

MICROBIAL TOOLS THAT WORK FOR YOU

MICROBIAL ANALYSIS

- Industry water quality and usability is directly impacted by its **microbial composition and has profound impacts on well production**, quality and longevity.
- Remote's Microbial Assesment process utilizes robust microbial analytic tools designed to be incorporated with other water and production variables to **create comprehensive, reliable and pragmatic solutions**.

- Our microbial analytic systems are rooted in a **cross-functional approach** incorporating various traditional and contemporary techniques.
- We can combine culture-based "bottle-turn" techniques with enzyme-linked fluorometer analysis to provide **fundamental microbial population and metabolic analysis**.
- A more comprehensive 16S metagenomic analysis affords **forensic-level identification of each bacteria** and relative abundance within the ecosystem.
- Cumulatively, Remote's approach facilitates water quality optimization in three critical ways. First, basic water-related **bacterial quantity and composition is important to well health** and a leading indicator of potential treatment needs. Second, we can **enumerate bacterial populations in real-time** thus allowing improved biocide selection and dosing optimized for well conditions and cost. Finally, **forensic-level microbial analysis can identify specific deleterious bacterially-related issues** within a well (or group of wells) and subsequent targeted remediation solutions. Moreover, as microbial metabolites have profound health and safety impacts, proper and effective bacterial control in water is a critical component in Remote's commitment to safely provide complete water solutions.



METHODS

ATP

- Rapid 5 min testing for onsite testing
- Relative enumeration of bacteria levels based on luminase reaction with ATP

CULTURE BASED

- Serial Dilution Bottles (SRBs, APBs, IRBs)
- Industry standard but not actually effective (grow < 1% of bacteria present in any given sample)

MYCOMETER

- Rapid 15 min test for onsite testing.
- Microbial populations presented as Bactiquant Value (BQV)
- Readings generated by fluorometer analysis of resultant fluorescence from microbial-specific enzyme reaction.
- BQV values converted to CFU/mL.

DNA BASED TOOLS (16S and Metagenomics)

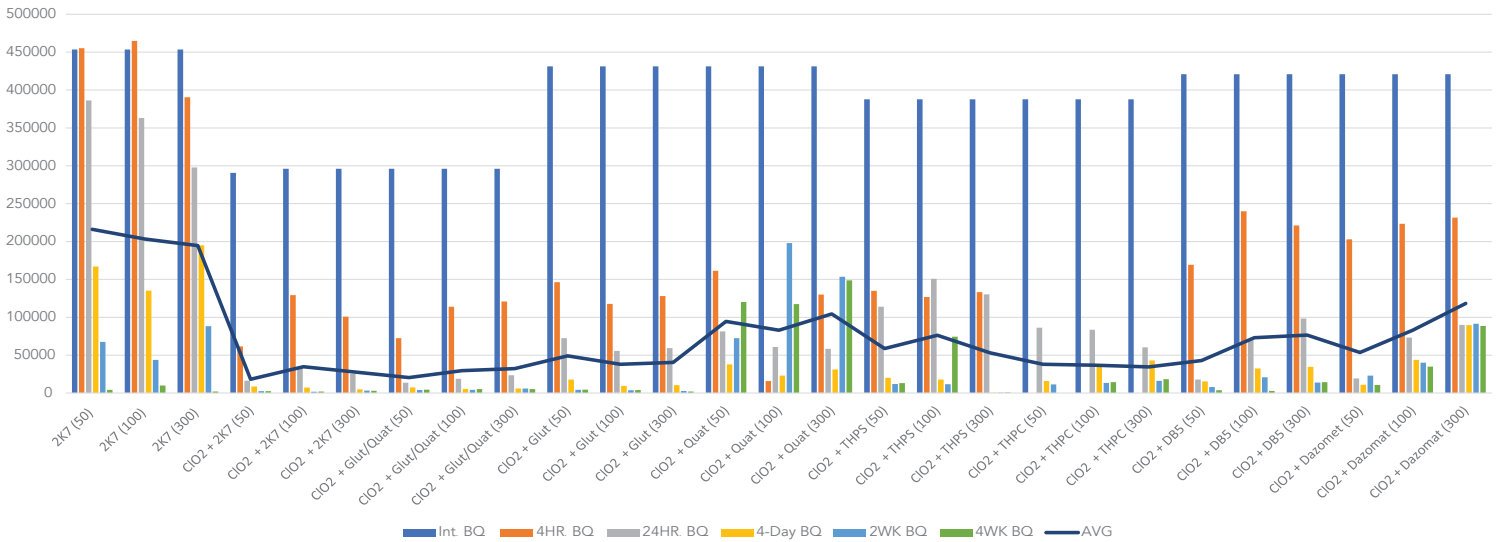
- Forensic equivalent ID to Spp. Level of bacteria
- Leading indicators that can be predictive of declines (scaling and fouling)

Better Water
Clear & Simple



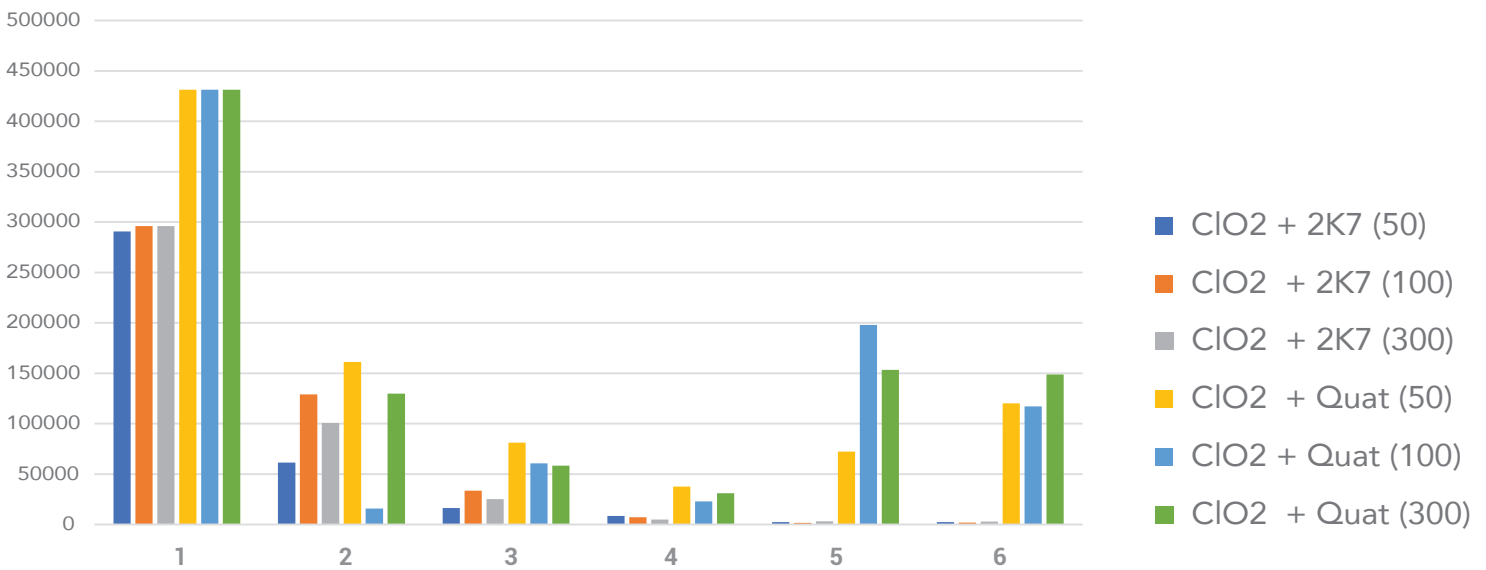
ClO₂ WORKS GREAT IN CONJUNCTION WITH MANY OTHER BIOCIDES CURRENTLY IN THE MARKET

Treatment Impact on Microbial Populations (CFU/mL) (*Initial ClO₂ dose applied was 10 ppm)



BE CAREFUL SOME BIOCIDES LEAD TO RE-GROWTH SCENARIOS

Negative Quat Interaction (CFU/mL)



best service.

best performance.

best people.