




## **Gap Analysis – July 2013**

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# **Gap Analysis of AS 5388 and NATA accreditation criteria in the field of Forensic Science**



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# Gap Analysis of AS 5388 and NATA accreditation criteria in the field of Forensic Science

For the purposes of this document, all mandatory criteria described in the AS 5388 standards have been included in this document. Where this corresponds to a requirement in any of the NATA assessment criteria this has been included and the clause referenced.

Where requirements are included in the AS 5388 series of standards which have no corresponding current criteria, this will be noted.

Where requirements described in the AS 5388 standards refer directly to an alternative standard (e.g. ISO/IEC 17025), jurisdictional requirements or legislation these have not been included.

NATA considers the mandatory requirements of the AS 5388 standards to be any sentence including the term “shall”. Where the words “should” and “may” have been used, these are considered desirable processes or information included for additional consideration. Whilst these are considered to be the favourable approach, alternatives are available and non adherence to these inclusions will not result in non conformances, provided the approach taken meets the requirements included in the NATA accreditation criteria.

The new documents described below are as follows:

- AS 5388.1 Forensic analysis Part 1: Recognition, recording, recovery, transport and storage of material
- AS 5388.2 Forensic analysis Part 2: Analysis and examination of material
- AS 5388.3 Forensic analysis Part 3: Interpretation
- AS 5388.4 Forensic analysis Part 4: Reporting

These are being reviewed against the following NATA assessment criteria:

- ISO/IEC 17025: 2005 General requirements for the competence of testing and calibration laboratories
- ISO/IEC 17025 Standard Application Document for accreditation of testing and calibration laboratories (SAD)
- Forensic Science ISO/IEC 17025 Application Document (FAD)

**AS 5388.1 Forensic analysis Part 1: Recognition, recording, recovery, transport and storage of material**

Requirement	Corresponding NATA criteria	Comment
<b>4. Underpinning Principles</b>		
<b>4.1 General</b>		
<ul style="list-style-type: none"> <li>Recognition, collection and subsequent management of physical material shall be undertaken to ensure recovery is relevant and optimal, integrity is not compromised, potential for contamination is minimized, evidence continuity and security is maintained and the potential for analysis is optimized.</li> </ul>	ISO/IEC 17025 5.3.1, 5.3.4	Current NATA requirement
<b>4.3 Preservation of forensic material</b>		
<ul style="list-style-type: none"> <li>Material shall be recovered and stored to minimise the risk of loss, deterioration, contamination or alteration, to ensure that the conclusions based on any scientific examination of the material are reliable and verifiable.</li> </ul>	ISO/IEC 17025 5.3.1, 5.8.4	Current NATA requirement
<b>5.2 Scene examination (forensic specialists)</b>		
<b>5.2.1 General</b>		
<ul style="list-style-type: none"> <li>The overall approach to recovery shall be systematic, objective, and thorough.</li> </ul>	ISO/IEC 17025 5.7.1	Current NATA requirement
<ul style="list-style-type: none"> <li>Contemporaneous notes shall be taken when attending a scene</li> </ul>	ISO/IEC 17025 4.13.2.3	Current NATA requirement
<ul style="list-style-type: none"> <li>The information obtained from first responders and investigating officers shall be recorded.</li> </ul>	ISO/IEC 17025 4.13.2.1	Current NATA requirement
<ul style="list-style-type: none"> <li>Examinations shall be carried out in a way that seeks to minimize damage to property. Discarded or used equipment and material shall be collected, bagged and removed before leaving the scene and a location for such collection planned in advance.</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>When examining a living person, the health, wellbeing and dignity of the person shall be considered. Similarly, the dignity of a deceased person shall also be considered</li> </ul>	N/A	Additional requirement
<b>5.2.4 Scene management</b>		
<ul style="list-style-type: none"> <li>The person in control of the crime scene shall be satisfied that all aspects have been satisfactorily completed</li> </ul>	ISO/IEC 17025 5.2.5	Expansion to specify the requirements for the person in control of the crime scene
<b>6. Occupational Health and Safety</b>		

Requirement	Corresponding NATA criteria	Comment
<p>The NATA assessment process emphasises the importance of safe facility practice, however, the review of health and safety issues during an assessment visit does not constitute a formal health and safety audit. State and Territory authorities are responsible for occupational health and safety in facilities.</p>		
<p><b>7. Recording material in situ</b></p>		
<p><b>7.2 Notes</b></p>		
<ul style="list-style-type: none"> <li>Notes shall be contemporaneous. They shall be uniquely identifiable and include sufficient detail to enable the examiner to accurately report a scene location and description, who took the notes and when, who examined what and when, what material was collected and where it was transported, and any known limitations to the examination or collection of material.</li> </ul>	<p>ISO/IEC 17025 4.13.2.1, 4.13.2.2 FAD 4.13.2.1, 4.13.2.3</p>	<p>Current NATA requirement</p>
<ul style="list-style-type: none"> <li>It shall be apparent if any notes and records are altered or have been removed.</li> </ul>	<p>ISO/IEC 17025 4.13.2.3 FAD 4.13.2.3</p>	<p>Current NATA requirement</p>
<p><b>7.4 Photographic recording</b></p>		
<p><b>7.4.1 Digital photography</b></p>		
<ul style="list-style-type: none"> <li>Any digital format used shall be sufficient to allow accurate representation and recording of the scene</li> </ul>	<p>ISO/IEC 17025 5.4.7, 5.5.2</p>	<p>Expansion to specifically refer to recording at a scene</p>
<ul style="list-style-type: none"> <li>Original photographic records shall be traceable at all times.</li> </ul>	<p>ISO/IEC 17025 4.13.2.1</p>	<p>Current NATA requirement</p>
<ul style="list-style-type: none"> <li>The digital camera, lenses and digital image format shall be fit-for-purpose</li> </ul>	<p>ISO/IEC 17025 5.4.7.2, 5.5.2</p>	<p>Current NATA requirement</p>
<ul style="list-style-type: none"> <li>The results of validation studies shall be recorded.</li> </ul>	<p>ISO/IEC 17025 5.4.5.2, 5.4.7.2</p>	<p>Current NATA requirement</p>
<p><b>7.4.2 Digital image capture</b></p>		
<ul style="list-style-type: none"> <li>Images requiring accurate scale printing shall include a visible scale within the frame.</li> </ul>	<p>N/A</p>	<p>Additional requirement</p>
<ul style="list-style-type: none"> <li>The photographic record of the scene shall not be deleted from short-term media until after the primary images have been saved to long-term storage media</li> </ul>	<p>N/A</p>	<p>Additional requirement</p>
<p><b>7.4.3 Digital image storage</b></p>		
<ul style="list-style-type: none"> <li>Primary images shall be saved on suitable long-term media as soon as is reasonably possible. When there will be an extended period of time prior, then the short-term storage media shall be stored appropriately to ensure its integrity. If this occurs then it shall be documented.</li> </ul>	<p>4.13.1.2, 5.8.4</p>	<p>Current NATA requirement</p>
<ul style="list-style-type: none"> <li>Where an optical disc is used for original image storage, the readability</li> </ul>	<p>ISO/IEC 17025 5.4.7.2</p>	<p>Current NATA requirement</p>

Requirement	Corresponding NATA criteria	Comment
<p>of the optical disc shall be checked prior to storage. The media shall be clearly identified and stored so as to ensure the integrity of the digital data. Longevity of data on optical disc storage shall be a consideration in relation to image storage.</p> <ul style="list-style-type: none"> <li>Where a centralised hard disc drive (HDD) backup is used for original image storage, access and levels of access to those images shall be strictly controlled.</li> <li>Enhancement of an original image shall not be carried out prior to the image being saved to long-term storage media. Image processing shall only be performed on working copies once original images have been safeguarded.</li> </ul>	<p>ISO/IEC 4.13.1.4</p> <p>FAD 5.8.1</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>7.5 Video recording</b></p> <ul style="list-style-type: none"> <li>Original analogue tapes shall be stored unedited and any edits made on copies. Precautions shall be taken to prevent the overwriting of any video images.</li> </ul>	<p>ISO/IEC 17025 4.13.1.4</p> <p>FAD 5.8.1</p>	<p>Current NATA requirement</p>
<p><b>8. Item Collection</b></p>		
<p><b>8.1.1 Collection</b></p> <ul style="list-style-type: none"> <li>The examiner shall collect the material that is fit for purpose, collect appropriate control and known samples, minimise possible contamination, avoid examining, collecting or recording material that is not relevant to the investigation, consider the potential impact of sampling and place collected material in appropriate packaging. Collection of material shall be recorded and continuity of the material ensured.</li> </ul>	<p>ISO/IEC 17025 5.7.1, 5.8.2, 5.8.4</p> <p>FAD 5.8.1, 5.8.4</p>	<p>Expansion of requirements to include the collection of control and known samples, avoiding collecting non relevant material and the need to consider the impact of sampling</p>
<p><b>8.1.2 Collection of physical material from the scene</b></p> <ul style="list-style-type: none"> <li>To ensure that physical material is properly collected, the type of examinations shall be taken into consideration.</li> <li>Collection shall be fit for purpose.</li> </ul>	<p>ISO/IEC 17025 5.7.1</p> <p>FAD 5.8.1</p> <p>ISO/IEC 17025 5.7.1</p> <p>FAD 5.8.1</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>8.1.3 Minimizing cross contamination</b></p> <ul style="list-style-type: none"> <li>Care shall be taken to avoid cross contamination between involved persons, victims, physical material, facilities, equipment, the collector and/or scenes</li> </ul>	<p>ISO/IEC 17025 5.3.3</p>	<p>Current NATA requirement</p>

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>Victim and suspect samples shall be collected separately</li> <li>Collection equipment shall be discarded after each use. If this is not possible, then the collection equipment shall be decontaminated after each use.</li> <li>Appropriate PPE shall be worn</li> <li>Facilities in which examinations of persons are conducted shall have adequate and documented cleaning policies and procedures, shall minimize the number of persons accessing examination areas and shall have secure areas for the storage and handling of equipment and samples.</li> </ul>	<p>ISO/IEC 5.7.1 FAD 5.7.1 N/A</p> <p>N/A ISO/IEC 17025 5.3.4, 5.3.5</p>	<p>Current NATA requirement</p> <p>Additional requirement</p> <p>OHS is not assessed by NATA Expansion to specifically refer to examinations of persons</p>
<p><b>8.1.4 The use of enhancement techniques at crime scenes</b></p> <ul style="list-style-type: none"> <li>When using complex equipment capable of emission over several wavelength ranges, the equipment shall be regularly checked for correct operation.</li> <li>Reagents shall be suitably labelled.</li> <li>Suitable control samples shall be used to assure the efficacy of the reagents. The efficacy of reagents shall be assured prior to use.</li> <li>In cases of reagent failure, sufficient details of the reagents and controls shall be apparent to allow their batch, origin or manufacture to be traced</li> </ul>	<p>ISO/IEC 17025 5.5.5</p> <p>FAD 4.6.2 ISO/IEC 17025 4.6.2</p> <p>ISO 17025 4.13.2.1 FAD 4.6.2</p>	<p>Expanded to specifically cover wavelength equipment</p> <p>Current NATA requirement Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>8.1.6 Confirmatory testing at the scene</b></p> <ul style="list-style-type: none"> <li>Testing shall be carried out by appropriately authorized staff and quality assurance measures shall be employed</li> </ul>	<p>ISO/IEC 5.2.5, 5.9.1</p>	<p>Current NATA requirement</p>
<p><b>8.1.7 Items generated at the scene</b></p> <ul style="list-style-type: none"> <li>When a photograph of material is taken and the photograph becomes the forensic evidence, continuity of the image shall be maintained. The photograph shall be of a suitable quality and fit-for-purpose.</li> </ul>	<p>FAD 5.8.1</p>	<p>Current NATA requirement</p>
<p><b>8.2 Sampling protocols</b></p> <p><b>8.2.1 General</b></p> <ul style="list-style-type: none"> <li>If re-usable implements are used, they shall be thoroughly cleaned between each use</li> </ul>	<p>N/A</p>	<p>Additional requirement</p>
<p><b>8.2.5 Vacuuming</b></p> <ul style="list-style-type: none"> <li>Where vacuuming is used, it shall be conducted using a purpose-built</li> </ul>	<p>N/A</p>	<p>Additional requirement</p>

Requirement	Corresponding NATA criteria	Comment
sample collection chamber.		
<b>8.2.6 Swabbing</b>		
<ul style="list-style-type: none"> <li>Swab kits shall, as far as possible, be contaminant free.</li> <li>Inorganic components of GSR shall be collected directly onto stubs.</li> </ul>	N/A N/A	Additional requirement Additional requirement
<b>8.3 Deceased persons or remains</b>		
<b>8.3.1 General</b>		
<ul style="list-style-type: none"> <li>Deceased persons or remains shall be examined in a systematic manner. The environment, position and state of the body, as well as physical damage and injuries, shall be recorded.</li> </ul>	ISO/IEC 7025 4.13.2.1	Expansion of requirements to refer specifically to deceased persons or remains
<b>8.3.2 Post-mortem attendance</b>		
<ul style="list-style-type: none"> <li>The forensic examiner shall maintain close liaison with pathology staff during the post-mortem examination</li> <li>At least one photograph shall include the body tag or other unique identifier.</li> <li>fingerprint impressions shall be collected from the deceased remains using an appropriate method.</li> </ul>	N/A N/A ISO/IEC 17025 5.4.2	Additional requirement Additional requirement Current NATA requirement
<b>8.3.3 Exhumations</b>		
<ul style="list-style-type: none"> <li>Exhumations shall be conducted systematically, using the same practices and considerations as apply with any forensic examination</li> </ul>	N/A	Additional requirement
<b>8.4 Collection of material from a person</b>		
<b>8.4.1 General</b>		
<ul style="list-style-type: none"> <li>When collecting samples or material from a person, deceased or living, a strict protocol of use of PPE shall be followed</li> </ul>	N/A	OHS not assessed by NATA
<b>8.4.2 Biological material</b>		
<b>8.4.2.1 Sexual assaults</b>		
<ul style="list-style-type: none"> <li>Examinations of persons associated with sexual assaults shall be carried out by qualified and suitably trained medical personnel.</li> </ul>	ISO/IEC 17025 5.2.1, 5.2.5	Current NATA requirement
<b>8.4.2.3 Fingernail trimmings and scrapings</b>		
<ul style="list-style-type: none"> <li>Scrapings and trimmings from each hand shall be placed in separate containers.</li> </ul>	FAD 5.8.4	Expansion to specify requirement for fingernails
<b>8.4.2.4 Hair collection</b>		
<ul style="list-style-type: none"> <li>Known samples shall be adequate and include both combed and plucked hairs to ensure all growth phases are represented.</li> </ul>	N/A	Additional requirement



Requirement	Corresponding NATA criteria	Comment
<b>8.5 Packaging and labelling of physical material</b>		
<b>8.5.1 General</b>		
<ul style="list-style-type: none"> <li>The principles of preservation and minimizing the risk of alteration or contamination shall be considered when packaging and labelling forensic material. The material shall not be packaged in a way that inhibits subsequent analysis and handling shall be minimized before analysis.</li> </ul>	ISO/IEC 17025 5.8.1 FAD 5.8.4	Expansion to describe minimal handling before analysis
<b>8.5.2 Packaging of forensic material</b>		
<ul style="list-style-type: none"> <li>Any hazardous samples collected shall be placed in a sample container appropriate for the material and shall be marked with an appropriate warning label</li> <li>each item shall be individually packaged in an appropriate container and sealed as soon as possible.</li> <li>Each item package shall be individually labelled with a unique identifier;</li> <li>Markings shall be made using indelible ink/permanent marker.</li> <li>Items shall not be handled unnecessarily.</li> <li>The area of the item that is subject to examination shall be protected from loss, deterioration or contamination by appropriate use of packaging and an appropriate seal or cover.</li> </ul>	N/A  FAD 5.8.1, 5.8.4  FAD 5.8.2 SAD 4.13.2.1 N/A ISO/IEC 17025 5.8.4 FAD 5.8.4	Additional requirement  Expansion to detail “as soon as possible”  Current NATA requirement Current NATA requirement Additional requirement Current NATA requirement
<b>8.5.3 Inappropriate packaging</b>		
<ul style="list-style-type: none"> <li>The integrity of the evidence shall be assessed to determine whether it has been compromised. Any report produced shall include a description of the inappropriate packaging</li> <li>If accepted by the forensic facility, the submitted material shall be sealed within appropriate new packaging. The original packaging shall be retained or its condition suitably described in the case notes.</li> </ul>	N/A  N/A	Additional requirement  Additional requirement
<b>8.5.4 Labelling of forensic material</b>		
<ul style="list-style-type: none"> <li>The outermost packaging of all items shall bear a unique identifying label which allows the chain of custody to be tracked. The chain of custody of all items shall be complete and unedited.</li> <li>The label shall alert the handler to any hazards associated with the item and shall allow details to be retrieved. The label shall include a description of the item, whether the item contains any hazard, the</li> </ul>	FAD 5.8.1, 5.8.4  FAD 5.8.1	NATA requirements refer to the activities over which the facility has control  Expansion to detail hazards associated with the item, description of item location, date and identification of officer involved

Requirement	Corresponding NATA criteria	Comment
location the item was collected from, the date the item was collected , the name or identifier of the officer and the case file or investigation the item relates to. <ul style="list-style-type: none"> <li>Labels shall be placed on the side of a container, not on a container's lid</li> </ul>	FAD 5.8.1	Current NATA requirement
<b>9. Item transport, storage and security</b> <b>9.1 General</b>		
<ul style="list-style-type: none"> <li>Facilities shall have documented acceptance and rejection criteria. The criteria shall cover the requirements for packaging, transport and storage of forensic material.</li> </ul>	FAD 5.8.1, 5.8.4	Expansion to specifically describe the need for acceptance/rejection criteria
<b>9.3 Item continuity</b>		
<ul style="list-style-type: none"> <li>Continuity of possession shall be maintained and recorded between sampling at the scene and acceptance for analysis by the facility.</li> <li>The movement of items after acceptance by the forensic facility shall be managed via an item management system. The location of an item shall be known by the storage location or the forensic officer</li> </ul>	N/A FAD 5.8.1	NATA requirements cover only those movements under the control of the facility Current NATA requirement
<b>9.4 Security of items in storage</b>		
<ul style="list-style-type: none"> <li>Access to forensic storage areas shall be by authorized personnel only.</li> </ul>	FAD 5.3.4	Current NATA requirement
<b>9.5 Specific transport and storage requirements</b>		
<b>9.5.2 Biological material</b>		
<ul style="list-style-type: none"> <li>Items that may deteriorate due to exposure to moisture shall be dried or frozen prior to storage.</li> </ul>	ISO/IEC 17025 5.8.1	Expansion to specify the need to dry or freeze samples
<ul style="list-style-type: none"> <li>All refrigerators, cool rooms and freezers used for forensic purposes shall be monitored and recorded regularly or equipped with a temperature alarm.</li> </ul>	ISO/IEC 17025 5.5.5	Current NATA requirement
<b>9.5.3 Deceased persons or remains</b>		
<ul style="list-style-type: none"> <li>Storage of bodies, samples and/or body parts shall be maintained at a temperature between approximately +2 to +6°C.</li> </ul>	ISO/IEC 17025 5.8.1	Expansion to specify temperature for storage of bodies
<b>9.5.5 Entomological material</b>		
<ul style="list-style-type: none"> <li>Live material shall be transported in a ventilated container and stored in such a container in a refrigerator (between +4 and +6°C)</li> </ul>	ISO/IEC 17025 5.8.1	Expansion of transport requirements specifically for entomology
<ul style="list-style-type: none"> <li>The growth chamber shall be located in a secure, restricted access area.</li> </ul>	FAD 5.8.4	Current NATA requirement
<b>9.5.6 Chemical material</b>		

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>Samples of corrosive material may be collected. Any such samples shall be representative of the whole. The relevant facility shall have written protocols to ensure adequate sampling.</li> </ul>	ISO/IEC 17025 5.7.1 FAD 5.7.1	Expansion to specifically refer to corrosive material
<b>9.5.8 Fire debris</b> <ul style="list-style-type: none"> <li>Fire debris shall be transported in sealed containers and the storage environment shall be separate from possible sources of ignitable liquid contamination and the storage environment shall be suitably ventilated to avoid any build-up of volatile compounds from the samples being stored.</li> </ul>	N/A	Additional requirement
<b>9.5.10 Firearms</b> <ul style="list-style-type: none"> <li>Firearms shall be rendered safe prior to being packaged and transported to an appropriate facility</li> <li>When a firearm item is received by the facility, it shall be checked by an appropriately trained person prior to storage to ensure that the firearm is not loaded.</li> </ul>	N/A  ISO/IEC 17025 5.2.2	Additional requirement  Current NATA requirement

### AS 5388.2 Forensic analysis Part 2: Analysis and examination of material

Requirement	Corresponding NATA criteria	Comment
<b>4. Underpinning principles and requirements</b> <b>4.2 Procedures</b> <ul style="list-style-type: none"> <li>The procedures involved shall be defined and carefully controlled to minimise the risk of inadvertent contamination, alteration or destruction and to ensure that the analytical results obtained are reliable</li> <li>All procedures conducted....shall be documented and shown to be fit for purpose prior to the application unless delay would jeopardize any subsequent analysis or impact on personal safety or national security</li> </ul>	ISO/IEC 17025 5.4.1  ISO/IEC 17025 5.4.1	Expansion to detail contamination, alteration and destruction  Expansion to include the need for immediate testing prior to validation/verification
<b>4.3 Training and competency</b> <ul style="list-style-type: none"> <li>Persons shall have undertaken appropriate training and have been assessed as competent to carry out the examination. Ongoing</li> </ul>	ISO/IEC 17025 5.2.1, 5.2.2, 5.2.5	Current NATA requirement

Requirement	Corresponding NATA criteria	Comment
competence shall be demonstrated	FAD 5.2.2	
<ul style="list-style-type: none"> <li>Full records of training, assessment and ongoing competence shall be maintained</li> </ul>	ISO/IEC 17025 5.2.5 FAD 5.2.5	Current NATA requirement
<b>4.4 Instrumentation</b>		
<ul style="list-style-type: none"> <li>The proper functioning of the instrumentation and its software shall be documented along with proof of continuing proper function</li> </ul>	ISO/IEC 17025 5.4.7.2, 5.5.3, 5.5.5	Current NATA requirement
<ul style="list-style-type: none"> <li>Instrumentation used in comparative techniques shall be fit for purpose</li> </ul>	ISO/IEC 17025 5.5.2	Current NATA requirement
<b>5. Acceptance of physical material received for examination</b>		
<b>5.1 Acceptance and rejection of physical material for analysis</b>		
<ul style="list-style-type: none"> <li>There shall be written criteria for the acceptance or rejection of material for examination</li> </ul>	ISO/IEC 17025 5.8.1	Expansion to specifically detail the need for criteria
<ul style="list-style-type: none"> <li>If the facility varies its criteria, then the facility shall advise clients of any limitations or qualifications that may ensue</li> </ul>	ISO/IEC 17025 5.8.3	Current NATA requirement
<ul style="list-style-type: none"> <li>The facility shall have procedures for vetting casework</li> </ul>	ISO/IEC 17025 5.8.1	Expansion to specifically detail vetting casework
<b>6. Item continuity</b>		
<b>6.1 Item management system</b>		
<ul style="list-style-type: none"> <li>Movement of items between forensic disciplines shall be managed by an item management system. The location of an item shall be known by the storage location or the forensic officer</li> </ul>	ISO/IEC 17025 5.8.2, 5.8.4 FAD 5.8.4	Expansion to describe specific requirement for an item management system to record sample tracking
<ul style="list-style-type: none"> <li>The item management system shall be robust and auditable, and include a unique identifier, a brief description of each individual item, the movement of each item, records of chain of custody, records of the actual holder of an individual item, the storage location and records of any changes made</li> </ul>	N/A	Additional requirement outlining the function of the system
<ul style="list-style-type: none"> <li>The system shall record sub-sampling and maintain a link</li> </ul>	ISO/IEC 17025 5.8.2	
<ul style="list-style-type: none"> <li>The system shall record the movement of items out of the forensic facility</li> </ul>	N/A	Additional requirement
<b>6.2 Security of items in storage</b>		
<ul style="list-style-type: none"> <li>Access to forensic storage areas shall be by authorised personnel only</li> </ul>	FAD 5.3.4, 5.8.4	Current NATA requirement
<b>6.3 Security of items during examination</b>		
<ul style="list-style-type: none"> <li>When not under examination, items shall be stored in a secured storage</li> </ul>	FAD 5.8.4	Current NATA requirement

Requirement	Corresponding NATA criteria	Comment
<p>area</p> <ul style="list-style-type: none"> <li>Items that are undergoing extended examination shall be stored within a secure examination area</li> <li>While under examination, items shall not be left unattended without appropriate measure to protect against contamination and to maintain integrity of the items.</li> <li>Where physical material is destroyed during or at the completion of examination, the reason shall be recorded</li> </ul>	<p>FAD 5.8.4</p> <p>FAD 5.8.4</p> <p>N/A</p>	<p>Expansion to describe extended examinations</p> <p>Additional requirement that items shall not be left unattended</p> <p>Additional requirement</p>
<p><b>8.2 Note taking</b></p> <ul style="list-style-type: none"> <li>Notes shall be permanent and the identity of the note taker and case manager shall be apparent as well as when the notes and any alterations were made.</li> </ul>	<p>ISO/IEC 17025 4.13.2.1</p> <p>FAD 4.13.2.1</p>	<p>Expansion to specify the need for the case manager to be included</p>
<p><b>8.3 Photography</b></p> <ul style="list-style-type: none"> <li>Photographic records and equipment shall be fit for purpose</li> <li>Any photographs shall be appropriately filed</li> <li>A mechanism for recording the date when images were taken shall be used...and shall be fit for purpose</li> </ul>	<p>ISO/IEC 17025 4.13.1.2, 5.5.2</p> <p>ISO/IEC 17025 4.13.2.1</p> <p>FAD 4.13.2.1</p> <p>ISO/IEC 17025 4.13.2.1</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p> <p>Expansion to specify recording of the date</p>
<p><b>8.4 Weighing and measuring physical material</b></p> <ul style="list-style-type: none"> <li>Any equipment and software used shall be fit for purpose and appropriately calibrated and maintained.</li> <li>The facility shall have policies on the rounding of numerical values and the use of significant figures.</li> </ul>	<p>ISO/IEC 17025 5.4.7.2, 5.5.2</p> <p>SAD 4.13.2.1</p>	<p>Current NATA requirement</p> <p>Expansion to require a policy on rounding</p>
<p><b>9. Presumptive and preliminary tests</b></p> <ul style="list-style-type: none"> <li>Presumptive or preliminary tests shall follow current written methods. Reagents used and results obtained shall be properly noted and any equipment used shall be properly maintained</li> <li>Where reference materials/standards and control samples exist, they shall be used to help assure the accuracy and/or reliability</li> </ul>	<p>ISO/IEC 17025 4.13.2.1, 5.4.2, 5.5.2</p> <p>ISO/IEC 17025 5.9.1</p> <p>FAD 5.9.1</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>10. Order of examination</b></p> <p><b>10.1 General</b></p> <ul style="list-style-type: none"> <li>Any significant variations from usual procedure shall be noted in case</li> </ul>	<p>ISO/IEC 17025 5.4.1</p>	<p>Expansion to require this to be recorded in</p>

Requirement	Corresponding NATA criteria	Comment
notes along with the reasons		case notes
<b>10.2 Preservation of evidence</b>		
<ul style="list-style-type: none"> <li>The order of examination shall be planned and implemented so as to ensure that non-destructive techniques are given priority and conducted before any destructive techniques are attempted.</li> </ul>	ISO/IEC 17025 5.8.4	Expansion to specify non-destructive techniques prior to destructive techniques
<b>11.2.1 Material to be analysed may be apparent but not in a form suitable for analysis</b>		
<ul style="list-style-type: none"> <li>Materials shall be transformed into a form suitable for analysis</li> </ul>	ISO/IEC 17025 5.8.4	Expansion to specify transformation of material
<b>11.2.2 Material to be analysed may be visible but a choice must be made between one or more possible areas of materials of interest</b>		
<ul style="list-style-type: none"> <li>Material shall be sampled after consideration of relevant case information</li> </ul>	ISO/IEC 17025 5.7.1	Current NATA requirement
<b>11.2.3 Instrumental methods must be used to obtain material suitable for analysis</b>		
<ul style="list-style-type: none"> <li>Materials shall be transformed into a form suitable for analysis</li> </ul>	ISO/IEC 17025 5.8.4	Expansion to specify transformation of material
<b>11.3.3 Sampling from a population</b>		
<ul style="list-style-type: none"> <li>If there are different groups of external characteristics, they shall be separated into as many groups as dissimilarities. Each group shall be considered as a whole population and shall be sampled separately.</li> <li>When examining enclosed material, if differences are subsequently observed in the appearance of the contents, the sampling procedure shall be stopped and the sampling rule shall be re-applied.</li> </ul>	ISO/IEC 17025 5.7.1	Expansion to specify grouping for sampling plans
	ISO/IEC 17025 5.7.1	Expansion to revisit sampling plan based on observations
<b>11.4 Sub-samples</b>		
<ul style="list-style-type: none"> <li>If not immediately analysed, sub-samples shall be properly packaged, labeled and be able to be linked to the original sample from which it was collected.</li> <li>The collection of a sub-sample shall be recorded in the examiner's notes</li> </ul>	ISO/IEC 17025 5.8.2	Current NATA requirement
	ISO/IEC 17025 5.7.3	Expansion to specify recording in examiners notes
<b>12.2.2 Collection and assessment of data</b>		
<ul style="list-style-type: none"> <li>The analyst or examiner shall assess the material to determine whether it is suitable and sufficient for the testing or comparison required. The analyst or examiner shall assure that relevant reference material and control samples are available, for testing and comparison purposes.</li> </ul>	ISO/IEC 17025 5.8.3, 5.9.1	Current NATA requirement
<b>12.2.3 Formulation of hypothesis</b>		

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>Where the hypothesis is not clearly defined, the analyst and the investigator shall maintain communication to ensure that no relevant aspect of the case is overlooked and to avoid unnecessary work.</li> </ul>	ISO/IEC 4.7.1	Current NATA requirement
<p><b>12.2.4 Hypothesis testing</b></p> <p><b>12.2.4.1 General</b></p> <ul style="list-style-type: none"> <li>Tests and examinations shall be carried out as specified in the relevant methods and in a controlled environment.</li> <li>Where it has a possible influence on a test outcome, any variation in the test environment shall be recorded.</li> <li>Where testing involves the comparison of unknown material with material from a known source or person, the material from that known source shall be sufficient for the required comparison and its provenance shall be properly documented</li> </ul>	ISO/IEC 17025 5.4.2	Current NATA requirement
	ISO/IEC 5.3.2	Current NATA requirement
	ISO/IEC 17025 5.9.1	Expansion to specify requirements for known comparisons
<p><b>12.2.4.2 Observations</b></p> <ul style="list-style-type: none"> <li>Where the technique provides a recorded result, such records shall be retained</li> <li>Where the technique requires observations these shall be objective, verifiable, comprehensive, and complete</li> <li>Observations shall not draw on any assumptions, prejudices, or preconceptions.</li> </ul>	ISO/IEC 17025 4.13.2.1	Current NATA requirement
	N/A	Additional requirement
	N/A	Additional requirement
<p><b>12.2.4.3 Calculations and data transfer</b></p> <ul style="list-style-type: none"> <li>All automated calculations that do not already form part of a validated process shall be independently validated or verified as required.</li> <li>Written calculations and data transfers shall be checked</li> <li>Sole practitioners shall check all calculations and data transfers themselves at a time other than the time of transfer</li> <li>The number of significant figures used shall reflect the precision of the instrumentation used.</li> </ul>	ISO/IEC 17025 5.4.7.2	Current NATA requirement
	ISO/IEC 17025 5.4.7.1	Current NATA requirement
	ISO/IEC 17025 5.4.7.1	Expansion to describe specific sole practitioner issues
	ISO/IEC 17025 5.5.2	Expansion to specify significant figures
<p><b>12.3 Validation and verification of analytical and comparative methods</b></p> <p><b>12.3.1 General</b></p> <ul style="list-style-type: none"> <li>Methods used shall be accepted within the relevant field or supported by data gathered and recorded in a systematic fashion</li> <li>Procedures previously validated in the facility or elsewhere shall be</li> </ul>	ISO/IEC 17025 5.4.2	Current NATA requirement
	FAD 5.4.2	
	ISO/IEC 17025 5.4.5.2	Current NATA requirement



Requirement	Corresponding NATA criteria	Comment
<p>verified as fit for purpose under the new conditions. Minor modifications shall require limited verification</p> <ul style="list-style-type: none"> <li>Where computer software is used independently of other equipment for testing, it shall be validated or verified prior to being put into service. Any updates to the software shall be verified prior to being put into service. Any changes to parameters under which the software is applied shall require the software to be verified for that specific use.</li> </ul>	<p>FAD 5.4.5</p> <p>ISO/IEC 17025 5.4.7.2</p>	<p>Current NATA requirement</p>
<p><b>12.4 Calibration</b></p> <ul style="list-style-type: none"> <li>Facilities shall identify critical items of equipment</li> <li>Facilities shall establish a calibration and maintenance schedule for critical equipment</li> <li>Records shall be kept of all maintenance, servicing and calibration of equipment.</li> <li>Calibration of equipment by external service providers shall be conducted by accredited service providers, where possible</li> <li>Records of calibration shall be maintained either on the equipment or in an accessible location</li> </ul>	<p>ISO/IEC 17025 5.5.2</p> <p>ISO/IEC 17025 5.5.6, 5.6.2.2.1</p> <p>ISO/IEC 17025 5.5.5</p> <p>SAD 5.6.1</p> <p>ISO/IEC 17025 5.5.5</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p> <p>Current NATA requirement</p> <p>Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>12.5 Measurement Uncertainty (MU)</b></p> <ul style="list-style-type: none"> <li>Test results shall be traceable to stated references through documented chain of calibrations</li> <li>MU shall be included in methods as well as statistical techniques for analysis of test and/or calibration data</li> <li>When estimating MU, all components of importance in the analysis shall be taken into account. Major sources of uncertainty shall be documented along with the overall uncertainty, with an explanation of how this was derived</li> </ul>	<p>ISO/IEC 17025 5.4.6.2</p> <p>ISO/IEC 17025 5.4.1, 5.4.6.2</p> <p>ISO/IEC 17025 5.4.6.2</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>12.6 Reference standards</b></p> <ul style="list-style-type: none"> <li>A register of reference standards shall be maintained</li> <li>A designated person shall hold appropriate licenses and shall ensure the integrity of the reference standards. The designated person shall be responsible for the contamination prevention, secure storage etc.</li> <li>If used beyond the expiry date, reasons shall be documented.</li> </ul>	<p>N/A</p> <p>N/A</p> <p>FAD 4.6.2</p>	<p>Additional requirement</p> <p>Additional requirement</p> <p>Expansion to specify use beyond expiry date</p>



Requirement	Corresponding NATA criteria	Comment
<p><b>12.7 Reference collections and databases</b></p> <ul style="list-style-type: none"> <li>Facilities shall utilise reference collections in the identification, comparison or interpretation of physical material</li> <li>Reference collections and databases shall include documentation detailing the provenance of the material</li> <li>Consideration shall be given to the minimization of possible contamination of reference material</li> <li>Where the reference collection or database comprises electronic records, the version number or date last updated shall be recorded</li> </ul>	<p>ISO/IEC 17025 5.9.1 FAD 5.9.1</p> <p>ISO/IEC 17025 4.6.3</p> <p>ISO/IEC 17025 5.6.3.1</p> <p>ISO/IEC 17025 4.13.1.4</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p> <p>Expansion to specify contamination</p> <p>Expansion to specify version or date updated for electronic records</p>
<p><b>13.3 Sample preparation</b></p> <ul style="list-style-type: none"> <li>Appropriate measures shall be taken during preparation to preserve the sample, prevent contamination and maintain sample integrity</li> <li>Where the technique has been validated for a particular concentration range, the concentration of the solution shall be within that range.</li> <li>Any chemical treatment which alters the material shall only be performed after consideration of any other examinations which may be required. Validated/verified procedures shall be followed.</li> <li>Where compounds need to be converted into another chemical form prior to analysis, a validated procedure shall be followed.</li> <li>Where components require extraction from a mixture, the extraction procedure shall be validated or be part of a validated procedure</li> </ul>	<p>ISO/IEC 17025 5.4.1, 5.8.1</p> <p>ISO/IEC 17025 5.4.1, 5.4.2</p> <p>ISO/IEC 17025 5.4.2, 5.8.1</p> <p>ISO/IEC 17025 5.4.2</p> <p>ISO/IEC 17025 5.4.2</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p> <p>Expansion to specify chemical treatment</p> <p>Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>13.5.2 Analytical detectors</b></p> <ul style="list-style-type: none"> <li>The separation technique employed shall be selected according to the efficiency of the technique and the suitability of the detector for measuring the compounds of interest</li> <li>The separation and detection technique employed shall be capable of separating and detecting the compounds of interest in the analyte mixture to which it is being applied. This shall be determined by appropriate validation or verification</li> </ul>	<p>ISO/IEC 17025 5.4.2</p> <p>ISO/IEC 17025 5.4.5.2</p>	<p>Current NATA requirement</p> <p>Current NATA requirement</p>
<p><b>13.5.3 Chromatographic reference test mixtures</b></p> <ul style="list-style-type: none"> <li>A reference test mixture shall be run on an appropriate basis on the same instruments and under the same conditions to ensure that reliable results are obtained from the analytical processes</li> </ul>	<p>ISO/IEC 17025 5.9.1</p>	<p>Current NATA requirement</p>

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>A test mixture shall consist of specified compounds covering a range of compounds of interest. Each component of the test mixture shall be detected by the chromatographic system</li> </ul>	ISO/IEC 17025 5.9.1	Expansion to describe specific requirements for chromatographic analysis
<b>13.6 Confirmation of identification</b>		
<ul style="list-style-type: none"> <li>At least one technique of high selectivity for the material being examined shall be used</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>Presumptive techniques that are used to identify classes of compounds, or have low specificity giving rise to potential 'false positive' results, shall not be used as confirmatory identification techniques.</li> </ul>	N/A	Additional requirement
<b>13.7 Quantification</b>		
<b>13.7.1 General</b>		
<ul style="list-style-type: none"> <li>The instrumental response over the concentration range applied to quantification shall be defined</li> </ul>	ISO/IEC 17025 5.4.1	Current NATA requirement
<b>13.7.2 Standard preparation</b>		
<ul style="list-style-type: none"> <li>Equipment used in the preparation of the standards shall be fit for purpose</li> </ul>	ISO/IEC 17025 5.5.2	Current NATA requirement
<b>13.7.3 Standard curves</b>		
<b>13.7.3.1 General</b>		
<ul style="list-style-type: none"> <li>Graphs of the fitted data and residuals shall be plotted and inspected to confirm the relationship and check for outliers.....the concentration range covered by the method shall be restricted to the linear range</li> </ul>	N/A	Additional requirement
<b>13.7.4 Calculations</b>		
<ul style="list-style-type: none"> <li>Two replicate samples shall be analysed and the variation between the calculated quantities shall be within defined limits. Should the calculated quantities fall outside the defined limits, the analysis shall be repeated. No quantity shall be reported until consistent results are achieved.</li> </ul>	N/A	Additional requirement
<b>14.2 Comparative testing to determine the type of material under examination</b>		
<ul style="list-style-type: none"> <li>Databases and keys shall be suitably validated or verified.</li> </ul>	ISO/IEC 17025 5.4.7.2	Current NATA requirement
<b>16. Recording the results of observations, analysis and comparisons</b>		
<ul style="list-style-type: none"> <li>The facility shall have written procedures that determine the format of its case files.</li> </ul>	N/A	additional requirement
<ul style="list-style-type: none"> <li>The case file shall contain sufficient detail to enable continuity of items received and details of all testing carried out and results obtained</li> </ul>	ISO/IEC 17025 4.13.2.1 FAD 4.13.2.1	Current NATA requirement

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>There shall be only one original case file whatever its format.</li> </ul>	N/A	Additional requirement

### AS 5388.3 Forensic analysis Part 3: Interpretation

Requirement	Corresponding NATA criteria	Comment
<b>4. Underpinning Principles and Requirements</b> <ul style="list-style-type: none"> <li>Forensic science shall conform to the general attributes of science in that it shall be testable, reproducible, explanatory, predictive and dynamic.</li> </ul>	N/A	Additional requirement
<b>5. Transforming Data into Information</b>		
<b>5.1 General</b> <ul style="list-style-type: none"> <li>When transforming data into information the data shall be systematically and thoroughly evaluated.</li> <li>The criteria used to assist in defining what constitutes an inclusion/exclusion, shall be documented.</li> </ul>	N/A ISO/IEC 17025 5.4.1 FAD 5.4.1	Additional requirement Current NATA requirement
<b>5.2 Statistical analysis</b> <ul style="list-style-type: none"> <li>Where quantitative and/or semi-quantitative testing includes statistical analysis, the processes shall be documented.</li> <li>Assessments of measurement uncertainty shall be used.</li> <li>Where results from a sample of the population are extrapolated to cover the whole population, the statistical approach used shall be documented. The 'confidence levels', or 'credible intervals', for the extrapolation shall be calculated and recorded. The use of confidence levels and/or credible intervals shall be documented.</li> <li>Databases used to derive estimates for the likelihood of any hypothesis shall be relevant for the intended purpose.</li> </ul>	ISO.IEC 17025 5.4.1 ISO/IEC 17025 5.4.6.2 N/A ISO/IEC 17025 5.4.7.2	Current NATA requirement Current NATA requirement Additional requirement Expansion to cover likelihood of hypothesis
<b>5.4 Event/Process reconstruction</b> <ul style="list-style-type: none"> <li>The practitioner shall consider the context information. Any alternative explanations that may emerge during the investigation process shall also be considered.</li> </ul>	FAD 4.13.2.1	Current NATA requirement
<b>6. Review of Information</b>		

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>There shall be a review of information</li> <li>Procedures shall be documented and shall specify the proportion and type of examinations, how and when a review is conducted and recorded and the principal responsibility for the information is retained by the primary practitioner.</li> </ul>	FAD 4.13.2.1, 5.9.1 FAD 4.13.2.1, 5.9.1	Current NATA requirement Current NATA requirement
<b>7. Interpretation of Information</b>		
<b>7.1 General</b>		
<ul style="list-style-type: none"> <li>Where information requires interpretation in the context of the case, an opinion shall be derived and reported.</li> </ul>	ISO/IEC 17025 5.10.5	Current NATA requirement
<b>7.2 Interpretation</b>		
<ul style="list-style-type: none"> <li>interpretation of results shall be based on all relevant results, supported by the data, and relevant to the forensic issues in question.</li> </ul>	ISO/IEC 17025 5.10.5	Expansion of information relating specifically to the Forensic discipline
<b>8. Formulating an Opinion</b>		
<b>8.1 General</b>		
<ul style="list-style-type: none"> <li>Opinions shall be based on professional judgement.</li> <li>The basis of all opinions shall be evident to all similarly trained and experienced practitioners.</li> </ul>	ISO/IEC 17025 5.2.5 FAD 4.13.2.1	Current NATA requirement Current NATA requirement
<ul style="list-style-type: none"> <li>The approach used to estimate probability shall be applicable to the type of examination or test being conducted. The particular approach used shall be stated in their report.</li> </ul>	N/A	Additional requirement
<b>9. Review of Opinions</b>		
<ul style="list-style-type: none"> <li>Opinions shall be reviewed</li> <li>There shall be policies that cover the review of opinions and shall be documented.</li> </ul>	FAD 5.9.1 ISO/IEC 17025 5.10.5 FAD 5.9.1	Current NATA requirement Current NATA requirement

### AS 5388.4 Forensic analysis Part 4: Reporting

Requirement	Corresponding NATA criteria	Comment
<b>5. General provisions</b>		
<ul style="list-style-type: none"> <li>The author of the report shall be concerned solely with reporting results and opinions based on forensic examinations</li> </ul>	ISO/IEC 17025 5.10.1	Current NATA requirement
<ul style="list-style-type: none"> <li>All reports shall be fit for purpose</li> </ul>	ISO/IEC 17025 5.10.1	Current NATA requirement
<ul style="list-style-type: none"> <li>Where prior review of a report is not possible, the report shall contain an appropriate caveat</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>This standard applies to testimony given in a judicial setting</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>The author shall not derive any benefit that is dependent on specific results obtained or opinions formulated in an investigation, or provided in conjunction with any court proceeding and services shall not be provided on a contingency basis</li> </ul>	N/A	Additional requirement
<b>6. Case File Review</b>		
<b>6.1 General</b>		
<ul style="list-style-type: none"> <li>There shall be documented policies on the proportion of case files requiring technical and administrative reviews</li> </ul>	FAD 5.9.1	Current NATA requirement
<ul style="list-style-type: none"> <li>The identity of the reviewer shall be recorded</li> </ul>	FAD 5.9.1	Current NATA requirement
<b>6.2 Technical review</b>		
<ul style="list-style-type: none"> <li>Technical review shall include all observations, results and opinions in the case notes</li> </ul>	FAD 5.9.1	Current NATA requirement
<ul style="list-style-type: none"> <li>Evidence of the review shall be maintained</li> </ul>	FAD 5.9.1	Current NATA requirement
<ul style="list-style-type: none"> <li>All technical reviews shall be completed by a peer or authorised person</li> </ul>	FAD 5.9.1	Current NATA requirement
<ul style="list-style-type: none"> <li>Where technical reviews are not possible, the report shall contain a disclaimer that the review was not carried out</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>There shall be documented policies on reporting findings where a dispute between examiner on the evaluation of data or observations or interpretation of results</li> </ul>	FAD 5.9.1	Current NATA requirement
<ul style="list-style-type: none"> <li>Disagreement between reviewer and examiner shall be recorded</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>The final decision on reported findings shall rest with the examiner provided all procedures were followed and this has been approved by the facility director</li> </ul>	FAD 5.9.1	Expansion of requirements to describe approval by Facility Director

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>A technical review shall not shift responsibility for the scientific findings, however, the reviewer shall share responsibility for the findings they endorse.</li> </ul>	FAD 5.9.1	Current NATA requirement
<b>8. Issue and Control of Reports</b> <b>8.1 Issuing of reports</b> <ul style="list-style-type: none"> <li>There shall be documented procedures for the issuing of reports</li> <li>A copy of all reports issued shall be retained</li> </ul>	FAD 5.10.1 ISO/IEC 17025 4.13.2.1 FAD 5.10.1	Current NATA requirement Current NATA requirement
<ul style="list-style-type: none"> <li>Summaries of oral reports and electronic communications shall be retained in the case file</li> <li>The intended use of any report shall be clearly communicated</li> </ul>	ISO/IEC 17025 5.10.7 N/A	Expansion to require this retention in the case file Additional requirement
<b>8.2 Control of reports</b> <ul style="list-style-type: none"> <li>Facilities shall be able to demonstrate appropriate control over distribution of original copies of hard copy reports.</li> <li>Clients shall be advised of any changes made to a report</li> <li>Alterations made to original hard copy reports shall be evident</li> <li>Electronic generation, access, storage and back-up of reports shall be appropriately controlled</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>Reports shall be issued in a protected format when accessed from a website or reports are sent as electronic communications</li> <li>Any information normally included in a hard copy report shall be included on electronic versions</li> </ul>	ISO/IEC 17025 5.10.9 ISO/IEC 17025 5.10.7 SAD 5.10.7 FAD 5.10.1 SAD 5.10.7	Current NATA requirement Current NATA requirement Current NATA requirement
<ul style="list-style-type: none"> <li>Reports shall be issued in a protected format when accessed from a website or reports are sent as electronic communications</li> <li>Any information normally included in a hard copy report shall be included on electronic versions</li> </ul>	ISO/IEC 17025 5.10.7 SAD 5.10.7	Current NATA requirement
<b>9. Report Contents</b> <b>9.1 General</b> <ul style="list-style-type: none"> <li>All written reports shall include the date of issue, name of facility, unique identifier, person responsible, a means of ensuring each page is part of the report and a means of identifying the end of the report</li> </ul>	ISO/IEC 17025 5.10.2 FAD 5.10.2	Current NATA requirement
<ul style="list-style-type: none"> <li>Reports issued for a primary purpose other than legal proceedings shall be appropriate to their purpose</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>Reports shall include only information, results and opinions based on information detailed in the case notes or records</li> </ul>	FAD 5.10.2	Current NATA requirement
<ul style="list-style-type: none"> <li>The use of emotive language that could imply bias shall be avoided</li> </ul>	N/A	Additional requirement

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>Subsequent reports shall reference previous issued reports</li> <li>Analytical data or observations shall be reported by a qualified person and shall be accompanied by appropriate interpretation</li> <li>Reports shall contain relevant facts and results as derived by the examiner based on evaluation and/or observation which shall be reported accurately, clearly and unambiguously</li> </ul>	ISO/IEC 17025 5.10.9 ISO/IEC 7025 5.2.5, 5.10.2 FAD 5.10.2 ISO/IEC 17025 5.10.1	Current NATA requirement Current NATA requirement Current NATA requirement
<b>9.2 Collection and continuity of forensic material</b>		
<ul style="list-style-type: none"> <li>Factual information relevant to attendance at crime scenes, with details of examination and recording of such scenes shall be reported unambiguously</li> </ul>	FAD 5.10.2	Current NATA requirement
<ul style="list-style-type: none"> <li>Details of the lodgement or retention of collected items and of any images taken at the scene and retained shall be included in the report, an accompanying report or otherwise traceable</li> </ul>	ISO/IEC 17025 5.10.3.2	Current NATA requirement
<ul style="list-style-type: none"> <li>Any deviations from documented procedures shall be stated in the report or relevant case notes</li> </ul>	ISO/IEC 17025 5.4.1, 5.10.3.1	Current NATA requirement
<ul style="list-style-type: none"> <li>The date of receipt of items for examination and/or comparison shall be stated in the report</li> </ul>	ISO/IEC 17025 5.10.2	Current NATA requirement
<ul style="list-style-type: none"> <li>A description of each items shall be included in the report such that each item is unambiguously identifiable</li> </ul>	ISO/IEC 17025 5.10.2, 5.10.3.2	Current NATA requirement
<ul style="list-style-type: none"> <li>For quantitative testing, the number of significant figured reported shall be no greater than warranted by the precision of the instrumentation used</li> </ul>	N/A	Additional requirement
<b>9.5 Reporting of opinions</b>		
<ul style="list-style-type: none"> <li>Opinions shall be differentiated from other sections of the report</li> </ul>	ISO/IEC 17025 5.10.5	Current NATA requirement
<ul style="list-style-type: none"> <li>The author of an opinion shall take into account all relevant observations and results</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>The author shall consider only those observations, analyses or facts directly related to or resulting from the examinations</li> </ul>	N/A	Additional requirement
<ul style="list-style-type: none"> <li>If requested to evaluate the results of their examinations in a particular context, then the context and the circumstances of the request shall be clearly stated in the report</li> </ul>	ISO/IEC 17025 5.10.3	Current NATA requirement
<ul style="list-style-type: none"> <li>The term “consistent with” shall not be used without a qualifying statement suggesting the weighting to be given to the opinion</li> </ul>	N/A	Additional requirement

Requirement	Corresponding NATA criteria	Comment
<ul style="list-style-type: none"> <li>There shall be documented policies on the reporting of opinions based on qualitative and quantitative data and results</li> </ul>	ISO/IEC 17025 5.10.5	Current NATA requirement
<p><b>10 Report Review</b></p>		
<ul style="list-style-type: none"> <li>There shall be documented procedures for report review, withdrawal of invalid reports and report retention</li> </ul>	ISO/IEC 17025 4.13.1.2 FAD 5.10.2	Current NATA requirement
<p><b>11 Testimony and Testimony Review</b></p>		
<ul style="list-style-type: none"> <li>There shall be a documented system of testimony monitoring</li> </ul>	FAD 5.9.1	Current NATA requirement
<ul style="list-style-type: none"> <li>The person conducting and the date of the evaluation shall be noted on the review</li> </ul>	FAD 5.9.1	Current NATA requirement
<ul style="list-style-type: none"> <li>Moot court or review of transcripts may be used but shall not be the only source used.</li> </ul>	FAD 5.9.1	Expansion that additional review mechanisms are required