



Verifier's recognition kit - subclass 4.2

Version 3.0 – September 2021

MSMSS00011 Trade Measurement Verification
(Simple Measuring Instrument) – subclass 4.2

**Complete this kit by typing directly into the
document**

Applicant's name:	
Subclasses requested for assessment:	
Observation assessment method requested (select one)	<p>Video calling (VC)</p> <p>Pre-recorded videos</p> <p>Direct observation (applicant choice of site)</p>

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Version changes

Version number	Main changes
V3.0	<ul style="list-style-type: none">• Assessment also includes mandatory observation• Added pre-completion checklist to establish readiness (inc. LLN)• Re-wording of some questions/instructions, including to aid clarity. Some questions removed and new questions added.• Test report questions removed.• Verification form task changed to require completion using the electronic version of the form.• Supervisor/mentor report now called third party report with comments required for each checkpoint.• Kit to be completed electronically.

Introduction

This kit enables you to demonstrate your competence as a verifier of measuring instruments used for trade against the performance criteria and assessment requirements set out in the nationally recognised units of competency for the skill set:

MSMSS00011 Trade Measurement Verification (Simple Measuring Instrument) – for licence subclass 4.2

- [MSMTMVER302 – Verify simple measuring instruments](#)
- [MSMTMREF301 – Use and maintain reference standards](#)

On successful completion of assessment, you will receive a statement of attainment.

Read these instructions carefully in combination with the [Recognition kit instructions](#) and [Instructions for observation assessments](#) documents. In addition, carefully read the instructions included at the start of each section.

Before you complete and submit your recognition kit, you should:

- read through the whole kit to understand what is required of you
- spend time in the field with an experienced verifier learning about the topics in the following checklist
- complete the checklist below, to self-assess your skills and knowledge.

Please contact the NMI Administrator if you have difficulties in understanding the requirements for compiling/submitting your kit.

Email: NMIadministrator@measurement.gov.au

Tel: 02 8467 3789

I have adequate skills and knowledge in the following to be able to complete this kit, and perform these tasks in the workplace, without direct assistance:

Yes No Not sure

Spoken English communication

Mathematics

English reading skills

Computer skills

The instruments I intend to verify

The techniques used in testing instruments, including planning and preparation

Storing, maintaining and handling reference standards/test equipment

Likely impacts of the environment on the function of instruments and/or the standards/test equipment used to verify them

Work health and safety considerations relevant to testing instruments

My organisation's and NMI requirements for recording and reporting details of verifications and other licensing matters

Any adjustments or corrections that may be needed during the verification process

Marking instruments for verification (what to mark and where to place the mark)

Communicating to the owner/user of the instrument and requesting any assistance

If you have checked 'no' or 'unsure' to any of the items in the table above, and are unsure what you need to do to be in a position to answer 'yes', please speak to your supervisor.

Check the LLN section of the [Participant's handbook](#) if you need to develop your mathematics or English skills (speaking or reading) before you attempt this assessment.

In addition, you should have personally tested instruments, ideally under supervision, using the relevant national instrument test procedures to develop your skills - either in the workplace or in a simulated workplace environment.

Assessment instructions

Completion of the kit

You should complete this kit by typing directly into the document or clicking on checkboxes, where appropriate. If you have any problems with the functionality of the fillable kit, please email the kit to the NMI Administrator, detailing the issues that you are having, specifying which page/question etc.

Submit the whole document along with any additional scanned reports, documents and videos.

DO NOT, print it out and scan it.

The kit comprises a number of components for you to complete/submit, relevant to the test method/s you intend to use, including the following:

- **Your work history**
- **Written assessments** – Complete only the parts relevant to the test method/s you intend to use.
- **A specific question** that asks you to complete a [verification forms](#) (Form 6) using the information provided.
- **Third party report/s** – a report/s from the verifier/s who worked with you during your training, or a work colleague (where you have no access to a verifier).

In addition, you will be asked to demonstrate your skills by completing one or more simulated verifications, observed by your assessor or an NMI-appointed skills observer.

MAKE SURE YOU COMPLETE ALL PARTS OF THE RECOGNITION KIT

Skills assessment requirements

In your workplace

This assessment requires that you **demonstrate your practical skills**, by completing **simulated** initial verifications on instruments, in a real or simulated environment. During training within your organisation, you should have practised these skills, ideally under supervision of an experienced verifier/s, including completing the appropriate test reports that you will submit as evidence (workplace documents).

The experienced verifier/s that observe you should complete a third party report and sign the test reports you will submit.

Wherever possible, include examples from instruments that did not meet the requirements for verification, to show your understanding of unacceptable instrument performance.

For beverage dispensers (subclass 4.2)

You must provide copies of test reports relating to instruments you have tested (ideally) under supervision. You should have personally completed all the processes required as if you were completing **initial** verification of the instruments, without assistance. You will need to provide **three (3)** reports in total, including the report you complete during your skills observation/video. (The third report will usually be submitted immediately following observation).

If you wish to be assessed for more than one **test method**, you should have tested an instrument using each test method, and submit a report from each of those tests.

See the [Workplace test reports](#) section for more information.

NMI observation

Your assessor will need to confirm you have the necessary practical and communication skills required when verifying measuring instruments. This includes demonstrating knowledge of, and implementing, safe work practices. Depending on the circumstances, this will be completed by one of the following methods:

- Video calling - The assessor will use video calling to complete a direct observation of you, either at your work place or another suitable location (trader's site).
- Pre-recorded videos - You will provide a series of videos, showing you completing each of the stages required for verification of an instrument, in a real or simulated situation.
- In-person observation (your choice and arrangement of site) - The assessor, or an NMI-appointed skills observer, will observe you completing all the processes required for verification of an instrument either at your work place or another suitable location (trader's site).

Be sure to mark your preferred observation method option on the front of this kit and on the Recognition kit checklist.

- If you choose to complete the observation using video calling, your assessor will contact you to schedule a suitable time and date.
- If you have chosen to provide videos, and you are unable to email the video files, the NMI Administrator will provide a link where you can upload your videos, after we have received your kit.
- For direct observation at your workplace, or other suitable location of your choice, you will liaise with the assessor or skills observer.

IMPORTANT – Please See separate Instructions for observation assessment.

Third party reports

You should supply a report from a person (or persons) who has worked directly with you, and who can comment on your workplace performance over time. Ideally, this person is a verifier who has worked directly with you during your training, AND who holds a statement of attainment relevant to this skillset and subclass. If you don't have access to a verifier during your training, but have a workplace supervisor or colleague who works with you, ask them to provide a report. **Note, you may be asked to complete additional observations if you cannot provide a third party report from a verifier.**

Ask the person/s completing the report/s to read the instructions for completing their report **before** you finalise this kit. **If more than one person can provide evidence to support your assessment, have each of them complete a separate copy of the report, for submission:**

- An existing verifier should complete the Third party report (experienced verifier).
- Any other work colleague, who isn't a verifier, should complete the Third party report (non-verifier).

If you have access to an existing verifier, ensure they observe you testing the instruments for which you will provide workplace test reports for this kit. **They should sign each report you provide**, to confirm that you have correctly followed the relevant, current, national instrument test procedures for **initial verification**.

If you don't have access to anyone in your workplace who can provide either of the above third party report, please contact the NMI Administrator.

IMPORTANT - Submission of the kit and enrolment

Once you have completed all relevant components, complete the separate Recognition kit checklist and the checklist on the Applicant's details form, to check that you are submitting **all** the components required for this assessment.

Save this document on your computer, and name the file by adding your name to the file name. For example, if your name is Joe Smith, the file name for your completed kit will be:

RK 4.2 F V3.0 Joe Smith.

Scan each of the **additional** documents you have completed, and save them by the name of document and the kit e.g. scan and save the test reports you are submitting as:

RK 4.2 F V3.0 Test report 1 Joe Smith

If submitting videos, name them **RK 4.2 F V3.0 Video 4.2 (1) Joe Smith**

Include a number for each video so your assessor can watch them in order, e.g. Video 4.2 (1); Video 4.2 (2) etc. or name them by what is covered by each video e.g. Video 4.2 (visual inspection)

Email the kit and the other documents to nmiadministrator@measurement.gov.au and keep your original kit and documents. Your assessor will ask questions about your kit when they speak to you, so you need to have it available.

The NMI Administrator will advise you how to submit the videos if you are unable to email them.

Once we have received all parts of your kit, the NMI Administrator will contact you regarding enrolment.

Assessment

Your assessor uses a number of forms to record the results of each part of your assessment. The forms are included at the end of this kit for your information.

Following enrolment, you will be assigned an assessor and an NMI-appointed skills observer (SO) for your observation (where applicable).

If a SO completes your observation, they will contact you to make arrangements. Following observation, they will provide their report to your assessor.

Once your assessor receives your submitted material, and any observation report, they will:

- assess the submitted material
- determine if any further evidence is required
- discuss your workplace skills with the person/s providing any third party report (if necessary)
- contact you to confirm arrangements for any skills observation (if they are completing the observation)
- contact you to arrange a mutually convenient time to call you, if required, to:
 - confirm your understanding
 - discuss the reports/documents/videos you submitted
 - ask any other questions to confirm your competence.
- record your results and provide feedback on the assessment recording form
- return the kit to the NMI Administrator for processing and confirmation of the result of your assessment, by email, and posting out your statement of attainment, when successful.

Applicant's details

Name: First Middle Family

Email address:

Telephone: Work Mobile

Name of any third party providing a report:

Third party's telephone number:

Third party's email address:

Company name:

Check the test method/s you are being assessed for – relating to skill set MSMSS00011 Trade Measurement Verification (Simple Measuring Instrument):

4.2 Beverage dispensers (volumetric method)

4.2 Beverage dispensers (gravimetric method)

**Checklist to ensure you have included all the required components of this kit.
Check all that apply:**

Applicant's work history

Third party report/s

Written assessment (all subclasses)

Written assessment (4.2 Beverage dispensers – all test methods)

Written assessment (4.2 Beverage dispensers – volumetric method)

Written assessment (4.2 Beverage dispensers – gravimetric method)

[Completed verification form](#) for 4.2 Beverage dispensers

[Test reports](#) from tests you have completed in the workplace (check all relevant to the test methods you are being assessed for):

4.2 Beverage dispensers (volumetric method)

4.2 Beverage dispensers (gravimetric method)

Applicant declaration: I verify that I personally completed all the work and activities related to, and submitted as part of this kit, without assistance.

(Complete the declaration once you are ready to submit the kit).

Name:

Date kit submitted:

Complete your work history on the next page

Applicant's work history and training

Details of current employment

Organisation:

Postal address:

Date employment started:

Date training related to these subclasses started:

Title of your current position:

Details of previous relevant employment

Organisation:

Postal address:

Period of employment: From: To:

Title of your previous position:

Relevant work experience

Specify the length of time you have been testing beverage dispensers and the approximate number of instruments you have tested (including under supervision and in simulated workplace situations)

Detail any relevant training courses you have attended (name and date) and attach copies of any relevant trade qualifications:

Assessment recording form (assessor)

Applicant name:

Assessor name:

Date kit received:

Applicant's ID checked at interview:

Summary of evidence used to assess the applicant:

Written assessments

Completed verification form task

Third party report/s

Conversation with applicant

Review of test reports

Skills observation/report/review of videos

Other – specify:

To obtain the skill set MSMSS00011 – Trade measurement verification (simple measuring instrument), applicants must demonstrate competency in both units of competency.

This applicant was assessed as:

Competent

Not yet competent

MSMTMREF301 Use and maintain reference standards

MSMTMVER302 Verify simple measuring instruments

Check whether they are satisfactory or not yet satisfactory for each test method requested:

Satisfactory

Not yet satisfactory

4.2 - Beverage dispensers (volumetric method)

4.2 – Beverage dispensers (gravimetric method)

Assessor's name:

Date:

RTO manager's signature:

Date:

Assessor's feedback form

Assessor: Please include feedback to the applicant here and add your name and date to the bottom of the form. Particularly where you have assessed the applicant as NYC, ensure you identify which assessment requirements the applicant has not yet demonstrated (e.g. Performance criteria (PC) 2.4 of the unit of competency (UoC) MSMTMREF301 - Use and maintain reference standards was not met as you were unable to correctly validate the reference standard suitability).

Assessor's name:

Date:

Instructions for all written assessments

You must complete the 'all subclasses questions'

In addition, complete all questions relating to the specific test methods you wish to verify.

For multiple choice questions, check the correct answer, or answers. If you make a mistake, you can simply uncheck the box/es and check the new correct box/es.

For free text questions, type in the text box provided below each question. Include any calculations you use. The text box shouldn't limit how much you can write, but the size of the box indicates the expected maximum length of your answer.

If you have any problems writing your calculations in the text box, write them on a separate document, referencing the question they relate to (e.g. All subclasses Q19), then scan or photograph them and email along with your kit.

Name the added document **RK 4.2 F V3.0 Calculations Joe Smith**

Written assessment 'all subclasses'

If you are completing other kits at the same time as this kit, complete the all subclasses questions in the OTHER kit, but note that for question 3, you only need to include 2 hazards for instruments of subclass 4.2.

1. In your own words, describe:

a) what a hazard is.

Correct

Incorrect

b) what a risk is.

Correct

Incorrect

2. List **four** basic duties you have under the safety legislation in your state or territory, as an employee or worker.

Satisfactory

Incomplete

Incorrect

3. List the main workplace health and safety **hazards** that you face when verifying measuring instruments or measures. Your answer should relate to the environments and method/s of verification for instruments/measures for which you are currently being assessed. Write your answer below. **Include at least 5 common hazards (2 for subclass 4.2. Add another 5 per additional kit you are completing at the same time).** In addition, identify the main controls you apply to ensure your safety, and list any specific workplace procedure that applies to the hazard.

Hazards	Controls	Workplace procedures
1.		
2.		
3.		
4.		
5.		
1.		
2.		
3.		
4.		
5.		
1.		
2.		
3.		
4.		
5.		

Satisfactory Incomplete Incorrect

4. Do you know what a SDS and a SWMS are?

a) Explain what a SDS is:

Correct Incorrect

b) Give an example of when you would use a SDS:

Correct Incorrect

c) Explain what a SWMS is:

Correct Incorrect

d) Give an example of when you would use a SWMS:

Correct Incorrect

5. As part of the licence conditions, a servicing licensee is required to maintain a quality management system. From the following list, select each item that is included in your quality management system manual. Check **all** that apply.

- a) The requirement for all measuring instruments/measures to be of an approved pattern and comply with their certificate of approval.
- b) Details of mandatory reverification periods for instruments/measures used for trade.
- c) References to the national instrument test procedures relevant to the servicing licence.
- d) Procedures relating to instruments/measures that cannot be verified.

Satisfactory Incomplete Incorrect

6. Which document, maintained by the servicing licensee, details the required format of the mark that verifiers, working under that servicing licence, must apply to show an instrument/measure has been verified? Choose the single correct answer.

- a) The National Trade Measurement Regulations 2009.
- b) The licensee's quality manual.
- c) The National Instrument Test Procedures.
- d) The licensee's servicing licence

Correct Incorrect

7. You have just changed your home address. What are you required to do? Choose the single correct answer.

- a) Nothing.
- b) Notify my employer who will notify NMI within 2 months.
- c) Notify my employer who will notify NMI within 14 days.
- d) Call my local trade measurement inspector and leave a message.

Correct Incorrect

8. If you verify a measuring instrument/measure, how long do you have to submit notice of the verification to the National Measurement Institute on the approved form? Choose the single correct answer.

- a) 7 days
- b) 14 days
- c) 21 days
- d) 1 month

Correct Incorrect

9. Select the actions you would take when you test a measuring instrument/measure in use for trade and you determine that you cannot verify it. Check **all** that apply.

- a) Replace the verification mark with one indicating the instrument/measure can no longer be used for trade.
- b) Remove any existing verification mark (where feasible).
- c) Notify the owner within 14 days.
- d) Notify the owner immediately.
- e) Notify NMI within 14 days
- f) Notify NMI immediately.

Satisfactory Incomplete Incorrect

10. What could be the consequence if you failed to provide the trader with a notice of non-verification when you have been unable to verify a measuring instrument/measure used for trade? Check **all** that apply.

- a) No consequence provided I told the trader they couldn't use the instrument/measure for trade.
- b) Customers could get incorrect measure.
- c) Nothing, it's the trader's responsibility to check the instrument/measure is correctly marked.
- d) I could be fined.
- e) I could be restricted from verifying instruments/measures.

Satisfactory Incomplete Incorrect

11. If you were unsure of the correct way to apply a verification mark to a measuring instrument/measure, or any other requirement relating to the verification process, what would you do? Write your answer below. Include at least **three** points.

Satisfactory Incomplete Incorrect

12. How often must a measuring instrument/measure used for trade (excluding weighbridges used for public weighing) be re-verified? Choose the single correct answer.

- a) Every 3 years.
- b) Every 5 years.
- c) Whenever it has been adjusted/repaired or every 2 years.
- d) Whenever an adjustment or repair affects its metrological performance.

Correct Incorrect

13. Can you verify a measuring instrument/measure where its certificate of approval states 'cancelled in respect of new instruments as from 1 January 2018'? Choose the single correct answer.

- a) No, never.
- b) Yes, always.
- c) Yes, if the instrument/measure was manufactured before 1 January 2018.
- d) Yes, provided the instrument is new.

Correct Incorrect

14. What markings would you apply to an instrument/measure you verified on 13 August 2020 if your servicing licensee code is DBA and you have the verifier number VR 01278? Choose the single correct answer.

- a) DBA 1278 80
- b) 1278 B 20
- c) DBA 1278 H0
- d) DBA 1278 H20
- e) 1278 DBA H20

Correct Incorrect

15. The following questions relate to the connection of **auxiliary devices** to measuring equipment.

- a) Which document specifies the requirements for the installation of auxiliary indicating or printing devices and POS systems installed prior to 1 August 2012? Choose the single correct answer.
 - i. S1/0/A
 - ii. S1/0B
 - iii. Supplementary certificate of approval for the device/system
 - iv. Measuring instrument approval

Correct Incorrect

- b) Which document specifies the requirements for the installation of auxiliary indicating or printing devices installed after 1 August 2012, **excluding** POS or Control systems? Choose the single correct answer.
 - i. S1/0/A
 - ii. S1/0B
 - iii. Supplementary certificate of approval for the device/system
 - iv. Measuring instrument approval

Correct Incorrect

- c) Which document specifies the requirements for the installation of POS systems installed after 1 August 2012? Choose the single correct answer.
 - i. S1/0/A
 - ii. S1/0B
 - iii. Supplementary certificate of approval for the device/system
 - iv. Measuring instrument approval

Correct Incorrect

- d) When verifying an instrument which has an auxiliary device (other than a POS or control system) connected to it, what are the requirements for verification marking? Choose the single correct answer.
- i. Apply a mark to the instrument only
 - ii. Apply a mark to the auxiliary device only
 - iii. Apply a mark to both the auxiliary device and the instrument

Correct Incorrect

16. Provide a couple of examples of how a trader's use of an instrument/measure may impact on its performance. (Give **two examples** per instrument type you are being assessed for at this time).

Satisfactory Incomplete Incorrect

17. In your organisation, how do you maintain records relating to verification? You should include **at least 2 points**.

Satisfactory Incomplete Incorrect

18. In order to verify instruments/measures, what are the principal legal requirements for the business and the individual completing a verification? Include **at least 3 points** in your answer.

Satisfactory Incomplete Incorrect

19. Who is responsible for determining whether a particular model of instrument can legally be used for trade in Australia?

Correct Incorrect

20. Where could you find the legal units of measurement for Australia? Choose **any** that apply.

- a) On the NMI internet pages.
- b) In the *National Measurement Act 1960*
- c) In the *National Measurement Regulations 1999*.
- d) In the licensee's quality manual

Correct Incorrect

21. MPEs for instruments/measures may be given in a number of different documents. If the instrument/measure you are to verify was first approved on the 20th January 2020, where would you find the correct MPE to use during testing?

Correct Incorrect

The questions listed below apply specifically to the knowledge requirements for the unit of competency MSMTMREF301 - Use and maintain reference standards

22. List the **reference standards/test equipment** you use when verifying measuring instruments or measures. (Include capacity ranges, scale intervals and class/es, where appropriate) The answer you give should relate to **all** instrument subclasses for which you are being assessed. Write your answer below.

Satisfactory Incomplete Incorrect

23. How do you protect the integrity of the **reference standards and test equipment** you described in the previous question? Your answer should relate to storage, transportation and handling of reference standards and equipment. Write your answer below. Include **at least four** points.

Satisfactory Incomplete Incorrect

24. This question relates to the reference standards/test equipment you use, not the instrument/measure being tested.

What environmental factors could influence the integrity of the **reference standards and test equipment** that you use when verifying instruments/measures? The answer you give should relate to any instrument subclasses for which you are being assessed. Check **all** that apply.

- a) Temperature
- b) Humidity
- c) Electrical interference
- d) Wind/air movement
- e) Rain/water
- f) Gravity
- g) Dust/dirt
- h) Instrument level
- i) Pressure
- j) Vibration
- k) Other (detail):

Satisfactory Incomplete Incorrect

25. How do you control these factors when undertaking a verification? The answer you give should relate to the standards/equipment for all subclasses for which you are being assessed. Write your answer below. You should include **at least one** control per item selected above.

Satisfactory Incomplete Incorrect

26. You have damaged a reference standard/test equipment used to verify measuring instruments/measures. What should you do with it? Choose the single correct answer.

- a) Fix the damage
- b) Quarantine it, until it has been repaired, tested and approved for use by the appropriate authority.
- c) Use it until it can be repaired.
- d) Quarantine it and then use it once repaired, if it is repairable.

Correct Incorrect

27. When using reference standards/test equipment, what signs/symptoms/measurement results might alert you to a possible problem/fault/damage with those standards/test equipment? Provide answers for each of the types of standards or equipment you use when verifying instruments/measures of the subclass/es you are being assessed for. Include **at least two** points per different type of reference standard/test equipment you use.

Satisfactory Incomplete Incorrect

28. You have verified and marked a measuring instrument/measure when you notice that a reference standard/test equipment used for the verification is damaged or faulty. What should you do with regards to the **verified instrument/measure**? Write your answer below. Include **at least two** points.

Satisfactory Incomplete Incorrect

29. What does your quality management system require your organisation to do when there is a change to the reference standards/test equipment you use, i.e. when you acquire new standards/test equipment, when your standards/test equipment are re-verified, when you dispose of standards/test equipment that are broken/excess to requirements? Check **all** that apply.

- a) Ensure that new standards/test equipment have the appropriate certification.
- b) Allocate a junior member of staff to clean the new standards/test equipment.
- c) Update the list of reference standards/test equipment.
- d) Supply a copy of the updated list of reference standards/test equipment to NMI within 30 days of the change.
- e) Supply a copy of the updated list of reference standards/test equipment to NMI within 14 days.

Satisfactory Incomplete Incorrect

30. What is the principal purpose of a certificate of verification (e.g. a Reg.13 certificate)? Write your answer below.

Satisfactory Incomplete Incorrect

31. What procedures does your business need in place for maintenance and calibration of your reference standards/test equipment? Refer to your quality manual. Write your answer below. Include **at least two** points.

Satisfactory Incomplete Incorrect

32. Can you identify any limitations of the reference standards/test equipment you use during verification related to the verification or the environment in which they are used? Address this question to all reference standards/test equipment you may use for the subclasses you are currently being assessed for, describing the limitations and how significant they might be.

Satisfactory Incomplete Incorrect

33. What are organisations who are authorised to verify reference standards called?

Correct Incorrect

Written assessment for subclass 4.2 (all test methods)

1. Complete the MPE values for each quantity in the table below for beverage dispensers used to measure alcoholic liquor:

Approval number	Quantity delivered	MPE
4/5/16B	15 mL	
5/6S/15	15 mL	
4/5/20	30 mL	
5/6S/12 Variant 2	60 mL	
4/9/4	1 – 20 L	

Satisfactory Incomplete Incorrect

2. What liquids can be used during verification of beverage measures? Choose the single correct answer.
- a) Any liquid can be used
 - b) Only those liquids given in the instrument's approval
 - c) Water
 - d) Pure alcohol

Correct Incorrect

3. Which of the following beverage dispensers require a low-level cut-out test? Check all that apply.
- a) 4/5/12A
 - b) 4/5/12C
 - c) 4/5/15
 - d) 4/5/16
 - e) 5/6S/15

Satisfactory Incomplete Incorrect

4. How would you complete a low-level cut out test for a remote storage alcoholic beverage dispensing system?

Satisfactory Incomplete Incorrect

5. Can you verify a remote storage alcoholic beverage dispensing system, NMI 5/6S/13, when the air pressure indicated by the system is 250 kPa, it is delivering accurate measurement of product and has passed all tests? Explain your answer

Satisfactory Incomplete Incorrect

6. You have just been employed by a licensee who holds a licence for instruments of subclasses 4.2 and 4.3. You have obtained a statement of attainment for instrument subclasses 4.2, but have yet to gain a statement of attainment for subclass 4.3. You have assisted your employer in verifying alcoholic beverage measures on many occasions. Your employer asks you to verify a batch of beer glasses as a rush job for a valuable customer, while he is overseas. What should you do? Choose the single correct answer.

- a) Verify the measures and release them to the customer– they don't need a verifier number to be marked.
- b) Test the measures but don't release them to the customer until your employer has completed the verification form.
- c) Verify the measures and release them to the customer, but tell the customer your boss will double check them when he returns.
- d) Tell your employer that you are not competent to verify the measures.

Correct Incorrect

7. You are completing annual testing of a number of beverage dispensers, as part of a service agreement with a customer and notice that all the dispensers appear to have errors to the advantage of the customer. What might be the cause of this? Write your answer in the text box below.

Satisfactory Incomplete Incorrect

8. During annual testing of instruments of pattern approval NMI 5/6S/13, you notice that some of the beverage dispensers are being used to measure Bourbon and Tequila. Is this acceptable practice? Explain your answer and what you might do if it is not?

Satisfactory Incomplete Incorrect

9. Which of the following would trigger the need to re-verify a beverage dispenser? Check all that apply.

- a) Replacement of a worn data plate
- b) Calibration adjustment of instrument
- c) Replacement of a measuring bowl for a bottle-mounted liquor dispenser
- d) All of the above

Satisfactory Incomplete Incorrect

10. Name 5 of the principal metrological components of a beverage dispenser. – Briefly describe their function.

Component	Function

Satisfactory Incomplete Incorrect

11. Define density and explain in your own words what happens to the density of a liquid as the temperature increases

Satisfactory Incomplete Incorrect

12. What environmental factors might affect the performance of a beverage dispenser? Include **at least two** factors and describe controls to prevent them affecting the dispenser.

Satisfactory Incomplete Incorrect

13. Which of the following are legal units of volume in Australia? Check **all** that apply.

- a) Gallons
- b) Litres
- c) Cubic centimetre
- d) Kilogram
- e) Fluid ounce

Satisfactory Incomplete Incorrect

Written assessment – Questions specific to the volumetric test method

Complete only if you wish to be assessed for this test method

1. What is the required accuracy for reference volume measures used to test liquor dispensers in relation to the MPE for the dispensers?

- a) One third of the MPE of the dispenser
- b) ± 0.5 mL
- c) Combined uncertainties and variations of the volume measure should be no more than one third of the MPE of the dispenser
- d) One third of the MPE of the control instrument

Correct Incorrect

2. What is the minimum number of deliveries required when testing a beverage dispenser approved for non-alcoholic beverages by the volumetric test method for each volume capable of being dispensed?

- a) 1
- b) 2
- c) 3
- d) 5

Correct Incorrect

3. Consider the Regulation 13 certificate of verification given below, and the *National Measurement Regulations 1999* and answer the following questions that relate to it and the standards detailed in it.

a) What is the uncertainty of the 30 mL measure at the 30 mL mark? Choose the single correct answer.

- i. 30 mL
- ii. 30.009 mL
- iii. 14.91 mL
- iv. ± 0.010 mL

Correct Incorrect

b) What conditions applied during the verification of the reference measures?

Satisfactory Incomplete Incorrect

c) Should the reference standards be used wet or dry when testing beverage dispensers? Explain your answer.

Satisfactory Incomplete Incorrect

d) Are these standards actual value or nominal value reference standards?

Satisfactory Incomplete Incorrect



Australian Government
Department of Industry, Science,
Energy and Resources

National
Measurement
Institute

**Certificate of Verification of a Reference Standard of Measurement in accordance
with Regulation 13 of the *National Measurement Regulations 1999* (Cth) in
accordance with the *National Measurement Act 1960* (Cth)**

Certificate Number RN211268

Description of standard of measurement: 30 mL borosilicate glass liquor measure and
5 mL borosilicate glass pipette, 2 pieces

Permanent distinguishing marks: 30mL - G2866A, 5mL - G2866C


Date of verification: 28 July 2021

Period of certificate: From date of verification until 28 July 2031

Value(s) of standard of measurement: As stated in Report RN211268 of the National
Measurement Institute

Accuracy of verification: Uncertainty of value(s) as stated in Report
RN211268 of the National Measurement Institute

Values and uncertainties of relevant influence factors:
As stated in Report RN211268 of the National
Measurement Institute

Signature: 

Date: 24 August 2021

Name of Signatory: Mr Greg Buckley

Being a person with powers delegated by the Chief Metrologist acting under section 18D of the *National Measurement Act 1960* (Cth) in respect of regulation 13 of the *National Measurement Regulations 1999* (Cth), I hereby certify that the above standard is verified as a reference standard of measurement in accordance with the regulations.

Note: Report RN211268 of the National Measurement Institute forms part of this Certificate.



MEASUREMENT REPORT ON

30 mL borosilicate glass liquor measure and a 5 mL borosilicate glass pipette,

Serial number: 30mL - G2866A & 5mL - G2866C



Accredited for compliance with ISO/IEC 17025 - Calibration
Accreditation Number 1.

The National Measurement Institute is responsible for Australia's units and standards of measurement.
The measurement results presented in this report are traceable to Australia's primary standards.

Measurement Standards Unit, Brisbane:
33 Kingtel Place
Geebung QLD 4034
Australia

Telephone: +61 2 9449 0139
Facsimile: +61 7 36136198

Headquarters:
GPO Box 2013
Canberra ACT 2601
Australia
Telephone: +61 2 8467 3600

For further information contact: Rolf Grubwinkler Telephone: +61 7 3613 6105

Ref: RN211268

File: CB/11/0821

Checked: ✖

Date: 29 July 2021

This report may not be published except in full unless permission for the publication of an approved extract has been obtained in writing from the Chief Metrologist, National Measurement Institute.

For: National Measurement Institute,
Trade Measurement Services, Brisbane
33 Kingtel Place
GEEBUNG QLD 4034
Australia

Description: 30 mL borosilicate glass liquor measure and a
5 mL borosilicate glass pipette, 2 pieces

Maker: Labglass brand borosilicate glass liquor measure and a
Blau brand borosilicate glass pipette.

Serial Number: 30mL - G2866A & 5mL - G2866C

Previous Examination: RN111275 dated 4 August 2011

Date(s) of Test: 12 to 28 July 2021

Results of measurement:

Table 1

Description: 30 mL borosilicate glass liquor measure

Identifying Marks(s): G2866A

Scale Interval: 1.0 mL

Nominal Volume	Measured Volume (mL)	Uncertainty (\pm mL)	Coverage factor (k)
29 mL	28.976	0.010	2.1
30 mL	30.009	0.010	2.0
31 mL	31.011	0.010	2.0
32 mL	32.017	0.010	2.0

Ref: RN211268

File: CB/11/0821

Checked: 

Date: 29 July 2021

Table 2

Description: 5 mL borosilicate glass pipette
 Identifying Marks(s): G2866C
 Scale Interval: 0.05 mL

Nominal Volume	Measured Volume (mL)	Uncertainty (± mL)	Coverage factor (k)
1 mL	1.002	0.010	2.1
2 mL	2.005	0.010	2.1
3 mL	3.020	0.010	2.0
4 mL	4.026	0.010	2.0
5 mL	4.989	0.010	2.0

Notes

1. The uncertainty stated in this Report has been calculated in accordance with the principles in *JCGM 100:2008 - Evaluation of measurement data - Guide to the expression of uncertainty in measurement*, and gives an interval estimated to have a level of confidence of 95%. Unless otherwise stated, a coverage factor (*k*) of 2.0 has been used. The uncertainty applies at the time of measurement only and takes no account of any drift or other effects that may apply afterwards. When estimating the uncertainty at any later time, other relevant information should also be considered, including, where possible, the history of the performance of the instrument and the manufacturer's specification.
2. The measured volume was calculated for reference temperature of 20 °C.
3. A cubic expansion coefficient of $9.9 \times 10^{-6}/^{\circ}\text{C}$ was used when referring the results to the reference temperature. The measured volume was determined with the bottom of the meniscus set to the top of the graduation line.
4. The liquor measure has been verified to 'CONTAIN'. Prior to use, the measure is required to be completely 'DRY'.
5. The pipette has been verified to 'DELIVER'. Prior to use, the pipette is required to be 'WET'. A 3 second waiting and setting time was used except in the case of a 5 mL delivery when a 15 second waiting time is used.
6. The measure was verified using the National Test Method 14.2.

Ref: RN211268

File: CB/11/0821

Checked: ✓

Date: 29 July 2021

7. The measure has been verified against the following reference standard(s):

Delta Ohm digital thermometer S/N: 09000401. Certificate No. RN210101,
Expiry Date: 01/03/2023

20 kg to 1 mg state secondary weights, Set G, Certificate No: RN202123,
Expiry Date: 04/11/2021

8. The verification was conducted at Measurement Standards Unit, Brisbane,
33 Kingtel Place, Geebung QLD 4034.

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Mr Greg Buckley
for Dr R B Warrington
Chief Metrologist



Mr Ridley Nugara
NMI approved signatory

Ref: RN211268

File: CB/11/0821

Checked: 

Date: 29 July 2021

Written assessment – Questions specific to the gravimetric test method

Complete only if you wish to be assessed for this test method

1. What is the required accuracy for reference standard weights used to test control instruments used in testing beverage dispensers? Choose the single correct answer.
- a) Combined uncertainties and variations of the weights used should be no greater than the MPE of the dispenser
 - b) $\pm 0.5 e$
 - c) Combined uncertainties and variations of the weights used at any load point should be no greater than one third of the MPE of the control instrument
 - d) $\pm 1.5\%$
- Correct Incorrect
2. Consider the Regulation 13 certificate of verification that follows, and *the National Measurement Regulations 1999*, and answer the following questions that relate to it and the weights detailed in it.
- a) What **maximum permissible** uncertainty applies for the 50 mg reference standard? Choose the single correct answer.
- i. 0.130 mg
 - ii. 0.27 mg
 - iii. 0.040 mg
 - iv. 0.080 mg
- Correct Incorrect
- b) Are these standards actual value or nominal value standards?
- Correct Incorrect

Further questions follow the certificate



Australian Government
National Measurement
Institute

**Certificate of Verification of a Reference Standard of Measurement in accordance
with Regulation 13 of the *National Measurement Regulations 1999* (Cth) in
accordance with the *National Measurement Act 1960* (Cth)**

Certificate Number RN181433

Description of standard of measurement: Inspectors' Class 1 standard of mass:
Set of weights, 2 kg to 1 mg, 57 pieces

Permanent distinguishing marks: See attached Schedule

Date of verification: 31 July 2018

Period of certificate: From date of verification until 31 July 2020

Value(s) of standard of measurement and accuracy of verification:
Deemed equal to the denomination, in accordance
with Regulations 30 and 31; see attached Schedule

Signature: *J. J. Buckley*

Name: Mr Greg Buckley

Date: 3 August 2018

Being a person with powers delegated by the Chief Metrologist acting under section 18D of the *National Measurement Act 1960* (Cth) in respect of regulation 13 of the *National Measurement Regulations 1999* (Cth), I hereby certify that the above standard is verified as a reference standard of measurement in accordance with the regulations.

This document may not be published except in full unless permission for the publication of an approved extract has been obtained in writing from the Chief Metrologist, National Measurement Institute

Test Method: NIM14.1

Trade Measurement Laboratory, Brisbane
33 Kingtel Place
Geebung QLD 4034
Australia

Telephone: +61 7 3613 6102
Facsimile: +61 7 3613 6198

Headquarters:
GPO Box 2013
Canberra ACT 2601
Australia
Telephone: +61 2 8467 3600

Signature: *Rolf Grubwinkler*

Name: Mr Rolf Grubwinkler

NMI approved signatory

Date: 3 August 2018



Accredited for compliance with ISO/IEC 17025 - Calibration.

Accreditation Number 1.

The measurement results presented in this document are traceable to Australian standards.

Schedule to Regulation 13 Certificate Number RN181433

Weights contained in case marked TMQ M-20

Denomination	Material/Construction
2 kg	stainless steel cylindrical weight
2 kg*	stainless steel cylindrical weight
1 kg	stainless steel cylindrical weight
500 g	stainless steel cylindrical weight
200 g	stainless steel cylindrical weight

Weights contained in box marked TMQ M-20

Denomination	Material/Construction
200 g*	stainless steel cylindrical weight
100 g	stainless steel cylindrical weight
50 g	stainless steel cylindrical weight
20 g	stainless steel cylindrical weight
20 g*	stainless steel cylindrical weight
10 g	stainless steel cylindrical weight
5 g	stainless steel cylindrical weight
2 g	stainless steel cylindrical weight
2 g*	stainless steel cylindrical weight
1 g	stainless steel cylindrical weight
500 mg	stainless steel rectangular weight
200 mg	stainless steel rectangular weight
200 mg*	stainless steel rectangular weight
100 mg	stainless steel rectangular weight
50 mg	stainless steel rectangular weight

Checked: *RG*

Page 2 of 3

Schedule to Regulation 13 Certificate Number RN181433

Denomination	Material/Construction
20 mg	stainless steel rectangular weight
20 mg*	stainless steel rectangular weight
10 mg	stainless steel rectangular weight
5 mg	aluminium rectangular weight
2 mg	aluminium rectangular weight
2 mg*	aluminium rectangular weight
1 mg	aluminium rectangular weight

Weights contained in pill box marked TMQ M-20

Denomination	Quantity/Material/Construction
500 mg	10 × stainless steel wire weights
200 mg	10 × stainless steel wire weights
100 mg	10 × stainless steel wire weights

Checked: *RG*

Page 3 of 3

3. What is the purpose of a control instrument? Check **all** that apply.

- a) To check the reference weights are correct
- b) To determine the weight of liquids measured by the dispenser
- c) To control the delivery of the beverage dispensed
- d) To determine the density of the liquid(s) measured

Satisfactory Incomplete Incorrect

4. What are the requirements for a control instrument suitable for testing a beverage dispenser capable of dispensing quantities of water from 1-20 whole litres? Check **all** that apply.

- a) Have a maximum MPE of $\pm 1/3$
- b) Have a maximum MPE of $\pm 0.5 e$
- c) Have a scale interval $< 0.2\%$ of the nominal mass of the liquid equivalent to the volume purported to be delivered
- d) Have a scale interval $< 0.1\%$ of the mass of the sample of liquid use to determine the liquid's density
- e) Have been tested within 14 days of testing the dispenser(s)
- f) Have a max capacity no less than the heaviest load to be weighed + 10%
- g) Have a max capacity equal to the heaviest load to be weighed
- h) Be a non-automatic weighing instrument
- i) Be of an approved pattern or have an approved load cell and indicator which meets the requirements of 6B/0
- j) Have been tested immediately prior to testing of the instruments to be verified

Satisfactory Incomplete Incorrect

5. What value for density should be used when testing a water dispensing machine?

Correct Incorrect

Verification form task

Download a 'Certificate of verification or notice of non-verification of a measuring instrument' form ([Form 6](#)) from the [verifying measuring instruments](#) page of the industry.gov.au website.

DO NOT print the form out.

Complete **all required fields** into the **electronic** form using the information given below, including the appropriate instrument performance code.

Once you have completed the form/s, save it/them, named as described in the [instructions](#), and include with your submitted recognition kit.

For subclass 4.2 (all test methods)

- Verification carried out for instrument user Lasseter's Hotel Casino, 93 Barrett Drive, Alice Springs NT 0870, ABN67676454542323.
- Verification carried out on the 14/09/21 by Bradley Turner Verifier number VR-00987.
- Licensee is Liquotec Pty Ltd SL-0582, Licensee's Mark is LTC. Licensee's ABN is 111122223333
- Instruments verified are 5 ITW Spirit dispensers Model ETN4, capacity 30 mL, approval number NMI 4/5/16A, serial numbers A123456, A122333, A413413, A232323, and A312312.
- Instrument A123456 was verified as a new instrument, the other 4 were verified following maintenance and service to leaking dispensers. In all 4 cases they had been delivering under-measure.

Satisfactory Incomplete Incorrect

Workplace test reports

In your workplace you need to develop your skills by testing instruments in accordance with the national instrument test procedures, ideally under the supervision of an experienced, competent verifier. When completing tests, record all your results, the details of the instruments tested and the reference measures/equipment you used, in test reports as used in your workplace. Show any calculations you use during the process.

Wherever possible, include reports for testing different models of instruments, and non-compliant instruments, to demonstrate your knowledge of the requirements.

If you have access to an experienced verifier, ask them to sign each test report to indicate they have observed you test the instrument, in accordance with the relevant NITP, before scanning the reports you submit.

You must provide three (3) test reports in total.

From the pool of reports you have completed in the workplace, submit a minimum of **two (2)** reports, **with accompanying calculations**, representing your best work and demonstrating your understanding of the test procedures and processes required for **initial verification** of the instruments.

Indicate on the report where you would apply the verification mark to each instrument tested.

You will provide a **third test report** from the test you complete when doing your observation/video.

Be sure to include at least **one (1)** report for each test method being assessed.

Scan the test reports and include them with your completed kit, named as described in the [instructions](#).

Third party report (experienced verifier)

Applicant:

Use this report **ONLY** if you hold the relevant statement of attainment for this skill set and the test method/s being assessed.

Persons providing a report must have directly supervised the applicant during training and completion of the simulated verifications for which the applicant is providing test reports. If other verifiers have also supervised the applicant, ask each of them to complete an additional report.

You must complete all pages of this report, in particular, you must include written comments to support your responses in the checklist (other than where N/A). It is essential that you detail your observations of how the applicant ensured safety for self and others and how clearly and effectively the applicant communicated with clients/colleagues.

We thank you for your contribution. The applicant's assessor may need to contact you to clarify your responses, or to gain additional information.

Are you a verifier, or inspector of trade measurement? **Yes No**

Verifier/inspector number:

What subclass/es of instrument are indicated on the statement/s of attainment you hold (e.g. 4.2)?

Have you verified instruments of these subclasses within the last 18 months? **Yes No**

State approximate numbers verified for subclass 4.2:

Describe briefly your level of experience in testing and verifying instruments of subclass 4.2. For example, how long have you been working with these instruments and in what ways (repairs, installation, verification).

During the last 12 months I have personally observed the applicant test the undermentioned instruments (including those detailed in the test report/s I have signed), without assistance, and in accordance with the National Instrument Test Procedures, paying close attention to detail and accuracy, while correctly selecting, using and handling the appropriate reference standards/test equipment:

	Yes	No	If yes, number of instruments tested
4.2 Beverage dispensers			

In addition, the applicant has demonstrated to me correctly, on at least two occasions (in a simulated environment), how a verification label should be marked and where it should be applied to instruments of this subclass.

Name of third party:

Date:

Telephone number of third party:

Third party report (experienced verifier)

Have you observed the applicant:	Yes	No	Not applicable or not able to comment
<ul style="list-style-type: none">liaise effectively with traders when organising site visits to ensure any assistance/equipment is provided, and to minimise impacts on traders, customers and employees – in accordance with company expectations? What interactions have you observed?			
<ul style="list-style-type: none">explain verification procedures and outcomes clearly and effectively to traders, including respectfully communicating any inadequacies in the way traders use instruments? When/where did you observe this?			
<ul style="list-style-type: none">correctly select, and ensure the suitability of, reference standards/test equipment for the specific task, as required by the relevant national instrument test procedures? How did they do this?			
<ul style="list-style-type: none">maintain the integrity of reference standards/test equipment during their storage, transport and use to ensure they are suitable for use? What did you observe?			
<ul style="list-style-type: none">identify, access and correctly interpret and apply certificates of approval and certificates of verification (Reg 13s)?			

Third party report (experienced verifier)

Have you observed the applicant:	Yes	No	Not applicable or not able to comment
----------------------------------	-----	----	---------------------------------------

-
- identify, access and correctly interpret and apply relevant test procedures when testing instruments? **When did you observe this?**
-

-
- evaluate the impact of the **operating environment** on the performance of the **instrument/standards/test equipment** and make any adjustments to ensure there was no impact? **Provide an example of when and how they did this.**
-

-
- identify local hazards and apply appropriate safety precautions as relevant to the hazard/s, in accordance with local legislation and company procedures? Include in your comments:
 - how they ensure safety for self and others when testing instruments
 - examples of compliance with local induction requirements
 - how they establish access to first aid

Include an example of what you observed them do at a site/in the workshop.

Third party report (experienced verifier)

Have you observed the applicant:	Yes	No	Not applicable or not able to comment
<ul style="list-style-type: none">correctly apply calculations to determine the verification result, as required by the national instrument test procedures?			
<ul style="list-style-type: none">correctly identify and apply the correct maximum permissible errors for each individual test, as determined by national trade measurement legislation and the national instrument test procedures?			
<ul style="list-style-type: none">analyse test results to determine whether an instrument could be marked for trade use, in accordance with the national instrument test procedures?			
<ul style="list-style-type: none">record, report and maintain test results and findings clearly, accurately, securely and in accordance with company policy? Provide details of how they did this.			
<ul style="list-style-type: none">correctly assess for compliance any auxiliary printing and indicating devices (non-POS) attached to measuring instruments? Detail the device and the instrument it was attached to.			
<ul style="list-style-type: none">solve routine or unexpected problems and seek advice, when required? Provide at least one example.			

Detail the approximate date range during which you have observed the applicant as detailed above:

From:

To:

The applicant has demonstrated oral and written language skills and numeracy skills to a standard expected for this role in our organisation.

Yes

No

Name of third party:

Date:

Third party report (non-verifier)

(This form is only for use where the applicant has not been supervised/trained by an experienced verifier of instruments relating to this kit)

Applicant:

Use this form if you have worked with the applicant but do NOT hold statements of attainment for this skill set (and unit of competency, if applicable)/subclasses.

You must complete all pages of this report. In particular, you must include written comments to support your responses in the checklist, including details of how the applicant ensured safety for self and others and how clearly and effectively the applicant communicated with clients/colleagues. We thank you for your contribution. The applicant's assessor may need to contact you to clarify your responses, or to gain additional information.

Describe briefly your working relationship to the applicant and the types of work activities you have observed the applicant undertake:

Have you observed the applicant:	Yes	No	Not applicable or not able to comment
<ul style="list-style-type: none">liaise effectively with traders when organising site visits to ensure any assistance/equipment is provided, and to minimise impacts on traders, customers and employees – in accordance with company expectations? What interactions have you observed? Provide at least one example.			
<ul style="list-style-type: none">communicate clearly, effectively and respectfully with clients and colleagues? Give at least two examples.			

Third party report (non-verifier)

Have you observed the applicant:	Yes	No	Not applicable or not able to comment
----------------------------------	-----	----	---------------------------------------

- identify local hazards and apply appropriate safety precautions as relevant to the hazard/s, in accordance with local legislation and company procedures? Include in your comments:
 - how they ensure safety for self and others when testing instruments
 - examples of compliance with local induction requirements
 - how they establish access to first aid

Include an example of what you observed them do at a site/in the workshop.

- record, report and maintain test results and findings clearly, accurately and securely and in accordance with company policy?
Provide details of how they did this.

- solve routine or unexpected problems and seek advice, when required? **Provide at least one example**

Detail the approximate date window during which you have observed the applicant as detailed above:

From:

To:

The applicant has demonstrated oral and written language skills and numeracy skills to a standard expected for this role in our organisation.

Yes

No

Name of third party:

Date:

Telephone number of third party:

Record of assessor's conversation with third party (if required)

The assessor will speak to any third party/s where they have not provided sufficient confirmation of the performance of the applicant they have observed. This form will be used to record the outcomes of any conversation between the assessor and a third party.

Name/s of third party/ies

Assessor's name:

Date:

Outcome of assessor's review of applicant's test reports

Applicant:

As part of your assessment, your assessor will use this form to record the accuracy of your submitted workplace documents.

Assessor: Use the check boxes to record if the documents have been completed/evaluated satisfactorily

Instrument test method	Satisfactory	Unsatisfactory	Not applicable
-------------------------------	---------------------	-----------------------	-----------------------

4.2 Beverage dispensers (volumetric method)			
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4.2 Beverage dispensers (gravimetric method)			
--	--	--	--

Please provide comments to support your findings on the submitted documents:

Where videos are provided, use the Skills observation report form for your comments:

Assessor's name:

Date:

Record of conversation with the applicant (to be completed by the assessor)

Applicant:

As part of your assessment, you will have a conversation with your assessor who may ask questions to clarify your knowledge in the following areas. Your assessor will use this checklist to record your responses.

Assessor: Use the check boxes to record the competency areas where you have asked questions. **You need not ask questions for all areas**, particularly where satisfactory evidence of competence has already been provided. You should include a list of questions asked, with expected answers and responses given, in a separate Word document. Note each correct answer provided or detail any incorrect response.

	Satisfactory	Unsatisfactory	Not asked/not required
• Preparation, planning and communication with trader			
• Using and maintaining reference standards and/or test equipment			
• Certificates of approval			
• Operating environment			
• Work, health and safety including use of SDS/SWMS			
• Maximum permissible errors			
• Test procedures			
• Test points			
• Analysis of test results			
• Marking instruments and verification documentation			
• Auxiliary devices			
• Reporting test results			
• Inappropriate use of instruments by trader			
• Servicing licence documentation and procedures including maintaining confidentiality and security of data			

Applicant's ID checked at interview:

Assessor's name:

Date:

Skills observation report

to be completed by the assessor or an NMI-appointed skills observer (SO)

If observation not completed by assessor, assessor to check bottom of each page

Name of applicant:

Skill set/unit of competency being assessed:

Subclass of instrument being observed:

Name of observer:

SO

Assessor

Contact number for skills observer:

Applicant's photo ID viewed by observer

Type of ID viewed:

Test report attached

Time at observation site:

As part of your assessment, you will need to demonstrate completing a simulated initial verification of at least one instrument/measure in a real or simulated workplace environment. This is a requirement of the performance evidence you must demonstrate for this skill set/unit of competency. During the observation, you should complete a test report for each instrument/measure tested and provide a copy of this to the person completing the skills observation. See also the [Instructions for observation assessments](#).

Your assessor, or an NMI-appointed skills observer, will observe you. They will contact you to discuss arrangements for this part of your assessment.

During the observation, the assessor/observer will use this checklist to record your skills in verifying measuring instruments/measures in accordance with legal requirements. They will also be noting how you:

- interact with businesses and their employees before, during and after completing testing
- assess and manage safety during the task
- store, use and handle any reference standards or equipment used (where applicable)
- consider any real or potential environmental impacts on the instrument/measure under test (and the standards and equipment used in testing) and take any necessary steps to account for any impacts
- identify, access and interpret relevant documentation
- record, analyse and report the findings of testing
- communicate the results of testing and any other factors relevant to the usage of instruments/measures
- identify the location for, and simulate the application of, a verification mark

For subclasses 6.1-6.3 and some simple measures/measuring instruments, you may be invited to complete the observation in the trade measurement office in your local city.

For skills observations for other instrument/measure types, or where you do not live in a major city, we will ask you to arrange a site local to you, where a suitable instrument/measure is available. We will contact you with further instructions.

Skills observation report to be completed by the assessor or a skills observer (SO)

Observer: Use the check boxes to record your conclusions regarding each of the specific items detailed in the following list, where applicable. You must record additional notes and comments that are relevant to, and support, your conclusions, under each item. Essentially, you should describe what you have observed that supports the finding you have checked (what the applicant did).

NOTE: Items 2, 3, 4, 5, 6 and 9 not applicable for subclasses 18.1 and 18.2.

(Use one form per instrument observed)

I have observed the applicant complete a simulated verification test on the following instrument/measure and simulate applying a verification mark:

(Instrument/measure tested:

Reference standards/equipment used:

Date/s observed:

Location:

Did the applicant:	Yes	No	Not applicable
1. liaise and communicate effectively with the trader prior to, during and after testing to ensure verification testing was carried out safely and with minimal disruption to the trader's business?			
2. select and validate the suitability of reference standards/equipment for the specific verification task?			
3. determine whether reference standards/equipment were suitable for use for the verification task/not defective?			

Name of assessor/SO:

Date:

Skills observation report

to be completed by the assessor or a skills observer (SO)

Did the applicant: **Yes** **No** **Not applicable**

4. maintain the integrity of reference standards/equipment during their transport, storage and use?

5. use the reference standards/equipment in the correct manner?

6. evaluate and (where required) adjust the impact of the operating environment on the performance of the standards/equipment?

7. evaluate and (where required) adjust the impact of the operating environment on the performance of the instrument/measure?

8. apply appropriate safety precautions and conduct testing safely?

Name of assessor/SO:

Date:

Skills observation report to be completed by the assessor or a skills observer (SO)

Did the applicant:

Yes

No

Not applicable

9. identify, access, interpret and apply certificates of verification for reference standards/equipment?

10. identify, access, interpret and apply certificates of approval?

11. identify, access, interpret and apply relevant test procedures?

12. use specified calculations to determine the performance result?

13. apply appropriate maximum permissible errors?

Name of assessor/SO:

Date:

Skills observation report to be completed by the assessor or a skills observer (SO)

Did the applicant:	Yes	No	Not applicable
--------------------	-----	----	----------------

14. analyse test results to determine whether the measure could be marked for trade use?			
--	--	--	--

15. report results and findings clearly and accurately?			
---	--	--	--

16. demonstrate how to apply the verification mark?			
---	--	--	--

17. identify and communicate any inadequacies in trader's use of the instrument/measure?			
--	--	--	--

Name of assessor/SO:

Date: