



UNDERSTANDING ISO 17025 CLAUSE 7.8 – REPORTING OF RESULTS

Why Reporting Matters – Communicating Results Without Misinterpretation

Reporting of results is one of the most visible and high-impact activities in any ISO/IEC 17025 laboratory. Clause 7.8 ensures that results are communicated clearly, accurately and responsibly. A laboratory may perform excellent technical work, but if results are reported poorly, incompletely or ambiguously, the value of that work collapses. Reporting is not administrative — it is a **technical process** that determines how clients, regulators and auditors interpret the laboratory's output.

Every detail in a test or calibration report carries meaning: sample/item identifiers, methods used, units, results, uncertainty, statements of conformity, environmental conditions, deviations, amendments and authorisation. These elements ensure traceability, clarity and defensibility. A missing or incorrect detail can lead to misinterpretation, disputes, regulatory challenges or reputational damage.

Clause 7.8 requires laboratories to present results in a structured, complete and unambiguous manner. Reports must be easy to understand, technically accurate and free from misleading statements. They must reflect the laboratory's competence and impartiality. Reporting is the final step in the measurement process — the point where technical work becomes actionable information.

The core principle: **results are only as strong as the way they are reported**. Clause 7.8 ensures that the laboratory's technical excellence is matched by communication excellence.

Mandatory Report Elements – What Every Result Must Include

Clause 7.8 specifies the essential elements that must appear in every test or calibration report. These elements ensure that results are complete, traceable and defensible. Missing information is not a formatting issue — it is a validity issue. When agreed with the customer, the results may be reported in a simplified way, provided all required data and information is readily available.

Mandatory elements include:

- **Title** of the report
- **Unique identification** of the report showing page traceability and end of report
- **Identification of amendments** to reports
- **Name and address** of the laboratory
- **Location** of performance of laboratory activities
- **Name and contact information** of the customer/client
- **Sample/item** description, identification and condition
- **Date of receipt and the date of sampling** of the test or calibration item(s), where relevant
- **Test or calibration methods used** (including revisions or deviations)
- **Sampling plan and sampling method used**, where relevant



- **Additions to, deviations, or exclusions from the method** clearly marked
- **Results** with correct units of measurement
- **Statement** to the effect that the results relate only to the items tested, calibrated or sampled
- **Date of testing or calibration**
- **Date of issue** of the report/certificate
- **Environmental conditions**, where relevant
- **Measurement uncertainty**, when applicable
- **Statement of conformity**, where relevant
- **Identification of the person authorising** the report (approved signatory)
- **Identification of results** from external providers
- **Statement** specifying that the report shall not be reproduced except in full without approval of the laboratory
- **Data provided by a customer** shall be clearly identified with the appropriate disclaimer
- **Information on specific test conditions**, such as environmental conditions, where relevant
- **Opinions and interpretations**, where appropriate
- **Additional information** that may be required
- **Requirements for sampling**

These elements ensure that anyone reading the report — client, regulator, auditor or legal authority — can understand exactly what was done, how it was done, and under what conditions. Reports must be structured, consistent and free from ambiguity.

Clause 7.8 also requires that any subcontracted work be clearly identified. Reports must not imply that the laboratory performed work it did not perform. Transparency protects impartiality and credibility.

A well-constructed report is a technical document, not a clerical output. It reflects the laboratory's competence, attention to detail and commitment to quality.

Reporting Measurement Uncertainty – Confidence Made Visible

Measurement uncertainty is a critical component of reporting. Clause 7.8 requires laboratories to include uncertainty whenever it is relevant to the validity of results or to compliance/conformance decisions. Uncertainty is not optional — it is part of the result.

Uncertainty must be reported clearly, consistently and transparently. Reports must state:

- The **expanded uncertainty**
- The **coverage factor (k)**
- The **confidence level**
- The measurement uncertainty **expressed in the same unit** as that of the measurand or in a term relative to the measurand (e.g. percent)
- The **method used** to evaluate uncertainty



This information allows clients to understand the reliability of the measurement and make informed decisions. Without uncertainty, results may appear more precise than they truly are, leading to incorrect conclusions or compliance/conformance errors.

Uncertainty also protects the laboratory. When results are close to specification limits, uncertainty provides context that prevents misinterpretation. It ensures that statements of conformity are defensible and scientifically sound.

Clause 7.8 links directly to Clause 7.6. Laboratories must evaluate uncertainty correctly and then report it correctly. Reporting uncertainty is not a mathematical exercise — it is a communication exercise that strengthens transparency, credibility and trust.

Statements of Conformity – Saying Only What Can Be Defended

Statements of conformity are among the most sensitive elements in a report. Clause 7.8 requires laboratories to make statements of conformity responsibly, accurately and only when supported by valid results and appropriate consideration of uncertainty.

Statements of conformity must:

- Be **clear and unambiguous**
- Reference the **specific specification or limit**
- Consider **measurement uncertainty**
- Avoid implying certainty where none exists
- Avoid misleading or incomplete interpretations
- Be supported by documented evidence

A statement of conformity is not simply “pass” or “fail”. It is a technical conclusion that must be defensible under audit, regulatory review or legal scrutiny. Laboratories must ensure that uncertainty is considered when determining conformity. Ignoring uncertainty can lead to incorrect decisions, disputes or regulatory non-compliance/conformance.

Clause 7.8 also requires laboratories to avoid statements that imply accreditation for activities outside the scope. Reports must not mislead clients about what the laboratory is accredited to perform.

Statements of conformity must be honest, precise and scientifically justified. They protect both the client and the laboratory.

Technician-Level & Signatory Responsibilities – Accuracy, Integrity and Authoritative Release

Reporting of results is a shared responsibility between technicians and authorised signatories. Clause 7.8 emphasises that reporting is a **technical activity**, not a clerical one. Accuracy begins with the technician and is finalised by the signatory.



Technicians ensure that:

- Raw data is transcribed accurately
- Calculations are correct
- Units are consistent
- Environmental conditions are recorded
- Deviations and anomalies are documented
- Amendments are clearly marked
- Results are presented without error

Their attention to detail directly influences the reliability of the final report. Errors at this stage can compromise validity, mislead clients and damage credibility.

Signatories carry the responsibility of **authorising the final report**. Their signature is a formal declaration that the report is complete, accurate, traceable and compliant with ISO/IEC 17025.

Signatories verify that:

- All mandatory elements are present
- Uncertainty is reported where required
- Statements of conformity are defensible
- Results fall within the accredited scope
- Subcontracted work is clearly identified
- No misleading statements are included

Together, technicians and signatories form a **dual-layer defence** that protects the integrity, clarity and authority of reported results. Reporting is the final quality checkpoint before results leave the laboratory — and it must be executed with precision and responsibility.

Communication That Protects Accuracy, Integrity and Trust

From **Clause 7.8 – Reporting of Results**, one message stands out: **a result is only as strong as the way it is reported**. The report is the point where all the technical work becomes visible to clients, regulators and auditors. Clause 7.8 ensures that results are communicated clearly, accurately and responsibly, protecting the integrity of the entire measurement process.

Reporting Is Technical Communication – Not Administration

Reporting is a technical activity requiring precision and discipline. Every detail in a report carries meaning, a single missing or incorrect detail can lead to misinterpretation, disputes or regulatory challenges. Clause 7.8 ensures that results are not only correct but **communicated correctly**.



Mandatory Report Elements – The Foundation of Traceability

The elements that must appear in every test or calibration report ensure that anyone reading the report can understand exactly what was done, how it was done and under what conditions. Reports must be complete, consistent and unambiguous. Clause 7.8 protects traceability, transparency and defensibility.

Reporting Measurement Uncertainty – Confidence Made Visible

Uncertainty must be reported whenever it is relevant to validity or compliance decisions. Uncertainty is not optional — it is part of the result. Reports must state the expanded uncertainty, coverage factor, confidence level, units and method used. This information allows clients to interpret results responsibly and prevents misleading conclusions.

Compliance Statements – Saying Only What Can Be Defended

Statements of conformance must be clear, defensible and supported by valid results and appropriate consideration of uncertainty. Statements of conformance must reference specific limits, avoid misleading implications and never imply accreditation outside the laboratory's scope.

Technician-Level & Signatory Responsibilities – Accuracy and Authoritative Release

Technicians ensure raw data is transcribed accurately, units are correct, deviations are documented and results are presented without error. Signatories verify completeness, traceability, defensibility and compliance with ISO/IEC 17025. Their signature is a formal declaration of accuracy and integrity.

Clause 7.8 ensures that results are delivered with clarity, accuracy and scientific integrity.

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