

Guide to troubleshooting for pH/ORP/Ion

When a measurement problem arises, it is best to try to locate the cause first. Here's a list of all possible reasons that might cause measurement issues:

READINGS ARE NOT REPRODUCIBLE

- Is there sample carryover?
- Are there sample interferences or complexing agents present?
- Is the reference electrode junction contaminated?

SLOW RESPONSE (READINGS SLOWLY CHANGING)

- Was the electrode stored in the wrong solution?
- Was the electrode poisoned by the sample?

OUT OF RANGE READING

- Is the electrode plugged into the controller properly?
- Is there a reference electrode present?
- Is there enough fill solution left in the reference electrode?
- Is the electrode placed in the sample solution?

LOW SLOPE OR NO SLOPE

- Are the standards too old, contaminated, or made wrong?
- Has the sample pH been adjusted properly to the operating range of the electrode?
- Is there an air bubble on electrode surface?
- Is the controller okay?
- Is there enough fill solution left in the reference electrode?

NOISY RESPONSE (READINGS RANDOMLY CHANGING)

- Is the controller grounded?
- Is there an air bubble on electrode surface?
- Is the controller operating properly?
- Is there enough fill solution left in the reference electrode?

DRIFTY RESPONSE (READINGS CONTINUOUSLY CHANGING)

- Is there excessive leaking at the reference electrode junction?
- Is the reference electrode junction clogged?
- Was the sensing membrane poisoned by the sample?
- Are there temperature problems?
- Is the sample too concentrated?
- Does the sensing membrane need conditioning?

INACCURATE READINGS (BUT CALIBRATION IS OK)

- Are the standards incorrect?
- Was the sample pH adjusted properly?
- Is there sample carryover?
- Are there sample interferences or complexing agents present?

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<http://www.consort.be/wiki/> - **Support website**

Permanent link:

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