

READ THE RECORD BEHIND THE RESULT

THE COA FIELD GUIDE

A clear, claim-sized way to read a
laboratory report.

Match the sample. Match the method. Read
the result with its limits.

EDITORIAL PROMISE

**Research in context. Claims in
proportion.**

An educational media project owned and operated by Pure & Direct Peptides.

A BOUNDED DOCUMENT

A COA is a record, not a verdict.

Read it as a statement about one identified sample, tested by named methods, at a particular time.

01 It can report

- Sample and report identifiers
- Methods and instruments named
- Measured results and units
- Specifications or acceptance limits
- Dates and sign-off, when supplied

02 It cannot establish alone

- Clinical safety or effectiveness
- Regulatory status or approval
- An attribute that was not tested
- Fitness for every intended purpose
- That the submitted sample matches another item

THE USEFUL QUESTION

What, exactly, does this document support - and where does that support stop?

If the report does not name the sample, method, result, and reporting basis, the claim has outrun the record.

FIRST PASS

Match the sample before reading the number.

A result only travels as far as the identifiers that connect the tested sample to the report.

01 Find these fields

Report or certificate number
Laboratory name and contact route
Client or requestor, if disclosed
Sample ID and lot or batch ID
Date received, tested, and reported
Sample description or matrix
Authorized review or signature

TRACE CHAIN

ITEM LABEL

What you are looking at

LOT / SAMPLE ID

The shared identifier

REPORT ID

The document record

LAB RECORD

The verification endpoint

STOP POINT

If the item or lot cannot be connected to the report, do not transfer the result by assumption.

SEPARATE THE QUESTIONS

Identity, purity, and content are not synonyms.

Each result answers a different analytical question. Read the named method and its intended purpose before combining claims.

01 IDENTITY

QUESTION Does the measured signature agree with the expected analyte?

Examples can include mass spectrometry or orthogonal identification procedures. The exact conclusion depends on the method and acceptance criteria.

02 PURITY

QUESTION How much of the detected signal is assigned to the main component under this method?

A chromatographic area percentage is method-specific. It is not automatically the same as mass purity or total amount in a container.

03 CONTENT / QUANTITY

QUESTION How much analyte is reported in the tested sample?

Content requires an appropriate quantitative procedure and reporting basis. Units, sample preparation, and calculation basis matter.

ONE NUMBER SHOULD NOT BE MADE TO ANSWER THREE QUESTIONS.

RESULT ARCHITECTURE

A result needs its frame.

Read the value, wording, and pass/fail call beside the method, units, specification, and reporting limit.

ILLUSTRATIVE RESULT BLOCK

EXAMPLE ONLY - NOT A REAL REPORT

ANALYTICAL QUESTION

Identity

METHOD / VERSION

Named procedure and version

RESULT

Observed result as reported by the lab

SPECIFICATION

Defined acceptance criterion, if applicable

UNITS / BASIS

Units and calculation basis, when applicable

LIMIT / UNCERTAINTY

Reporting limit or uncertainty, when provided

RESULT WITHOUT METHOD

The procedure and intended use are missing.

PASS WITHOUT SPEC

The threshold behind the call is missing.

NUMBER WITHOUT UNITS

The reporting basis is missing.

Note: 'ND' is not the same as zero. Its meaning depends on the laboratory's stated detection or reporting convention.

ABSENCE IS NOT A RESULT

Look for what was not tested.

Treat an attribute as tested only when the report identifies a suitable method and an actual result for that sample.

MICROBIAL / BIOBURDEN

A separate microbiological question

ENDOTOXIN

A distinct test with its own units and limit

RESIDUAL SOLVENTS

Specific analytes and reporting thresholds

ELEMENTAL IMPURITIES

Named elements, method, and limits

WATER / MOISTURE

A separate contribution to composition

COUNTERION / SALT FORM

Identity and amount may require separate context

CONTENT / TOTAL AMOUNT

Not established by an area-purity result alone

STABILITY

A single time point is not a stability program

Which tests matter depends on the analytical question and applicable requirements. This field guide does not set release specifications.

PAUSE BEFORE INFERENCE

Polished is not the same as complete.

These are prompts for a closer look, not proof that a document is invalid.

01

A cropped screenshot appears instead of the complete report.

02

The lot, sample, or report ID is missing or does not match.

03

The laboratory is named but no verification route is provided.

04

A 'pass' appears without the method, result, or specification.

05

Units, calculation basis, or reporting conventions are unexplained.

06

A generic template lacks sample-specific dates and identifiers.

07

One metric is presented as proof of every quality attribute.

08

An accreditation mark is shown without checking the relevant scope.

THE CHECK: Can a reader retrace this result to a sample, method, and lab record?

SAVE THIS SEQUENCE

The 60-second COA scan.

01

MATCH

Sample or lot ID to the item in question.

02

LOCATE

Lab, report number, and relevant dates.

03

SEPARATE

Identity, purity, content, and other tests.

04

READ

Actual result beside method, units, and specification.

05

NOTE

Attributes and limits that are not listed.

06

VERIFY

The complete report or laboratory record when stakes justify it.

KEEP THE CONCLUSION CLAIM-SIZED

Say only what the identified method and result support. Name what remains unknown.

PRIMARY REFERENCES

Sources belong beside the claims.

01 ISO/IEC 17025:2017

Laboratory competence, impartiality, and consistent operation.

[iso.org/standard/66912.html](https://www.iso.org/standard/66912.html)

02 FDA Q2(R2), March 2024

Analytical procedure validation and suitability for intended purpose.

[fda.gov/.../q2r2-validation-analytical-procedures](https://www.fda.gov/.../q2r2-validation-analytical-procedures)

03 FDA Dietary Supplement CGMP Guide

A scoped example of COA fields: methods, limits, and actual results.

[fda.gov/.../small-entity-compliance-guide](https://www.fda.gov/.../small-entity-compliance-guide)

04 NIST Metrological Traceability FAQ

Traceability applies to a measurement result and does not ensure fitness for purpose.

[nist.gov/metrology/metrological-traceability](https://www.nist.gov/metrology/metrological-traceability)

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