | Cadmium pH 8.5 | 950 | 30 | 1.1 | 5 |
| | Gross Beta (Cesium) | 50 | 200 Ci/L | 4.4 Ci/L | 15uCi/L |
| | Chromium (trivalent) pH 6.5 | 950 | 300 | 27 | 100 |
| | Chromium (trivalent) pH 8.5 | 950 | 300 | 17 | 100 |
| | Chromium (hexavalent) pH 6.5 | 250 | 300 | 42 | 100 |
| | Chromium (hexavalent) pH 6.5 | 250 | 300 | 52 | 100 |
| | Lead pH 6.5 | 4000 | 150 | 1.7 | 5 |
| | Lead pH 8.5 | 450 | 150 | 1.6 | 5 |
| | Mercury pH 6.5 | 800 | 6 | 0.4 | 2 |
| | Mercury pH 8.5 | 800 | 6 | 0.4 | 2 |
| | Uranium | 500 | 97 | 4.3 | 30 |
| Pharmaceuticals up to 99.5% | Atenol | 200 | 200 ng/L | 12 ng/L | 30 ng/L |
| | Carbamazepine | 250 | 1400 ng/L | 42 ng/L | 200 ng/L |
| | Estrone | 250 | 140 ng/L | 3 ng/L | 20 ng/L |
| | Ibprofen | 200 | 400 ng/L | 22 ng/L | 60 ng/L |
| | Meprobamate | 200 | 400 ng/L | 14 ng/L | 60 ng/L |
| | Naproxen | 250 | 140 ng/L | 2 ng/L | 20 ng/L |
| | Phenytoin | 250 | 200 ng/L | 3 ng/L | 30 ng/L |
| | Trimethoprim | 250 | 140 ng/L | 6 ng/L | 20 ng/L |

† Below detectable levels.

* Volatile organic chemicals (VOC's) are included by chloroform surrogate testing.

# Contaminant Filtration Chart

| | Contaminant | Gallons Tested as of 04/09/24 | Influent Challenge Concentration Before Filtration (ug/L) | Average Effluent Concentration After Filtration (ug/L) | Maximum Allowable Effluent Concentration (ug/L) |
|---|---|---|---|---|---|
| Forever Chemicals | Total PFAS | 400 | 2 | 0.01 | 0.02 |
| | PFOA | 400 | 0.5 | 0.01 | |
| | PFOS | 400 | 1 | 0.01 | |
| | PFOA+PFOS | 400 | 1.5 | 0.01 | 0.02 |
| | PFDA | 400 | 0.01 | | |
| | PFHpA | 400 | 0.04 | <0.01 † | 0.02 |
| | PFHxS | 400 | 0.3 | <0.01 † | 0.02 |
| | PFBS | 400 | 0.25 | | |
| | PFNA | 400 | 0.05 | 0.01 | 0.02 |
| Pesticides, Herbicides, Insecticides<br><br>up to 99.95% | *Alachlor | 200 | 300 | 4.4 | 15 |
| | *Atrazine | 200 | 300 | 4.4 | 15 |
| | *Bromochloroacetonitrile | 200 | 300 | 4.4 | 15 |
| | *Carbofuran | 200 | 300 | 4.4 | 15 |
| | *Chlorodibromomethane | 200 | 300 | 4.4 | 15 |
| | DEET | 250 | 1400 ng/L | 46 ng/L | 200 ng/L |
| | *Dibromochloropropane (DBCP) | 200 | 300 | 4.4 | 15 |
| | *Dinoseb | 200 | 300 | 4.4 | 15 |
| | *Endrin | 200 | 300 | 4.4 | 15 |
| | *Ethylene dibromide (EDB) | 200 | 300 | 4.4 | 15 |
| | Glyphosate | 350 | 1800 | 99 | 800 |
| | *Heptachlor | 200 | 300 | 4.4 | 15 |
| | *Heptachlor epoxide | 200 | 300 | 4.4 | 15 |
| | *Hexachlorocyclopentadiene | 200 | 300 | 4.4 | 15 |
| | *Lindane | 200 | 300 | 4.4 | 15 |
| | Linuron | 250 | 140 ng/L | 1.1 ng/L | 20 ng/L |
| | *Methoxyhlor | 200 | 300 | 4.4 | 15 |
| | Metolachlor | 250 | 1400 ng/L | <10 ng/L† | 200 ng/L |
| | *p-Dichlorobenzene (PDCB) | 200 | 300 | 4.4 | 15 |
| | *Simazine | 200 | 300 | 4.4 | 15 |
| | *1, 2, 4-Trichlorobenzene | 200 | 300 | 4.4 | 15 |
| | *1, 3-dichloropropene | 200 | 300 | 4.4 | 15 |
| | *1, 4-dichlorobenzene | 200 | 300 | 4.4 | 15 |
| | *2, 4-D | 200 | 300 | 4.4 | 15 |
| | *2, 4, 5-TP (slivex) | 200 | 300 | 4.4 | 15 |

† Below detectable levels.

* Volatile organic chemicals (VOC's) are included by chloroform surrogate testing.

# Contaminant Filtration Chart

| | Contaminant | Gallons Tested as of 04/09/24 | Influent Challenge Concentration Before Filtration (ug/L) | Average Effluent Concentration After Filtration (ug/L) | Maximum Allowable Effluent Concentration (ug/L) |
|---|---|---|---|---|---|
| | *Benzene | 200 | 300 | 4.4 | 15 |
| | Bisphenol A (BPA) | 200 | 2000 ng/L | 75 ng/L | 300 ng/L |
| | *Carbon tetrachloride | 200 | 300 | 4.4 | 15 |
| | *Cis-1, 2-dichloroethylene | 200 | 300 | 4.4 | 15 |
| | *Chlorobenzene | 200 | 300 | 4.4 | 15 |
| | *Dichloroacetonitrile | 200 | 300 | 4.4 | 15 |
| | *Ethylbenzene | 200 | 300 | 4.4 | 15 |
| | *Hexachlorobutadiene | 200 | 300 | 4.4 | 15 |
| | Nonylphenol | 200 | 300 | 4.4 | 15 |
| | *O-dichlorobenzene | 200 | 300 | 4.4 | 15 |
| | *Pentachlorophenol | 200 | 300 | 4.4 | 15 |
| | *Styrene | 200 | 300 | 4.4 | 15 |
| Industrial Chemicals<br><br>up to 99.55% | TCEP | 150 | 5000 ng/L | 173 ng/L | 700 ng/L |
| | TCPP | 200 | 5000 ng/L | 114 ng/L | 700 ng/L |
| | *Tetrachloroethylene | 200 | 300 | 4.4 | 15 |
| | *Tolune | 200 | 300 | 4.4 | 15 |
| | *Trans-1, 2,-dichloroethylene | 200 | 300 | 4.4 | 15 |
| | *Trichloroethylene | 200 | 300 | 4.4 | 15 |
| | *Xylenes (total) | 200 | 300 | 4.4 | 15 |
| | *1, 1-dichloro-2-propanone | 200 | 300 | 4.4 | 15 |
| | *1, 1-dichloroethylene | 200 | 300 | 4.4 | 15 |
| | *1, 2-dichloropropane | 200 | 300 | 4.4 | 15 |
| | *1, 1, 1-trichloro-2-propane | 200 | 300 | 4.4 | 15 |
| | *1, 1, 2, 2-tetrachloroathane | 200 | 300 | 4.4 | 15 |
| | *1, 1, 1-trichloroethane | 200 | 300 | 4.4 | 15 |
| | *1, 1, 2-trichloroethane | 200 | 300 | 4.4 | 15 |
| | *1, 2-dichloroethane | 200 | 300 | 4.4 | 15 |

† Below detectable levels.

* Volatile organic chemicals (VOC's) are included by chloroform surrogate testing.

BOROUX

# Chloramine Reduction

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:

James Enterprise Inc

1981 Aspen Circle

Pueblo, CA 81006

Result: Passed at 6000 gallons Date: 04/29/2024

Customer Name: James Enterprise Inc

Tested To: NSF/ANSI Standard 42 Chloramine Reduction test to 100%

Trade Designation/Model Number: BOROUX Foundation

Test Type: R & D

Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R&T Lab, NJ.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 04/29/2024

Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 42 Chloramine Reduction 100%**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** R & D

**Product:** Plumbed in without reservoir

**Flow Rate:** 10 gph

**Filter Capacity:** 3000 gallons

**Cycle:** 50/50

**Conditioning Procedure:** Discard first load

**Physical Description of Sample:** Inline filter

**Performance Indicator Device:** N/A, test up to 100%

**Test Description:** NSF/ANSI Std. 42 – Chloramine Reduction Testing

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 200 mL

**Performance Standard:** NSF/ANSI 42 – 2022

**Pass/Fail Criteria (Chloramine):** ≥80%

**Water Characteristics Filters 1 & 2**

| Sample Point | pH (8.75-9.25) | Temp (20 ± 3 °C) | TDS (200- 500 mg/L) | Hardness (<170 ppm) | Turbidity (<1 NTU) | TOC (1.0-2.0 ppm) | Organic Nitrogen (<0.2) |
|---|---|---|---|---|---|---|---|
| 10 UV | 8.75 | 17.9 | 224 | 111 | 0.42 | 1.3 | <0.2 |
| 17% | 8.79 | 18.3 | 227 | 113 | 0.44 | 1.3 | <0.2 |
| 33% | 8.81 | 18.1 | 229 | 111 | 0.43 | 1.2 | <0.2 |
| 50% | 8.83 | 18.3 | 225 | 115 | 0.42 | 1.4 | <0.2 |
| 67% | 8.81 | 17.9 | 227 | 111 | 0.42 | 1.3 | <0.2 |
| 83% | 8.90 | 18.6 | 231 | 112 | 0.41 | 1.2 | <0.2 |
| 100% | 8.88 | 18.4 | 227 | 114 | 0.41 | 1.3 | <0.2 |
| 117% | 8.79 | 18.3 | 224 | 111 | 0.43 | 1.2 | <0.2 |
| 133% | 8.81 | 18.5 | 220 | 113 | 0.41 | 1.3 | <0.2 |
| 150% | 8.86 | 18.6 | 217 | 115 | 0.4 | 1.4 | <0.2 |
| 167% | 8.87 | 18.5 | 223 | 114 | 0.41 | 1.3 | <0.2 |
| 183% | 8.92 | 18.6 | 221 | 111 | 0.40 | 1.5 | <0.2 |
| 200% | 8.88 | 18.5 | 225 | 112 | 0.41 | 1.6 | <0.2 |
| **Average** | **8.84** | **18.3** | **225** | **113** | **0.42** | **1.30** | **<0.2** |

***Note: Not Included in the ANAB ISO 17025 Scope of Certification.**

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Flow Rate and Pressure F1 & F2**

| Sample Point | *Flow Rate (gpm) | *Pressure (psi) |
|---|---|---|
| 10 UV | 0.17 | 3 |
| 17% | 0.17 | 3 |
| 33% | 0.17 | 3 |
| 50% | 0.17 | 3 |
| 67% | 0.17 | 3 |
| 83% | 0.17 | 3 |
| 100% | 0.17 | 3 |
| 117% | 0.17 | 3 |
| 133% | 0.17 | 3 |
| 150% | 0.17 | 3 |
| 167% | 0.17 | 3 |
| 183% | 0.17 | 3 |
| 200% | 0.17 | 3 |
| **Average** | 0.17 | 3 |

***Note: Not Included in the ANAB ISO 17025 Scope of Certification.**

**Filter Table**

| Sample Point | Accumulated Volume | Influent Chloramine Concentration (mg/L) | Effluent Chloramine (mg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | 10 UV | 3.10 | <0.01 | 99.68% | Passed |
| 17% | 500 gallons | 2.78 | <0.01 | 99.64% | Passed |
| 33% | 1000 gallons | 2.83 | <0.01 | 99.65% | Passed |
| 50% | 1500 gallons | 2.79 | <0.01 | 99.64% | Passed |
| 67% | 2000 gallons | 2.71 | <0.01 | 99.63% | Passed |
| 83% | 2500 gallons | 2.80 | 0.06 | 97.86% | Passed |
| 100% | 3000 gallons | 2.77 | 0.07 | 97.47% | Passed |
| 117% | 3500 gallons | 2.87 | 0.17 | 94.08% | Passed |
| 133% | 4000 gallons | 2.73 | 0.07 | 97.44% | Passed |
| 150% | 4500 gallons | 2.75 | 0.13 | 95.27% | Passed |
| 167% | 5000 gallons | 2.73 | 0.10 | 96.34% | Passed |
| 183% | 5500 gallons | 2.73 | 0.09 | 96.70% | Passed |
| 200% | 6000 gallons | 2.72 | 0.09 | 96.69% | Passed |

Chloramine Reporting Limit: 0.01 mg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer**: The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
QC Manager

BOROUX

# Modified Chlorine Reduction

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:

James Enterprise Inc

1981 Aspen Circle

Pueblo, CO 81006

Result: Passed at 6000 gallons Date: 01/25/2024

Customer Name: James Enterprise Inc

Tested To: NSF/ANSI 42 Standard Modified Chlorine Reduction

Trade Designation/Model Number: BOROUX Foundation

Test Type: R & D

Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T Lab, NJ.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/25/2024

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard Modified 42 Chlorine Reduction: Passed at 6000 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** R & D

**Product:** Gravity Filter

**Flow Rate** 5 gph

**Filter Capacity:** 6000 gallons

**Cycle:** 50/50

**Conditioning Procedure:** Run 2 gallons before testing.

**Physical Description of Sample:** Gravity filter

**Trade Designation/Model Number:** BOROUX Foundation

**Test Description:** NSF/ANSI Modified 42 Standard -Chlorine Reduction Testing

**Performance Standard:** NSF/ANSI 42 – 2022

**Pass/Fail Criteria** (Chlorine Minimum Percent Reduction): 50%

**Decision Rule:** Acceptance based on the NSF/ANSI standard limit.

**Water Characteristics**

| Accumulated Volume | Temp. (17-23 C) | pH (7.00 to 8.00) | TDS (200-500) | Turbidity <1 NTU | TOC (1.0-2.0 ppm) | Flow Rate (gpm) |
|---|---|---|---|---|---|---|
| 10 UV | 20.8 | 7.45 | 255 | 0.45 | 1.2 | 0.08 |
| 500 gallons | 20.0 | 7.40 | 254 | 0.44 | 1.2 | 0.08 |
| 1000 gallons | 19.7 | 7.43 | 239 | 0.41 | 1.1 | 0.08 |
| 1500 gallons | 20.1 | 7.41 | 227 | 0.45 | 1.1 | 0.08 |
| 2000 gallons | 20.5 | 7.39 | 231 | 0.43 | 1.2 | 0.08 |
| 2500 gallons | 20.7 | 7.41 | 227 | 0.41 | 1.2 | 0.08 |
| 3000 gallons | 19.7 | 7.37 | 229 | 0.43 | 1.2 | 0.08 |
| 3500 Gallons | 19.9 | 7.41 | 224 | 0.41 | 1.1 | 0.08 |
| 4000 Gallons | 19.5 | 7.45 | 229 | 0.47 | 1.1 | 0.08 |
| 4500 Gallons | 19.1 | 7.43 | 231 | 0.45 | 1.2 | 0.08 |
| 5000 Gallons | 19.6 | 7.52 | 225 | 0.43 | 1.2 | 0.08 |
| 5500 Gallons | 18.7 | 7.31 | 227 | 0.43 | 1.1 | 0.08 |
| 6000 Gallons | 19.2 | 7.27 | 217 | 0.46 | 1.2 | 0.08 |

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter #1 Data Summary Table**

| Accumulated Volume | Influent Concentration in mg/L | Effluent Concentration in mg/L | Chlorine % Reduction | Pass/Fail Criteria |
|---|---|---|---|---|
| 10 UV | 1.81 | 0.13 | 92.82% | Passed |
| 500 gallons | 2.20 | <0.01 | 99.55% | Passed |
| 1000 gallons | 2.01 | 0.03 | 98.51% | Passed |
| 1500 gallons | 1.97 | 0.02 | 98.98% | Passed |
| 2000 gallons | 2.20 | 0.01 | 99.55% | Passed |
| 2500 gallons | 1.98 | 0.01 | 99.49% | Passed |
| 3000 gallons | 2.20 | 0.01 | 99.55% | Passed |
| 3500 Gallons | 2.20 | <0.01 | 99.55% | Passed |
| 4000 Gallons | 1.91 | <0.01 | 99.55% | Passed |
| 4500 Gallons | 2.20 | <0.01 | 99.55% | Passed |
| 5000 Gallons | 1.87 | 0.03 | 98.40% | Passed |
| 5500 Gallons | 1.81 | 0.04 | 97.79% | Passed |
| 6000 Gallons | 2.08 | 0.02 | 99.04% | Passed |

Chlorine Reporting Limit: 0.01 mg/L.

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filters Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
QC Manager

BOROUX

# Chloroform Reduction

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed at 200 Gallons Date: 12/15/2023

Customer Name: James Enterprise Inc
Tested To: Standard 53 Chloroform Reduction
Trade Designation/Model Number: BOROUX Foundation
Type: R & D
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R&T Lab, NJ.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 12/15/2023
Corey Elise Young
QC Manager

Report # 23-199-1-Chloroform
Page 1 of 3

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Chloroform Reduction: Passed at 200 Gallons**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** R & D
**Product Type:** Gravity Filter

**Flow Rate:** 10 gpd
**Filter Capacity:** 200 Gallons
**Cycle:** 15-60 min rest between loads
**Conditioning Procedures:** Discard first batch
**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – VOC Reduction Testing
**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 mL
**Performance Standard:** NSF/ANSI Std 53 – 2022

**Pass/Fail Criteria** ($CHCl_3$ Maximum Product Water Concentration): 15 µg/L.

**Decision Rule:** Simple Acceptance based on the NSF/ANSI standard limit.

**Water Characteristics**

| Sample Point | pH (7.0 to 8.0) | Temp (17 to 22.5°C) | TDS (200 to 500 mg/L) | TOC (≥1.0 mg/L) | Turbidity (<1 NTU) | Flow Rate (gpd) |
|---|---|---|---|---|---|---|
| Start | 7.39 | 20 | 257 | 1.2 | 0.4 | 10 |
| 40 gallons | 7.41 | 19.7 | 240 | 1.2 | 0.3 | 10 |
| 80 gallons | 7.45 | 19.6 | 251 | 1.2 | 0.3 | 10 |
| 120 gallons | 7.52 | 19.7 | 246 | 1.3 | 0.4 | 10 |
| 160 gallons | 7.50 | 19.8 | 259 | 1.3 | 0.4 | 10 |
| 200 gallons | 7.42 | 19.7 | 255 | 1.2 | 0.3 | 10 |

**Data Summary Table**

| Accumulated Volume Effluent | Influent $CHCl_3$ (270 to 330µg/L) | Effluent $CHCl_3$ Concentration (µg/L) | %Reduction | Passed/Failed ≤15 µg/L |
|---|---|---|---|---|
| 10 UV | 298 | <0.1 | 99.97% | Passed |
| 40 gallons | 298 | 0.1 | 99.97% | Passed |
| 80 gallons | 305 | 0.6 | 99.80% | Passed |
| 120 gallons | 302 | 6.5 | 97.85% | Passed |
| 160 gallons | 304 | 6.0 | 98.03% | Passed |
| 200 gallons | 239 | 13 | 94.56% | Passed |

$CHCl_3$ Reporting Limit: 0.1 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

BOROUX

# Chromium III-Cadmium-Selenium Reduction pH 6.5

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Chromium Passed. Cadmium Passed to 350 gallons. Selenium Passed at the Start Date: 04/18/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Standard 53 Chromium III-Cadmium-Selenium Reduction pH 6.5
Trade Designation/Model Number: BOROUX Foundation
Test Type: R & D
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 04/18/2024
Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Chromium III-Cadmium-Selenium Reduction at pH 6.5**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** R & D

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 125 gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch.

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – Chromium III-Cadmium-Selenium Reduction Testing pH 6.5

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Chromium III):** 100 µg/L

**Pass/Fail Criteria (Cadmium):** 5 µg/L

**Pass/Fail Criteria (Selenium):** 50 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Water Characteristics**

| Sample Point | pH | *Temperature (17.5-22.5) | Alkalinity (10-30) | Hardness (10-30) | Turbidity <1 NTU | TDS | Polyphosphate as P | *Flow Rate |
|---|---|---|---|---|---|---|---|---|
| | (6.25-6.75) | | | | | <100 mg/L | <0.5 ppm | (gpd) |
| 10 UV | 6.52 | 20 | 22 | 19 | 0.4 | 57 | 0.2 | 10 |
| 50% | 6.55 | 19.5 | 25 | 22 | 0.4 | 59 | 0.3 | 10 |
| 100% | 6.50 | 19.6 | 22 | 23 | 0.3 | 51 | 0.2 | 10 |
| 150% | 6.53 | 19.8 | 25 | 24 | 0.3 | 52 | 0.2 | 10 |
| 180% | 6.57 | 19.9 | 23 | 26 | 0.4 | 56 | 0.3 | 10 |
| 200% | 6.56 | 19.7 | 21 | 24 | 0.4 | 57 | 0.3 | 10 |
| 240% | 6.55 | 19.6 | 23 | 26 | 0.3 | 68 | 0.2 | 10 |
| 280% | 6.49 | 19.6 | 22 | 24 | 0.3 | 61 | 0.3 | 10 |
| 320% | 6.41 | 19.5 | 23 | 25 | 0.2 | 51 | 0.3 | 10 |
| 360% | 6.47 | 18.5 | 21 | 21 | 0.2 | 54 | 0.3 | 10 |
| 400% | 6.45 | 18.3 | 23 | 24 | 0.2 | 57 | 0.3 | 10 |
| 440% | 6.40 | 18.5 | 25 | 21 | 0.3 | 49 | 0.2 | 10 |
| 480% | 6.45 | 18.4 | 24 | 29 | 0.3 | 41 | 0.2 | 10 |
| 520% | 6.41 | 18.5 | 24 | 25 | 0.2 | 42 | 0.3 | 10 |
| 560% | 6.48 | 18.2 | 22 | 24 | 0.3 | 40 | 0.3 | 10 |
| 600% | 6.49 | 18.4 | 23 | 25 | 0.2 | 41 | 0.3 | 10 |
| 640% | 6.51 | 18.4 | 25 | 24 | 0.3 | 42 | 0.3 | 10 |
| 680% | 6.57 | 18.3 | 24 | 27 | 0.2 | 41 | 0.3 | 10 |
| 720% | 6.55 | 18.2 | 23 | 25 | 0.3 | 40 | 0.3 | 10 |
| 760% | 6.51 | 18.2 | 21 | 28 | 0.3 | 39 | 0.3 | 10 |
| 800% | 6.54 | 18.3 | 26 | 22 | 0.3 | 38 | 0.3 | 10 |
| Average | **6.50** | **18.9** | **23** | **24** | **0.3** | **49** | **0.3** | **10** |

***Note: Not Included in the ANAB ISO 17025 Scope of Certification.**

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Data Analysis Table Chromium III Passed to 1000 Gallone**

| Sample Point | Accumulated Volume Effluent | Influent Chromium III (µg/L) | Effluent Chromium III Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | 10 UV | 365 | 15 | 95.89% | Passed |
| 50% | 62.5 gallons | 297 | 3 | 98.99% | Passed |
| 100% | 125 gallons | 305 | 4 | 98.69% | Passed |
| 150% | 187.5 gallons | 321 | 5 | 98.44% | Passed |
| 180% | 225 gallons | 360 | 62 | 82.78% | Passed |
| 200% | 250 gallons | 298 | 25 | 91.61% | Passed |
| 240% | 300 gallons | 306 | 55 | 82.03% | Passed |
| 280% | 350 gallons | 290 | 18 | 93.79% | Passed |
| 320% | 400 gallons | 295 | 70 | 76.27% | Passed |
| 360% | 450 gallons | 302 | 42 | 86.09% | Passed |
| 400% | 500 gallons | 311 | 16 | 94.86% | Passed |
| 440% | 550 gallons | 297 | 41 | 86.20% | Passed |
| 480% | 600 gallons | 231 | 43 | 81.39% | Passed |
| 520% | 650 gallons | 328 | 28 | 91.46% | Passed |
| 560% | 700 gallons | 297 | 17 | 94.28% | Passed |
| 600% | 750 gallons | 328 | 20 | 93.90% | Passed |
| 640% | 800 gallons | 319 | 19 | 94.04% | Passed |
| 680% | 850 gallons | 318 | 14 | 95.60% | Passed |
| 720% | 900 gallons | 315 | 16 | 94.92% | Passed |
| 760% | 950 gallons | 291 | 17 | 94.16% | Passed |
| 800% | 1000 gallons | 295 | 34 | 88.47% | Passed |

Chromium III Detection Limit:1 µg/L

**Data Analysis Table Cadmium Passed to 350 Gallons**

| Sample Point | Accumulated Volume Effluent | Influent Cadmium (µg/L) | Effluent Cadmium Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | 10 UV | 33 | 1 | 96.97% | Passed |
| 50% | 62.5 gallons | 30 | <1 | 96.67% | Passed |
| 100% | 125 gallons | 33 | 1 | 96.97% | Passed |
| 150% | 187.5 gallons | 31 | <1 | 96.77% | Passed |
| 180% | 225 gallons | 31 | <1 | 96.77% | Passed |
| 200% | 250 gallons | 33 | 4 | 87.88% | Passed |
| 240% | 300 gallons | 30 | 3 | 90.00% | Passed |
| 280% | 350 gallons | 25 | <1 | 96.00% | Passed |

Cadmium Detection Limit: 1 µg/L

**Data Analysis Table Selenium Passed at the Start**

| Sample Point | Accumulated Volume Effluent | Influent Selenium (µg/L) | Effluent Selenium Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | 10 UV | 121 | 26 | 78.51% | Passed |

Selenium Detection Limit: 1 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

BOROUX

# Chromium III-Cadmium-Selenium Reduction pH 8.5

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Chromium Passed at 1000 Gallons. Cadmium Passed at 1000 Gallons. Selenium Passed at the Start. Date: 04/18/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Standard 53 Chromium III-Cadmium-Selenium Reduction pH 8.5
Trade Designation/Model Number: BOROUX Foundation
Test Type: Qualification
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 04/18/2024
Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Chromium III-Cadmium-Selenium Reduction at pH 8.5:**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Qualification

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 125 gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – Chromium III-Cadmium-Selenium Reduction Testing pH 8.5

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Chromium III):** 100 µg/L

**Pass/Fail Criteria (Cadmium):** 5 µg/L

**Pass/Fail Criteria (Selenium):** 50 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Water Characteristics**

| Sample Point | pH | *Temperature (17.5-22.5 C) | Alkalinity (100-250) | Hardness (100-200) | Turbidity <1 NTU | TDS | Polyphosphate as P | *Flow Rate |
|---|---|---|---|---|---|---|---|---|
| | (8.25-8.75) | | | | | 200-500 mg/L | <0.5 ppm | (gpd) |
| 10 UV | 8.38 | 20.0 | 186 | 121 | 0.4 | 257 | 0.2 | 10 |
| 50% | 8.40 | 19.4 | 198 | 135 | 0.4 | 248 | 0.2 | 10 |
| 100% | 8.51 | 19.6 | 180 | 142 | 0.4 | 263 | 0.2 | 10 |
| 150% | 8.47 | 19.8 | 199 | 157 | 0.3 | 254 | 0.2 | 10 |
| 180% | 8.50 | 19.5 | 189 | 143 | 0.3 | 243 | 0.3 | 10 |
| 200% | 8.46 | 19.4 | 190 | 141 | 0.3 | 240 | 0.3 | 10 |
| 240% | 8.51 | 19.6 | 198 | 153 | 0.2 | 275 | 0.2 | 10 |
| 280% | 8.53 | 19.5 | 196 | 147 | 0.3 | 261 | 0.2 | 10 |
| 320% | 8.50 | 19.6 | 185 | 142 | 0.2 | 254 | 0.3 | 10 |
| 360% | 8.56 | 18.5 | 199 | 141 | 0.2 | 257 | 0.3 | 10 |
| 400% | 8.57 | 18.2 | 189 | 142 | 0.3 | 251 | 0.2 | 10 |
| 440% | 8.51 | 18.5 | 181 | 145 | 0.2 | 229 | 0.2 | 10 |
| 480% | 8.56 | 18.4 | 196 | 148 | 0.3 | 235 | 0.2 | 10 |
| 520% | 8.51 | 18.4 | 185 | 150 | 0.2 | 247 | 0.2 | 10 |
| 560% | 8.50 | 18.2 | 190 | 142 | 0.2 | 238 | 0.3 | 10 |
| 600% | 8.45 | 18.4 | 188 | 145 | 0.3 | 229 | 0.2 | 10 |
| 640% | 8.52 | 18.4 | 197 | 146 | 0.3 | 225 | 0.2 | 10 |
| 680% | 8.50 | 18.2 | 187 | 157 | 0.2 | 229 | 0.2 | 10 |
| 720% | 8.51 | 18.3 | 190 | 142 | 0.2 | 221 | 0.2 | 10 |
| 760% | 8.49 | 18.1 | 175 | 140 | 0.3 | 220 | 0.2 | 10 |
| 800% | 8.50 | 18.3 | 181 | 142 | 0.3 | 224 | 0.2 | 10 |
| **Average** | **8.50** | **19.4** | **189** | **144** | **0.3** | **255** | **0.2** | **10** |

***Note: Not Included in the ANAB ISO 17025 Scope of Certification.**

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Data Analysis Table Chromium III Passed at 1000 Gallons**

| Sample Point | Accumulated Volume Effluent | Influent Chromium III (µg/L) | Effluent Chromium III Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | 10 UV | 356 | 8 | 97.75% | Passed |
| 50% | 62.5 gallons | 300 | 8 | 97.33% | Passed |
| 100% | 125 gallons | 318 | 6 | 98.11% | Passed |
| 150% | 187.5 gallons | 337 | 4 | 98.81% | Passed |
| 180% | 225 gallons | 308 | 38 | 87.66% | Passed |
| 200% | 250 gallons | 303 | 24 | 92.08% | Passed |
| 240% | 300 gallons | 297 | 34 | 88.55% | Passed |
| 280% | 350 gallons | 313 | 19 | 93.93% | Passed |
| 320% | 400 gallons | 329 | 26 | 92.10% | Passed |
| 360% | 450 gallons | 302 | 24 | 92.05% | Passed |
| 400% | 500 gallons | 321 | 17 | 94.70% | Passed |
| 440% | 550 gallons | 298 | 32 | 99.69% | Passed |
| 480% | 600 gallons | 329 | 31 | 99.70% | Passed |
| 520% | 650 gallons | 289 | 22 | 92.39% | Passed |
| 560% | 700 gallons | 278 | 8 | 97.12% | Passed |
| 600% | 750 gallons | 271 | 12 | 95.57% | Passed |
| 640% | 800 gallons | 276 | 12 | 95.65% | Passed |
| 680% | 850 gallons | 303 | 5 | 98.35% | Passed |
| 720% | 900 gallons | 224 | 5 | 97.77% | Passed |
| 760% | 950 gallons | 264 | 6 | 97.73% | Passed |
| 800% | 1000 gallons | 261 | 15 | 94.25% | Passed |

Chromium Detection Limit:1 µg/L

**Data Analysis Table Cadmium Passed at 1000 Gallons**

| Sample Point | Accumulated Volume Effluent | Influent Cadmium (µg/L) | Effluent Cadmium Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | 10 UV | 33 | <1 | 96.97% | Passed |
| 50% | 62.5 gallons | 30 | 3 | 90.00% | Passed |
| 100% | 125 gallons | 31 | <1 | 96.77% | Passed |
| 150% | 187.5 gallons | 30 | <1 | 96.67% | Passed |
| 180% | 225 gallons | 30 | <1 | 96.67% | Passed |
| 200% | 250 gallons | 31 | <1 | 96.77% | Passed |
| 240% | 300 gallons | 32 | <1 | 96.88% | Passed |
| 280% | 350 gallons | 26 | <1 | 96.15% | Passed |
| 320% | 400 gallons | 26 | <1 | 96.15% | Passed |
| 360% | 450 gallons | 23 | <1 | 95.65% | Passed |
| 400% | 500 gallons | 29 | <1 | 96.55% | Passed |
| 440% | 550 gallons | 29 | <1 | 96.55% | Passed |
| 480% | 600 gallons | 31 | <1 | 96.77% | Passed |
| 520% | 650 gallons | 30 | 1 | 96.67% | Passed |
| 560% | 700 gallons | 33 | <1 | 96.97% | Passed |
| 600% | 750 gallons | 32 | <1 | 96.88% | Passed |
| 640% | 800 gallons | 31 | <1 | 96.77% | Passed |
| 680% | 850 gallons | 30 | <1 | 96.67% | Passed |
| 720% | 900 gallons | 27 | <1 | 96.30% | Passed |
| 760% | 950 gallons | 34 | <1 | 97.06% | Passed |
| 800% | 1000 gallons | 43 | <1 | 97.67% | Passed |

Cadmium Detection Limit: 1 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Data Analysis Table Selenium Passed at the Start**

| Sample Point | Accumulated Volume Effluent | Influent Selenium (µg/L) | Effluent Selenium Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | 10 UV | 125 | 33 | 73.60% | Passed |

Selenium Detection Limit: 1 µCi/L

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

BOROUX

# Chromium VI Reduction pH 6.5

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:

James Enterprise Inc

1981 Aspen Circle

Pueblo, CO 81006

Result: Passed at 250 gallons Date: 01/24/2024

Customer Name: James Enterprise Inc

Tested To: NSF/ANSI Standard 53 Chromium VI Reduction pH 6.5

Trade Designation/Model Number: BOROUX Foundation

Test Type: Qualification

Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/24/2024

Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Chromium VI Reduction at pH 6.5: Passed at 250 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Qualification

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 250 gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – Chromium VI Reduction Testing pH 6.5

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Chromium VI):** 100 µg/L

**Water Characteristics**

| Accumulated Volume | pH | Temperature (17.5-22.5 C) | Alkalinity (10-30) | Hardness (10-30) | Turbidity <1 NTU | TDS | Polyphosphate as P | Flow Rate |
|---|---|---|---|---|---|---|---|---|
| Effluent | (6.25-6.75) | | | | | <100 | <0.5 ppm | (gpm) |
| 10 UV | 6.50 | 20.1 | 22 | 23 | 0.3 | 59 | 0.2 | 10 |
| 62.5 gallons | 6.57 | 19.4 | 25 | 25 | 0.3 | 61 | 0.2 | 10 |
| 125 gallons | 6.41 | 19.6 | 23 | 25 | 0.4 | 55 | 0.2 | 10 |
| 187.5 gallons | 6.61 | 19.5 | 24 | 21 | 0.4 | 53 | 0.3 | 10 |
| 225 gallons | 6.52 | 19.5 | 25 | 20 | 0.3 | 54 | 0.2 | 10 |
| 250 gallons | 6.50 | 19.4 | 23 | 22 | 0.3 | 55 | 0.2 | 10 |

**Data Analysis Table**

| Accumulated Volume Effluent | Influent Chromium VI (µg/L) | Effluent Chromium VI Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|
| 10 UV | 306 | 2 | 99.35% | Passed |
| 62.5 gallons | 294 | 8 | 97.28% | Passed |
| 125 gallons | 313 | 40 | 87.22% | Passed |
| 187.5 gallons | 310 | 74 | 76.13% | Passed |
| 225 gallons | 338 | 62 | 81.66% | Passed |
| 250 gallons | 309 | 63 | 79.09% | Passed |

Chromium VI Detection Limit:1 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer**: The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

BOROUX

# Chromium VI Reduction pH 8.5

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:

James Enterprise Inc

1981 Aspen Circle

Pueblo, CO 81006

Result: Passed at 250 gallons Date: 01/24/2024

Customer Name: James Enterprise Inc

Tested To: NSF/ANSI Standard 53 Chromium VI Reduction pH 8.5

Trade Designation/Model Number: BOROUX Foundation

Test Type: Qualification

Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/24/2024

Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Chromium VI Reduction at pH 8.5: Passed at 250 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Qualification

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 250 gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – Chromium VI Reduction Testing pH 8.5

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Chromium VI):** 100 µg/L

**Water Characteristics**

| Accumulated Volume | pH | Temperature (17.5-22.5 C) | Alkalinity (100-250) | Hardness (100-200) | Turbidity <1 | TDS | Polyphosphate as P | Flow Rate |
|---|---|---|---|---|---|---|---|---|
| Effluent | (8.25-8.75) | | | | | 200-500 mg/L | <0.5 ppm | (gpm) |
| 10 UV | 8.62 | 19.8 | 146 | 121 | 0.4 | 258 | 0.3 | 10 |
| 62.5 gallons | 8.60 | 19.5 | 152 | 130 | 0.4 | 249 | 0.2 | 10 |
| 125 gallons | 8.54 | 19.6 | 161 | 125 | 0.3 | 256 | 0.3 | 10 |
| 187.5 gallons | 8.49 | 19.7 | 170 | 133 | 0.3 | 241 | 0.2 | 10 |
| 225 gallons | 8.38 | 19.6 | 147 | 142 | 0.2 | 245 | 0.2 | 10 |
| 250 gallons | 8.40 | 19.5 | 160 | 141 | 0.3 | 239 | 0.2 | 10 |

**Data Analysis Table**

| Accumulated Volume Effluent | Influent Chromium VI (µg/L) | Effluent Chromium VI Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|
| 10 UV | 320 | <1 | 99.69% | Passed |
| 62.5 gallons | 335 | 23 | 93.13% | Passed |
| 125 gallons | 330 | 79 | 76.06% | Passed |
| 187.5 gallons | 321 | 73 | 77.26% | Passed |
| 225 gallons | 326 | 54 | 83.44% | Passed |
| 250 gallons | 301 | 79 | 73.75% | Passed |

Chromium VI Detection Limit:1 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed at 350 gallons Date: 01/29/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Modified Standard 53 Glyphosate Reduction
Trade Designation/Model Number: BOROUX Foundation
Test Type: Qualification
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/29/2024
Corey Elise Young
QC Manager

BOROUX

# Glyphosate Reduction

# Test Report
# IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Modified Standard 53 Glyphosate Reduction: Passed at 350 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Qualification

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 350 gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Modified Std. 53 – Glyphosate Reduction Testing

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 mL

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Glyphosate):** 800 µg/L

**Water Characteristics**

| Accumulated Volume Effluent | pH (7.00-8.00) | Temperature (17.0-23.0 C) | TDS 200-500 mg/L | Hardness (100-200) | Turbidity (<1 NTU) | TOC (1.0-2.0) | Flow Rate (gpd) |
|---|---|---|---|---|---|---|---|
| 10 UV | 7.52 | 20.2 | 243 | 125 | 0.3 | 1.2 | 10 |
| 62.5 gallons | 7.49 | 19.5 | 250 | 145 | 0.2 | 1.2 | 10 |
| 125 gallons | 7.45 | 19.7 | 273 | 135 | 0.2 | 1.3 | 10 |
| 187.5 gallons | 7.41 | 19.6 | 259 | 129 | 0.2 | 1.3 | 10 |
| 225 gallons | 7.62 | 19.8 | 248 | 127 | 0.3 | 1.2 | 10 |
| 250 gallons | 7.60 | 19.5 | 246 | 154 | 0.3 | 1.2 | 10 |
| 300 gallons | 7.41 | 19.4 | 241 | 137 | 0.2 | 1.2 | 10 |
| 350 gallons | 7.47 | 19.6 | 245 | 139 | 0.3 | 1.3 | 10 |

**Data Analysis Table**

| Accumulated Volume Effluent | Influent Glyphosate (µg/L) | Effluent Glyphosate Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|
| 10 UV | 1792 | <1 | 99.94% | Passed |
| 62.5 gallons | 1821 | <1 | 99.95% | Passed |
| 125 gallons | 1813 | <1 | 99.94% | Passed |
| 187.5 gallons | 1883 | <1 | 99.95% | Passed |
| 225 gallons | 1793 | <1 | 99.94% | Passed |
| 250 gallons | 1791 | <1 | 99.94% | Passed |
| 300 gallons | 1663 | 269 | 83.82% | Passed |
| 350 gallons | 1565 | 517 | 66.96% | Passed |

Glyphosate Detection Limit:1 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer**: The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
QC Manager

BOROUX

# Lead Reduction Test pH 6.5

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 80123

Result: Passed at 4000 gallons Date: 11/22/2023

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Modified Standard 53 Lead Reduction pH 6.5.
Trade Designation/Model Number: BOROUX Foundation
Test Type: R & D
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R&T Lab, NJ.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 11/22/2023
Corey Elise Young
QC Manager

Report # 23-142-3-Lead-Low pH
Page 1 of 3

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Modified Standard 53 Lead Reduction Test pH 6.5: Passed at 4000 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** R & D

**Product:** Gravity Filter

**Flow Rate:** 10 gph

**Filter Capacity:** 4000 gallons

**Cycle:** 50/50

**Conditioning Procedures:** Run 2 gallons before testing.

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Modified Std. 53 – Lead Reduction Testing pH 6.5

**Trade Designation/Model Number:** BOROUX Foundation

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Lead):** 5 µg/L

**Decision Rule:** Simple Acceptance based on the NSF/ANSI standard limit.

**Water Characteristics**

| Sample Point | Influent pH 6.25 to 6.75 | Alkalinity (10-30 mg/L) | TDS <100 mg/L) | Hardness (10-30 mg/L mg/L) | Temperature (17.5 to 22.5°C) | Turbidity <1 NTU) | Polyphosphate as P <0.5 mg/L) | Flow Rate |
|---|---|---|---|---|---|---|---|---|
| 10 UV | 6.6 | 20 | 90 | 22 | 20.5 | 0.44 | <0.1 | 0.08 |
| 500 gallons | 6.65 | 21 | 90 | 25 | 20.3 | 0.41 | <0.1 | 0.08 |
| 1000 gallons | 6.63 | 21 | 91 | 26 | 20.2 | 0.43 | <0.1 | 0.08 |
| 1500 gallons | 6.71 | 19 | 93 | 21 | 20.7 | 0.45 | <0.1 | 0.08 |
| 2000 gallons | 6.57 | 21 | 91 | 19 | 20.3 | 0.49 | <0.1 | 0.08 |
| 2500 gallons | 6.69 | 19 | 97 | 23 | 20.1 | 0.43 | <0.1 | 0.08 |
| 3000 gallons | 6.57 | 21 | 93 | 20 | 19.9 | 0.45 | <0.1 | 0.08 |
| 3500 gallons | 6.32 | 19 | 92 | 29 | 19.7 | 0.41 | <0.1 | 0.08 |
| 4000 gallons | 6.60 | 20 | 91 | 23 | 18.0 | 0.43 | <0.1 | 0.08 |
| **Average** | **6.60** | **20** | **92** | **23** | **19.9** | **0.44** | **<0.1** | **0.08** |

**Filter Data Summary Table**

| Accumulated Volume Effluent | Influent Lead (135-165 µg/L) | Effluent Lead Concentration (µg/L) | % Reduction | Passing Criteria |
|---|---|---|---|---|
| Start | 157 | <1 | 99.36% | Passed |
| 500 gallons | 156 | <1 | 99.36% | Passed |
| 1000 gallons | 136 | <1 | 99.26% | Passed |
| 1500 gallons | 156 | <1 | 99.36% | Passed |
| 2000 gallons | 160 | 3 | 98.13% | Passed |
| 2500 gallons | 149 | 1 | 99.33% | Passed |
| 3000 gallons | 134 | 3 | 97.76% | Passed |
| 3500 gallons | 132 | 1 | 99.24% | Passed |
| 4000 gallons | 140 | 3 | 97.86% | Passed |

Lead Reporting Limit: 1 µg

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

BOROUX

Lead Reduction pH 8.5

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed at 450 Gallons Date: 01/24/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Standard 53 Lead Reduction pH 8.5
Trade Designation/Model Number: BOROUX Foundation
Test Type: R & D
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R&T NJ Laboratory.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/24/2024
Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Lead Reduction Test pH 8.5: Passed at 450 Gallons**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** R & D

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 450 gallons

**Conditioning Procedure:** Discard first batch

**Cycle:** 15-60 min rest between loads

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – Lead Reduction Testing pH 8.5

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Lead):** 5 µg/L

**Decision Rule:** Simple Acceptance based on the NSF/ANSI standard limit.

**Water Characteristics**

| Accumulated Volume Effluent | pH (8.25 to 8.75) | Alkalinity (90-110 mg/L) | Hardness (90-110 mg/L) | Temperature (17.5 to 22.5 °C) | Chlorine (0.25 to 0.75 mg/L) | Flow Rate |
|---|---|---|---|---|---|---|
| Start | 8.68 | 101 | 103 | 20.1 | 0.60 | 10 |
| 100 gallons | 8.46 | 100 | 97 | 19.7 | 0.49 | 10 |
| 200 gallons | 8.50 | 102 | 104 | 19.8 | 0.51 | 10 |
| 300 gallons | 8.52 | 94 | 99 | 19.7 | 0.46 | 10 |
| 360 gallons | 8.55 | 96 | 98 | 19.5 | 0.43 | 10 |
| 400 gallons | 8.51 | 99 | 94 | 19.6 | 0.41 | 10 |
| 450 gallons | 8.49 | 94 | 93 | 19.5 | 0.40 | 10 |

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Data Summary Table**

| Accumulated Volume Effluent | Influent Lead (135 to 165 µg/L) | Effluent Lead Concentration (µg/L) | Influent Fine Particulate (>20%) | Influent Total Particulate (20-40%) |
|---|---|---|---|---|
| Start | 155 | <1 | 42% | 23% |
| 100 gallons | 155 | 1 | 64% | 34% |
| 200 gallons | 148 | <1 | 54% | 25% |
| 300 gallons | 153 | 2 | 57% | 28% |
| 360 gallons | 154 | 1 | 58% | 29% |
| 400 gallons | 156 | 2 | 67% | 34% |
| 450 gallons | 154 | 3 | 43% | 27% |

Lead Reporting Limit: 1 µg/L

**Data Summary Table**

| Accumulated Volume Effluent | Influent Lead (135 to 165 µg/L) | Effluent Lead Concentration (µg/L) | Passing Criteria |
|---|---|---|---|
| Start | 155 | <1 | Passed |
| 100 gallons | 155 | 1 | Passed |
| 200 gallons | 148 | <1 | Passed |
| 300 gallons | 153 | 2 | Passed |
| 360 gallons | 154 | 1 | Passed |
| 400 gallons | 156 | 2 | Passed |
| 450 gallons | 154 | 3 | Passed |

Lead Reporting Limit: 1 µg/L

**Filters Tested**

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
QC Manager

BOROUX

# Mercury-Uranium-Gross Beta (Cesium) Reduction pH 6.5

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Results: Mercury & Uranium Passed at 350 gallons/Cesium passed at 50 gallons Date: 01/24/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Standard 53 Mercury-Uranium-Gross Beta (Cesium) Reduction pH 6.5 PT 200%
Trade Designation/Model Number: BOROUX Foundation
Test Type: Qualification
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/24/2024
Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Mercury-Uranium-Gross Beta (Cesium) Reduction at pH 6.5:**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Qualification

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 100 gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – Mercury-Uranium-Gross Beta (Cesium) Reduction Testing pH 6.5

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria (Mercury):** 2 µg/L

**Pass/Fail Criteria (Uranium):** 30 µg/L

**Pass/Fail Criteria (Gross Beta) (Cesium):** 15 µCi/L

**Water Characteristics**

| Accumulated Volume | pH | Temperature (17.5-22.5) | Alkalinity (10-30) | Hardness (10-30) | Turbidity <1 | TDS | Polyphosphate as P | Flow Rate (gpd) |
|---|---|---|---|---|---|---|---|---|
| Effluent | (6.25-6.75) | | | | | <100 mg/L | <0.5 ppm | |
| 10 UV | 6.65 | 19.8 | 24 | 21 | 0.4 | 52 | 0.3 | 10 |
| 25 gallons | 6.60 | 19.9 | 21 | 23 | 0.4 | 58 | 0.2 | 10 |
| 50 gallons | 6.70 | 20.0 | 22 | 24 | 0.3 | 56 | 0.2 | 10 |
| 75 gallons | 6.51 | 20.1 | 24 | 24 | 0.3 | 59 | 0.2 | 10 |
| 90 gallons | 6.55 | 20.0 | 22 | 24 | 0.3 | 54 | 0.2 | 10 |
| 100 gallons | 6.49 | 20.0 | 23 | 25 | 0.4 | 56 | 0.2 | 10 |
| 150 gallons | 6.52 | 19.6 | 20 | 21 | 0.3 | 48 | 0.2 | 10 |
| 200 gallons | 6.51 | 19.8 | 25 | 22 | 0.4 | 61 | 0.2 | 10 |
| 250 gallons | 6.57 | 19.6 | 26 | 24 | 0.3 | 52 | 0.3 | 10 |
| 300 gallons | 6.53 | 19.2 | 21 | 23 | 0.2 | 58 | 0.2 | 10 |
| 350 gallons | 6.50 | 19.0 | 21 | 20 | 0.3 | 57 | 0.2 | 10 |

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Data Analysis Table Mercury Result: Passed at 350 gallons.**

| Accumulated Volume Effluent | Influent Mercury (µg/L) | Effluent Mercury Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|
| 10 UV | 6.5 | <0.1 | 98.46% | Passed |
| 25 gallons | 5.9 | <0.1 | 98.31% | Passed |
| 50 gallons | 5.8 | 0.5 | 91.38% | Passed |
| 75 gallons | 7.1 | 0.9 | 87.32% | Passed |
| 90 gallons | 6.1 | <0.1 | 98.36% | Passed |
| 100 gallons | 5.9 | 0.3 | 94.92% | Passed |
| 150 gallons | 6.5 | 0.3 | 95.38% | Passed |
| 200 gallons | 5.9 | 0.1 | 98.31% | Passed |
| 250 gallons | 6.6 | <0.1 | 98.48% | Passed |
| 300 gallons | 6.2 | 1.4 | 77.42% | Passed |
| 350 gallons | 5.8 | <0.1 | 98.28% | Passed |

Mercury Detection Limit: 0.1 µg/L

**Data Analysis Table Uranium Result: Passed at 350 gallons.**

| Accumulated Volume Effluent | Influent Uranium (µg/L) | Effluent Uranium Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|
| 10 UV | 74 | <1 | 98.65% | Passed |
| 25 gallons | 97 | <1 | 98.97% | Passed |
| 50 gallons | 103 | <1 | 99.03% | Passed |
| 75 gallons | 104 | <1 | 99.04% | Passed |
| 90 gallons | 83 | <1 | 98.80% | Passed |
| 100 gallons | 91 | <1 | 98.90% | Passed |
| 150 gallons | 89 | 1 | 98.88% | Passed |
| 200 gallons | 90 | 2 | 98.89% | Passed |
| 250 gallons | 86 | 4 | 98.84% | Passed |
| 300 gallons | 123 | 4 | 99.19% | Passed |
| 350 gallons | 113 | 1 | 99.12% | Passed |

Uranium Detection Limit: 1 µg/L

**Data Analysis Table Gross Beta (Cesium) Result: Passed at 50 gallons.**

| Accumulated Volume Effluent | Influent Gross Beta (Cesium) (µCi/L) | Effluent Gross Beta (Cesium) Concentration (µCi/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|
| 10 UV | 201 | 1 | 99.50% | Passed |
| 25 gallons | 208 | 2 | 99.04% | Passed |
| 50 gallons | 201 | 10 | 95.02% | Passed |

Cesium Detection Limit: 1 µCi/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

BOROUX

# Mercury Reduction pH 8.5

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed Date: 04/18/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Standard 53 Mercury Reduction pH 8.5
Trade Designation/Model Number: BOROUX Foundation
Test Type: Qualification
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 04/18/2024
Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 Mercury Reduction at pH 8.5: Passed**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Qualification

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 200 gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std. 53 – Mercury Reduction Testing pH 8.5

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI 53 – 2022

**Pass/Fail Criteria:** (Mercury Emerging Compound Maximum Product Water Concentration): 2 µg/L

**Water Characteristics**

| Accumulated Volume Effluent | pH (8.25-8.75) | *Temperature (17.5-22.5 C) | Alkalinity (100-250) | Hardness (100-200) | Turbidity <1 NTU | TDS 200-500 mg/L | Polyphosphate as P <0.5 ppm | *Flow Rate (gpd) |
|---|---|---|---|---|---|---|---|---|
| 10 UV | 8.52 | 20.0 | 149 | 155 | 0.5 | 253 | 0.2 | 10 |
| 50% | 8.43 | 20.1 | 160 | 149 | 0.4 | 238 | 0.2 | 10 |
| 100% | 8.41 | 20.0 | 153 | 151 | 0.3 | 245 | 0.2 | 10 |
| 150% | 8.50 | 19.6 | 147 | 146 | 0.3 | 229 | 0.2 | 10 |
| 180% | 8.60 | 19.9 | 151 | 145 | 0.4 | 243 | 0.2 | 10 |
| 200% | 8.62 | 20.1 | 148 | 142 | 0.3 | 244 | 0.2 | 10 |
| 300% | 8.50 | 19.6 | 147 | 146 | 0.3 | 229 | 0.2 | 10 |
| 400% | 8.60 | 19.9 | 151 | 145 | 0.4 | 243 | 0.2 | 10 |
| 500% | 8.54 | 19.5 | 158 | 150 | 0.3 | 247 | 0.2 | 10 |
| 600% | 8.5 | 19.2 | 152 | 149 | 0.3 | 233 | 0.2 | 10 |
| 700% | 8.51 | 18.2 | 154 | 146 | 0.2 | 238 | 0.2 | 10 |
| 800% | 8.54 | 18.3 | 150 | 135 | 0.3 | 221 | 0.2 | 10 |
| 900% | 8.51 | 18.4 | 141 | 136 | 0.3 | 229 | 0.2 | 10 |
| 1000% | 8.45 | 18.4 | 140 | 145 | 0.2 | 234 | 0.2 | 10 |
| 1100% | 8.46 | 18.5 | 151 | 142 | 0.2 | 231 | 0.3 | 10 |
| 1200% | 8.5 | 18.4 | 149 | 141 | 0.2 | 230 | 0.2 | 10 |
| 1300% | 8.47 | 18.5 | 154 | 136 | 0.2 | 221 | 0.2 | 10 |
| 1400% | 8.42 | 18.2 | 147 | 156 | 0.2 | 230 | 0.2 | 10 |
| 1500% | 8.4 | 18.0 | 140 | 156 | 0.2 | 238 | 0.3 | 10 |
| 1600% | 8.41 | 18.2 | 142 | 153 | 0.3 | 236 | 0.3 | 10 |
| 1700% | 8.45 | 18.3 | 146 | 148 | 0.3 | 233 | 0.3 | 10 |
| **Average** | **8.49** | **19.0** | **149** | **146** | **0.3** | **235** | **0.2** | **10** |

***Note: Not Included in the ANAB ISO 17025 Scope of Certification.**

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Data Analysis Table**

| Sample Point | Accumulated Volume Effluent | Influent Mercury (µg/L) | Effluent Mercury Concentration (µg/L) | % Reduction | Passed/Failed |
|---|---|---|---|---|---|
| 10 UV | Start | 7.1 | <0.5 | 98.59% | Passed |
| 50% | 25 gallons | 6.6 | 0.6 | 90.91% | Passed |
| 100% | 50 gallons | 6.8 | 0.9 | 86.76% | Passed |
| 150% | 75 gallons | 5.4 | 0.9 | 83.33% | Passed |
| 180% | 90 gallons | 5.7 | 0.2 | 96.49% | Passed |
| 200% | 100 gallons | 5.9 | 0.2 | 96.61% | Passed |
| 300% | 150 gallons | 6.5 | <0.5 | 98.46% | Passed |
| 400% | 200 gallons | 6.0 | <0.5 | 98.33% | Passed |
| 500% | 250 gallons | 5.4 | <0.5 | 98.15% | Passed |
| 600% | 300 gallons | 5.8 | <0.5 | 98.28% | Passed |
| 700% | 350 gallons | 5.7 | 0.2 | 96.49% | Passed |
| 800% | 400 gallons | 6.2 | <0.5 | 98.39% | Passed |
| 900% | 450 gallons | 5.9 | 0.2 | 96.61% | Passed |
| 1000% | 500 gallons | 5.9 | 0.9 | 84.75% | Passed |
| 1100% | 550 gallons | 6.0 | 0.1 | 98.33% | Passed |
| 1200% | 600 gallons | 5.9 | 0.9 | 84.75% | Passed |
| 1300% | 650 gallons | 5.8 | 0.1 | 98.28% | Passed |
| 1400% | 700 gallons | 6.0 | 1.2 | 80.00% | Passed |
| 1500% | 750 gallons | 6.3 | 0.6 | 90.48% | Passed |
| 1600% | 800 gallons | 6.2 | 0.4 | 93.55% | Passed |
| 1700% | 900 gallons | 6.1 | 1.2 | 80.33% | Passed |

Mercury Detection Limit: 0.5 µg/L

# Test Report
## IAPMO R&T LAB (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
QC Manager


# PFAS Reduction

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed at 400 Gallons Date: 01/24/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Standard 53 PFAS Reduction
Trade Designation/Model Number: BOROUX Foundation
Test Type: R & D
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T Lab, NJ.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/24/2024
Corey Elise Young
QC Manager

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**NSF/ANSI Standard 53 PFAS Reduction: Passed at 400 Gallons**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** R & D

**Product:** Gravity Filter

**Flow Rate:** 10 gpd

**Filter Capacity:** 400 Gallons

**Cycle:** 15-60 min rest between loads

**Conditioning Procedure:** Discard first batch

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std 53 PFAS Reduction Testing

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI Std 53 – 2022

**Pass/Fail Criteria:** PFOA+PFOS Combined Maximum Product Water Concentration 0.02 µg/L; PFNA 0.006 µg/L; PFHxS 0.02 µg/L; PFHpA 0.02 µg/L. Total PFAS maximum effluent concentration: 0.02 µg/L

**Decision Rule:** Simple Acceptance based on the NSF/ANSI Std 53.

**Water Characteristics**

| Accumulated Volume Effluent | pH (7.5±0.5) | Temperature (20±3°C) | Turbidity (<1 NTU) | TOC (1.0-2.0 mg/L) | TDS (200-500) | Flow Rate |
|---|---|---|---|---|---|---|
| 10 UV | 7.37 | 20.0 | 0.4 | 1.3 | 241 | 10 |
| 100 gallons | 7.31 | 20.0 | 0.3 | 1.4 | 237 | 10 |
| 200 gallons | 7.35 | 19.8 | 0.3 | 1.3 | 244 | 10 |
| 300 gallons | 7.36 | 19.6 | 0.4 | 1.3 | 250 | 10 |
| 360 gallons | 7.42 | 19.4 | 0.3 | 1.2 | 255 | 10 |
| 400 gallons | 7.39 | 19.5 | 0.3 | 1.3 | 245 | 10 |

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**PFOA Data Summary Table**

| Accumulated Volume Effluent | Influent PFOA (µg/L) | Effluent PFOA Concentration (µg/L) |
|---|---|---|
| 10 UV | 0.51 | <0.01 |
| 100 gallons | 0.52 | 0.01 |
| 200 gallons | 0.49 | <0.01 |
| 300 gallons | 0.52 | <0.01 |
| 360 gallons | 0.50 | <0.01 |
| 400 gallons | 0.50 | 0.01 |

**PFOS Data Summary Table**

| Accumulated Volume Effluent | Influent PFOS (µg/L) | Effluent PFOS Concentration (µg/L) |
|---|---|---|
| 10 UV | 0.98 | <0.01 |
| 100 gallons | 1.10 | <0.01 |
| 200 gallons | 1.00 | 0.01 |
| 300 gallons | 1.10 | 0.01 |
| 360 gallons | 1.10 | <0.01 |
| 400 gallons | 1.10 | 0.01 |

**PFOA & PFOS Data Summary**

| Accumulated Volume Effluent | Influent Total PFOA + PFOS Concentration (µg/L) | Effluent Total PFOA + PFOS Concentration (µg/L) |
|---|---|---|
| 10 UV | 1.49 | <0.01 |
| 100 gallons | 1.62 | 0.01 |
| 200 gallons | 1.49 | 0.01 |
| 300 gallons | 1.62 | 0.01 |
| 360 gallons | 1.60 | <0.01 |
| 400 gallons | 1.60 | 0.02 |

**PFNA Data Summary Table**

| Accumulated Volume Effluent | Influent PFNA (µg/L) | Effluent PFNA Concentration (µg/L) |
|---|---|---|
| 10 UV | 0.05 | <0.001 |
| 100 gallons | 0.05 | 0.001 |
| 200 gallons | 0.05 | <0.001 |
| 300 gallons | 0.05 | <0.001 |
| 360 gallons | 0.05 | <0.001 |
| 400 gallons | 0.05 | <0.001 |

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**PFHxS Data Summary Table**

| Accumulated Volume Effluent | Influent PFHxS (µg/L) | Effluent PFHxS Concentration (µg/L) |
|---|---|---|
| 10 UV | 0.31 | <0.01 |
| 100 gallons | 0.29 | <0.01 |
| 200 gallons | 0.28 | <0.01 |
| 300 gallons | 0.30 | <0.01 |
| 360 gallons | 0.31 | <0.01 |
| 400 gallons | 0.29 | <0.01 |

**PFHpA Data Summary Table**

| Accumulated Volume Effluent | Influent PFHpA (µg/L) | Effluent PFHpA Concentration (µg/L) |
|---|---|---|
| 10 UV | 0.04 | <0.01 |
| 100 gallons | 0.04 | <0.01 |
| 200 gallons | 0.04 | <0.01 |
| 300 gallons | 0.04 | <0.01 |
| 360 gallons | 0.04 | <0.01 |
| 400 gallons | 0.04 | <0.01 |

**PFBS Data Summary Table**

| Accumulated Volume Effluent | Influent PFBS (µg/L) |
|---|---|
| 10 UV | 0.25 |
| 100 gallons | 0.27 |
| 200 gallons | 0.27 |
| 300 gallons | 0.28 |
| 360 gallons | 0.25 |
| 400 gallons | 0.28 |

**PFDA Data Summary Table Filter 1**

| Accumulated Volume Effluent | Influent PFDA (µg/L) |
|---|---|
| 10 UV | 0.01 |
| 100 gallons | 0.01 |
| 200 gallons | 0.01 |
| 300 gallons | 0.01 |
| 360 gallons | 0.01 |
| 400 gallons | 0.01 |

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Total PFAS Data Summary Table**

| Accumulated Volume Effluent | Influent PFAS (µg/L) | Effluent PFAS Concentration (µg/L) | Passing Criteria |
|---|---|---|---|
| 10 UV | 2.15 | <0.01 | Passed |
| 100 gallons | 2.28 | 0.011 | Passed |
| 200 gallons | 2.14 | 0.01 | Passed |
| 300 gallons | 2.30 | 0.01 | Passed |
| 360 gallons | 2.26 | <0.01 | Passed |
| 400 gallons | 2.27 | 0.02 | Passed |

**Filters Tested**

**Disclaimer**: The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

Report # 23-199-2-PFAS
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BOROUX

NSF/ANSI Std 401 Section 7, Group 1

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed at 200 gallons Date: 01/29/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Std 401 Section 7, Group 1
Trade Designation/Model Number: BOROUX Foundation
Test Type: Qualification
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/29/2024
Corey Elise Young
QC Manager

Report # 23-199-15-Group 1
Page 1 of 5

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Standard 401 Emerging Compounds Group 1 Reduction PT 200%: Passed at 200 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Gravity Filter

**Product:** R & D

**Flow Rate:** 10 gpd

**Filter Capacity:** 200 Gallons

**Conditioning Procedure:** Discard first batch

**Cycle:** 15-60 min rest between loads

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std 401 Section 7, Group 1– Emerging Compound Reduction Testing Group 1

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI Std 401 Section 7 – 2022

**Pass/Fail Criteria** (Emerging Compound Maximum Product Water Concentration):

**Atenolol** Passing criteria: 30 ng/L; **Carbamazepine** Passing criteria: 200 ng/L

**DEET** passing criteria: 200 ng/L; **Metolachlor** passing criteria: 200 ng/L

**Meprobamate** passing criteria: 60 ng/L; **Trimethoprim** passing criteria: 20 ng/L

**Linuron** passing criteria: 20 ng/L

**Decision Rule:** Pass/Fail based on simple acceptance of the analytical results above the NSF/ANSI Std limit.

**Water Characteristics**

| Accumulated Volume Effluent | pH (7.5±0.5) | Temperature (20±3°C) | TDS 200 to 500 mg/L | Turbidity (<1 NTU) | TOC (1-2 mg/L) | Flow Rate (gpd) |
|---|---|---|---|---|---|---|
| Start | 7.32 | 20.1 | 227 | 0.3 | 1.3 | 10 |
| 25 gallons | 7.36 | 20.0 | 238 | 0.2 | 1.3 | 10 |
| 50 gallons | 7.34 | 20.0 | 229 | 0.3 | 1.3 | 10 |
| 75 gallons | 7.4 | 20.1 | 256 | 0.3 | 1.3 | 10 |
| 90 gallons | 7.38 | 19.9 | 253 | 0.2 | 1.2 | 10 |
| 100 gallons | 7.41 | 20.0 | 256 | 0.3 | 1.2 | 10 |
| 150 gallons | 7.50 | 19.6 | 245 | 0.4 | 1.3 | 10 |
| 200 gallons | 7.46 | 19.5 | 237 | 0.4 | 1.3 | 10 |

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Trimethoprim Data Summary Table**

| Accumulated Volume Effluent | Influent Trimethoprim (ng/L) | Effluent Trimethoprim (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 143 | 1 | Passed |
| 25 gallons | 138 | 1 | Passed |
| 50 gallons | 142 | 3 | Passed |
| 75 gallons | 130 | 10 | Passed |
| 90 gallons | 149 | 11 | Passed |
| 100 gallons | 161 | 15 | Passed |
| 150 gallons | 155 | 9 | Passed |
| 200 gallons | 139 | <1 | Passed |

Trimethoprim Reporting Limit: 1 ng/L

**Atenolol Data Summary Table**

| Accumulated Volume Effluent | Influent Atenolol (ng/L) | Effluent Atenolol (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 191 | 3 | Passed |
| 25 gallons | 181 | 6 | Passed |
| 50 gallons | 201 | 4 | Passed |
| 75 gallons | 201 | 9 | Passed |
| 90 gallons | 216 | 14 | Passed |
| 100 gallons | 223 | 26 | Passed |
| 150 gallons | 260 | 20 | Passed |
| 200 gallons | 192 | 10 | Passed |

Atenolol Detecting Limit: 1 ng/L

**Meprobamate Data Summary Table**

| Accumulated Volume Effluent | Influent Meprobamate (ng/L) | Effluent Meprobamate (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 374 | 2 | Passed |
| 25 gallons | 422 | 1 | Passed |
| 50 gallons | 413 | 9 | Passed |
| 75 gallons | 421 | 29 | Passed |
| 90 gallons | 366 | 21 | Passed |
| 100 gallons | 393 | 31 | Passed |
| 150 gallons | 379 | 10 | Passed |
| 200 gallons | 426 | 9 | Passed |

Meprobamate Reporting Limit: 1 ng/L

**Carbamazepine Data Summary Table**

| Accumulated Volume Effluent | Influent (ng/L) | Effluent Concentration (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 1469 | <10 | Passed |
| 25 gallons | 1434 | <10 | Passed |
| 50 gallons | 1457 | 18 | Passed |
| 75 gallons | 1469 | 28 | Passed |
| 90 gallons | 1425 | 78 | Passed |
| 100 gallons | 1354 | 65 | Passed |
| 150 gallons | 1430 | 57 | Passed |
| 200 gallons | 1484 | 52 | Passed |

Carbamazepine Reporting Limit: 10 ng/L

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**DEET Data Summary Table**

| Accumulated Volume Effluent | Influent DEET (ng/L) | Effluent DEET (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 1511 | 3 | Passed |
| 25 gallons | 1383 | 4 | Passed |
| 50 gallons | 1359 | 12 | Passed |
| 75 gallons | 1328 | 36 | Passed |
| 90 gallons | 1393 | 68 | Passed |
| 100 gallons | 1418 | 68 | Passed |
| 150 gallons | 1486 | 71 | Passed |
| 200 gallons | 1439 | 52 | Passed |

DEET Reporting Limit: 10 ng/L

**Linuron Data Summary Table**

| Accumulated Volume Effluent | Influent Linuron (ng/L) | Effluent Linuron (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 157 | <1 | Passed |
| 25 gallons | 163 | <1 | Passed |
| 50 gallons | 126 | 2 | Passed |
| 75 gallons | 140 | <1 | Passed |
| 90 gallons | 155 | <1 | Passed |
| 100 gallons | 146 | <1 | Passed |
| 150 gallons | 158 | <1 | Passed |
| 200 gallons | 130 | <1 | Passed |

Linuron Reporting Limit: 1 ng/L

**Metolachlor Data Summary Table**

| Accumulated Volume Effluent | Influent Metolachlor(ng/L) | Effluent Metolachlor (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 1388 | <10 | Passed |
| 25 gallons | 1501 | <10 | Passed |
| 50 gallons | 1438 | <10 | Passed |
| 75 gallons | 1295 | <10 | Passed |
| 90 gallons | 1385 | <10 | Passed |
| 100 gallons | 1351 | <10 | Passed |
| 150 gallons | 1571 | <10 | Passed |
| 200 gallons | 1326 | <10 | Passed |

Metolachlor Reporting Limit: 10 ng/L

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
QC Manager

BOROUX

NSF/ANSI Std 401 Section 7, Group 2

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed at 150 gallons Date: 01/29/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Std 401 Section 7, Group 2
Trade Designation/Model Number: BOROUX Foundation
Test Type: R & D
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/29/2024
Corey Elise Young
QC Manager

Report # 23-199-16-Group 2
Page 1 of 4

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Standard 401 Emerging Compounds Group 2 Reduction: Passed at 150 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Gravity Filter

**Product:** R & D

**Flow Rate:** 10 gpd

**Filter Capacity:** 150 Gallons

**Conditioning Procedure:** Discard first batch

**Cycle:** 15-60 min rest between loads

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std 401 Section 7, Group 2– Emerging Compound Reduction Testing Group 2

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI Std 401 Section 7 – 2022

**Pass/Fail Criteria** (Emerging Compound Maximum Product Water Concentration):

TCEP passing criteria: 700 ng/L

TCPP passing criteria: 700 ng/L

**Decision Rule:** Pass/Fail based on simple acceptance of the analytical results above the NSF/ANSI Std limit.

**Water Characteristics**

| Accumulated Volume Effluent | pH (7.5±0.5) | Temperature (20±3°C) | TDS (200 to 500 mg/L) | Turbidity (<1 NTU) | TOC (1-2 mg/L) | Flow Rate |
|---|---|---|---|---|---|---|
| Start | 7.49 | 20 | 260 | 0.4 | 1.2 | 10 |
| 25 gallons | 7.43 | 19.9 | 241 | 0.4 | 1.2 | 10 |
| 50 gallons | 7.41 | 20.1 | 250 | 0.3 | 1.2 | 10 |
| 75 gallons | 7.45 | 20.0 | 245 | 0.3 | 1.3 | 10 |
| 90 gallons | 7.43 | 20.0 | 243 | 0.3 | 1.2 | 10 |
| 100 gallons | 7.49 | 20.1 | 256 | 0.4 | 1.3 | 10 |
| 150 gallons | 7.51 | 19.5 | 243 | 0.3 | 1.3 | 10 |

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**TCEP Data Summary Table**

| Accumulated Volume Effluent | Influent TCEP (ng/L) | Effluent TCEP Concentration (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 5177 | 12 | Passed |
| 25 gallons | 5271 | <10 | Passed |
| 50 gallons | 5226 | 50 | Passed |
| 75 gallons | 5020 | 96 | Passed |
| 90 gallons | 4949 | 161 | Passed |
| 100 gallons | 5140 | 142 | Passed |
| 150 gallons | 4670 | 578 | Passed |

TCEP Reporting Limit: 10 ng/L

**TCPP Data Summary Table**

| Accumulated Volume Effluent | Influent TCPP (ng/L) | Effluent TCPP Concentration (ng/L) | Passed/Failed |
|---|---|---|---|
| Start | 5176 | 63 | Passed |
| 25 gallons | 5253 | 48 | Passed |
| 50 gallons | 4910 | 58 | Passed |
| 75 gallons | 4852 | 127 | Passed |
| 90 gallons | 4602 | 178 | Passed |
| 100 gallons | 5196 | 194 | Passed |
| 150 gallons | 4410 | 129 | Passed |

TCEP Reporting Limit: 10 ng/L

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

BOROUX

NSF/ANSI Std 401 Section 7, Group 3

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

Send To:
James Enterprise Inc
1981 Aspen Circle
Pueblo, CO 81006

Result: Passed at 200 gallons Date: 01/29/2024

Customer Name: James Enterprise Inc
Tested To: NSF/ANSI Std 401 Section 7, Group 3
Trade Designation/Model Number: BOROUX Foundation
Test Type: R & D
Project Manager: Corey Elise Young

Thank you for having your product tested by IAPMO R & T NJ Lab.
Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Corey Elise Young Date: 01/29/2024
Corey Elise Young
QC Manager

Report # 23-199-17-Group 3
Page 1 of 5

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Standard 401 Emerging Compounds Group 3 Reduction: Passed at 200 gallons.**

**Manufacturer's Name:** James Enterprise Inc

**Sample Type:** Gravity Filter

**Product:** R & D

**Flow Rate:** 10 gpd

**Filter Capacity:** 200 Gallons

**Conditioning Procedure:** Discard first batch

**Cycle:** 15-60 min rest between loads

**Physical Description of Sample:** Gravity Filter

**Test Description:** NSF/ANSI Std 401 Section 7, Group 3– Emerging Compound Reduction Testing Group 3

**Trade Designation/Model Number:** BOROUX Foundation

**Unit Volume:** 100 L

**Performance Standard:** NSF/ANSI Std 401 Section 7 – 2022

**Pass/Fail Criteria** (Emerging Compound Maximum Product Water Concentration):

**Phenytoin** passing criteria: 30 ng/L **Ibuprofen** passing criteria: 60 ng/L **Naproxen** passing criteria: 20 ng/L

**Estrone** passing criteria: 20 ng/L **Bisphenol A** passing criteria: 300 ng/L **Nonylphenol** passing criteria: 200 ng/L

**Decision Rule:** Pass/Fail based on simple acceptance of the analytical results above the NSF/ANSI Std limit.

**Water Characteristics**

| Sample Point | pH (7.5±0.5) | Temperature (20±3°C) | TDS (200 to 500 mg/L) | Turbidity (<1 NTU) | TOC (1-2 mg/L) | Flow Rate |
|---|---|---|---|---|---|---|
| Start | 7.41 | 19.9 | 248 | 0.5 | 1.4 | 10 |
| 50% | 7.38 | 20.0 | 241 | 0.5 | 1.4 | 10 |
| 100% | 7.35 | 20.1 | 239 | 0.4 | 1.3 | 10 |
| 150% | 7.40 | 20.0 | 250 | 0.4 | 1.3 | 10 |
| 180% | 7.41 | 19.9 | 246 | 0.4 | 1.2 | 10 |
| 200% | 7.39 | 20.0 | 247 | 0.3 | 1.3 | 10 |
| 300% | 7.41 | 19.6 | 253 | 0.5 | 1.3 | 10 |
| 400% | 7.52 | 19.4 | 251 | 0.5 | 1.3 | 10 |

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Phenytoin Data Summary Table**

| Sample Point | Accumulated Volume Effluent | Influent Phenytoin (ng/L) | Effluent Phenytoin (ng/L) | Passed/Failed |
|---|---|---|---|---|
| 10 UV | Start | 201 | 1 | Passed |
| 50% | 25 gallons | 212 | 5 | Passed |
| 100% | 50 gallons | 184 | 1 | Passed |
| 150% | 75 gallons | 202 | 6 | Passed |
| 180% | 90 gallons | 205 | 5 | Passed |
| 200% | 100 gallons | 208 | 5 | Passed |
| 300% | 150 gallons | 211 | 3 | Passed |
| 400% | 200 gallons | 192 | <1 | Passed |

Phenytoin Reporting Limit: 1 ng/L

**Naproxen Data Summary Table**

| Sample Point | Accumulated Volume Effluent | Influent Naproxen(ng/L) | Effluent Naproxen (ng/L) | Passed/Failed |
|---|---|---|---|---|
| 10 UV | Start | 148 | 3 | Passed |
| 50% | 25 gallons | 144 | 4 | Passed |
| 100% | 50 gallons | 130 | 2 | Passed |
| 150% | 75 gallons | 134 | 4 | Passed |
| 180% | 90 gallons | 162 | 1 | Passed |
| 200% | 100 gallons | 135 | 5 | Passed |
| 300% | 150 gallons | 145 | 1 | Passed |
| 400% | 200 gallons | 136 | <1 | Passed |

Naproxen Reporting Limit: 1 ng/L

**Estrone Data Summary Table**

| Sample Point | Accumulated Volume Effluent | Influent Estrone (ng/L) | Effluent Estrone (ng/L) | Passed/Failed |
|---|---|---|---|---|
| 10 UV | Start | 131 | 8 | Passed |
| 50% | 25 gallons | 138 | 2 | Passed |
| 100% | 50 gallons | 155 | 2 | Passed |
| 150% | 75 gallons | 161 | 6 | Passed |
| 180% | 90 gallons | 133 | 3 | Passed |
| 200% | 100 gallons | 130 | 2 | Passed |
| 300% | 150 gallons | 141 | 6 | Passed |
| 400% | 200 gallons | 166 | <1 | Passed |

Estrone Reporting Limit: 1 ng/L

**Bisphenol A Filter #1 Data Summary Table**

| Sample Point | Accumulated Volume Effluent | Influent Bisphenol A (ng/L) | Effluent Bisphenol A (ng/L) | Passed/Failed |
|---|---|---|---|---|
| 10 UV | Start | 2112 | <10 | Passed |
| 50% | 25 gallons | 2171 | <10 | Passed |
| 100% | 50 gallons | 2137 | 32 | Passed |
| 150% | 75 gallons | 2157 | 29 | Passed |
| 180% | 90 gallons | 2262 | 54 | Passed |
| 200% | 100 gallons | 1917 | 115 | Passed |
| 300% | 150 gallons | 2184 | 219 | Passed |
| 400% | 200 gallons | 2118 | 134 | Passed |

Bisphenol A Reporting Limit: 10 ng/L

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Ibuprofen Data Summary Table**

| Sample Point | Accumulated Volume Effluent | Influent Ibuprofen (ng/L) | Effluent Ibuprofen (ng/L) | Passed/Failed |
|---|---|---|---|---|
| 10 UV | Start | 410 | <10 | Passed |
| 50% | 25 gallons | 398 | <10 | Passed |
| 100% | 50 gallons | 424 | <10 | Passed |
| 150% | 75 gallons | 413 | 13 | Passed |
| 180% | 90 gallons | 424 | 34 | Passed |
| 200% | 100 gallons | 460 | 26 | Passed |
| 300% | 150 gallons | 444 | 20 | Passed |
| 400% | 200 gallons | 407 | 53 | Passed |

Ibuprofen Reporting Limit: 10 ng/L

**Nonylphenol Data Summary Table**

| Sample Point | Accumulated Volume Effluent | Influent Nonylphenol ng/L) | Effluent Nonylphenol (ng/L) | Passed/Failed |
|---|---|---|---|---|
| 10 UV | Start | 1433 | <10 | Passed |
| 50% | 25 gallons | 1442 | <10 | Passed |
| 100% | 50 gallons | 1371 | 11 | Passed |
| 150% | 75 gallons | 1367 | <10 | Passed |
| 180% | 90 gallons | 1372 | 11 | Passed |
| 200% | 100 gallons | 1447 | 24 | Passed |
| 300% | 150 gallons | 1414 | 29 | Passed |
| 400% | 200 gallons | 1342 | 88 | Passed |

Nonylphenol Reporting Limit: 10 ng/L

# Test Report
## IAPMO R&T LAB, (NJ)

1041 Glassboro Road Suite D-1, Williamstown NJ 08094
IAPMO ID# 000102 ANAB Cert # AT 3220

**Filter System Tested**

**Disclaimer:** The test results are only related to the filter cartridges tested, in the condition received at the laboratory.

Corey Elise Young
Corey Elise Young
QC Manager

# Contact us

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