

***WATER REUSE FOR
TOILET FLUSHING AT A
HIGHWAY REST AREA
PILOT STUDY***

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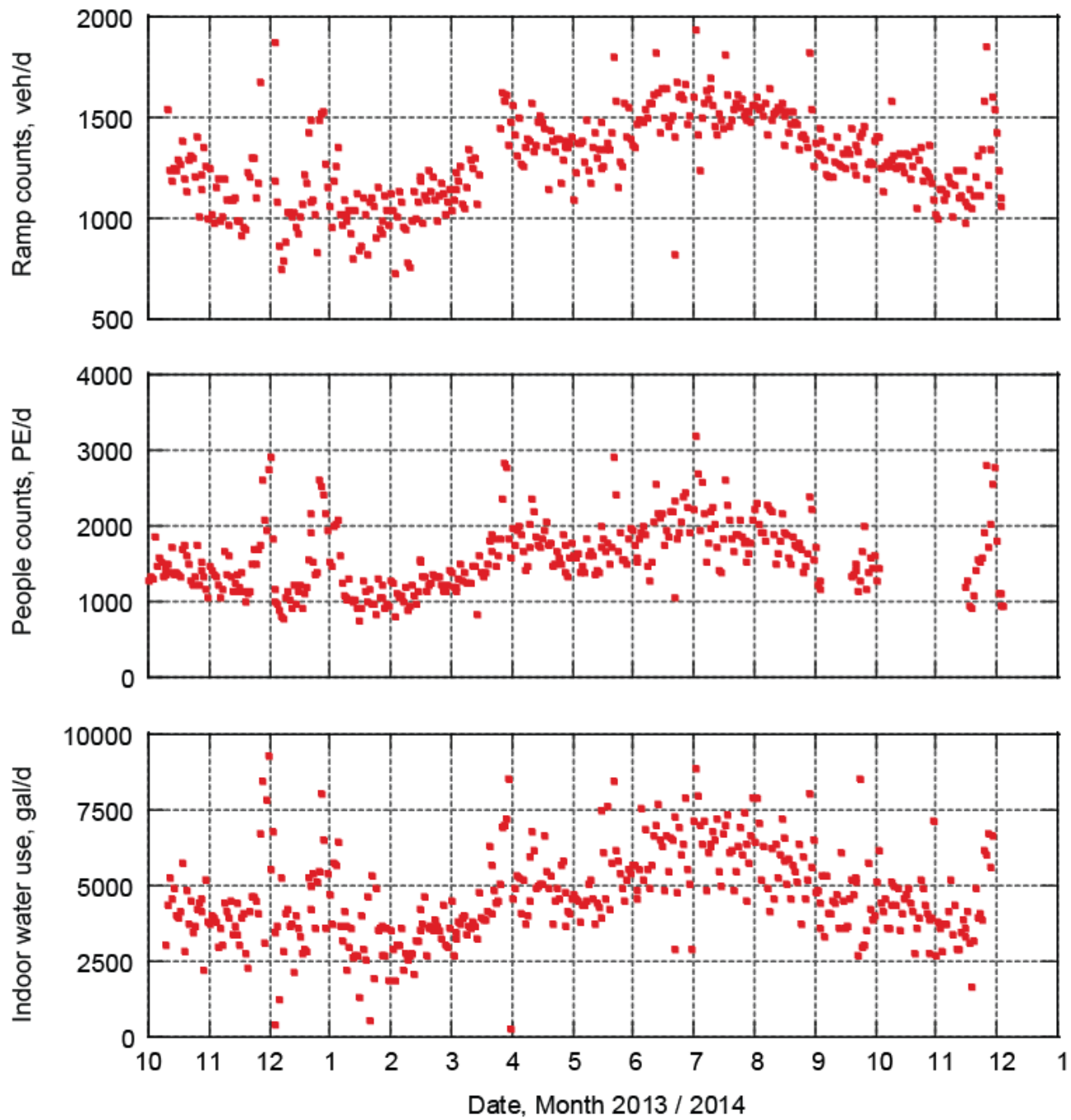


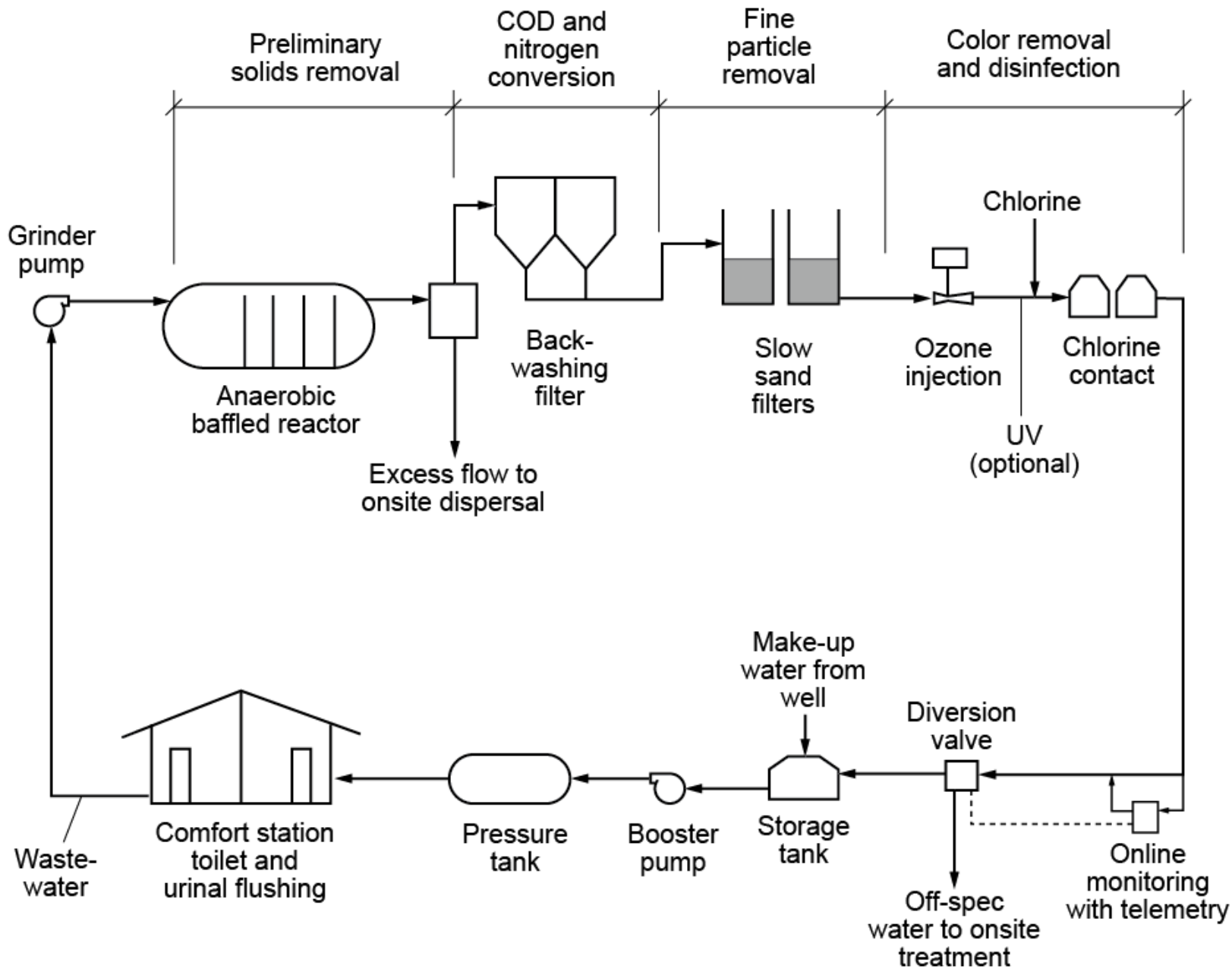
SRRA background

- Dual plumbed water systems
- Full-backup water supply
- Full-backup wastewater system

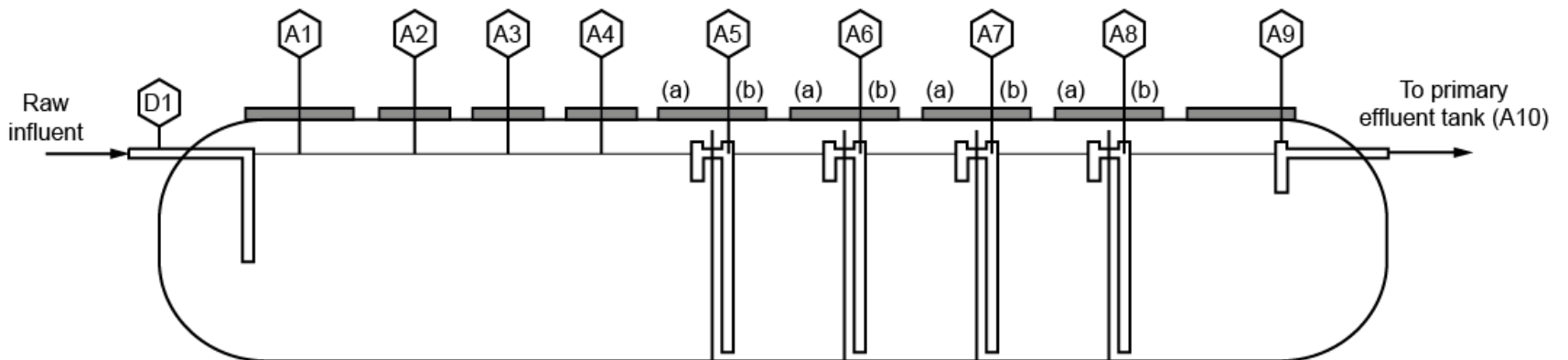
Proposed water reuse system

- Online turbidity, pH, total chlorine, redox potential, color
- Automatic diversion of off-spec water
- SCADA connected
- Water reuse around 90 percent

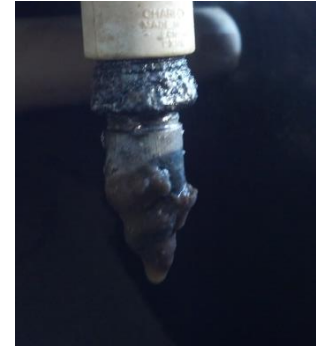




Anaerobic / Anoxic Baffled Reactor



Backwashing biological filter

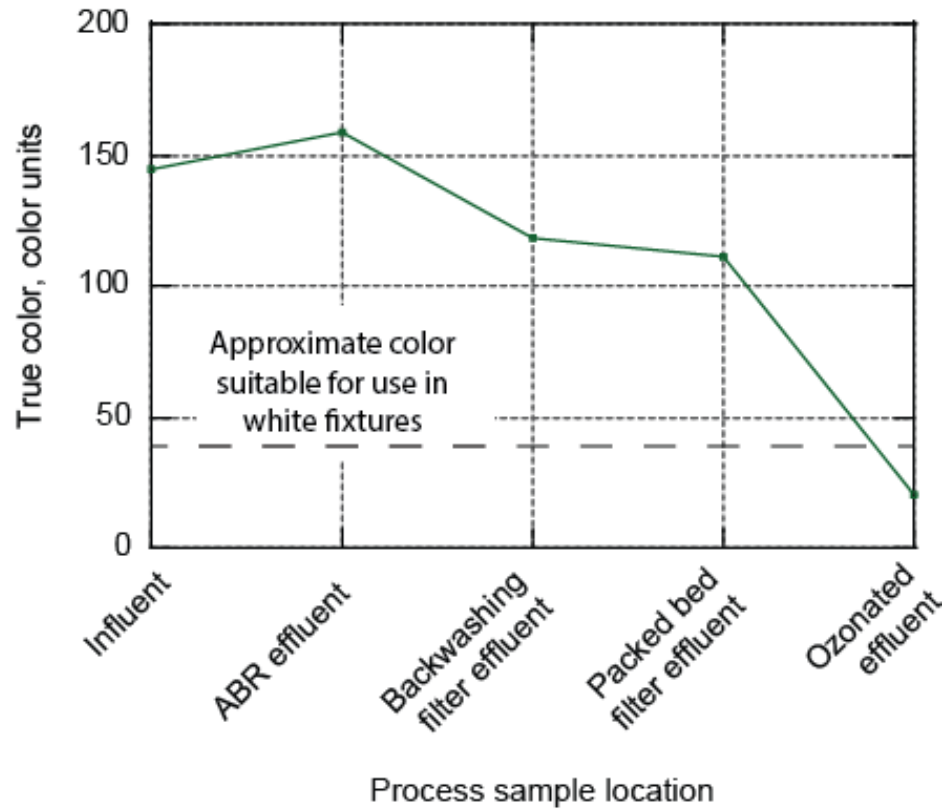


Tertiary Slow Sand Filters



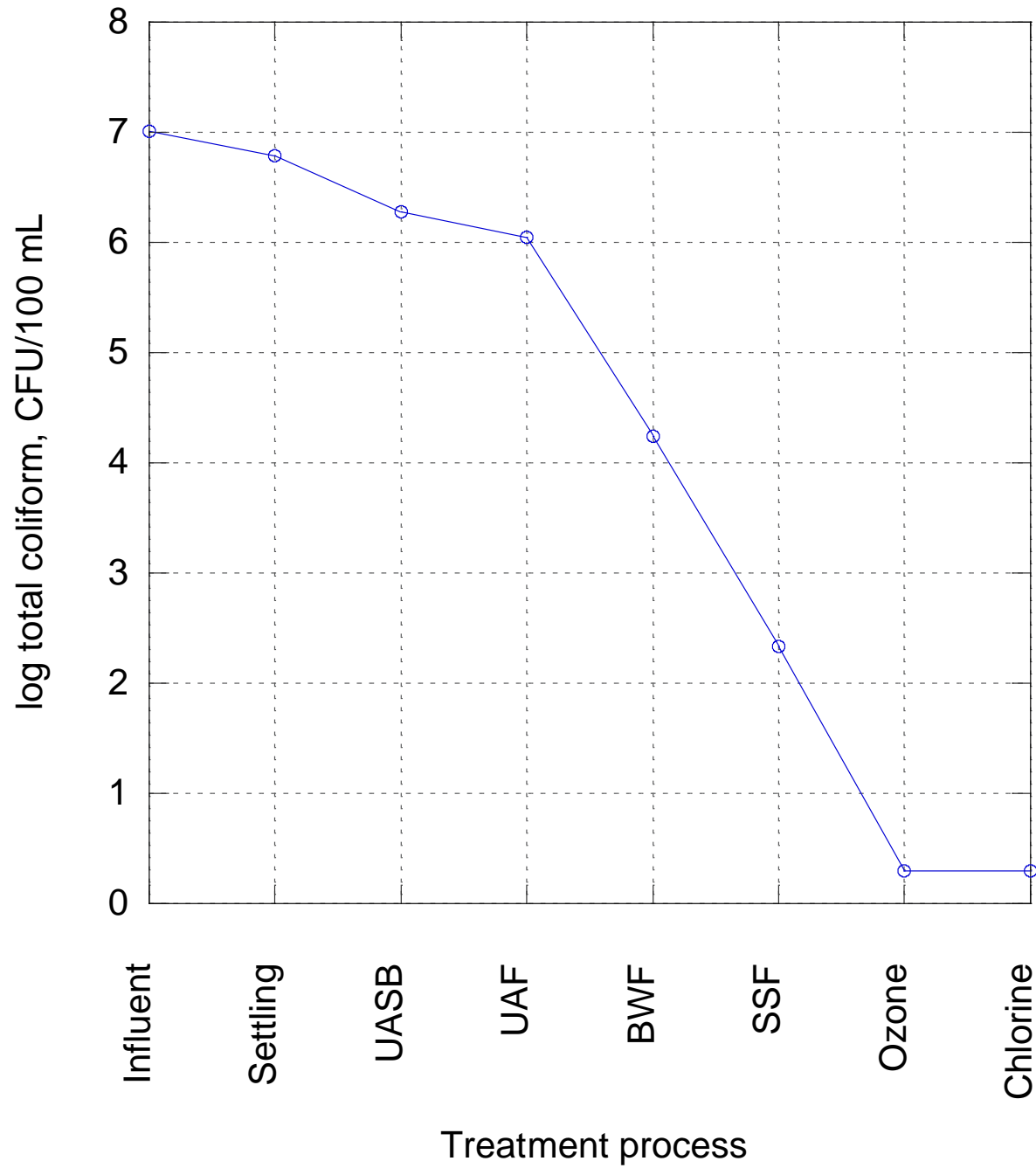
Ozone injection

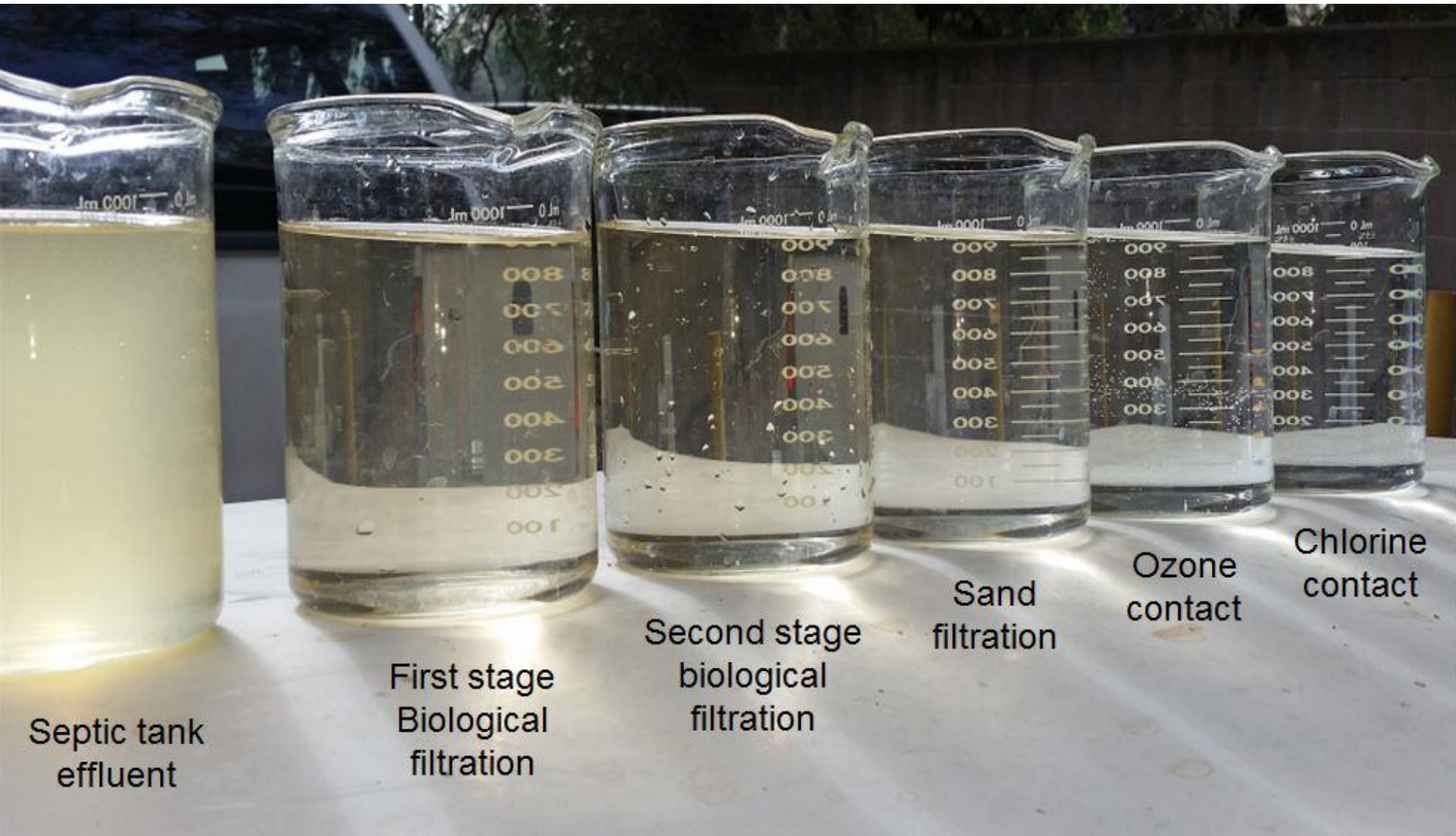
- Color removal



- Virus removal >6 log (single pass)







Septic tank effluent

First stage Biological filtration

Second stage biological filtration

Sand filtration

Ozone contact

Chlorine contact



Groundwater



Recycled water (color = 40 cu)