Table S1. Laboratory analytical procedures and Mexican technical standards, describing analytical methodologies and quality controls for the analytical determination of arsenic, fluoride, nitrate, pH and temperature.

Parameter	Analytical procedure, Mexican Standard Reference Method	Method
Sampling	Water Sampling NOM-014-SSA1-1993	Take sample in a clean 2 L glass (or plastic) container. Keep sample refrigerated in a dark place (4° – 10 °C). Analyze within 48 hours. Acidified samples can keep refriferated up to 14 days.
Arsenic	Water analysis – measurement of metals in natural waters, drinking, and wastewaters. NMX-AA-051-SCFI-2016	Atomic Absorption (AA) with graphite furnace. Calibrate with standard solutions. Determine at least three readings of blank, a standard solution or a sample of known concentration. Keep control records. Use quality grade chemical reagents
Fluoride	Waters analysis - determination of fluoride in natural, wastewaters and wastewaters treated NMX-AA-077-SCFI-2001	Spectrophotometric or selective F Ion. Daily calibration with reference standards. Take reading after meter/electrode stabilizes (3 min). Use quality grade chemical reagents.
Nitrate- N NO_3-N	Water Analysis – Determination of nitrate in natural waters NMX-AA-079-SCFI-2001 Filtered samples need to be analyzed right away. Otherwise, preserve with sulfuric acid and maintain cool at 4°C for a maximum of 14 days.	Colorimetric method of cadmium – reduction (nitrate to nitrite) using colorimeter or spectrophotometer. Calibrate with standards, blanks, and solutions of known concentrations. Keep control records. Use quality grade chemical reagents
pH	Water analysis -measurement of pH in natural waters, and wastewaters. NMX-AA-008-SCFI-2016	pH meter and buffer solutions for its calibration. Take reading preferably on site, or as soon as possible as pH value changes with time. Calibrate daily with buffer solutions (pH 4, pH 7 and pH 10)
Temperature (°C)	Water analysis - determination of temperature in natural waters and wastewaters. NMX-AA-007-SCFI-2013	Thermometer (glass or a sensor) with a minimum of 0.5 °C resolution. Immerse the sensor in water, mix gently and take the reading once value stabilizes. Measure *in situ*.