

Negative Blanks

Question:

Are negative blanks an indication of an underlying issue?

Answer:

Yes! If you get a negative reading on your blanks on day 5, it can indicate the presence of mold or mildew. The problem is the oxygen inside the cells will produce a higher reading on day 5.

Below are the 5 things you should check if you get a negative blank reading after the 5-day incubation period:

Check the following:

DO Meter – Check to ensure it has been properly calibrated; faulty DO readings will occur on meters that have been improperly calibrated.

BOD Bottles - Make sure the BOD bottles have been thoroughly cleaned.

Analyst – Check for consistency and accuracy when pipetting.

Incubation Temperature – Make sure the incubator is holding a constant temperature of 20°C.

Aeration Tubing & Air Stones – Check for signs of mold or mildew. Both mold and mildew will release more oxygen after the 5-day incubation period leading to a higher reading.

NOTE: Replace tubing and air stones regularly. Make sure the tubing and air stones are completely dry before storing.