# Error Sources During Analysis

**Pipetting error (incorrect volume)**

- Check pipette volume with pipette checking set LCA 722

**Sample clearly coloured**

- Measure sample specific blank value (SBV)
  - If the SBV is within the measuring range: subtract the SBV from the analysis result
  - If the SBV is less than the lower measurement range limit: the intrinsic colour of the sample has no influence on the result
- Digestion and measurement

**Solution in the cuvette is noticeably turbid**

- Filter using membrane filtration set (LCW 904 or LCW 916) and repeat the measurement




**Influence of interfering ions; reaction time/reaction temperature not being adhered to**

- Observe analysis instruction (reaction conditions) precisely and repeat analysis if necessary

**Concentration above or below the measuring range**

- Perform dilution or spiking, with Addista, plausibility check and compare the result with the original result
- Perform dilutions for plausibility check or set up test with a higher or lower measuring range if necessary

**Contaminated cuvette**

- Clean the cuvette

## Important Information

**Filtration:** May only be performed for parameters that are generally completely dissolved: e.g. $NO_2$-N, $NO_3$-N, $NH_4$-N etc.
Recommendation: membrane filtration set LCW 904 (1.2 µm) or LCW 916 (0.45 µm).

**Digestion:** Perform for all metal determinations with the LCW 902 Crack Set.

**SBV:** Sample specific blank value must be performed for samples with strong intrinsic colouring (see document, Sample Specific Blank Value, DOC042.52.00280).

An important basic pre-requisite for high result reliability is regular checking of the **entire** analysis system: pipettes, photometer, reagents and general handling. This check is made considerably easier by the AQA system Addista.