# Skills Assessment

**Assessment event 3 of 3**

## Criteria

### Unit code, name and release number

MSL973013 - Perform basic tests (1)

### Qualification/Course code, name and release number

MSL30118 - Certificate III in Laboratory Skills (1)

MSL40118 - Certificate IV in Laboratory Techniques (1)

\*\*Amend the qualification box before distributing to the student. The information here should only contain the qualification the student is enrolled in\*\*

## Student details

### Student number

### Student name

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is my own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

Version: 1.0

Date created: 28/08/2019

Date modified: 16/12/2019

For queries, please contact:

Innovative Manufacturing, Robotics and Science SkillsPoint

Hamilton Campus

© 2019 TAFE NSW, Sydney  
RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

The contents of this document are copyright © TAFE NSW 2019, and should not be reproduced without the permission of the TAFE NSW. Information contained in this document is correct at time of printing: 16 December 2019. For current information please refer to our website or your teacher as appropriate.

## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your skills as would be required to:   * Interpret test methods * Prepare samples for testing * Perform tests on samples * Maintain a safe work environment |
| **Assessment Event number** | 3 of 3 |
| **Instructions for this assessment** | This is a skills based assessment and will be assessing you on your ability to demonstrate skills required in the unit.  This assessment is in 3 parts:   1. Practical 2. Observation Checklist 3. Assessment Feedback   In this Skills Assessment you will be observed completing the tests/measurements that you researched in assessment event 2 of 3: Project Assessment.  You may refer to your class notes during this assessment.  The Assessor will have available at each session:   * the sample to be tested * the equipment/instrument for the test * SDS’s required for the test * SOP * standard test methods * disposal facilities * your completed, marked Project Assessment, which you can refer to during this assessment but you must return it at the end of the session. |
| **Submission instructions** | On completion of this assessment, you are required to upload it or hand it to your assessor for marking. Ensure you have written your name at the bottom of each page of this assessment. Every page must be returned even if you have not written on it.  It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment. |
| **What do I need to do to achieve a satisfactory result?** | To successfully complete this assessment the student will be available at the arranged time to complete all the assessment criteria as outlined in the assessment instructions.  All parts of the observable task must be performed to a satisfactory level as indicated in the criteria section of the Observation Checklist.  All oral questions must be answered correctly to be deemed satisfactory in this assessment task; however, Assessors may ask questions to clarify understanding. |
| **What do I need to provide?** | Calculator, pens, PPE (safety glasses, enclosed shoes, laboratory coat or protective clothing), student prepared study notes |
| **Due date/time allowed/venue** | To be arranged / 3 hour laboratory session. |
| **Assessment feedback, review or appeals** | Appeals are addressed in accordance with Every Student’s Guide to Assessment. |

## Specific task instructions

The instructions and the criteria in the tasks and activities below will be used by the assessor to determine whether the tasks and activities have been satisfactorily completed. Use these instructions and criteria to ensure you demonstrate the required skills and knowledge.

If this assessment requires you to record information, your assessor will provide you with an appropriate document/template.

In assessment event 2: Project you have researched three basic tests/measurements that you have practiced in the laboratory. In the Skills Assessment you will be observed completing each of the three tests/measurements.

Complete the table below for the 3 allocated tests/measurements chosen by your assessor for this assessment.

Table 2 Complete the table

|  |  |  |
| --- | --- | --- |
| Test | Test/Measurement | I have practiced this test prior to this assessment |
| 1. |  | Yes / No |
| 2. |  | Yes / No |
| 3. |  | Yes / No |

## Part 1: Practical

To complete this part of the assessment, you will be required to participate in a practical demonstration of how to complete a task or activity.

These practicals will be observed by your assessor. There is a Laboratory Record sheet to be completed for each test.

Your responses will be used as part of the overall evidence requirements of the unit.

The following are general guidelines and can be used for each of the three tests/measurements. Use the observation checklist remembering though that not all steps may be required (the actual test steps will depend on the task allocated).

You should refer to the list of criteria in the Observation Checklist to understand what you need to demonstrate in this section of the assessment. This Checklist outlines the assessment criteria used to assess your performance.

Once completed you will need to submit this assessment and the tasks and activities you are required to complete to your assessor for marking.

1. **Prepare for the tests**
2. obtain the sample and note the sample ID and description on the Laboratory Record Sheet (note in the comments section if there are any discrepancies in the observed sample to that expected).
3. determine the test to be conducted and record on the Laboratory Record Sheet
4. locate the standard method for the test allocated
5. locate the SOP for any instruments
6. note any hazards and controls related to the method
7. list all the PPE, equipment and reagents required for the test
8. obtain the SDS for any chemicals noted on the standard method and record the hazards, PPE etc. required (use the SOP if there is no SDS for the particular test).
9. **Conduct the test**
10. wear correct PPE and prepare the sample in accordance with the method (note on the Laboratory Record sheet the type of preparation required for the test. This could be a direct reading, or weighing or dilution etc.)
11. ensure that wastes are kept to a minimum
12. ensure all equipment is set up according to the SOP and conducting pre-use and safety checks. Report any issues and note on the Laboratory Report Form
13. prepare any calibration standards that are required according to the method
14. conduct any calibration required for the instrument completing any laboratory paperwork
15. conduct the test as required noting any problems that may occur and how these were actioned on the Laboratory Record Sheet
16. record all data for the sample and any standards
17. shutdown the instrument/equipment according to the SOP.
18. **Complete the test**
19. Perform any calculations required for the test
20. Report the final result according to Laboratory procedures
21. Dispose of any waste materials according to laboratory procedures
22. Complete any instrument logs
23. Clean the laboratory and equipment
24. Store equipment/instrument as required by the procedure.

Laboratory Record: Test/Measurement

The information contained in this report is confidential and issued without alteration

|  |  |  |  |
| --- | --- | --- | --- |
| Date: | Analyst | | Sample ID |
| Sample Description | | Test required | |
| Standard Method: | | SOP | |
| SDS/SOP information  PPE  Spill control  Disposal | Hazards | | Controls |
| Equipment required | | Sample preparation | |
| Pre-use and safety checks  Satisfactory  Yes  No  NA | | Actions if required | |
| Calibration results | | Calibration status  Satisfactory  Yes  No | |
| Raw data and observations | | Calculations (see worksheet if required) | |
| Safe shutdown  Yes  No  NA | | Instrument log completed  Yes  No  NA | |
| Disposal method: | | Safe disposal  Yes  No  NA | |
| Equipment clean and stored  Yes  No  NA | | Laboratory cleaned  Yes  No  NA | |
| Reported Result | |  | |
| Comments: | | | |
| Analyst signature | |  | |

Skills Assessment: Calculation additional space.

|  |  |  |
| --- | --- | --- |
| Analyst | Test | Date |
| *This space is provided for additional space for the recording of results and calculations. It must be submitted with your Assessment task even if you do require the space.* | | |

Laboratory Record: Test/Measurement

The information contained in this report is confidential and issued without alteration

|  |  |  |  |
| --- | --- | --- | --- |
| Date: | Analyst | | Sample ID |
| Sample Description | | Test required | |
| Standard Method: | | SOP | |
| SDS/SOP information  PPE  Spill control  Disposal | Hazards | | Controls |
| Equipment required | | Sample preparation | |
| Pre-use and safety checks  Satisfactory  Yes  No  NA | | Actions if required | |
| Calibration results | | Calibration status  Satisfactory  Yes  No | |
| Raw data and observations | | Calculations (see worksheet if required) | |
| Safe shutdown  Yes  No  NA | | Instrument log completed  Yes  No  NA | |
| Disposal method: | | Safe disposal  Yes  No  NA | |
| Equipment clean and stored  Yes  No  NA | | Laboratory cleaned  Yes  No  NA | |
| Reported Result | |  | |
| Comments: | | | |
| Analyst signature | |  | |

Skills Assessment: Calculation additional space.

|  |  |  |
| --- | --- | --- |
| Analyst | Test | Date |
| *This space is provided for additional space for the recording of results and calculations. It must be submitted with your Assessment task even if you do require the space.* | | |

Laboratory Record: Test/Measurement

The information contained in this report is confidential and issued without alteration

|  |  |  |  |
| --- | --- | --- | --- |
| Date: | Analyst | | Sample ID |
| Sample Description | | Test required | |
| Standard Method: | | SOP | |
| SDS/SOP information  PPE  Spill control  Disposal | Hazards | | Controls |
| Equipment required | | Sample preparation | |
| Pre-use and safety checks  Satisfactory  Yes  No  NA | | Actions if required | |
| Calibration results | | Calibration status  Satisfactory  Yes  No | |
| Raw data and observations | | Calculations (see worksheet if required) | |
| Safe shutdown  Yes  No  NA | | Instrument log completed  Yes  No  NA | |
| Disposal method: | | Safe disposal  Yes  No  NA | |
| Equipment clean and stored  Yes  No  NA | | :Laboratory cleaned  Yes  No  NA | |
| Reported Result | |  | |
| Comments: | | | |
| Analyst signature | |  | |

**Skills Assessment: Calculation additional space.**

|  |  |  |
| --- | --- | --- |
| Analyst | Test | Date |
| *This space is provided for additional space for the recording of results and calculations. It must be submitted with your Assessment task even if you do require the space.* | | |

## Part 2: Observation Checklist

The Observation Checklist will be used by your assessor to mark your performance in the practical demonstration. Use this Checklist to understand what skills you need to demonstrate. The Checklist lists the assessment criteria used to determine whether you have successfully completed this assessment event. All the criteria must be met. Your demonstration will be used as part of the overall evidence requirements of the unit. The assessor may ask questions while the demonstration is taking place or if appropriate directly after the task/activity has been completed.

Table 3 Observation Checklist

| TASK | Instructions | Test 1 | | | Test 2 | | | Test 3 | | | Assessor Comments  *Assessors are to record their observations in sufficient detail to demonstrate their judgement of the student’s performance against the criteria required.* |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Test ID |  | | |  | | |  | | |
|  | Date |  | | | | | | | | |
|  |  | S | US | NA | S | US | NA | S | US | NA | The assessment will be stopped for any breach of safety |
| 1. Prepare for the test | | | | | | | | | | | |
|  | Obtains the sample and notes the sample ID and description on the Laboratory Record Sheet (noting any discrepancy to the expected sample description). |  |  |  |  |  |  |  |  |  |  |
|  | Determines the test to be conducted and records on the Laboratory Record Sheet |  |  |  |  |  |  |  |  |  |  |
|  | Locates and records the standard method for the test |  |  |  |  |  |  |  |  |  |  |
|  | Locates and records the SOP for any instruments required |  |  |  |  |  |  |  |  |  |  |
|  | Notes any hazards and controls indicated in the method |  |  |  |  |  |  |  |  |  |  |
|  | Lists all the equipment and reagents required for the test on the Laboratory Record Sheet |  |  |  |  |  |  |  |  |  |  |
|  | Obtains the SDS for any chemicals noted on the standard method and record the hazards, PPE etc. required |  |  |  |  |  |  |  |  |  |  |
| 1. **Conduct the test** | | | | | | | | | | | |
|  | Prepares the sample in accordance with the method (note on the Laboratory Record Sheet the type of preparation required for the test) |  |  |  |  |  |  |  |  |  |  |
|  | Ensures that wastes are kept to a minimum |  |  |  |  |  |  |  |  |  |  |
|  | Ensures all equipment is set up according to the SOP and conducts pre-use and safety checks. Reports any issues |  |  |  |  |  |  |  |  |  |  |
|  | Prepares any standards that are required according to the method |  |  |  |  |  |  |  |  |  |  |
|  | Conducts any calibration required for the instrument completing any laboratory paperwork. Record results on the Laboratory sheet |  |  |  |  |  |  |  |  |  |  |
|  | Conducts the test as required noting any problems that may occur and how these were actioned |  |  |  |  |  |  |  |  |  |  |
|  | Records all data for the sample and any standards |  |  |  |  |  |  |  |  |  |  |
|  | Shuts down the instrument/ equipment according to the SOP |  |  |  |  |  |  |  |  |  |  |
| 1. **Complete the test** | | | | | | | | | | | |
|  | Performs calculations as required |  |  |  |  |  |  |  |  |  |  |
|  | Reports final result |  |  |  |  |  |  |  |  |  |  |
|  | Disposes of waste materials |  |  |  |  |  |  |  |  |  |  |
|  | Completes instrument logs |  |  |  |  |  |  |  |  |  |  |
|  | Cleans laboratory and equipment |  |  |  |  |  |  |  |  |  |  |
|  | Stores equipment/instruments |  |  |  |  |  |  |  |  |  |  |

## Part 3: Assessment Feedback

*NOTE: This section* ***must*** *have the assessor signature and student signature to complete the feedback.*

### Assessment outcome

Satisfactory

Unsatisfactory

### Assessor Feedback

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?  
*If yes, ensure it is detailed on the assessment document.*

Comments:

### Assessor name, signature and date:

### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

### Student name, signature and date

***NOTE: Make sure you have written your name at the bottom of each page of your submission before attaching the cover sheet and submitting to your assessor for marking.***