# CSCA Technical Meeting minutes
# Tuesday 12th February 2019

**Attendees:**
John Smith (Chairman), Alan Edwards, Matt Morse, Martin Ronceray
Pam Simpson, Heather Read (Secretariat)

**Topic:**
What can change in a closed system water analysis in transit to the testing laboratory? Are the results the same as the water in the system?

1) Pressure change will affect dissolved gasses e.g. evolution of dissolved $CO_2$
2) pH change can occur as result of evolution of or reaction with of $CO_2$
3) Dissolved metals can change as they can precipitate due to increase in pH or oxidation
4) Suspended solids – Turbidity can increase due to precipitation of dissolved metals & hardness or decrease due to settlement or adsorbtion onto surfaces.
5) Temperature, glycol & colour can change with time.
6) Microbiology. Bacteria with no biocide may continue to multiply.
7) NRBs and SRBs depend on how full the bottle is. With an air gap or not. Oxygen may not kill them but they become stressed and more difficult to develop in Lab.
8) Dissolved $O_2$ relates to temperature
9) Dissolved $CO_2$ relates to temperature
10) Nitrite/Nitrate can change if NRB's present in the sample.
    *how quick do NRBs take nitrites out?*
11) Sulphate can change if SRB's present in the sample
12) Hardness can change by precipitation of $CaCO_3$ with increasing pH **(see 2 above)**

**Questions & Comments (For further discussion):**

**i.** How relevant is the change?
**ii.** When you take a sample, you should also take the pH and then check if the pH is the same from the result from the lab.
**iii.** AJE asked what is pH creep?
**iv.** CP commented that BG29 does not reference about sampling, maybe it is in BS8552?
**v.** MR referred to BG50 table 6.5. Water Quality Analysis and Guidelines.
**vi.** Molybdates information to be discussed re MoO4RB's

**Conclusion:**
A lot can change in a closed system water in transit to the testing laboratory. Some things can change within minutes & certainly hours. There are certain things you should do on site and not rely solely on the labs if you want to know and understand what the water quality is 'in the system'.

**Next topic suggestions:**

1) Range of inhibitors pros and cons
2) Thin walled carbon manufacturers – invite two different manufacturers to the next CSCA Technical meeting