RIDING BYTES

COMPUTERIZED SYSTEM VALIDATION

Qualification Protocol

Q20261028-082047 · 2026-10-28 08:20:47 +0100

Vitis Analytical Laboratory
SENAITE LIMS, SENAITE Standard Qualification 1.2.0

Laboratory	Vitis Analytical Laboratory
Installation	http://lims-copy.vitis-lab.example:8091/senaite
Run	`Q20261028-082047`
Started	2026-10-28 08:20:47 +0100
Finished	2026-10-28 08:20:59 +0100
Executed by	Jane Doe
Test account	qualification

All 14 test cases passed.

Generated by senaite.qualification from the record of run Q20261028-082047. The record, `results.json`, and its checksum, `results.json.sha256`, are kept with this protocol.

1. Purpose, scope and responsibilities

Operational qualification of the functions every laboratory relies on: sample registration and receipt, result entry, calculation, rounding, specification limits, verification, retraction, and the separation of duties between roles.

The catalogue brings its own configuration, so its results do not depend on how the laboratory has set up its services. Calculations, specifications and workflows specific to the laboratory are covered by a catalogue of their own.

This protocol records the execution of the test cases listed below against the installation named in section 2, and the results the installation returned. It is evidence for the qualification of that installation. Whether the system is fit for its intended use is decided by the laboratory, which reviews this protocol, assesses any deviation, and approves or rejects the result in section 7.

Declaration. Jane Doe confirmed that http://lims-copy.vitis-lab.example:8091/senaite is a copy of the laboratory's installation and not the one in production use.

Every sample a test case creates carries the run id `Q20261028-082047` in its client sample ID, and the tool refuses to report on a sample it did not create in this run, so the test data can be told apart from the laboratory's own data and from that of other runs.

2. Test environment

Installation	http://lims-copy.vitis-lab.example:8091/senaite
JSON API version	2.7.0

Test catalogue	Version	SHA-256
SENAITE Standard Qualification	1.2.0	`4b0dee86cf926d512c6f05db9f18be5f462e08d411f938b8cc4121ef7a3e59f6`

Installed SENAITE products

Product	Version
senaite.app.listing	`2.7.0`
senaite.app.spotlight	`2.7.0`
senaite.composer	`1.0.0`
senaite.core	`2.7.0`
senaite.dashboard	`1.0.0`
senaite.impress	`2.7.0`
senaite.jsonapi	`2.7.0`
senaite.lims	`2.7.0`

Configuration used

Items a catalogue's setup looked up are the laboratory's own and were not changed. Items it created or updated are the catalogue's own test configuration.

Looked up, not changed	none
Created by the catalogue	lc-qual-manager, dept-qual, cat-qual, svc-qph, svc-qno3, svc-qca, svc-qmg, calc-qhard, svc-qhard, st-qual, spec-qual, user-clerk, user-analyst, user-analyst2, user-manager, client-qual, contact-qual
Brought to the catalogue's state	none

Fields beyond SENAITE

Fields the installation has beyond those of SENAITE 2.7.0 alone, on the types this run composed, and the test cases that write or read each. A field no case names was not tested by this run; the laboratory decides whether it needs to be.

None: every type this run composed has the fields of SENAITE alone.

Test tooling

senaite.qualification	0.1.0.dev0
Source revision	94c32437dc027a42e457baaa5449ff62befc009b
Python	3.12.13
Playwright	1.64.1
Browser (Chromium)	156.0.8078.4
Operating system	Darwin 27.0.0 (arm64)
Operating system user	jdoe

3. Summary of results

14 passed, 0 failed, 0 not executed, of 14 test cases.

ID	Test case	Category	Risk	Result
OQ-WF-01	A registered sample is identified and awaits receipt	Workflow	high	Passed
OQ-WF-02	Receiving a sample records the time of receipt	Workflow	high	Passed
OQ-WF-03	A submitted result is stored and attributed to its analyst	Workflow	high	Passed
OQ-WF-04	A second person verifies a submitted result	Workflow	high	Passed
OQ-WF-05	Retracting a result keeps it and opens a retest	Workflow	high	Passed
OQ-CALC-01	A calculated result follows from the results it depends on	Calculations	high	Passed

ID	Test case	Category	Risk	Result
OQ-ROUND-01	A result is shown rounded up to the configured precision	Rounding	medium	Passed
OQ-ROUND-02	A result is shown rounded down to the configured precision	Rounding	medium	Passed
OQ-SPEC-01	A result above the specification is flagged	Specifications	high	Passed
OQ-SPEC-02	A result within the specification is not flagged	Specifications	high	Passed
OQ-SPEC-03	A result on an inclusive limit is not flagged	Specifications	high	Passed
OQ-ROLE-01	A lab clerk cannot enter results	Roles and permissions	high	Passed
OQ-ROLE-02	Nobody verifies their own result	Roles and permissions	high	Passed
OQ-ROLE-03	An analyst cannot verify a colleague's result	Roles and permissions	high	Passed

4. Traceability matrix

Each requirement, the test cases that cover it, the number of checks it was verified with, and the result.

Requirement	Statement	Test cases	Checks	Result
URS-WF-01	The system registers a sample with the data entered, assigns it a unique identifier in the configured format, and records it as due for receipt.	OQ-WF-01	3	Passed
URS-WF-02	When a sample is received, the system records the moment of receipt itself, also over a date entered beforehand, and makes the sample's analyses available for result entry.	OQ-WF-02	3	Passed
URS-WF-03	The system stores a result as entered, records who submitted it and when, and holds it for verification.	OQ-WF-03	5	Passed
URS-WF-04	The system lets a person other than the analyst verify a submitted result, records who verified it, and marks the sample verified once all its results are.	OQ-WF-04	4	Passed
URS-WF-05	A retracted result is kept and marked as retracted, and a retest takes its place. The retest offers the retracted value as a proposal but counts as not submitted until somebody submits it again.	OQ-WF-05	5	Passed
URS-CALC-01	The system calculates a dependent result from the results it depends on with the configured formula, and reports it with the configured precision.	OQ-CALC-01	2	Passed
URS-ROUND-01	The system stores a result as entered and shows and reports it rounded to the precision configured for the analysis.	OQ-ROUND-01 OQ-ROUND-02	6	Passed
URS-SPEC-01	The system compares a result with the specification of its sample and flags it when it lies outside the limits, honouring whether a limit is inclusive.	OQ-SPEC-01 OQ-SPEC-02 OQ-SPEC-03	6	Passed
URS-ROLE-01	Only users whose role allows it can enter results; a lab clerk, who registers and receives samples, cannot.	OQ-ROLE-01	2	Passed
URS-ROLE-02	A result is verified by a person other than the one who submitted it, also when that person's role would otherwise allow verification.	OQ-ROLE-02	2	Passed
URS-ROLE-03	Only users whose role allows verification can verify a result; an analyst cannot, even for a result someone else submitted.	OQ-ROLE-03	2	Passed

5. Test cases

`OQ-WF-01` A registered sample is identified and awaits receipt

Passed

Category: Workflow · Risk: high · Executed 2026-10-28 08:20:48 +0100 to 2026-10-28 08:20:48 +0100

> **URS-WF-01** The system registers a sample with the data entered, assigns it a unique identifier in the configured format, and records it as due for receipt.

1. The lab clerk registers a sample of the type Qualification Water with the client sample ID of this run.
2. The registered sample is read back from the system.

Test data: sample `/senaite/clients/client-3/QW-0001`

#	Check	Expected	Actual	Result
1	The sample awaits receipt read 2026-10-28 08:20:48 +0100 from sample QW-0001 (ae533d11873a4c33af32525332bf68cf)	sample_due	sample_due	Passed
2	The sample ID follows the configured format read 2026-10-28 08:20:48 +0100 from sample QW-0001 (ae533d11873a4c33af32525332bf68cf)	matches QW-[0-9]{4}	QW-0001	Passed
3	The client sample ID is stored as entered read 2026-10-28 08:20:48 +0100 from sample QW-0001 (ae533d11873a4c33af32525332bf68cf)	Q20261028-082047-REG	Q20261028-082047-REG	Passed

`OQ-WF-02` Receiving a sample records the time of receipt

Passed

Category: Workflow · Risk: high · Executed 2026-10-28 08:20:48 +0100 to 2026-10-28 08:20:48 +0100

> **URS-WF-02** When a sample is received, the system records the moment of receipt itself, also over a date entered beforehand, and makes the sample's analyses available for result entry.

1. The lab clerk registers a sample with the receipt date 16 January 2026, 08:00, a date long before the run, and receives it.
2. The sample is read back from the system.

Test data: sample `/senaite/clients/client-3/QW-0002`

#	Check	Expected	Actual	Result
1	The sample is received read 2026-10-28 08:20:48 +0100 from sample QW-0002 (8aa7914d4d1b4435b8b4ef8b3496b4ba)	sample_received	sample_received	Passed
2	The moment of receipt is recorded, not the date entered read 2026-10-28 08:20:48 +0100 from sample QW-0002 (8aa7914d4d1b4435b8b4ef8b3496b4ba)	within the run	2026-10-28T08:20:48+01:00	Passed
3	Its analysis is ready for results read 2026-10-28 08:20:48 +0100 from analysis /senaite/clients/client-3/QW-0002/QpH (befe31ceb8a549fdbd50386e162eec4c)	unassigned	unassigned	Passed

`OQ-WF-03` A submitted result is stored and attributed to its analyst

Passed

Category: Workflow · Risk: high · Executed 2026-10-28 08:20:48 +0100 to 2026-10-28 08:20:49 +0100

> **URS-WF-03** The system stores a result as entered, records who submitted it and when, and holds it for verification.

1. The lab clerk registers and receives a sample.
2. The analyst enters 7.20 for pH and submits it.
3. The analysis and the sample are read back.

Test data: sample `/senaite/clients/client-3/QW-0003`

#	Check	Expected	Actual	Result
1	The result is stored as entered read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0003/QpH (4bf14801f1354dcca1b0cac4a093c42b)	7.20	7.20	Passed
2	The submission is attributed to the analyst read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0003/QpH (4bf14801f1354dcca1b0cac4a093c42b)	qual-analyst	qual-analyst	Passed
3	The time of capture is recorded during the test read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0003/QpH (4bf14801f1354dcca1b0cac4a093c42b)	within the run	2026-10-28T08:20:49+01:00	Passed
4	The analysis awaits verification read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0003/QpH (4bf14801f1354dcca1b0cac4a093c42b)	to_be_verified	to_be_verified	Passed
5	The sample awaits verification read 2026-10-28 08:20:49 +0100 from sample QW-0003 (3434eaecb9cc4be8948b7d10b53b5689)	to_be_verified	to_be_verified	Passed

`OQ-WF-04` A second person verifies a submitted result

Passed

Category: Workflow · Risk: high · Executed 2026-10-28 08:20:49 +0100 to 2026-10-28 08:20:49 +0100

> **URS-WF-04** The system lets a person other than the analyst verify a submitted result, records who verified it, and marks the sample verified once all its results are.

1. The lab clerk registers and receives a sample.
2. The analyst enters 7.20 for pH and submits it.
3. The lab manager verifies it.
4. The analysis and the sample are read back.

Test data: sample `/senaite/clients/client-3/QW-0004`

#	Check	Expected	Actual	Result
1	The analysis is verified read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0004/QpH (d0e3370ff16a44d996f3136d8b9249a5)	verified	verified	Passed
2	The verification is attributed to the lab manager read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0004/QpH (d0e3370ff16a44d996f3136d8b9249a5)	includes qual-manager	qual-manager	Passed
3	The submission stays attributed to the analyst read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0004/QpH (d0e3370ff16a44d996f3136d8b9249a5)	qual-analyst	qual-analyst	Passed
4	The sample is verified read 2026-10-28 08:20:49 +0100 from sample QW-0004 (c3c900e8e1ec441195dea9654309c2fb)	verified	verified	Passed

`OQ-WF-05` Retracting a result keeps it and opens a retest

Passed

Category: Workflow · Risk: high · Executed 2026-10-28 08:20:49 +0100 to 2026-10-28 08:20:49 +0100

> **URS-WF-05** A retracted result is kept and marked as retracted, and a retest takes its place. The retest offers the retracted value as a proposal but counts as not submitted until somebody submits it again.

1. The lab clerk registers and receives a sample.
2. The analyst enters 9.90 for pH and submits it.
3. The lab manager retracts it.
4. The original analysis and its retest are read back.

Test data: sample `/senaite/clients/client-3/QW-0005`

#	Check	Expected	Actual	Result
1	The original analysis is retracted read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0005/QpH (79ca40903f4948b2aae486e4fb19dc39)	retracted	retracted	Passed
2	The retracted result is kept read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0005/QpH (79ca40903f4948b2aae486e4fb19dc39)	9.90	9.90	Passed
3	A retest is open for result entry read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0005/QpH-1 (57df15cef53244499dea72b5991738c9)	unassigned	unassigned	Passed
4	The retest offers the retracted value as a proposal read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0005/QpH-1 (57df15cef53244499dea72b5991738c9)	9.90	9.90	Passed
5	The retest is not submitted read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0005/QpH-1 (57df15cef53244499dea72b5991738c9)	(empty)	(empty)	Passed

`OQ-CALC-01` A calculated result follows from the results it depends on

Passed

Category: Calculations · Risk: high · Executed 2026-10-28 08:20:49 +0100 to 2026-10-28 08:20:50 +0100

> **URS-CALC-01** The system calculates a dependent result from the results it depends on with the configured formula, and reports it with the configured precision.

1. The lab clerk registers and receives a sample with calcium, magnesium and total hardness.
2. The analyst enters 80 mg/L calcium and 24 mg/L magnesium and submits both.
3. Total hardness is read back. The formula (Ca / 40.08 + Mg / 24.31) * 100.09 gives 298.6 mg/L.

Test data: sample `/senaite/clients/client-3/QW-0006`

#	Check	Expected	Actual	Result
1	Total hardness is calculated from calcium and magnesium read 2026-10-28 08:20:49 +0100 from analysis /senaite/clients/client-3/QW-0006/QHard (01d668e1d58841bf9a20d03fa3526d09)	298.6 ± 0.05	298.594096053	Passed
2	Total hardness is reported with one decimal read 2026-10-28 08:20:50 +0100 from analysis /senaite/clients/client-3/QW-0006/QHard (01d668e1d58841bf9a20d03fa3526d09)	298.6	298.6	Passed

`OQ-ROUND-01` A result is shown rounded up to the configured precision

Passed

Category: Rounding · Risk: medium · Executed 2026-10-28 08:20:50 +0100 to 2026-10-28 08:20:53 +0100

> **URS-ROUND-01** The system stores a result as entered and shows and reports it rounded to the precision configured for the analysis.

1. The lab clerk registers and receives a sample.
2. The analyst enters 7.456 for pH, configured with two decimals, and submits it.
3. The stored result, the formatted result and the result shown in the sample's analyses listing are read back.

Test data: sample `/senaite/clients/client-3/QW-0007`

#	Check	Expected	Actual	Result
1	The result is stored as entered read 2026-10-28 08:20:50 +0100 from analysis /senaite/clients/client-3/QW-0007/QpH (f535ef7a07f64c7691e18493bbe84815)	7.456	7.456	Passed
2	The result is formatted to two decimals read 2026-10-28 08:20:50 +0100 from analysis /senaite/clients/client-3/QW-0007/QpH (f535ef7a07f64c7691e18493bbe84815)	7.46	7.46	Passed
3	The listing shows the rounded result read 2026-10-28 08:20:53 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0007	7.46	7.46	Passed

☐	Analysis	Result	+-	Specification	Retested	Attachments	Submitter	Analyst	Captured	Due Date	Status	Hidden
☐	Qualification pH	7.46			No		Qualification Analyst	Qualification Analyst	2026-10-28 08:20	2026-11-02	To be verified	☐

Evidence for check 3: Sample QW-0007, analyses listing as qual-manager sees it, the row of QpH marked. SHA-256 `cbb10b9e3b733ebfbdb40e02064d037048b9c19520fcf1f2d9513cd52f238967`

`OQ-ROUND-02` A result is shown rounded down to the configured precision

Passed

Category: Rounding · Risk: medium · Executed 2026-10-28 08:20:53 +0100 to 2026-10-28 08:20:55 +0100

> **URS-ROUND-01** The system stores a result as entered and shows and reports it rounded to the precision configured for the analysis.

1. The lab clerk registers and receives a sample.
2. The analyst enters 7.454 for pH, configured with two decimals, and submits it.
3. The stored result, the formatted result and the result shown in the sample's analyses listing are read back.

Test data: sample `/senaite/clients/client-3/QW-0008`

#	Check	Expected	Actual	Result
1	The result is stored as entered read 2026-10-28 08:20:53 +0100 from analysis /senaite/clients/client-3/QW-0008/QpH (2cb88462431949f89a1d47291379eb2c)	7.454	7.454	Passed
2	The result is formatted to two decimals read 2026-10-28 08:20:53 +0100 from analysis /senaite/clients/client-3/QW-0008/QpH (2cb88462431949f89a1d47291379eb2c)	7.45	7.45	Passed
3	The listing shows the rounded result read 2026-10-28 08:20:55 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0008	7.45	7.45	Passed

☐	Analysis	Result	+-	Specification	Retested	Attachments	Submitter	Analyst	Captured	Due Date	Status	Hidden
☐	Qualification pH	7.45			No		Qualification Analyst	Qualification Analyst	2026-10-28 08:20	2026-11-02	To be verified	☐

Evidence for check 3: Sample QW-0008, analyses listing as qual-manager sees it, the row of QpH marked. SHA-256 `47b6cafc316e14a9a4891df5ce09ad21c01f523176fb3e7578ec134d7c31dd69`

`OQ-SPEC-01` A result above the specification is flagged

Passed

Category: Specifications · Risk: high · Executed 2026-10-28 08:20:55 +0100 to 2026-10-28 08:20:56 +0100

> **URS-SPEC-01** The system compares a result with the specification of its sample and flags it when it lies outside the limits, honouring whether a limit is inclusive.

1. The lab clerk registers a sample with the specification Qualification Limits (pH 6.5 to 9.5, both inclusive) and receives it.
2. The analyst enters 9.80, above the upper limit of 9.5, and submits it.
3. The sample's analyses listing is read as the lab manager sees it.

Test data: sample `/senaite/clients/client-3/QW-0009`

#	Check	Expected	Actual	Result
1	The listing shows the result read 2026-10-28 08:20:56 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0009	9.80	9.80	Passed
2	The out-of-range flag is shown read 2026-10-28 08:20:56 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0009	flagged out of range	flagged out of range	Passed

Analysis	Result	+-	Specification	Retested	Attachments	Submitter	Analyst	Captured	Due Date	Status	Hidden
Qualification pH	9.80 ⓘ		[6.5;9.5]	No		Qualification Analyst	Qualification Analyst	2026-10-28 08:20	2026-11-02	To be verified	

Evidence for check 1, 2: Sample QW-0009, analyses listing as qual-manager sees it, the row of QpH marked. SHA-256 `dd60e6a9128b4a1c5ed3e92b481b08d8a94eba7fd058d49f690fcb425f0bbca0`

`OQ-SPEC-02` A result within the specification is not flagged

Passed

Category: Specifications · Risk: high · Executed 2026-10-28 08:20:56 +0100 to 2026-10-28 08:20:57 +0100

> **URS-SPEC-01** The system compares a result with the specification of its sample and flags it when it lies outside the limits, honouring whether a limit is inclusive.

1. The lab clerk registers a sample with the specification Qualification Limits (pH 6.5 to 9.5, both inclusive) and receives it.
2. The analyst enters 7.00, within the limits of 6.5 and 9.5, and submits it.
3. The sample's analyses listing is read as the lab manager sees it.

Test data: sample `/senaite/clients/client-3/QW-0010`

#	Check	Expected	Actual	Result
1	The listing shows the result read 2026-10-28 08:20:57 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0010	7.00	7.00	Passed
2	The out-of-range flag is not shown read 2026-10-28 08:20:57 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0010	not flagged	not flagged	Passed

☐	Analysis	Result	+-	Specification	Retested	Attachments	Submitter	Analyst	Captured	Due Date	Status	Hidden
☐	Qualification pH	7.00		[6.5;9.5]	No		Qualification Analyst	Qualification Analyst	2026-10-28 08:20	2026-11-02	To be verified	☐

Evidence for check 1, 2: Sample QW-0010, analyses listing as qual-manager sees it, the row of QpH marked. SHA-256 `9582c87b2b6a115bb78123af41bad724122185f647848e6d4237d4ddc3f811c9`

`OQ-SPEC-03` A result on an inclusive limit is not flagged

Passed

Category: Specifications · Risk: high · Executed 2026-10-28 08:20:57 +0100 to 2026-10-28 08:20:58 +0100

> **URS-SPEC-01** The system compares a result with the specification of its sample and flags it when it lies outside the limits, honouring whether a limit is inclusive.

1. The lab clerk registers a sample with the specification Qualification Limits (pH 6.5 to 9.5, both inclusive) and receives it.
2. The analyst enters 9.50, equal to the inclusive upper limit of 9.5, and submits it.
3. The sample's analyses listing is read as the lab manager sees it.

Test data: sample `/senaite/clients/client-3/QW-0011`

#	Check	Expected	Actual	Result
1	The listing shows the result read 2026-10-28 08:20:58 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0011	9.50	9.50	Passed
2	The out-of-range flag is not shown read 2026-10-28 08:20:58 +0100 from http://lims-copy.vitis-lab.example:8091/senaite/clients/client-3/QW-0011	not flagged	not flagged	Passed

Analysis	Result	+-	Specification	Retested	Attachments	Submitter	Analyst	Captured	Due Date	Status	Hidden
Qualification pH	9.50		[6.5;9.5]	No		Qualification Analyst	Qualification Analyst	2026-10-28 08:20	2026-11-02	To be verified	

Evidence for check 1, 2: Sample QW-0011, analyses listing as qual-manager sees it, the row of QpH marked. SHA-256 `6f4b8c9fd9b2fe381ade5933fee5c7bd0bed52bc6ed9ca8c73bd976d35ebb896`

`OQ-ROLE-01` A lab clerk cannot enter results

Passed

Category: Roles and permissions · Risk: high · Executed 2026-10-28 08:20:58 +0100 to 2026-10-28 08:20:59 +0100

> **URS-ROLE-01** Only users whose role allows it can enter results; a lab clerk, who registers and receives samples, cannot.

1. The lab clerk registers and receives a sample.
2. The lab clerk tries to enter 7.10 for pH.
3. The attempt and the analysis are read back.

Test data: sample `/senaite/clients/client-3/QW-0012`

#	Check	Expected	Actual	Result
1	The system refuses the result from the lab clerk read 2026-10-28 08:20:59 +0100 from composer report for 'sample'	results.QpH refused	results.QpH refused	Passed
2	The analysis has no result read 2026-10-28 08:20:59 +0100 from analysis /senaite/clients/client-3/QW-0012/QpH (3f262b44794744e2b225b2f519372346)	(empty)	(empty)	Passed

`OQ-ROLE-02` Nobody verifies their own result

Passed

Category: Roles and permissions · Risk: high · Executed 2026-10-28 08:20:59 +0100 to 2026-10-28 08:20:59 +0100

> **URS-ROLE-02** A result is verified by a person other than the one who submitted it, also when that person's role would otherwise allow verification.

1. The lab clerk registers and receives a sample.
2. The lab manager enters 7.20 for pH and submits it.
3. The lab manager tries to verify it.
4. The attempt and the analysis are read back.

Test data: sample `/senaite/clients/client-3/QW-0013`

#	Check	Expected	Actual	Result
1	The system refuses the verification by the submitter read 2026-10-28 08:20:59 +0100 from composer report for 'sample'	analyses.QpH.verify refused	analyses.QpH.verify refused	Passed
2	The analysis still awaits verification read 2026-10-28 08:20:59 +0100 from analysis /senaite/clients/client-3/QW-0013/QpH (b2381e11ca0743c9a4357ed25cdddeaf)	to_be_verified	to_be_verified	Passed

`OQ-ROLE-03` An analyst cannot verify a colleague's result

Passed

Category: Roles and permissions · Risk: high · Executed 2026-10-28 08:20:59 +0100 to 2026-10-28 08:20:59 +0100

> **URS-ROLE-03** Only users whose role allows verification can verify a result; an analyst cannot, even for a result someone else submitted.

1. The lab clerk registers and receives a sample.
2. The analyst enters 7.20 for pH and submits it.
3. A second analyst tries to verify it.
4. The attempt and the analysis are read back.

Test data: sample `/senaite/clients/client-3/QW-0014`

#	Check	Expected	Actual	Result
1	The system refuses the verification by the second analyst read 2026-10-28 08:20:59 +0100 from composer report for 'sample'	analyses.QpH.verify refused	analyses.QpH.verify refused	Passed
2	The analysis still awaits verification read 2026-10-28 08:20:59 +0100 from analysis /senaite/clients/client-3/QW-0014/QpH (e804abb225724a579b85b787832f78d9)	to_be_verified	to_be_verified	Passed

6. Deviations

None. Every test case met its expectations.

7. Review and approval

Role	Name	Signature	Date
Executed by	Jane Doe		
Reviewed by (laboratory)			
Approved by (laboratory)			

By approving, the laboratory confirms that it has reviewed the results and the deviations of run Q20261028-082047 and accepts the installation for its intended use, or records why it does not.

Appendix: catalogue files

The SHA-256 of each file of the catalogues that ran. Each catalogue's own checksum in section 2 is taken over its list.

File	SHA-256
cases/01-oq-wf-01-registration.yaml	cf8b997ad3ae4556dd4376b8b9e531963bc3ce221ea65cea9b6cf33bc2b4980d
cases/02-oq-wf-02-receipt.yaml	d0a7f0625e2efa483a37db2193d2909dd7caaf5d688639a9e9e009d0439cee9d
cases/03-oq-wf-03-submission.yaml	402f9851a52feff721a33f677daa8ca704fdea6cbd58c097ffad2377ee473cbb
cases/04-oq-wf-04-verification.yaml	1a79b9501439db53bc7472399095a351e9f839b5bf0041181fb9c6920b3a6712
cases/05-oq-wf-05-retraction.yaml	b010c63f4eb2a1425a0385c1794208fcc426ca178797222959bb0cc8a3cabb68
cases/06-oq-calc-01-calculation.yaml	7c0ddeb59dcf91851645e48519e147e35de0ccf6cbd511272dc6f50dc8f93e8b
cases/07-oq-round-01-precision-up.yaml	7b5bb533b731835b4033ddad68719b07f9ebd94d767645665d13820cc74dfb79
cases/08-oq-round-02-precision-down.yaml	7d5c62e4ea168e4bf1cab65ca4e0d8658638bebd77bb42d4206fae60f5a22190
cases/09-oq-spec-01-out-of-range.yaml	b79f35a64126c00a8a55b2870023e44c696f1b74275f451eee5e0d761360ac2a
cases/10-oq-spec-02-in-range.yaml	31ffd4955767ec6916c771bd49cc1493f277e5479304af25795d043ba95202a2
cases/11-oq-spec-03-on-the-limit.yaml	8df41e40f893749fcf642fec8c779568a59dfd9326e862ab7d691d70d142d90e
cases/12-oq-role-01-clerk-results.yaml	ecb521e019d2500bff7f0a9004428507d6d237c955bac50b097f82fd1cd754cf
cases/13-oq-role-02-self-verification.yaml	353401862847aabdf83c16e262b0a36f276e417645fb042cf8ba30373aee8116
cases/14-oq-role-03-analyst-verification.yaml	200f103148d91c8b280d000514de203628ab8c48843e891940bbd8f26a7effe4
catalogue.yaml	c7ae819aa1e869125ff4dc0fd57948ef8f7c4c99b7d7259b6fbb0e6553795c49