



ORIGINAL DEVELOPERS OF MANGANESE GREENSAND AND GREENSANDPLUS

P.O. BOX 650  
CLAYTON, NEW JERSEY 08312-0650  
856-881-2345  
FAX 856-881-6859  
E-mail: [sales@inversand.com](mailto:sales@inversand.com)

## PROCEDURE FOR COLLECTING A REPRESENTATIVE FILTER MEDIA CORE SAMPLE

To properly sample filter media, the media must be thoroughly backwashed. After backwashing the media, drain the filter completely and remove the manway cover.

Using a 1 ¼" or 1 ½" diameter by 4' to 6' long (depending on the bed depth and amount of freeboard) piece of thin wall tubing, insert the tube approximately six inches into the media with a twisting motion. Empty the media into a clean bucket by tapping the side of the tube. Repeat this procedure, being sure to sample the same hole, at six-inch increments until the entire media bed has been sampled and the gravel or gravel retaining screen, if such has been installed in the unit, has been intersected.

The composited sample should then be thoroughly mixed to obtain a representative sample and no less than one quart of the material forwarded to us for laboratory evaluation. If one core sample does not yield a full quart, a second core sample should be obtained and mixed together with the first so that a full quart is available for analysis.

**CAUTION:** *Be sure to sample only the filtering media. DO NOT force the sample tube into the sub-fill or the underdrain.*

Place a minimum of one quart of the sampled media into a waterproof container

Mud balls or foreign material on or in the media should be included in the core sample. A separate sample of any foreign material or mud balls should be sent along with the core samples.

Note the depth of the filter media (by inserting a ruler into the sample hole) and the general condition of the bed surface. Note observations such as the media level, media mounding, and fissures (channels) on the media surface.

**NOTE:** *Prior to sending in a sample to be analyzed, please contact our Sales Department at 856-881-2345 and request a quotation for this service. Our Sales Department will request a Purchase Order and will provide you with an Inversand Sales Order number for tracking purposes. We will also provide a form requesting additional information on your system that would be very helpful in generating a report on the condition of your media.*

**Include with sample:** Person, Company, Address, Phone Number  
Type of Media sample (Greensand, Anthracite, etc.)  
Date sampled  
Reason for sample (low capacity, poor quality, etc.)  
Purchase Order Number

**Forward sample to:** INVERSAND COMPANY  
Attn: Sales Department/Lab  
P.O. Box 650  
Clayton, NJ 08312

# I nversand Company

SINCE 1925

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## INSTRUCTIONS FOR INSPECTION OF THE UNITS AND SAMPLING OF THE FILTER MEDIA

### 1. Company Information/Bill to

Name: \_\_\_\_\_  
Street: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip code: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

\*\*\*PLEASE ENTER YOUR PURCHASE ORDER NUMBER BELOW. SAMPLES WILL NOT BE ANALYSED UNTIL AFTER A PO NUMBER IS PROVIDED.\*\*\*

Purchase Order #: \_\_\_\_\_

### Media Type

\_\_\_\_ Manganese Greensand      \_\_\_\_ GreensandPlus  
\_\_\_\_ Filter Sand                      \_\_\_\_ Other \_\_\_\_\_

### 2. General

- Backwash, drain, open unit, and sample per attached instructions.
- Is the bed completely level (no mounding around edges)? Yes No
- Bed depth \_\_\_\_\_ inches; Original Bed Depth \_\_\_\_\_ inches
- Examine the surface of bed.
- Is it dirty? Yes No
- Are mudballs present? Yes No
- Are greensand fines visible on top dual media bed? Yes No Not applicable (sand/anthracite filter media bed)
- No. of units \_\_\_\_\_ Diameter of filter(s) \_\_\_\_\_
- Age of filter media \_\_\_\_\_ years

Comments (describe conditions found):  
\_\_\_\_\_

### 3. Operating Conditions

- Plant flow rate \_\_\_\_\_ gpm \_\_\_\_\_ gpd
- Run length \_\_\_\_\_ hrs. \_\_\_\_\_ gals. (between backwashes)
- Pressure differential at beginning of run \_\_\_\_\_ psi
- Pressure differential at end of run \_\_\_\_\_ psi
- Raw water, iron \_\_\_\_\_ mg/L; Manganese \_\_\_\_\_ mg/L
- Is process CR or IR?
- Is chlorine fed? Yes No lb/day \_\_\_\_\_
- Pre-feed, post-feed, or both? Pre – Post – both
- Is KMnO<sub>4</sub> fed? Yes No lb/day \_\_\_\_\_
- Pre-pH correction? Yes No
- If feeding both Cl<sub>2</sub> and KMnO<sub>4</sub> How far is Cl<sub>2</sub> fed upstream of KMnO<sub>4</sub> injection point? \_\_\_\_\_ ft.
- Any iron or manganese breakthrough at end of run? Yes No
- Is filter effluent clear at the end of run? Yes No
- Backwash rate \_\_\_\_\_ gpm Time \_\_\_\_\_ minutes
- Air wash frequency \_\_\_\_\_

**LAB ANALYTICAL FEE SCHEDULE**

**Media Samples**

Updated January 2023

**Cation Resin** **\$ 500.00**  
Including: Vol. capacity, moisture, bead integrity, metals, percentage regenerated & picture

**Anion Resin**  
Strong base **\$ 765.00**  
Including: Including: Vol. capacity, moisture, bead integrity, metals, percentage  
Regenerated, TOC & picture  
Weak base **\$ 590.00**

**Mixed Bed Resin** **\$1,265.00**

**Filter Sand Sieve Analysis** **\$ 100.00**

**Greensand / Greensand Plus** **\$ 225.00**

Greensand and Greensand Plus analysis includes:  
Cleanliness of the media  
Grain hardness determined.  
Effective size and uniformity coefficient.  
Manganese oxide coating.

**Capacity Test** **\$1,233.00**

**Ship Samples To:**

Inversand Company  
Attn: Laboratory  
226 N. Atlantic Ave.  
Clayton, NJ 08312

**Direct Questions To:**

Raymond Jones  
Technical Manager  
Inversand Company  
Phone: (856) 881-2345 ext. 241