



VIRGINIA DEPARTMENT OF FORENSIC SCIENCE
EVIDENCE HANDLING & LABORATORY
CAPABILITIES GUIDE

QUESTIONED DOCUMENTS

Contact Information

If you have any questions concerning the Questioned Documents examination capabilities or evidence handling procedures, please call the Training Section or the Questioned Document Section Supervisor listed below.

Please note that the Questioned Document Section is located as the Western Laboratory in Roanoke.

Section Contact

Phone Number

Mike Moore

(540) 283-5908

OVERVIEW

A questioned document can be any material substance bearing marks or symbols (not always visible to the naked eye) whose authenticity or origin is under scrutiny. Questioned documents are not always paper products. Questioned marks often appear on objects such as walls or items of clothing. The typical questioned document submission involves a comparison of a questioned document with known samples. The results of a comparison of this type are largely dependent on the quality and the quantity of the entries in both the questioned and known documents. Equally important is having an adequate amount of directly comparable known material. In handwriting cases, for example, it is necessary to have known samples that duplicate the text and general type of writing from the questioned document (cursive, hand printing, signatures or numerals), and to have known samples adequate in number in order to establish the writer's range of writing habits and variations.

Although the majority of the submissions involves handwriting or hand printing (e.g., checks, credit card receipts, robbery/demand notes, threatening letters, suicide notes) non-handwritten evidence is routinely examined as well. Non-handwritten evidence would include such things as inks, pens and other writing instruments, rubber stamps, typewritten documents, typewriters and typewriter components (e.g., ribbons, elements, print wheels), photocopied documents and photocopiers, counterfeit documents (e.g., currency, checks, receipts, passports, driver's licenses), papers and envelopes, paper products with virtually invisible indented entries, torn and cut paper products, burnt matches, alterations and obliterations to documents, plus others. In short, any document or component related to a document would likely be examined in the Questioned Document Section.

CAPABILITIES AND SERVICES

SPECIAL NOTE: Effective July 1st, 2012, all requests for document examinations will be completed at the Department of Forensic Science (DFS) Western Regional Laboratory in Roanoke. Submitters from Central, Northern and Eastern Regions should submit the evidence to their servicing regional lab. DFS will handle transporting the evidence to the Western Lab for examination and returning it to your servicing regional lab for pickup. Alternatively, submitters have the option of mailing questioned document evidence directly to the DFS Western Regional Lab at the following address:

Department of Forensic Science
Attn: Evidence Receiving
6600 Northside High School Road
Roanoke, VA 24019-2837

The main telephone number to the Western Lab is (540) 561-6600, FAX (540) 561-6608.

The direct line to the Questioned Document Section is (540) 283-5908, 5909 or 5887.

Handwritten Documents

By comparing the writing on a questioned document with known writings, the document examiner may be able to identify or eliminate an individual as the writer of the questioned document. In some circumstances the examiner may indicate a less than absolute degree of certainty that a particular writer did (or did not) prepare certain entries. Handwritten evidence such as robbery/demand notes should always be submitted even when there are no known suspects or samples. Notes of this type can be

compared to file copies of other robbery notes submitted.

On all documents fingerprints may be present and should be considered. The obvious value of fingerprints should not be underestimated, and documents should be handled in a proper manner. (see COLLECTION GUIDELINES – [Handle Document Carefully](#))

Typewriting/Machine Impressions

Documents produced by type writers, printers, photocopiers, mechanical printing or facsimile copies can be examined. Examinations and comparisons can be conducted on mechanical impressions and/or perforations associated with check protectors and rubber stamps. It may be possible to provide information about the device that produced the particular document. Other possible examinations include the examination of a ribbon to determine if it was used to produce a specific document, as well as the examination of correction tapes, typing elements and print wheels.

Alterations, Obliterations and Erasures

These can be examined using various lighting conditions including ultraviolet (UV) and infrared (IR) photography and/or video. Under these conditions the original text may be visualized and recoverable. The sites of any erasures (mechanical or chemical) can also be detected.

Charred and Water Soaked Documents

The written text may be enhanced and made visible using special lighting techniques. Special handling is necessary in preserving fragile documents of this nature. (See COLLECTION GUIDELINES – [Handle Document Carefully](#))

Fracture Matches

Torn edges of paper can be examined to determine if two or more pieces of paper were at one time joined. For example, pages torn out of a writing tablet may be matched back to the tablet in question. Other torn edges could include items such as stamps, paper matches and match books.

Other Examinations

These can include recovering indented (virtually invisible) writings from items such as robbery/demand notes and anonymous threatening letters. Differentiating and comparing inks (nondestructively). Examinations of paper products for dimensions, weight, color, texture, watermarks, composition, rulings and other important characteristics which could allow for a determination regarding whether all originated from a common source.

COLLECTION GUIDELINES

ITEM - Intact Document (e.g., checks, credit cards, letters, etc.)

METHOD I - Pre-label the evidence container to avoid having to mark the document or the packaging material with the document already enclosed. Label the envelope with instructions not to bend, fold, or stamp the container. Whenever possible, submit the original questioned document rather than a photograph, photocopy or other type of copy. DMV records, banking transactions, and treasury checks are often the only documents available. In these instances, they are the "best evidence" and will be examined if submitted to the forensic laboratory. If copies must be submitted, please try to submit a first generation copy rather than copies of other copies or copies of faxed documents.

DISCUSSION I - The submission of copies limits the types of comparisons that can be conducted. Some of the examinations that cannot be conducted on copies include ink comparisons, determining the type of writing instrument(s), indented writings, type of paper, plus others. Additionally, when working from a copy it may not be possible to determine whether a signature was traced, letters were overwritten, or material was added or deleted through photocopier manipulation. Photocopies can be manipulated to produce a completely fraudulent document.

METHOD II - Handle questioned documents carefully in order to preserve latent fingerprints. Soft tipped tweezers or gloves should be used as necessary.

DISCUSSION II - Fingerprints may associate a suspect with the document even if the writing comparison cannot. By handling the document with soft tipped tweezers, fingerprints will not be destroyed. **DO NOT PROCESS FOR FINGERPRINTS PRIOR TO SUBMITTING FOR HANDWRITING COMPARISON** because the inks and subsequently the handwriting may be damaged. Also, the chance for the recovery of any indented writing will be lost.

METHOD III - **DO NOT** fold, staple, pin, tamper with, mark or touch unnecessarily, stamp, etc., document evidence.

DISCUSSION III - It is important to maintain and preserve documents in the same condition as received. This allows for the most comprehensive examination possible and improves the chance for a definitive conclusion.

ITEM - Obtaining Handwriting Exemplars or Standards

METHOD - The purpose of dictated known writings is to obtain exemplars that are **comparable**, **representative** and **adequate** to conduct the requested examinations.

DISCUSSION - Comparability between the questioned and known material is of the utmost importance. If the questioned entry is in the form of hand printing, then the known material should also be hand printed. If the questioned entry is in the form of cursive handwriting, then the known material should also be cursive handwriting. It is not possible to compare hand printing with cursive handwriting because they are fundamentally different styles, and, as such, there exists no basis for comparison.

Equally important is that the questioned and known material represents the same characters and numerals. This means that the known material must also repeat the text (words, signatures, numerals) from the questioned document.

It is also important that there be an adequate amount of known material in order to allow the examiner to establish the writer's level of ability and range of writing variation. Twenty to twenty-five exact text exemplars are generally adequate, however, depending on the writer, more specimens may be required. As a general rule, too many is always better than not enough.

Suggestions to Follow When Interviewing Suspects and Victims:

It may be helpful to obtain non-dictated specimens (preexisting course of business samples) of the person's writing before the interview. This represents the person's cursive handwriting or hand printing that was completed prior to the interview. This has distinct advantages if the writer begins to deliberately distort or disguise the dictated specimens. If course of business samples are not available before the interview, these samples should still be obtained and submitted, along with the dictated samples, to the laboratory for examination.

Obtain at least 25 samples or more during the first interview if possible. Non-dictated writings (course of business samples) can be obtained from social, employment, bank, confinement facilities, courts, and other sources. They often include cancelled checks, applications, letters, diaries, written requests, telephone and address books, traffic summons, DMV records, etc. A more comprehensive listing of suggested sources for preexisting writings follows at the end of this section.

Generally, ballpoint pen shows the most writing line detail, and should be used for obtaining the samples, unless the questioned document was prepared with an uncommon writing instrument such as a chisel point or other wide tip type marker.

The procedures for obtaining dictated handwriting specimens are as follows:

1. Whenever possible, the investigator should attempt to duplicate the conditions under which the questioned writings were produced. This includes the same type of form, writing instrument, and if known, comparable writing position. To accomplish this it may be necessary to use blank check sample forms, prescription forms, Virginia Uniform Summons forms, etc. If the questioned writing was prepared on a small slip of paper, papers used for the dictated samples should be cut to that size prior to being written on.
2. Do not allow the writer to view, or copy from, the questioned writing directly. 3. Dictate the full text of the questioned wording and numbers. This can include all the questioned entries on a check, an application form, letter, etc. Ask the person to print where there is hand printing in the questioned material, and to write when there is cursive handwriting.
4. Remove each specimen as it is completed. Number them in the order they were taken. Make sure they are initialed and dated by the writer.
8. Obtain writing samples from the weak hand. For example, if the person is right handed, instruct him or her to write some samples with the left hand.

9. Whenever possible, supplement the dictated specimens with the non-dictated known writings as previously described. The person could be asked for copies of known writings that are in their possession at the interview.

10. In most cases, it is helpful to the Document Examiner for you to obtain known writings of the victim. These specimens can be obtained from dictation or may consist of numerous samples of course of business writing such as canceled checks. In cases of stolen and forged checks, the suspect may have had access to the victim's signature and may have attempted to copy the victim's signature. Proper evaluation of the potential for any attempt to copy or imitate the writing style of the victim requires the submission of known victim samples.

In summary, when obtaining handwriting samples:

DUPLICATE AS NEARLY AS POSSIBLE THE ORIGINAL CONDITIONS OF THE QUESTIONED WRITING

Making sure the samples are:

- **Comparable** - cursive handwriting for comparison to cursive handwriting. Hand printing for comparison to hand printing. Signatures for comparison to signatures. Numerals for comparison to numerals.
- **Representative** - same exact wording
- **Adequate** - enough to obtain the normal range of writing in check cases - 20-25 samples with the full wording of each questioned document (when possible).

Package known items separately from questioned documents.

Suggested Sources of Non-Dictated Writings

Bank Records

Canceled checks
Deposit Slips
Microfilm
Mortgages
Promissory Notes
Safety Deposit Vault Register
Signature Cards
Withdrawal Slips

City Records

Building Department
 Building Permits
City Auditor

County Records

County Clerk
 Civil Service Applications
 Claims for Services or
 Merchandise
 Fishing, Hunting, Marriage
 Licenses
Purchasing Department
 Bid and Contracts
Register of Deeds
 Deeds
 Birth Certificates
 Public Assistance Applications
 ID Card Applications

Canceled Checks
 City Clerk
 Licenses (e.g., Peddler, Tavern,
 Special Permits)
 Voter's Registration Lists
 Personnel Department
 Civil Service Applications

Department Store Records

Applications for Credit
 Complaints and Correspondence
 Receipts for Merchandise
 Signed Sales Checks

Employment Records

Applications for Employment
 Canceled Payroll Checks
 Credit Union
 Personnel Jacket, Letters,
 Memoranda
 Receipts for Bonds, Salary, etc.
 Withholding Exemption Forms
 Work Product (Notes, Ledgers, Sales
 Checks, etc.)

Federal Records

Civil Service Regional Offices
 Applications (No. 57)
 Department of Justice (FBI)
 Fingerprint Cards
 Military Records
 Air Force, Army, Coast Guard,
 Marines, Navy
 (Bases and Stations)
 Record Depots (for Ex-Service
 Men)
 Post Office Department
 Application for P. O. Box
 Registered and Special Delivery
 Receipts
 Social Security Administration
 Applications for Numbers,
 Benefits
 Veterans Administration
 Applications for Benefits,
 (Veterans & Widows)
 U.S. Treasury
 Canceled Payroll Checks

Selective Service (Local Board)
 Registrations
 Department of Taxation
 State Income Tax Returns
 Treasurer
 Canceled Checks

Drug Store Records

Register for Exempt Narcotics,
 Poisons

Hospital Records

Admissions, Releases

Hotel and Motel Records

Registrations, Reservations

Insurance Records (Life)

Applications for Insurance

Library Records

Applications for Cards

On the Person

Contents of Wallet (Signed ID Cards
 of all types)
 Letters, Post Cards
 Notebooks
 Passport

Police and Sheriffs' Department
 Records

Complaints
 Fingerprint Cards
 Receipts for Returned Property

Prison Records

Complaints
 Requests
 Property Receipts
 Correspondence located in the cell
 Letters or copies of letters sent

Public Utility Records

Applications for Service
 Electricity

In The Home

Books (Flyleaf Signatures)
 Canceled Checks, Notes
 Correspondence
 Diaries
 Insurance Policies
 Military Discharge Papers
 Notebooks
 Passports
 Receipts (Rent)
 Recipes (Cooking)
 Wills

State Records

Conservation Files
 Boat, Fishing, Hunting Licenses
 Workmen and Unemployment Files
 Unemployment Compensation
 Canceled Checks
 Motor Vehicle Files
 Drivers' Files
 Title Files
 Personnel Files
 Civil Service Applications and
 Examinations
 Corrections Files
 Probation and Parole Reports
 Secretary of State
 Application for Notary Public
 Taxation Files
 Beverage and Cigarette Tax Applications
 State Treasurer
 Canceled Checks

Gas
 Telephone
 Water

Real Estate Records

Property Listing Agreements

Relatives

Letters, Post Cards

School and College Records

Applications for Entrance
 Daily Assignments
 Registration Cards

Miscellaneous

Building After-hour Registers
 Express Company, Cartage, Movers'
 Receipts
 Rent Receipts to Tenants

ITEM - Charred Documents

METHOD - If the evidence is found in a fireplace or woodstove, the damper must be closed before recovering the charred material. Slide a piece of heavy paper under the charred paper and carefully place on a cushion of tissue paper in a rigid box (cardboard). Be sure to mark the top of the box and indicate this side up. The top should be closed to prevent air currents. If the document is in a movable container, such as an ash tray (consider fingerprints), place the ash tray in a rigid container so that it does not slide and fingerprints are not damaged. If the document is in a larger movable container such as a trash can, either submit the trash can with the charred paper (cover trash can and mark this end up), or if the can has excessive trash in it, carefully attempt to remove the document by sliding paper under it and proceed as mentioned above (re: fireplace or woodstove). Charred

documents are fragile, and for this reason should be hand carried to the nearest laboratory.

DISCUSSION - Charred documents may be successfully examined, but proper handling of this most fragile evidence is very important. The objective is to deliver the evidence to the laboratory in the same condition as it was found.

ITEM - Water-soaked Documents

METHOD - Documents that are merely wet or damp should be air dried prior to packaging for submission. Documents that are **completely** saturated, however, are fragile and present problems if not immediately hand-carried to the laboratory. It is strongly recommended you telephone the Questioned Documents Section for specific instructions.

DISCUSSION - Saturated documents may be successfully separated and deciphered if delivered to the laboratory expeditiously before any further degradation occurs.

ITEM - Crumpled Documents

METHOD - Do not try to straighten the document - simply place in a rigid container for submission to the laboratory.

DISCUSSION - Excessive handling may damage fingerprint evidence or confuse elements of the handwriting examination.

ITEM - Indented Writing Submission

METHOD - Handle carefully. Pre-label the evidence container to avoid having to mark the document or the packaging material with the document already enclosed. Label the envelope with instructions not to bend, fold, or stamp the container. Place the document inside a file folder or enclose it between cardboard large enough to cover the document and place in an appropriate size envelope. The document should be packaged securely to limit rubbing and prevent any "surface friction". This can damage the indented writings, limiting the potential for deciphering or recovering them.

DISCUSSION - The cardboard will protect the document from additional indentation.

REMEMBER - any type of document could contain indented writings that result in the development of significant investigative leads.

ITEM - Obliterated/Eradicated/Altered Documents

METHOD - Handle in the same manner as intact documents.

ITEM - Extended Writings (e.g., lengthy letters, diaries, journals)

METHOD - Submit the entire questioned document using the same procedures and precautions as for intact documents.

For dictated known samples, have the suspect repeat the entirety of the questioned body of writing 7-10 times. In cases involving extremely large bodies of questioned writing choose a representative sample (paragraph or several lines) from each page and have the suspect repeat the writing from each page 7-10 times.

ITEM - Typewriting and Typewriters (and typewriter components)

METHOD - The intact typewritten document should be handled as previously described in the Intact Documents Section. Any suspect typewriters should be submitted along with any extra typing elements or wheels and any known standard specimens. The typewriter should be hand carried to the laboratory. If the suspect typewriter cannot be submitted to the laboratory, the Questioned Document Section should be contacted directly for advice on obtaining known samples from it. It is always best to submit the entire typewriter to the lab for a complete examination.

Typewriter ribbons should be submitted with the ribbon still on the machine. As with typing elements and wheels, any extra ribbons should also be submitted for examination. If the machine is not being submitted remove the ribbon cassette from the typewriter and package it in a box of the appropriate size. If the ribbon is loose (not a cassette) secure the ribbon spools so the ribbon will not become unraveled. If the ribbon is of the carbon film type (readable), it **SHOULD NOT** be used for obtaining any known samples from the suspect typewriter. In that case a fresh ribbon would need to be used for the samples.

ITEM - Check Writer and/or Pricing Labeler

METHOD - Same as for Typewriting above.

ITEM - Torn Documents

METHOD - Do not attempt to piece the torn document back together. Instead, carefully place all the pieces in an envelope prepared for submission to the laboratory.

DISCUSSION - Excessive handling may destroy important information.

ITEM - Inks/Writing Instruments

METHOD - Handle and submit the questioned document in the same manner as in Intact Documents. Package the writing instrument in an appropriate size box or envelope.

ITEM - Matches/Other Torn Paper

METHOD - Used (meaning partially burnt) and unused matches may be associated or fracture matched back to the matchbook from which they were torn. Package the match in a crush proof container such as a pill box. Package the match book in a separate container that will also protect it from damage. A small box would be ideal. **KEEP AWAY FROM EXCESSIVE HEAT AND DO NOT SEND THROUGH THE MAIL.**

Fragments of torn paper can also be fracture matched back to the sheet from which they were torn. These items are fragile, especially along their torn edges, and should be handled carefully.

ITEM - Paper

METHOD - Paper products (e.g., sheets, envelopes) may be examined for dimensions, weight, color, texture, watermarks, composition, rulings, indentations and other important characteristics in order to determine whether two or more could have originated from the same source.

Safety Measures

Personal protective equipment should be worn when handling documents believed to be contaminated with biological fluids. Documents of this type should be submitted indicating the BIOHAZARD potential. The laboratory can provide BIOHAZARD stickers for this type of evidence. The documents should be air dried prior to packaging and submitting to the laboratory.

Packaging for Transporting to the Laboratory

Questioned and known documents should be packaged separately. The known writings of one person may be contained in the same envelope and listed as a single item. Even if they total 10, 15 or even 20 separate specimens, as long as all were written by the same person they may be combined as a single item.

Generally, each questioned document should be submitted as a separate item of evidence. Exceptions to this might be appropriate in large volume questioned check cases (e.g., twenty or more) when it is suspected that all were written by the same individual, or where multiple documents are collected at one scene/incident.

Multiple questioned documents may be packaged in a single evidence container provided that each document is packaged in a manner that provides for internal separation of the documents. For example, each document is placed into a pre-labeled envelope then all the envelopes are placed into a single larger envelope.

Evidence packaging should be labeled **prior** to putting the questioned documents in the container. If the questioned documents are put in an envelope and the envelope is marked, then there is a good possibility that indented writings will be imparted on the questioned documents. This should be avoided. Always label the packaging material before placing the document in the envelope.

Evidence containers (e.g., envelopes) should be large enough to hold the document evidence without having to fold it.

The use of plastic “document protectors” is not recommended due to the possibility of altering evidence by lifting off layers of toner (e.g., photocopies, laser printed documents), or adversely affecting some

inks. If a “document protector” is used, place an intervening sheet of plain white bond paper between the document and the plastic holder.

Documents should be accurately described and documented in the field notes to include a photograph or photocopy to record things such as check number, date, payee name, etc., so that the document does not have to be physically marked for identification. The packaging material should be clearly labeled with the date, case number, item designation, item description and officer's name or initials. If a document must be marked, as dictated by your agency's policy, then it should be done discretely in an area that is not near the questioned entries. Marking the document may hamper later efforts to develop latent fingerprints, and could also interfere with efforts to decipher and recover any indented writing from the document.

SUBMISSION REMINDERS

Whenever possible, submit the original questioned and known documents. If photocopies or photographs rather than originals are submitted, describe them as such in the “Evidence Submitted” section of the Request for Laboratory Examination form (RFLE).

The "Handwriting Samples Forms" packets supplied by DFS are designed for use in check and credit card cases only, and may not be appropriate for other types of cases, such as those involving Virginia Uniform Summonses, Public Assistance documents, anonymous letters, bomb threats, robbery/demand notes, or credit card application forms. It is preferred that forms similar to the questioned one(s) be used whenever possible. This may mean photocopying a blank form like the questioned one 20-25 times, and having the writer provide dictated samples on each copy. You can usually obtain blank forms from the source (e.g., bank, business, law office, DMV).

Number the items you are submitting, and keep the same numbers if the same items are resubmitted at a later date for additional examinations.

Use envelopes that are large enough that you do not have to fold the documents being submitted for examination.

Protect document evidence by avoiding exposure to moisture, heat, and strong light sources.

Don't handle the documents excessively, and don't carry them around in your pocket.

Don't write on the questioned document or on packaging material while questioned document is enclosed.

Don't dust or chemically treat for latent prints prior to document examination.

Don't staple the RFLE to the evidence container.

If questioned documents represent separate cases, then have separate RFLEs for each case.