



THE REPUBLIC OF UGANDA

## MITYANA DISTRICT LOCAL GOVERNMENT

Date 15 / 01 / 2015

The Country Coordinator  
Friendly Water For the World  
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[www.friendlywater.net](http://www.friendlywater.net)

Thru' The District Health Officer  
Mityana District Local Government

Thru' The District Water Officer  
Mityana District Local Government

*Received  
Kwambale Robert  
20th Jan 2015*

Dear Sir/Madam,

### RE: WATER QUALITY SURVEILLANCE AND TESTING REPORT

This is to forward to you the above mentioned report about the exercise which was carried out on the water sources below particularly providing a comparison between raw water and filtered water.

Please find the attached details of the whole analysis and interpretation of the findings.

Yours faithfully,

Bwambale Robert  
Health Inspector – Busujju HSD/Focal Person Water Quality Surveillance and testing

TESTING DATE: 13/01/2015  
 LABORATORY RESULTS FOR WATER SAMPLES COLLECTED FROM DIFFERENT WATER SOURCES IN  
 MITYANA DISTRICT

| S/N | Sample Location Details   | TESTED PARAMETERS |              |                |                 |                |                 |                 |                           |                |
|-----|---------------------------|-------------------|--------------|----------------|-----------------|----------------|-----------------|-----------------|---------------------------|----------------|
|     |                           | Coliforms         | E-coli (CFU) | PH             | Turbidity (NTU) | Ammonia (mg/l) | Colour (mg/lpt) | Nitrates (mg/l) | Conductivity (micro CNNS) | Iron           |
|     | <b>NATIONAL STANDARDS</b> | <b>0</b>          | <b>0</b>     | <b>6.5-8.5</b> | <b>&lt;5</b>    | <b>&lt;0.1</b> | <b>&lt;15</b>   | <b>&lt;50</b>   | <b>&lt;1000</b>           | <b>&lt;0.3</b> |
| 1   | R(LUB <sub>A</sub> )      | 25                | 03           | 8.90           | 18              | 0.02           | 175             | 0.238           | 298                       | 0.14           |
| 2   | F(LUB <sub>A</sub> )      | 03                | 0            | 10.60          | 0               | 0.86           | 15              | 1.82            | 278                       | 0.08           |
| 3   | R(LUB <sub>B</sub> )      | 12                | 0            | 8.20           | 12              | 0.04           | 115             | 0.472           | 277                       | 0.17           |
| 4   | F(LUB <sub>B</sub> )      | 01                | 0            | 8.34           | 6               | 0.26           | 50              | 0.375           | 285                       | 0.17           |
| 5   | R(D)                      | 02                | 0            | 8.65           | 0               | 0.15           | 5               | 0.530           | 113.5                     | 0.17           |
| 6   | F(D)                      | 0                 | 0            | 7.41           | 0               | 0.13           | 5               | 0.213           | 146.2                     | 0.14           |
| 7   | BH                        | 04                | 0            | 6.95           | 4               | 2.40           | 15              | 0.251           | 10969                     | 0.23           |

**KEY**

|                      |   |
|----------------------|---|
| R(LUB <sub>A</sub> ) | Raw Water Lubbaja A                                 |
| F(LUB <sub>A</sub> ) | Bio-sand Filtered Water Lubbaja A                   |
| R(LUB <sub>B</sub> ) | Raw Water Lubbaja B                                 |
| F(LUB <sub>B</sub> ) | Bio-sand Filtered Water Lubbaja B                   |
| R(D)                 | Raw water David Peter (Urban Setting)               |
| F(D)                 | Bio-sand Filtered water David Peter (Urban Setting) |
| BH                   | Borehole  |
| CFU                  | Coliform forming unit                               |
| NTU                  | Nethrometric turbidity unit                         |

From the analysis table, it's noted that there are chemical and physical changes that take place in water after filtering through the Biosand filters.

1. Raw water from the lake has high amounts of coliforms (bacteria); 25. This is reduced to 3 after filtering using the Biosand water filter.
2. Turbidity and color are also reduced after filtering the water through the Biosand filter. This efficiency in turbidity reduction is due to the suspended debris in the filter, the color is trapped by sand thus clean water after filtering
3. The filtered water also has a higher mineral content than the raw water.