# Project Assessment

**Assessment event 2 of 3**

# Trainer & Assessor Marking Guide

## 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\*\*

Version: 1.0

Date created: 28/08/2019

Date modified: 16/12/2019

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Innovative Manufacturing, Robotics and Science Skills Point

Hamilton Campus

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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)

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## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Instructions for the trainer and assessor** | This is a project based assessment and will be assessing the student on their knowledge and performance of the unit.  This assessment is in 3 parts and includes an Assessment Feedback form:   1. Assignment 2. Assessment Checklist 3. Assessment Feedback (Student facing document only)   The performance evidence for the unit requires different sample preparations and completion of at least three basic tests or measurements using standard methods and procedures. The three tests/measurements which the student will research in this assessment and which you will observe the student performing in assessment event 3: Skills Assessment are listed below.  Group A: these two tests **must** be completed   * pH of soil * temperature measurement of water bath or drying oven   Group B: **one** of these tests must be completed   * Bulk density of rice * Brix of a provided solution * E-coli   You are required to ensure that all information for the test/measurement such as SDS, standard methods, safe operating procedures, and laboratory protocols will be available to the student in the laboratory in either hard copy or on the LIMS.  Where a test does not allow for a section to be completed in the assignment table then a NA (not applicable) should be recorded. There should be at least one occurrence of each step over the three tests/measurements. For example if the pH of a sample was chosen, there would be nothing in the SI unit reported space as there are no units for pH. NA would be recorded.  Students need to indicate that they have received training in the tests that they are being assessed on. Only select tests that the student has practiced.  Model answers, sample responses or criteria for each test/measurement are provided below. Use these to support your judgement when determining a satisfactory result.  The student’s work must contain the information indicated in this marking guide in order to deem it satisfactory. However, if a student provides information other than indicated below, and in the professional opinion of the assessor it is appropriate and meets the intent of the criteria, it may be considered correct.  The assessment feedback page must be signed by both the student and the assessor so the student displays that they have received, understood and accepted the feedback.  Complete the assessment feedback to the student and ensure you have taken a copy of the assessment prior to it being returned to the student. |
| **About this marking guide** | All tasks and activities must responded to correctly in order to satisfactorily complete this assessment event.  Assessors will need to make a judgement call as to whether each answer/response meets the criteria based upon the:   * Rules of Evidence:   + Validity – does the answer address the assessment question and does the evidence reflect the four dimensions of competency?   + Sufficiency – is the answer sufficient in terms of length and depth?   + Currency – has the work been done so recently as to be current?   + Authenticity – is this work the student’s own authentic work? * Principles of Assessment:   + Fairness – individual student’s needs are considered in the assessment process   + Flexibility – assessment is flexible to the individual student   + Validity – any assessment decision is justified, based on the evidence of performance of the student   + Reliability – evidence presented for assessment is consistently interpreted and assessment results are comparable irrespective of the assessor conducting the assessment * Dimensions of Competency   + Task skills   + Task Management Skills   + Contingency Planning Skills   + Job Role Environment Skills |
| **Student must provide** | Calculator, pens |
| **Assessor must provide** | A list of the three tests to be researched  The Assessment task |
| **Due date and time allowed** | Due three weeks prior to Skills Assessment |

## Specific task instructions

The instructions and the criteria in the tasks and activities are to be used by you to determine if the student has satisfactorily completed the assessment.

You will have met with the Laboratory Trainer to determine the most appropriate test/measurements to be allocated to the student from the groups identified in the instructions to the Trainer/Assessor above.

## Part 1: Assignment

To complete this part of the assessment, the student will be required to provide responses related to three tests you have allocated and complete all the tables below.

**Brief:**

The unit covers the ability to interpret test requirements, prepare samples for testing, checking equipment prior to use, doing the test and maintaining a safe laboratory environment.

The type/function of the laboratory will determine the three tests/measurements that will form your assessment task.

Testing requirements will differ because of the particular laboratory function. You may be testing environmental samples either in the field or the lab, or from a road construction site or a pathology laboratory or a chemical process laboratory.

You should complete the table below indicating your allocated tests/measurements.

Provide all the information required for each of the three allocated test/measurements in the test/measurement report templates provided. You are not required to reproduce the method here, just interpret the laboratory procedure and record the information. Your response to any section should be no more than 100 words.

You will be assessed in the Skills Assessment Task in the practical application of the tests/measurements.

Table 2 Tests allocated

|  |  |  |
| --- | --- | --- |
| Test | Test/Measurement | Sample preparation |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |

Test 1 pH of soil  
Table 3 Test 1

| 1 | Test / Measurement Report | |
| --- | --- | --- |
|  | Test/measurement name | pH of soil |
|  | Standard method number/ name | M118 Basic soil parameters (pH, conductivity moisture) |
|  | PPE required for test/measurement | Safety glasses  Protective clothing  Enclosed shoes  Gloves (depending on where sample is from) |
|  | Hazards and control measures for the test/measurement | If field sample is from a contaminated sited gloves must be worn.  Electricity to meter check the Tag and test date and for any sign of wear on the leads  Sample size could have implications for handling |
|  | Type of samples analysed | Soil from various sites tested but could be liquid samples from a variety of sources. |
|  | What is required to ensure traceability of the sample? | Chain of custody form completed correctly from taking of sample through to result reporting.  Sample ID should be checked at each handover and in documentation system. |
|  | Sample preparation required for the identified test/ measurement. | Solution is required.  Air dried soil must be sieved through a 2mm mesh and the base fraction is that to be sampled.  If the initial sample is large it may require subsampling down to a laboratory sample size.  For soil samples the method will indicate the ratio of solid to water added. Such as 1:5, stirred and left for 30 mins prior to testing  Solutions such as milk can cause issues with the probe. |
|  | Equipment/reagents required for test/measurement, including calibration of instruments/equipment and standard preparation and safety checks required | Calibrated pH meter (calibration should be in the area of the expected value for the sample)  pH buffers (4, 7, 9 for example) to be used for the calibration or as QC sample  primed pH probe  thermometer for checking solution temperature  beakers to place sample in  wash bottle to clean the probe  tissues to dry off the probe  3M KCl standing solution for the probe  Magnetic stirrer if required (for stirring soil:water mix)  Safety check: ensure no leads not adequate |
|  | Principle behind the test/measurement and key components involved in the test equipment, pre-use equipment and safety checks required | The test measures the voltage difference between two electrodes in the probe. The measured voltage is converted into number representing the pH.  The glass electrode has a porous bulb and hydrogen ions from the solution are measured is measured with respect to an internal reference electrode.  The test is temperature dependent and the meter must be calibrated at the temperature of the solution.  Calibration of the meter is done using pH buffers of known value.  Key components are calibrated meter and a probe.  Safety and pre-use checks are to check electrical leads, and ensure probe is not damaged |
|  | Data/observations that should be recorded for the test/measurement | Temperature of the solution  For solid sample the mass of sample to the volume of water added.  Sample description/ number  Values for each sample and quality control sample or standard |
|  | Typical results for the sample | Values will generally be between 4 and 10 |
|  | What would be considered an atypical result and how would this be reported | Historical records for the particular soil location would provide this detail. Values outside the 4 to 10 range could be considered atypical. This would be reported to Supervisor |
|  | Processes for atypical results | Sample is retested  Calibration is checked  Temperature checked  If still atypical values recorded and supervisor notified |
|  | Cleaning and storage requirements for equipment and reagents | Probe should be left in a standing solution of 3M KCl after being washed down with purified water.  Meter should be either switched off or placed in standby mode depending on the usage requirements for the remainder of the day. |
|  | Typical wastes generated | Lots of tissues  Beaker of wash down |
|  | Disposal of wastes | Liquids (unless from a contaminated site or containing identified ions such as silver, lead, mercury) placed down the sink.  Contaminated residue solutions disposed of according to procedure |
|  | SI unit reported (or required unit according to procedure) | There is no SI unit for pH. NA would be applicable |
|  | Typical WHS issues and actions from sample preparation through reporting of results | Spills as holding beaker may be knocked over  For contaminated samples (solid and liquid) additional controls would be in place such as in the identification notifications according to GHS.  It is possible if large numbers of samples are being read that the area becomes untidy and wet. |

Temperature Measurement (information provided for laboratory testing, adjustments would be required if field testing provides the basis for the temperature measurement).

Table 4 Test 2

| 2 | Test / Measurement Report | |
| --- | --- | --- |
|  | Test/measurement name | Temperature |
|  | Standard method number/ name | M116 Calibration of thermometer, measuring temperature of sample/equipment  (**Note:** a student (or local site) may consider the method for measurement of temperature in the field if working with field probes. In this case the Standard method number/name would differ) |
|  | PPE required for test/measurement | For laboratory samples and equipment:  Protective clothing  Eye protection  Enclosed shoes |
|  | Hazards and control measures for the test/measurement | **Equipment**:   * will be hot (for example drying ovens, muffle furnaces, incubators)/ student should be aware of the hot surfaces or where steam may be present. This information would be provided in the SOP * electrical leads for heating equipment / leads checked for electrical tag and test dates. |
|  | Type of samples analysed | Laboratory samples, generally liquid or  Laboratory equipment such as muffles, drying ovens, incubators, water baths |
|  | What is required to ensure traceability of the sample? | Laboratory samples: check of sample identification numbers checked against chain of custody and reporting/recording sheets  Equipment: reporting /recording sheets matched to equipment identification numbers. |
|  | Sample preparation required for the identified test/ measurement. | Equipment should have had time to heat up.  No specific preparation for a sample. |
|  | Equipment/reagents required for test/measurement, including calibration of instruments/equipment and standard preparation and safety checks required | Measuring equipment: (depending on what is being tested)   * Thermometer or * Thermocouple if for high temperature readings * Field instrument that has a temperature probe   Safety check: ensure no exposed leads |
|  | Principle behind the test/measurement and key components involved in the test equipment, pre-use equipment and safety checks required | For a liquid thermometer, a change in temperature will result in the internal solution changing in volume (expansion or contraction) and this will be shown in the window as an increase or decrease in the numerical value that can be read off the thermometer.  Digital thermometers rely on a thermistor to sense the change in resistance due to heat and this is then converted to temperature and displayed digitally.  Key component is a thermometer.  Safety check is to ensure thermometer is not cracked or damaged. There is no specific pre-use equipment required. |
|  | Data/observations that should be recorded for the test/measurement | Date the test was completed.  Equipment ID if using NATA certified thermometer (this will have a number that corresponds to the calibration history of this particular thermometer).  Liquid thermometer should have been checked for calibration and noted corrections.  Digital instruments should be allowed to be become stable before a reading is taken. |
|  | Typical results for the sample | For a drying oven: temperature should be ± 2 oC of expected. Ie for an oven set at 105oC temperature should be between 103oC and 107oC |
|  | What would be considered an atypical result and how would this be reported | For a drying oven temperatures below the expected would be atypical  Reported to supervisor if atypical or non-compliant result |
|  | Processes for atypical results | Recheck the reading.  Check the calibration on the thermometer.  Check the control chart for obvious trends |
|  | Cleaning and storage requirements for equipment and reagents | Thermometers should be checked for cracks in the glass before storage. They should be stored dry.  Digital display instruments should be dried and leads checked prior to storage. |
|  | Typical wastes generated | Not applicable |
|  | Disposal of wastes | Not applicable |
|  | SI unit reported | Generally not SI unit (K) but oC |
|  | Typical WHS issues and actions from sample preparation through reporting of results | Temperature is always significant. If the equipment monitored is steam related this must be considered and appropriate care taken. |

Bulk Density of rice

Table 5 Test 3

| 3 | Test / Measurement Report | |
| --- | --- | --- |
|  | Test/measurement name | Measurement of bulk density of rice |
|  | Standard method number/ name | M120 Determination of density by various techniques |
|  | PPE required for test/measurement | Safety glasses  Laboratory coat  Enclosed shoes |
|  | Hazards and control measures for the test/measurement | Handling large amounts of sample prior to sub-sampling. May require lifting equipment if very large quantities provided.  Use of electrical equipment. Should be checked for tag and test dates and also for exposed wires etc.  Use of glass measuring cylinders could be replaced with plastic |
|  | Type of samples analysed | Various food stuffs, sand, aggregate |
|  | What is required to ensure traceability of the sample? | Sample ID should be checked against sampling plan, chain of custody paperwork, actual container label etc. |
|  | Sample preparation required for the identified test/ measurement. | Sample will require sub-sampling by use of riffle or coning and quartering or if large quantities such as in bin then use of a sample thief may be required |
|  | Equipment/reagents required for test/measurement, including calibration of instruments/equipment and standard preparation and safety checks required | Calibrated balance required (top pan, 3d.p)  1 L plastic measuring cylinder  There are no standards required for this test  Safety checks: ensure no exposed wires |
|  | Principle behind the test/measurement and key components involved in the test equipment, pre-use equipment and safety checks required | Bulk density provides an indication of the volume of a sample (including air spaces) to the mass of a sample. This is particularly important in the transport and packaging industry.  Mass is recorded using a balance and the volume measured using a measuring cylinder  Safety check is to ensure there are no sharp edges on the sieve. The pre-use check of the sieve is to ensure it is clean with no fragments remaining from previous sample. |
|  | Data/observations that should be recorded for the test/measurement | Sample ID  Date of the test  Mass of the empty measuring cylinder (or sample holding container)  Volume of sample placed into the container. (Note: some procedures particularly if related to a production process will have a known mass container and also a fill mark for the sample).  Mass of container + sample |
|  | Typical results for the sample | Between 0.85 g cm and 0.95 gcm-3 |
|  | What would be considered an atypical result and how would this be reported | Outside of the ranges indicated above  Reported to supervisor if found |
|  | Processes for atypical results | Repeat the test  Repeat the sample  Call for a new sample |
|  | Cleaning and storage requirements for equipment and reagents | Measuring cylinder/holding container washed, dried and stored in correct place  Balance left clean, tared at 0, level and dry. |
|  | Typical wastes generated | Only rice from the test. |
|  | Disposal of wastes | Disposed of in general waste (or maybe in environmental green waste container). |
|  | SI unit reported | For this test the reported unit is gcm-3. |
|  | Typical WHS issues and actions from sample preparation through reporting of results | Large sample masses that may be sent to the laboratory for testing.  Manual handling required for the subsampling. |

Catalase Slide

Table 6 Test 4

|  | Test / Measurement Report | |
| --- | --- | --- |
|  | Test/measurement name | Catalase slide |
|  | Standard method number/ name | M409 Bacterial classification and identification  Part 6.5 Catalase slide |
|  | PPE required for test/measurement | * Closed footwear * Laboratory coat * Safety glasses * Sterile gloves (not with hot work) |
|  | Hazards and control measures for the test/measurement | Infectious agents – masks, gloves  Glass slides– training, handle with care |
|  | Type of samples analysed | Water samples |
|  | What is required to ensure traceability of the sample? | Check sample ID with chain of custody  Check sample container matches report notification |
|  | Sample preparation required for the identified test/ measurement. | Pipette bacterial sample onto slide |
|  | Equipment/reagents required for test/measurement, including calibration of instruments/equipment and standard preparation and safety checks required | Control samples – to confirm reagent is working  Reagent – peroxide  Safety check: do not use broken slide |
|  | Principle behind the test/measurement and key components involved in the test equipment, pre-use equipment and safety checks required | Catalase enzyme neutralises toxic forms of oxidative compounds, the test determines whether the bacterial species can produce this enzyme  Key components are the reagents (fresh) and a glass slide. (it is a simple test)  There is no pre-use equipment. Safety check would be to check slide has not been cracked. |
|  | Data/observations that should be recorded for the test/measurement | Whether the sample produces bubbles or no reaction |
|  | Typical results for the sample | Either bubbles or no reaction |
|  | What would be considered an atypical result and how would this be reported | No particular atypical, it will either react or not.  Only if a standard value was run and found to be non-compliant would reporting be required |
|  | Processes for atypical results | Potentially check controls to ensure peroxide reagent is active |
|  | Cleaning and storage requirements for equipment and reagents | Put into biohazards bin, if anything is reusable, it would go into sterilisation buckets |
|  | Typical wastes generated | Biohazardous wastes – bacteria coated slides and spatulas/pipettes |
|  | Disposal of wastes | Biohazards bins |
|  | SI unit reported | Not reported in units, just positive reaction or negative reaction |
|  | Typical WHS issues and actions from sample preparation through reporting of results | Infection or cuts, eye strain, electrical risks |

Table 7 Test 5

|  | Test / Measurement Report | |
| --- | --- | --- |
|  | Test/measurement name | Brix test on liquid sample by hydrometer |
|  | Standard method number/ name | M122 Determination of Brix in general foods using a hydrometer |
|  | PPE required for test/measurement | Protective clothing  Eye protection  Enclosed shoes |
|  | Hazards and control measures for the test/measurement | Glass equipment: measuring cylinders, beakers. Control: training in use of equipment  Electrical leads of water bath  Control: Electrical leads tagged and tested. Check for bare wires |
|  | Type of samples analysed | Food samples such as cordial, syrups |
|  | What is required to ensure traceability of the sample? | Check ID of samples against chain of custody, sample register, report forms etc |
|  | Sample preparation required for the identified test/ measurement. | Sample may require subsampling from bulk. Must be taken in clean dry container. Approximately 300 mL required for this test. |
|  | Equipment/reagents required for test/measurement, including calibration of instruments/equipment and standard preparation and safety checks required | Hydrometers  250 mL measuring cylinders  400 mL beakers  Purified water  Safety check: make sure there is no broken glass |
|  | Principle behind the test/measurement and key components involved in the test equipment, pre-use equipment and safety checks required | A hydrometer is submerged into a volume of the test liquid. The level to which the hydrometer floats/sinks is measured. The hydrometer will displace equal weights of all liquids in which it floats.  A scale within the top of the hydrometer is read at the level of the liquid. This reading provides the Brix value (for a Brix hydrometer).  Hydrometer provides the reading of the %sugar  Safety check is to check hydrometer has no cracks (it should be replaced if cracks are found)  There is no pre-use equipment required. |
|  | Data/observations that should be recorded for the test/measurement | Samples and water should be at the same temperature when the values are taken.  http://www.eckraus.com/wp/wp-content/uploads/2015/07/Hydrometer-Scale-In-Beer.png reading should be taken half way between the top and the bottom of the meniscus |
|  | Typical results for the sample | Historical results would provide an indication. Generally 1 Brix is equivqlent to 1%w/v sucrose |
|  | What would be considered an atypical result and how would this be reported | Unless there is some expectation of the value it would be difficult to pick an outlier. In a run of samples from the same production line it may be possible to identify a result that appears ‘odd’. Reported to supervisor |
|  | Processes for atypical results | Repeat the test  Call for another sample or if a bulk sample was provided another subsample may be prepared |
|  | Cleaning and storage requirements for equipment and reagents | Measuring cylinders should be carefully emptied of their contents either down the drain with copious amounts of water or they may be collected in bulk waste containers. Cylinders and hydrometers are washed In water/detergent, rinsed, drained, dried and stored carefully |
|  | Typical wastes generated | Only wastes are the samples themselves |
|  | Disposal of wastes | Down the drain unless procedures indicate otherwise. |
|  | SI unit reported | Brix is not a SI unit |
|  | Typical WHS issues and actions from sample preparation through reporting of results | Sub-sampling if from bulk tanks  Manual handling of materials  Fragile nature of the hydrometer (glass so additional care must be taken). |

## Part 2: Assessment Checklist

The student’s copy of the Assessment Checklist will be used by you to capture evidence of their performance the project. This checklist outlines all the required criteria you will be marking the student on. All criteria must be met. The following checklist contains benchmark responses for you to use when assessing to ensure reliability of judgement. You may ask questions during the demonstration or if appropriate directly after the assessment has been completed noting that both the question and student response needs to be captured on the checklist.

Where a particular test/measurement does not provide the information to respond to a task then a Not Applicable should be recorded.

| TASK | Instructions | Test 1 | | Test 2 | | Test 3 | | Assessor Comments |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Report | Date |  | |  | |  | |  |
|  |  | S | US | S | US | S | US | Actual responses are provided for the 5 indicated tests/measurements of the task of which 3 must be undertaken according to the criteria for Group A and B. |
|  | Names test |  |  |  |  |  |  | The identification should match the identification in the table within the brief. Completed examples provided as per the Benchmark responses. |
|  | Provides method name and number |  |  |  |  |  |  | For each test the student should have identified the number and the name of the method as per the Benchmark responses provided. |
|  | Identifies required PPE |  |  |  |  |  |  | The PPE identified in the laboratory procedure should be identified. Generally this will include eye protection, enclosed shoes, laboratory coat or overalls.  Completed examples provided as per the Benchmark responses  The student may choose to add information related to field tests or production tests. This is not a requirement. Students are not expected to provide this and should not be penalised if they do or do not add.  For field tests it may include hat, sun glasses,  Sunscreen.  For production workers it may include safety boots, face shields |
|  | Identifies hazards and controls |  |  |  |  |  |  | These should match those identified in the paperwork available to the student. Could include (depending on laboratory/test site): high temperatures, electrical equipment, hazardous chemicals, exposure to biological agents as hazards. Controls would include PPE, training, reduced volumes of chemicals available, lifting equipment if large samples are provided.  Completed examples provided as per the Benchmark responses |
|  | Identifies sample types |  |  |  |  |  |  | Student is to identify the nature of sample for example soil, blood sample, tissue specimen, road base, ashphalt, production gas etc.  Completed examples provided as per the Benchmark responses |
|  | Identifies traceability requirements |  |  |  |  |  |  | Should identify all that is required by laboratory system. Could include:   * Sampling date * Sampling location * Sample ID * Sample description * Tests required * Chain of custody information * Equipment calibration reports.   Completed examples provided as per the Benchmark responses |
|  | Lists sample preparation |  |  |  |  |  |  | This should clearly state the type of preparation required. For example sample may need to have preservative added at time of collection (blood samples or many environmental samples) or sample size may need reducing by coning and quartering or riffling or sample may need ashing prior to analysis.  Completed examples provided as per the Benchmark responses |
|  | Lists equipment/reagents including standards and calibration requirements |  |  |  |  |  |  | This list will be specific for test  Completed examples provided as per the Benchmark responses |
|  | Discusses function of equipment/reagents and pre-use and safety checks |  |  |  |  |  |  | Buffers: allows instrument to calibrate. Buffers are solutions of known pH that resist changes to pH if small amounts of acid or base are added.  pH probe measures the difference in the hydrogen ion concentration between the sample solution and the internal solution of the probe.  Thermometer: the test is temperature dependent  Quality control solution: this could be a buffer but allows for checking that the instrument is still in calibration.  Completed examples provided as per the Benchmark responses |
|  | Lists data/observations to be made |  |  |  |  |  |  | Reading on the instrument  Irregularities in instrument response  (Will be differ depending on the test environment)  Completed examples provided as per the Benchmark responses |
|  | Identifies typical results |  |  |  |  |  |  | For a solution from a still water location pH values between 6.0 8.0) Here any acceptable reading for the particular test is acceptable  Completed examples provided as per the Benchmark responses |
|  | Identifies atypical results |  |  |  |  |  |  | A pH value outside the expected range.  Temperatures outside of ±2oC for oven set at 105oC  Completed examples provided as per the Benchmark responses |
|  | Identifies processes for atypical results |  |  |  |  |  |  | Response should indicate processes for the individual laboratory. Processes could include:   * Recheck analysis * Call for a new sample * Report to supervisor * Notify customer * Check instrument/equipment calibration   Completed examples provided as per the Benchmark responses |
|  | Identifies cleaning and storage requirements |  |  |  |  |  |  | Check needs to be made on the actual test requirements in the laboratory procedures. For a pH test this would be to ensure laboratory is clean, the meter is switched off if not to be used again. The electrode is washed down and stored in 3M KCl solution.  Completed examples provided as per the Benchmark responses |
|  | Identifies typical wastes |  |  |  |  |  |  | Check with laboratory procedures. For pH would be container of waste liquid from washing process, tissues from drying  Completed examples provided as per the Benchmark responses |
|  | Identifies how to dispose of wastes |  |  |  |  |  |  | For pH unless toxic or poisonous solutions all could be washed down the sink. Tissues into normal refuse.  Completed examples provided as per the Benchmark responses |
|  | Identifies the SI unit reported (or laboratory unit) |  |  |  |  |  |  | For pH there are no SI units  Completed examples provided as per the Benchmark responses |
|  | Identifies WHS issues and actions |  |  |  |  |  |  | These will be laboratory dependent. Could include things like: spills, snakes (for field assistants) trip hazards, Where an issue is raised an appropriate action should be provided.  Completed examples provided as per the Benchmark responses  Student would not be expected to indicate anything other than the local response as per the completed report. They should not be penalised for including this information. |