

DNA Discovery Checklist for Defense Attorneys

What your expert needs to review the state's DNA evidence

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A lab report alone is never enough for a thorough independent review. The report gives you the lab's conclusions; the underlying data shows whether those conclusions are supported. Before retaining an expert, or as soon as you do, request the complete DNA discovery packet below.

1. Complete laboratory report and case file

all analytical reports, chain-of-custody forms, internal laboratory tracking logs, and analyst notes.

2. Electropherograms

raw electronic data files (e.g., .hid) and printed or PDF electropherograms for every evidence item, every known reference sample, and all associated blanks and controls (extraction blanks, amplification controls, allelic ladders).

3. Quantification data

quantitation results (Qubit or real-time PCR) for all extracts, including input volumes and dilutions.

4. Amplification and thermal cycling logs

the amplification kits used, target template amounts, and thermal cycler logs.

5. Probabilistic genotyping inputs and outputs

for TrueAllele, STRmix, or any other system: the electronic case files and configuration parameters; run logs, settings, mixture weights, degradation parameters, and number-of-contributor assumptions; and the complete analytical and administrative reports, including match statistics (likelihood ratios) and drop-out / drop-in evaluations.

6. Laboratory SOPs

the standard operating procedures in effect at the time of testing for DNA extraction, quantification, amplification, and capillary electrophoresis, plus the laboratory's local guidelines and validation documents for its probabilistic genotyping implementation.

7. Quality assurance and contamination records

contamination logs, freezer and refrigerator logs, staff proficiency test records, and any corrective-action reports or audit findings for the laboratory covering the testing window.

Gaps in the file are themselves informative, missing data can reveal reliability problems. Send the complete packet to your expert as early as possible; the sooner review begins, the sooner you know what the DNA really shows. Questions about DNA discovery in your case? Contact Paul F. Meeh, Forensic DNA Consultant, (803) 312-5504, paulfmeeh@gmail.com.

The guides on this site are general information about South Carolina procedure, not legal advice.