



Operation Blessing International Tests Water Quality in Haiti with the CBT

OPERATION | BLESSING INTERNATIONAL

Operation Blessing International is a non-profit, humanitarian organization headquartered in the United States. One of the largest charities in America, Operation Blessing provides strategic relief in 23 countries around the world on a daily basis.

<http://www.ob.org/>



OBI local staff collecting a water sample from Lake Azuei, Haiti.

About the CBT



The Aquagenx Compartment Bag Test (CBT) is a portable, simple water quality test kit that lets anyone, anywhere determine if drinking water contains *E. coli* bacteria and poses a health risk.

Challenge

Operation Blessing International (OBI) needed to test for *E. coli* bacteria in a water source they intended to desalinate and purify for local communities and a school with no source of reliable sanitation in the villages of Medan Belize and Kanez, Haiti. Water samples were obtained from a remote location at Lake Azuei, but OBI required quicker test results than a local water quality laboratory could provide. Although OBI frequently used MUG tests to identify the presence or absence of coliforms in water samples, this project needed a quantitative test specifically for *E. coli* bacteria.

Solution

OBI turned to the Aquagenx Compartment Bag Test (CBT) as the solution to their testing challenges in Haiti. They retrieved the water sample from Lake Azuei and took it to their office. On the same day, they performed testing using the CBT. Test results were obtained in 24 hours, and there was no need to send the sample to a laboratory and be added to a waiting list for test results.

Test Results

Test results revealed a substantial concentration of *E. coli* bacteria. The CBT showed a Most Probable Number (MPN) of 48.3 *E. coli* in the 100 mL sample, which rated the sample as High Risk/Unsafe for drinking. Because this was the first time they used a quantitative test, the results allowed OBI to determine the lakeshore water source had a much higher level of contamination than water from a local well, and they should use the cleaner well water for their desalination/purification project. Test results also allowed OBI to better understand the level of contamination resulting from behaviors of local communities that rely on the sampled water source for many uses. Now OBI can better educate the communities on the risks of poor sanitation and hygiene and their impact on water.

Benefits the CBT Provided

“Being able to perform our own reliable quantitative testing saved our organization time and money,” says Ted Barlow, National Director, Operation Blessing International Haiti. “We will continue to use the CBT because we routinely test water sources for the presence of *E. coli*, and we now prefer to have a clear, quantitative understanding of the magnitude of fecal contamination.”