## **University of Asia Pacific**

Environmental Engineering Laboratory Department of Civil Engineering Monthly water quality parameter report

Date: September 26, 2018

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| SL<br>No | Water Quality Parameters                 | Unit       | Concentration |            | Bangladesh Standard for<br>Drinking Water (ECR, 1997) | Remarks |
|----------|--|------------|---------------|------------|---|---------|
|          |  |            | Civil Filter  | CafeFilter |   |         |
| 1        | pH                                       |            | 7.18          | 7.23       | 6.5-8.5   | OK      |
| 2        | Color                                    | Pt-Co      | 2             | 4          | 15  | OK      |
| 3        | Turbidity                                | JTU        | 0.5           | 0.6        | 10  | OK      |
| 4        | Alkalinity (as CaCO <sub>3</sub> )       | mg/L       | 120           | 128        |   |         |
| 5        | Iron                                     | mg/L       | 0.3           | 0.3        | 0.3-1.0   | OK      |
| 6        | Electrical Conductivity (EC)             | μS/cm      | 523           | 41.8       |   |         |
| 7        | Dissolve Oxygen (DO)                     | mg/L       | 7.31          | 7.26       | 6   | OK      |
| 8        | Total Hardness (as CaCO <sub>3</sub> )   | mg/L       | 90            | 95         | 200-500   | OK      |
| 9        | Chloride (Cl <sup>-</sup> )              | mg/L       | 112           | 130        | 150-600   | OK      |
| 10       | Chemical Oxygen Demand (COD)             | mg/L       | 0             | 0          | 4   | OK      |
| 11       | Total Dissolved Solids                   | mg/L       | 150           | 141        | 1000  | OK      |
| 12       | Suspended Solids                         | mg/L       | 0.0           | 0.0        | 10  | OK      |
| 13       | Ammonia Nitrogen (NH <sub>3</sub> -N)    | mg/L       | 0.03          | 0.04       | 0.5   | OK      |
| 14       | Nitrite Nitrogen (NO <sub>2</sub> -N)    | mg/L       | 0.009         | 0.007      | <1.0  | OK      |
| 15       | Nitrate Nitrogen (NO <sub>3</sub> -N)    | mg/L       | 1             | 0.8        | 10  | OK      |
| 16       | Sulfate (SO <sub>4</sub> <sup>2-</sup> ) | mg/L       | 8             | 0          | 400   | OK      |
| 17       | Phosphate (PO <sub>4</sub> )             | mg/L       | 0.0           | 0.0        | 6   | OK      |
| 18       | Free Chlorine                            | mg/L       | 0.0           | 0.0        | 0.2   | OK      |
| 19       | Temperature                              | °C         | 25.3          | 25.3       | 20-30   | OK      |
| 20       | Fecal Coliform (E. Coli)                 | CFU/100 mL | 0.0           | 0.0        | 0   | OK      |

Samples Analyzed By: Md. Shahadat Hossain, Technician, Environmental Engineering and Chemistry Laboratory