

Reading Drug Analysis Lab Reports

Item	What it is	What are you looking for? What additional information is needed?	Possible actions to take
Table of Contents		Does it say Case Record (Full) or (Adhoc)? If Adhoc, the prosecution downloaded a customized incomplete report. Do you have the prior versions and resources?	Seek additional discovery from the DA's office if you don't have the full report, prior versions, and resources.
Laboratory Report	Lists methods used	Make sure you understand the methods	Review the lab procedure posted on NCDOJ.gov or forensicresources.org
	Lists items tested	Check descriptions of items of evidence – is it consistent throughout discovery?	
	Provides weight	Gross weight – weight of item with packaging Net weight – weight of item without packaging – will be used unless item can't be separated from packaging. Will give uncertainty budget and level of confidence. These refer only to confidence in weight, not in identification of the drug.	Review the lab procedure for more information about weighing
	Identifies the substance	Is it a controlled substance? Is it accurately identified in the indictment?	Review the statutes to determine if it is controlled and the schedule
Case Report	Provides suspect name, gender, DOB, SID		Cross-examine on bias
	Tells the scientist what the officer thinks the drug is		Cross-examine on bias – analyst has the answer key to the test
	Provides dates/times of exam start and completion	Compare with timestamps on data/graphs. Were tests run before exam was completed? Was sufficient time spent on testing and interpretation?	Cross-examine on lack of time spent on testing and interpretation
	Analyst and review comments	Look for feedback provided by reviewer. Is there evidence of disagreement between analysts?	Cross-examine on conflicting interpretations
Chain of Custody			Review for consistency with times/dates in Case Report and better understanding of any delays
Request for Examination of Physical Evidence	Provides biasing information to the analyst such as race and DOB of suspect and victim and law enforcement narrative		Cross-examine on bias

Worksheets/Case Notes – Analysts no longer take handwritten notes. Any notations during analysis go here or on the data. Look for notations indicating any unexpected results.	Lists name and result of screening test	This is the only place you'll find the name of the screening test and the results of that test.	Read lab procedure for the screening test. Determine if other substances produce the same color change .
	Lists weight received and weight returned		The amount consumed in testing should be minimal, around 0.01 g.
	Lists sampling plan used, if any	Administrative – test one item (for pills) Threshold – test up to a statutory threshold weight Hypergeometric – test a statistically-determined number of items and make an inference about the rest	Consider whether sampling plan has been applied to reliably identify the substance in question, a very fact-specific determination
	Describes packaging used to return item	If an item is repackaged in lab packaging, that is noted.	
Messages/Communication Log	Notes from any calls, emails, conversations about the case		
FTIR Blank	A sample containing no drugs is run to show the instrument is not contaminated	Check date and time to ensure blank was run just before the item of evidence	
FTIR Evidence Item	At least 6 peaks should be labeled	Are there peaks that don't match? Was it necessary to perform a subtraction or re-run the item of evidence? At least 6 peaks should be within 1 inverse cm of the standard.	If peaks are not labeled, make a 702 challenge. If a subtraction or re-run was necessary, consider 702 challenge
	Are there additional peaks that don't match?		Consider expert review to determine if this is a mixture or a mis-identification. Consider 702 challenge if it is a mixture.
	Is this a meth case?	FTIR cannot distinguish between optical isomers. L-meth is a legal substance (in Vick's vapor inhaler) and is an optical isomer of D-meth (a controlled substance)	Consider 702 challenge
FTIR Reference Standard	At least 6 peaks should be labeled		
GC Blank	A sample containing no drugs is run to show the instrument is not contaminated		
Analyst CV	Certifications, if any	2011 Forensic Sciences Act requires analysts to be certified, but not all are	Consider 702 challenge
	Memberships in professional organizations		Consider reviewing standards of the professional organization and use in cross-exam if analyst did not follow them
	Years of relevant experience and experience testifying		Consider whether there has been a career change