



Australian Government

**Assessment Requirements for MSL974015
Operate an automated mineral analysis
system**

Release: 1

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Modification History

Release 1. New unit

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- operating an automated mineral analysis system safely, reliably and efficiently for at least three (3) different sets of operating conditions or three (3) different types of samples
- interpreting and applying workplace procedures for operating an automated mineral analysis system
- recognising potential problems caused by prior sample handling and/or preparation
- applying specified start-up/shutdown procedures and system checks
- recognising and promptly responding to common system error codes
- taking control of the system and safely investigating and rectifying faults using specified procedures
- cleaning and repositioning automated system elements
- using appropriate commands to reset system, update system information and resume operations after stoppages
- maintaining sequential control of samples through all stages of analysis
- recognising hazards and using specified safety equipment, personal protective equipment (PPE) and safe work practices
- communicating problems clearly and promptly to supervisors and/or service personnel
- minimising rework, waste and environmental impacts
- working safely.

Knowledge Evidence

- Must provide evidence that demonstrates knowledge of:
- importance of good customer relations, achieving production targets and minimising costs and rework
- purpose of analytical tests conducted in job role
- function and operation of automated system elements and flow chart for automated analysis process
- computer operating procedures, including use of specific control screens, menus and control commands
- common faults, routine system error codes and specified corrective actions for each
- procedures for cleaning/maintaining equipment and instruments used in job role
- procedures for preventing contamination of samples and equipment
- procedures for ensuring traceability of samples

relevant hazards, work health and safety (WHS) and environment requirements.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept in each case).
- Holistic assessment methods include:
 - review of production data in operator/system logs showing the range of operating conditions and samples handled by the candidate
 - review of quality control performance and analytical results traceable to samples handled by the candidate
 - feedback from supervisors, other operators and/or service personnel about the candidate's ability to safely operate an automated mineral analysis system, achieve quality and production targets, communicate effectively with other personnel and seek advice when necessary
 - observation of the candidate using an automated mineral analysis system and handling stoppages or breakdowns
 - oral or written questions to assess candidate's knowledge of automated system procedures, prioritising work flows, recognising and rectifying common faults, and safe work procedures.
- Access is required to instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit, including, but not limited to:
 - an automated mineral analysis system, operating procedures, reagents, sample containers and labels
 - mineral ore samples, such as iron ore
 - client requests/documentation, such as client profile, sample identification and sample receipts, required analyses, storage and/or disposal, and service charges
 - safe work procedures, safety equipment and PPE.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competence and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience.
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR

- having consulted with a laboratory about performing the competency being assessed within the last twelve months.

Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>