

# Summary IVL Report

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Attached report compares optical methods with ultra sonic methods. It points at the following advantages of the optical methods:

## **CBX – Optical methods**

- The sludge level is a predetermined concentration
- Can measure 2 levels (sludge and fluff level)
- Is not disturbed by diffused sludge
- Measures concentration from the surface to the bottom of the basin
- Gives a reliable profile
- Works well regardless sludge properties

## **Ultrasonic method**

- Measures a difference in density
- Measures only the sludge level and not fluff level
- Is disturbed by diffused sludge and fluff
- Does not give a reliable profile
- Works only in optimal circumstances

## **Why measure sludge level?**

- Energy savings through reduced pumping of sludges with low TS
- General savings in operation due to better monitoring and control
- Improved and more stable microbiology
- Improved digestion process due to higher TS
- Reduced return sludge flow
- Control of polymer dosing in post-sedimentation
- Decrease of polymer dosage
- Possible to prevent problems in the process