1 General Information

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PEH-02-04A	Criteria for DNA Evidence Submission	v.00	
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2 Evidence Collection

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PEH-02-08A	Template for Computer Search, Seizure and Analysis Warrant	v.01	
PEH-02-08B	Criteria for DME Evidence Submission	v.01	R
PEH-02-09	Firearms and Toolmarks Evidence	v.05	R
PEH-02-10	NIBIN Evidence	v.04	R
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3 Resources

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4 Forms

LAB-06	Laboratory Submission Form	v.01
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LAB-17	Gunshot Residue Kit Information Form	v.00
LAB-23	DME Triage Form	v.01
LAB-24	Sexual Assault Information Form	v.00

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

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06	08/08/2014	Revised: PEH-01-03 Table 2, PEH-01-05, PEH-02-03, PEH-02-05, PEH-02-05A, PEH-02-06, PEH-02-07, PEH-02-08, PEH-02-09, PEH-02-10 Rescinded: PEH-02-03 Table 1
07	12/04/2014	Revised: PEH-01-02, PEH-01-03, PEH-01-03 Table 1 Rescinded: PEH-01-03 Figures 1-6
08	10/15/2015	Revised: PEH-01-01, PEH-01-03 Table 2, PEH-02-02

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INTRODUCTION

For admissibility of evidence examination in Texas criminal courts by either the prosecutor or the defense, it is required that the examination be performed in an accredited laboratory.

Texas Code of Criminal Procedure 38.35 requires that forensic analysis of physical evidence (including chemical or other expert examination) and expert testimony relating to the evidence be admissible in a criminal action only if, at the time of the analysis, the crime laboratory or other entity conducting the analysis was accredited by the Texas Forensic Science Commission (TFSC) effective 09/01/2015. A description of the accreditation program and **a listing of accredited laboratories** may be found on the Texas Forensic Science Commission website: http://www.fsc.texas.gov/texas-forensic-science-commission-crime-laboratory-accreditation-program.

Forensic analysis does not include the location, identification, collection, or preservation of physical evidence by laboratory or investigative personnel unless the activity is integral to an expert examination or test (see Texas Administrative Code Title 37, §28)

The Physical Evidence Handbook is provided as a resource to acquaint law enforcement personnel about the Texas DPS Crime Laboratory forensic services. It is intended as a guide to assist officers in the proper, safe, and efficient methods of evidence collection, packaging, and submission. Law enforcement personnel must take care to ensure the evidence will not be lost, damaged, or contaminated and that the chain of custody will be as short as possible. It is our goal to work with law enforcement to protect the integrity of the evidence and the criminal case being investigated.

The Texas Department of Public Safety (DPS) strives to provide high quality forensic laboratory services on evidence associated with a criminal investigation for all law enforcement agencies in Texas. The Texas DPS Crime Laboratories are accredited by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board to ISO/IEC 17025 Standards and are located in thirteen locations around the state, making them convenient to all parts of Texas. All forensic services, including expert witness testimonies, are rendered free of cost.

All laboratories located throughout the state have the capability to analyze **Controlled Substance** evidence, and all (with the exception of Amarillo and Laredo) can analyze blood/urine evidence samples for blood alcohol content.

The laboratories in Austin, Corpus Christi, El Paso, Garland, Houston, Lubbock, Tyler, Waco, and Weslaco can examine biological evidence for **DNA** typing.

The Austin, Garland, Houston, and Lubbock laboratories can examine various types of **Trace** evidence.

Firearms and **Toolmarks** examinations, including distance determinations and serial number restorations, are conducted in the Austin, El Paso, Garland, Houston, Laredo, Lubbock, Tyler, and Weslaco laboratories. The Austin and Garland laboratories also have a **NIBIN** (National Integrated Ballistic Imaging Network) unit for the entry of cartridge cases from seized firearms and spent cartridge cases from crime scenes in a national database to identify possible associations of gun-related crimes. Arrangements will be made by the DPS for cartridge cases which are suitable for entry and analyzed in other DPS laboratories to be entered into the NIBIN database.

The Austin, Garland, Lubbock, and Weslaco laboratories can examine and process evidence for **Latent Prints**.

In addition, the Austin laboratory also provides services in the areas of **Toxicology**, **Photography**, **AFIS** (Automated Fingerprint Identification System)**, Questioned Documents,** and **Digital Multimedia Evidence**.

Typical daily hours of operation for staff members are between 8 a.m. and 5 p.m. Local laboratories should be contacted for hours during which they will receive evidence. For special assistance needed during off hours, contact DPS Communications.

The DPS Crime Laboratory observes the state of Texas holiday schedule. On occasion, offices may be closed due to inclement weather conditions.

It is the desire of our Crime Laboratory staff to work closely with stakeholders to provide the most information that can be gained from evidence. Our staff will also provide assistance when necessary in the collection/preservation of evidence from the scenes of major crimes and clandestine drug labs. Consultation for testimony is highly encouraged.

Preparer

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Concurrence

Brady W. Mills Date: 09/30/2015
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03	10/15/2015	Major Revision – Introduction

INTRODUCTION

Texas Department of Public Safety Crime Laboratories have been continually accredited since 1986 to provide expert forensic laboratory services to law enforcement agencies within Texas.

In order to maintain accreditation and provide the most efficient and effective testing, policies regarding communication and case acceptance must be upheld. This section outlines the specific parameters and limitations regarding the submission of evidence to a Texas Department of Public Safety Crime Laboratory (hereafter referred to as DPS Crime Laboratory).

In the remainder of this document, the submitting officer and/or submitting agency may also be referred to as "customer." The Texas Department of Public Safety Crime Laboratory Service values and encourages collaboration with its customers.

LABORATORY SERVICE REQUESTS AND POLICIES

The DPS Crime Laboratory submission form should accompany the evidence when it is submitted. Submission forms are available within specific evidence collection kits, from the Laboratories, or from the Texas DPS website: www.dps.texas.gov. Examples of submission forms include the LAB-06 and LAB-12. Information requested on the forms should be complete and include a description of the items of evidence being submitted, names of parties involved, and the general type of service(s) or discipline(s) believed to be necessary in the analysis of the evidence.

A completed DPS Crime Laboratory submission form serves as a proposed <u>contract</u> between the customer and the DPS Crime Laboratory.

For DNA, Hair Analysis, Latent Prints, and Questioned Documents requests, the Laboratory will require the submission of known reference or exemplar samples from victim(s), suspect(s) and elimination standards (including from consensual sex partners depending on the nature of the evidence) for comparison purposes. It is the responsibility of the customer to facilitate the collection of these samples prior to submission of the evidence as available. These standards should be collected during the initial investigation, packaged separately from the evidence, and should be submitted at the same time as the evidence if possible. The Laboratory cannot perform a complete analysis until these samples have been submitted. The Laboratory can be consulted on a case-by-case basis.

The Laboratory has additional case/evidence acceptance policies associated specifically with Controlled Substance, DNA, Digital and Multimedia Evidence, and Gun Shot Residue Testing which are included in this Handbook. These policies have been established to maximize efficiency for all stakeholders. (For cases where evidence is submitted for analysis to multiple sections or in special circumstances, the Laboratory will consider additional evidence beyond the limitations communicated in the policies.)

If a case receives a disposition any time after submission **such that it no longer requires testing**, notify the Laboratory as soon as possible.

Following submission, Laboratory personnel will evaluate the evidence, the requested services, and the case history to ensure that the needs of the customer can be met by the DPS Crime Laboratory where the evidence was originally submitted. A case synopsis or report can assist in evaluating the requested services.

If it is determined that the laboratory system cannot comply with the requested examination prior to or during analysis, the submitter must be contacted to either discuss potential modifications of the request or arrange for the subsequent return of the evidence. The customer will be informed if the Laboratory is unable to meet their needs or if other services offered by the Laboratory would benefit the agency's investigation.

The Laboratory may contact the customer to clarify any discrepancies with the submission form, description or condition of the item(s) of evidence, and whether to proceed with testing.

A forensic scientist may contact the customer when circumstances of the submission need to be clarified before work can commence.

During the course of analysis of evidentiary items, where there is a limited amount of sample, it may be necessary for the forensic scientist to deplete the evidence in order to analyze the exhibit. The forensic scientist may contact the customer to ensure that it is acceptable to deplete the evidence sample when such circumstances occur. If the Laboratory believes that the evidence is unsuitable, insufficient quantity/quality or of limited value, the forensic scientist has the discretion to not perform a test. Information will be provided on the Laboratory report to inform the customer that an item of evidence was not analyzed or examined.

The customer permits the forensic scientist to choose the appropriate testing methods to fulfill the requested services and also to choose the testing method deemed to be of the most relative value to the submitted evidence.

When the Laboratory has the capability to complete the requested services, appropriate methods of analyses and examinations that have been validated and recognized by the forensic community will be used.

The customer will not be explicitly informed prior to testing of the specific methods used to conduct the analyses or examinations on the submitted evidence. However, the methods used are available for review by the customer on the DPS website.

During the course of analysis of evidentiary items where large numbers of a particular item are submitted as one exhibit (e.g. corner baggies, pills, and excess quantity drugs), it may be necessary for the forensic scientist to use a sampling plan to analyze a portion of the items from that exhibit. A statistically valid method of selection and analysis will be used on the samples if the reported results are intended to be representative of the whole exhibit. The customer will be informed through the testing report when a sampling plan has been used.

Occasionally, it may be necessary for the forensic scientist to subdivide an exhibit for analysis or to collect a sample from the exhibits in order to properly preserve or analyze the evidence (e.g. cuttings, tape lifts, extractions, and segregation of samples). These subdivided exhibits may be retained by the DPS Crime Laboratories for possible future examination or retrieval. All DPS Crime Laboratories will maintain an internal chain of custody of the movement of exhibits through the DPS Crime Laboratory.

The DPS Crime Laboratory may contact the customer to discuss the decision to not perform a requested service. After receiving the Laboratory report, the customer, in turn, may contact the Laboratory to discuss the test(s) not performed or to request other services.

At a time convenient to all parties, customers may meet with the scientist(s) to discuss potential testing, view the evidence or discuss the results and conclusions of testing.

FORWARDING OF EVIDENCE

Submitted evidence may be forwarded to another DPS Crime Laboratory or another accredited laboratory to complete the requested services.

If the DPS Crime Laboratory where the evidence was submitted is not capable of performing the service or for purposes of efficiency and effectiveness, the evidence and request may be transferred at the discretion of the Laboratory to another DPS Crime Laboratory or outsourced to another accredited laboratory capable of fulfilling the request. The DPS Crime Laboratory may advise the customer, as appropriate, when their evidence has been forwarded. The location of testing is communicated to the customer on the testing report on the Agency letterhead.

For DPS officer-involved shootings or internal investigations, the evidence will be forwarded to a DPS Crime Laboratory capable of performing the requested service(s) that is outside the normal service area of the parties involved in the investigation. If only one DPS Laboratory is capable of performing the required analysis, the decision to outsource will be handled on a case-by-case basis.

RUSH REQUESTS

If the Laboratory receives a request to complete analysis of evidence in a certain time-frame but the Laboratory cannot meet the requested time requirements, the customer will be notified. Delays in routine casework will usually not result in communication with the customer. Should a significant delay occur, Laboratory management may contact the affected agencies.

Cases are typically worked chronologically based on submission date (those that have been in the queue the longest). A case will be prioritized if it involves any of the following circumstances:

1. A threat to public safety (example: an unidentified serial rapist)
2. An impact to court trials
3. An impact to jails (person is confined for an extended period pending lab results)
4. A high profile incident that draws national media attention

For special service requests or time constraints, it is the responsibility of the customer to effectively communicate those needs to the laboratory. The customer should understand that non-routine service requests and rush situations are discouraged as it will inevitably impact completion of other cases.

STORAGE OF EVIDENCE

DPS Crime Laboratories examine evidence from over 2,000 law enforcement agencies across Texas. Only evidence submitted by DPS officers is stored. All non-DPS submitted evidence will be returned to the submitting agency.

DPS Crime Laboratories do not accept evidence for destruction from outside agencies.

Law enforcement agencies and other criminal justice entities from counties with a population less than 100,000 can deliver biological evidence for long-term storage to the DPS evidence storage facility in Houston. (Refer to Code of Criminal Procedure, Article 38.43**.**) Agencies are encouraged to store this evidence locally until **conclusion** of trial.

RE-ANALYSIS OF EVIDENCE

It is Laboratory policy that evidence previously tested will not be re-analyzed except by court order or with the documented approval of the Laboratory Manager under the following circumstances:

1. Cases affected by a warrantless blood draw
2. Administrative or quality assurance purposes
3. Original forensic scientist is not available for testimony
4. New technology or procedures become available

The Laboratory may consider a resubmission of evidence for analysis for a different test and/or processing of additional evidence.

TOURS

Open houses are scheduled at least annually during which testing stops to provide access to laboratory areas.

Outside of the open house, the Laboratory may provide approved video tours or tours limited to non-working Laboratory areas (hallways or meeting rooms).

In order to preserve the confidentiality of all cases and maintain a safe and secure working environment, customers are not permitted to be present during the examination of evidence for the following reasons:

1. **Safety Risk:** Access to the bench area of a laboratory means high risk exposure to biological, chemical, and fire hazards, and exposure to use of live weapons. Personnel who work within these secure areas of the Crime Laboratory are required to have considerable training in safety awareness such as routes of exposure, chemical properties impacting spill and fire response, use of safety equipment, sharps protocol to prevent bloodborne pathogen exposure, prevention of lead exposure, weapon safety, and much more. Personnel must be trained, wear personal protective gear, and must be offered the hepatitis vaccine before working in the Lab. It is an Agency liability to allow an untrained and unvaccinated visitor in such a high risk area.
2. **Contamination Risk to Evidence**: Evidence open for examination is at risk for contamination, which diminishes its integrity, quality, and usefulness as evidence. Contamination can occur in a variety of ways depending on the type of evidence. DNA contamination can occur from coughing, talking, sneezing, shedding a hair or dandruff, or touching a surface. A DNA contamination event may occur days before detection. The slightest amount of DNA can now be detected with the very sensitive technologies in use. Trace evidence

contamination can occur from the shedding of hairs or fibers. Latent Print contamination can occur from a touch. Questioned Document evidence can be altered by touch, pressure, impressions and liquid. Digital Multimedia contamination can occur from a magnet, a touch, pressure, and liquids.

In order to prevent contamination when a visitor is present, a laboratory must remove all other evidence from the area. The analyst must prevent access to the evidence by others while simultaneously accessing the evidence themselves for careful testing, all while overcoming the added distraction of an audience. Once a visitor departs, the Lab must decontaminate the testing area. In certain areas, contamination prevention requires a full face mask and protective clothing to be worn by anyone entering the room, and in all areas, the knowledge of how to prevent contamination is critical. Decontamination may involve wiping down an entire room with bleach or flooding an area with ultraviolet light. Laboratory personnel are trained to know how to protect the evidence, but a visitor is not aware, so evidence is put at unnecessary risk for change or loss.

3. **Security Risk to Lab:** While unintentional contamination can easily occur, deliberate actions are also a threat. It is Agency policy to perform a background check on any vendor or contractor before they are allowed into the secure areas of the laboratory. The lab is entrusted to protect confidential information and handles valuable evidence including money, jewelry, and drugs.

4. **Expense to Lab:** The presence of visitors inside the secure area is costly to the lab. With an observer, time and space must be dedicated to a single case, where, for example, instead of testing one blood tube for one blood alcohol case, the usual lab procedure is to run a batch of multiple cases. During a visit, no other instruments within the room can be used nor may another analyst perform work on other cases within the room to avoid unnecessary contamination or security risk to other evidence. Usually, instruments are arranged together for convenience of plumbed gases and ventilation, so one single observed case can limit access to most of the lab equipment for all other cases of the same type, resulting in lost productivity for many analysts. Reagents, particularly those associated with DNA analysis, are costly, and all normal quality controls must be run regardless of how few samples are run. Decontamination of a workspace is time consuming and labor intensive and may also require the workspace to be vacated for a time, such as for decontamination by ultraviolet light. Visitor DNA may need to be analyzed and compared if contamination does occur, using reagents and analysts' time to search for the source of contamination. Additional costs are incurred by the lab in purchasing personal protective gear for an observer and cleaning costs for non-disposable items. A lab visitor must be observed at all times by a staff member for security reasons, further decreasing productivity for the laboratory. Access for visitors to the working areas of the laboratory is a costly disruption of efficient workload processes in many ways.

If there are questions regarding laboratory services and policies, please call the Regional Laboratory in your service area and laboratory staff will answer any questions. Phone numbers and addresses are listed in PEH-01-03 Scope of Testing.

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

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…		Previous revision history included in archived documents.
02	07/09/2010	Minor Revision – Section: Laboratory Service Requests and Policies
03	05/16/2012	Major Revision – Section: Laboratory Service Requests and Policies
04	12/04/2014	Major Revision – Addition of laboratory policy regarding tours to general public
05	08/16/2016	Minor Revision – Laboratory Service Requests and Policies

LABORATORY SERVICES

A listing of laboratory services and the laboratories that provide those services is included on Table 1 of this section of the Physical Evidence Handbook. The DPS Crime Laboratory does not perform external calibration services.

The specific evidence collection sections of this handbook outline more specific details and limitations of the testing offered by the Texas DPS.

PEH-01-03: Table 1 Crime Laboratory Services

LABORATORY ADDRESSES AND PHONE NUMBERS

The mailing and physical addresses and phone numbers for the Texas DPS Crime Laboratories are located on Table 2 of this section.

PEH-01-03: Table 2 Laboratory Addresses and Phone Numbers

DISCIPLINE MAPS

Maps for forensic testing services in the areas of Drug Analysis, Latent Prints, DNA, Trace, Firearms/Toolmarks, and Blood Alcohol are available from at the DPS website (http://www.dps.texas.gov/CrimeLaboratory/LabRequest.htm) or at each laboratory. These maps depict a geographical representation by county of laboratory service areas.

Preparer

Forrest W. Davis Date: 12/04/2014
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 12/04/2014
Deputy Assistant Director

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02	05/16/2012	Major Revision – Discipline Maps
03	12/04/2014	Major Revision – Discipline maps removed and made available through website

CRIME LABORATORY SERVICES

Crime Lab	Drugs	Clan Lab Assistance [1]	Blood Alcohol	Toxicology	Biological Evidence Screening	DNA	Firearms and Toolmarks	Gunshot Distance Determination	NIBIN	Serial Number Restoration	Fibers	Paint	Hair	Shoe/Tire Impressions	Unknown Substances	Lamp Filament	Glass	Gunshot Residue	Latent Prints	AFIS	Questioned Documents	Digital Evidence [2]	Crime Scene Assistance [3]	Photography
Abilene	X	X	X																					
Amarillo	X	X																						
Austin	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Corpus Christi	X	X	X		X	X																	X	
El Paso	X	X	X		X	X	X			X													X	
Garland	X	X	X		X	X	X		X	X	X	X	X	X	X	X			X				X	
Houston	X	X	X		X	X	X			X	X	X	X	X		X							X	
Laredo	X				X																			
Lubbock	X	X	X		X	X	X			X	X	X	X	X					X				X	
Midland	X	X	X																					
Tyler	X	X	X		X		X	X		X													X	
Waco	X	X	X		X	X																	X	
Weslaco	X		X		X	X	X			X									X				X	

[1] Clandestine laboratory shut-down and evidence collection

[2] Digital Evidence includes computer forensic, video, and audio examinations

[3] Assistance at complex scenes

The most current copy of the Physical Evidence Handbook is available at:
http://www.dps.texas.gov

LABORATORY ADDRESSES AND PHONE NUMBERS

Laboratory	Address	Phone Numbers
Breath Alcohol	5805 North Lamar Blvd. MSC 0570 Austin, TX 78752	512-424-5238 Fax 512-424-2869
Abilene	2720 Industrial Blvd. Abilene, TX 79605	325-795-4040 Fax 325-795-4134
Amarillo	4200 Canyon Dr. Amarillo, TX 79109	806-468-1430 Fax 806-468-1442
Austin	5800 Guadalupe St. Austin, TX 78752	512-424-2105 Fax 512-424-2869
Corpus Christi	1922 S Padre Island Dr. Corpus Christi, TX 78416	361-698-5641 Fax 361-698-5574
El Paso	11612 Scott Simpson Dr. El Paso, TX 79936	915-849-4120 Fax 915-849-4113
Garland	402 West IH 30 Garland, TX 75043	214-861-2190 Fax 214-861-2194
Houston	12230 West Rd., Bldg. C Houston, TX 77065-4523	281-517-1380 Fax 281-517-1395
Laredo	1901 Bob Bullock Loop, Bldg. B Laredo, TX 78043-9771	956-728-2245 Fax 956-728-2246
Lubbock	1404 Lubbock Business Park Blvd, Suite 200 Lubbock, TX 79403	806-740-8900 Fax 806-740-8918
Midland	2405 South Loop 250 West Midland, TX 79703	432-498-2190 Fax 432-498-2358
Tyler	4700 University Blvd., Bldg. C Tyler, TX 75707	903-939-6021 Fax 903-939-6097
Waco	1617 East Crest Dr. Waco, TX 76705	254-759-7180 Fax 254-759-7185
Weslaco	2525 N. International Blvd. Weslaco, TX 78599	956-565-7250 Fax 956-565-7259

INTRODUCTION

A DPS Crime Laboratory Submission form (LAB-06) should be included with all evidence submissions. The Sexual Assault Evidence Submission Form (LAB-06A) should also be included with all sexual assault evidence submissions. These forms are designed to ensure that the laboratory has all the necessary information about the case and to minimize the officer's time and effort.

Submission forms are available at any of the 13 Texas DPS Crime Laboratories or can be downloaded from the Texas DPS website:

http://www.txdps.state.tx.us/CrimeLaboratory/Forms.htm

A Toxicology/Blood Alcohol Kit Laboratory Submission Form (LAB-12) should be used for the submission of whole blood or urine specimens for the determination of alcohol and/or drug content. This form will be included in the blood specimen and urine specimen collection kits available from the General Stores.

Submission forms must be filled out as completely as possible and they **MUST BE LEGIBLE**. Please note that incorrect or incomplete submission forms may delay the processing of evidence.

Submit all evidence with a thoroughly completed submission form to the appropriate DPS Crime Laboratory for your service area. Failure to submit the evidence to the proper laboratory may result in a delay in processing the evidence.

EVIDENCE COLLECTION KITS

Call 512-424-5424 for ordering and price information. Use only these approved test kits, as they are prepared according to strict specifications under DPS authority and knowledge of component preservatives and anti-coagulants. The syringe transport tube is required for submission of syringes to the laboratories.

These may be purchased from DPS General Stores. The address is:

DPS General Services

108 Denson Drive

Austin, Texas 78752

Item	Stock Number
Blood Alcohol Specimen Kit	680-93-8050
Urine Specimen Kit	680-93-8060
Syringe Transport Tube	475-34-7920

Preparer

Forrest W. Davis Date: 04/19/2012
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 04/24/2012
Laboratory Director

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00	05/04/2007	Original Issue
01	05/16/2012	Major Revision - Introduction

LABORATORY SUBMISSION FORM INSTRUCTIONS (LAB-06)

General Instructions

1. The Laboratory Submission form (LAB-06) serves as a contract between the submitting agency and the DPS Crime Lab. It must be filled out as thoroughly as possible.
2. The form is available in a Word document and as a PDF document.
3. If you choose to use the Word document to complete the form, please note the following:
    a. The Individual section will accommodate additional individuals by entering a tab in the last cell of the table.
    b. The Description of Evidence section will accommodate additional evidence by entering a tab in the last cell of the table.
    c. Some cells on the form will expand to accommodate additional text.
4. Do not write or type inside the box marked "DPS Laboratory Use Only".
5. Attach a brief synopsis/offense report for all cases except for drug or blood alcohol cases.
6. If a blood alcohol or toxicology exam is needed, use the DPS kit to collect the evidence and submit with a Toxicology/Blood Alcohol Laboratory Submission Form.
7. All DNA cases MUST include a victim.
8. If any evidence is being RESUBMITTED, please submit the evidence being resubmitted as a separate Laboratory Submission.

Submission Type

Check only one of the three submission types:

New: The first submission request for this case to any DPS laboratory.

Additional: A subsequent submission request for this case (other evidence had been previously submitted to a DPS laboratory)

Resubmission: The evidence had been previously submitted for analysis, returned to the agency, and is being resubmitted for additional testing.

- Please check **Corrected Copy** if the submission information has been corrected.

Agency/Offense Information

Agency: The name of the submitting agency

Agency Case #: The complete agency case number

- Please do not include any punctuation.
- Please indicate if mulitple agency case numbers are associated with this case.

Offense: The type of offense

- Please indicate if mulitple offenses are associated with this case.

Offense Date: The date of offense

Offense County: The county of offense

- Please indicate if multiple offense counties are associated with this case.

Case Contact Person Information

Title/Full Name: Full name of the person requesting the analysis

- Please do not use abbreviations.

Badge Number: The badge or ID number of the person requesting the analysis

Physical Address, City/State/Zip: The physical street address of the agency

Phone: The phone number of the person requesting the analysis

Fax: The fax number of the person requesting the analysis

Email: The email of the individual responsible for the laboratory request

- Only secure and valid agency email addresses, such as those ending in .gov or .edu, may be used. DPS will not send reports to public domain email addresses such as gmail, yahoo, or from other internet providers.
- If a secure or valid email address is not available, one may be established at http://www.leo.gov/

Individual Information

S/V/E: Indicate whether the individual is a suspect (S), victim (V), or an elimination (E)

Name: The individual name [LAST, FIRST, MIDDLE (if known)]

- If the Submission Type is Additional or Resubmission, please indicate any new individuals (not included on original submission form) with an asterisk (*)

Sex: The sex of the individual (M – Male; F – Female; U – Unknown)

Race: The race of the individual (W – White/Caucasian/Hispanic; B – Black/African American; A – Asian/Pacific Islander; O – Other)

DOB: The date of birth (if known)

State: The state that issued the individual's driver license/ID

Driver License #: The driver license number issued by the state

ID Card #: The ID number issued by the state

Description of Evidence Submitted

Agency Item #: The agency item number associated with the evidence

# of items: The total number of evidence items (Examples: number of pills, bundles, cartridge cases, swabs, etc.)

Description of Evidence: Brief description of the evidence (Example: white round tablets, swab of blood, latent print from window, etc.)

- Please indicate if the items were collected as probable cause.

Source: The source from where the evidence was collected. Examples: suspect's pocket, broken window at point of entry, victim's living room

Type of Exam(s) Requested: The type of examination(s) to be performed

- Examples of Common Laboratory Request/Service and/or Type of Examination:

Drug Analysis
Destruction Only
DNA (see PEH-02-04A for criteria for submission)
Latent Prints (processing and/or comparison)
Latent AFIS (see PEH-02-06 for additional information)
Trace Analysis
- Fibers
- Paint
- Hair
- Physical Match/Comparison
- Adhesive Tape Analysis
- Shoeprint Impressions
- Tireprint Impressions
- Lamp Filament
- Glass
- Unknown Substances (non-drugs)

Gunshot Residue/GSR (see PEH-02-05A for submission requirements)
Firearms
Distance Determination (see PEH-02-09 for additional information)
NIBIN
Toolmarks
Serial Number Restoration
Questioned Documents
Computer Forensic (see PEH-02-08A and PEH-02-08B for lab requirements for computer search warrant and submission)
Video Examination
Blood Alcohol (Refer to the Toxicology Laboratory Submission form, LAB-12 and Toxicology Collection Kit)
Toxicology (Refer to the Toxicology Laboratory Submission form, LAB-12 and Toxicology Collection Kit)

- Additional specific laboratory requests can be considered and should be clearly communicated and agreed to with the laboratory.

Preparer

Forrest W. Davis Date: 07/23/2014
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 08/04/2014
Deputy Assistant Director

Version #	Effective Date	Brief Description of Change(s)
00	07/01/2013	Original Issue
01	08/08/2014	Minor Revision – Individual Information, Description of Evidence Submitted

TECHNIQUES OF EVIDENCE HANDLING

The true value of evidence can be realized only if proper care has been used in observing the simple rules – scientific and legal – that should govern the journey of physical evidence from its discovery to its final appearance as a court exhibit. The steps in this procedure may be described as follows:

1. Security of the scene and the evidence
2. Discovery of the evidence
3. Documentation of the evidence (via photography or sketches)*
4. Collection of the object(s) or sample(s)*
5. Packaging of the evidence (to include properly sealing the packaging)*
6. Submission to the laboratory*
7. Laboratory examination
8. Custody of the evidence pending trial
9. Transportation to court
10. Exhibition in court

* This manual has been developed to assist law enforcement agencies in the State of Texas in fulfilling the necessary requirements of these steps.

Contact the Laboratory if you require assistance.

GENERAL PRINCIPLES

The following principles are given for general guidance. Laboratory staff can answer questions regarding the handling of evidence.

Integrity of the Crime Scene

Prior to entering any crime scene, ensure that its original condition has been documented, preferably by photography.

Gloves, disposable shoe covers and a face mask should be worn when investigating a crime scene to avoid contamination of the evidence. Change gloves and shoe covers often to avoid cross contamination.

Sufficiency of Sample

It cannot be too strongly emphasized that very often insufficient amounts of evidence are submitted for analysis. This is especially true in cases involving trace evidence (e.g. hair, paint, etc.). If there is any question as to sufficiency when collecting evidentiary samples, it is far better to collect and/or submit generous samples than not enough. Laboratory staff can answer questions regarding amounts needed for analysis.

Maintenance of Individuality

Each bit of evidence must be collected and preserved as a separate sample to avoid contamination. For example, the glass found at the scene of a hit-and-run must not be placed in the same container as the known glass sample from the suspect's automobile.

Labeling

To preserve the identity and chain-of-custody of each item of evidence, each sample or exhibit must be labeled. Evidence should be labeled with exhibit numbers on the outside of all containers being submitted. However labeled, the evidence should correspond to labeling and item descriptions of a crime scene log. Labeling should not occur on the item itself; rather it should be on a tag attached to the item in an area not to be tested or on its individual container.

It is recommended that at a minimum, items be labeled with an item number, location of collection, date collected (to include time; as required by some agencies), and initials of individual who collected the item. Other pertinent information may also be included, depending on local agency policy. It is highly recommended that an item numbering system be used when referring to item numbers on the submission form for evidence that will be submitted to the Crime Lab. The Crime Laboratory Service is using a Laboratory Information Management System that will assign your evidence a laboratory item number. The Laboratory will make every effort to correlate your item number and the laboratory number to ensure that the evidence is properly reported.

Small items should be placed in appropriate containers. **ALL EVIDENCE MUST BE LABELED AND PROPERLY SEALED.** For a seal to be considered proper, the tape must have the initials of the person performing the seal and the date on which the seal was created with some part of the labeling extending over the edge of the seal. Tape should completely cover all openings to the evidence container. Please do not use staples as they do not constitute a proper seal and may present a safety hazard. All of these steps are taken in an effort to ensure that if a seal has been tampered with, it will be evident.

The container of items suspected of containing blood or other body fluids must be either labeled with a biohazard symbol or in a red container, except as it pertains to the shipping container.

The shipping container for Biological Substances Category B must have a UN3373 symbol and the inside container must be either red or labelled with a biohazard symbol. (Please see guidelines from US Postal Service for specific instructions, http://pe.usps.gov/text/pub52/pub52apxc_019.htm)

It is desirable that containers of glass and/or sharp objects are identified as such on the container.

COLLECTING AND PACKAGING

When packaging evidence, the essential goal is to preserve the original integrity of the sample. For this reason, samples should be properly segregated so that contamination does not occur and all instruments, bottles, test tubes, envelopes and other containers used to package evidentiary items must be clean and not previously used.

It is necessary that evidence samples and standards be packaged separately. The collection of these items must be separated by space and if possible by time as well.

All packaging must be labeled and a chain of custody maintained (in the manner deemed appropriate by your agency) so that all items can be readily identified by all who have been a part of the chain of custody.

Place the exhibits of one case in external containers that have been labeled with that case information only. Do not place the evidence from more than one case in the same external container; unless that container is used only for the convenience of transport, does not have any case information on it, and is unsealed.

When mailing, package only one case in a container and attach submission form to the outside of the container in a pouch or envelope. The Texas DPS Crime Laboratory System considers all mailing containers to be a part of the evidence packaging; which may find their way into court and for which testimony might have to be given.

NOTE: The following pages contain photos of properly sealed envelopes and boxes.

Examples of properly sealed envelopes (note that manufactured seal at the bottom has not been reinforced with tape)

Proper seal on the top of a box

Proper seal on the bottom of a box

Examples of a properly sealed box (note that the bottom of the box has also received a seal – necessary to demonstrate the seal has not been broken since evidence was placed into the box)

CONVEYANCE CONTAINERS

Occasionally, there is an outer shipping container and/or packaging material used to facilitate the secure transfer or transit of evidence, provided that it is **NOT** determined to be the evidence container.

The conveyance container may be discarded if it has determined that the evidence is properly sealed inside of another container within the conveyance container. The mailing information, invoice, shipping or billing label, or package barcode must be documented in sufficient detail for chain of custody. They may be imaged or photographed.

Preparer

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Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

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00	05/04/2007	Original Issue
01	05/16/2012	Major Revision – General Principles
02	08/16/2016	Major Revision – General Principles, Conveyance Containers

INTRODUCTION

The DPS Crime Laboratories test and examine evidence received from more than 2,000 Law Enforcement Agencies statewide. In order to reduce the time to complete controlled substance cases and better serve our customers in the criminal justice system, criteria have been established for the submission of evidence. Additionally, some changes are being implemented including: increasing controlled substance personnel, streamlining procedures, and defining the case acceptance policy provided below. These criteria will allow the Laboratory to provide the timely and quality service that our customers deserve.

This section will offer guidelines for the collection, packaging procedures, and submission criteria for controlled substance evidence. **Contact your local laboratory for additional instructions on collection, packaging, and submission procedures.**

SAFETY CONSIDERATIONS

The greatest safety hazard is associated with biological fluids and materials on syringes, razors, and broken glass. Universal Bloodborne Pathogen Precautions should be observed.

Appropriate safety apparel should be used during collection and handling of evidence. It is extremely important to follow your own department's safety procedures for collecting and handling evidence.

POLICY

For all cases accepted, the number of items that will be tested in each case will typically be limited to the minimum number necessary to reach the weight requirement of the highest penalty group in the Texas Health and Safety Code. This means that typically the only items analyzed will be the highest felony submitted.

Non DPS Evidence:

The Crime Laboratory will limit the number of items or samples that can be accepted for a case based on their assignment in the Texas Health and Safety Code and the weight of the submitted items.

It is imperative that agencies submit felony substances as soon as possible after they have been collected so that the Crime Laboratory can provide timely service.

The Laboratory does not typically accept or analyze the following cases:

- Evidence categorized as a misdemeanor offense such as possession of Marihuana under four ounces, synthetic cannabinoid materials under four ounces, identifiable dangerous drugs, etc.
- Misdemeanor offenses may be analyzed when a prosecutor needs a laboratory report for adjudication purposes. A written request from the Prosecutor must be received by the Laboratory before any testing will occur. Form letters and/or blanket requests for analysis will not be accepted.

DPS Non-bulk Evidence:

The Crime Laboratory will receive controlled substance evidence from our Agency's law enforcement officers.

Evidence will be analyzed to the same extent as our external partners. Only the items needed to reach the highest penalty group will be analyzed. If a case contains both felony

and misdemeanor items, they should be packaged in separate containers to expedite analysis.

DPS Bulk Evidence and Excess Evidence:

The Crime Laboratory will accept these cases and process them in accordance with the Health and Safety Code and governing Administrative Codes.

SAMPLE SUBMISSION LIMITS

The type and number of items or samples that will be accepted will be based on the penalty group of the substance.

- **Once results have been released, a written request from the Prosecutor, including sufficient justification, must be received by the Crime Laboratory before any decisions on performing additional testing will be considered.**
- **Additional samples will not be tested to merely have a heavier weight on the report.**

Controlled Substance Analysis for Court

The Crime Laboratory understands the evolving nature of criminal investigations and court schedules; however, fulfilling requests for extremely short turnaround times is not possible without severe negative impacts to the timeliness and quality of other case reports. The Crime Laboratory cannot provide accurate and complete information without sufficient time to perform the testing and review the results. Notice must be given to the Crime Laboratory at least **5 business days prior** to the date the results are needed for court purposes for Marihuana cases and at least **30 business days** for all other substances. This will enable the Crime Laboratory to perform the analyses in the most effective manner while maintaining a high level of quality.

Transportation of Evidence to and from Court

Laboratory personnel are not commissioned officers and are required at times to use their personal vehicles to travel to and from court. For these reasons, laboratory personnel are not permitted to transport evidence to and from court. Deviation from this policy must be approved by laboratory management.

PACKAGING

1. Submit drug evidence in an appropriately sized container.
2. The actual physical evidence may require additional packaging before placing it in the outer container. This packaging may include zippered bags, heat-sealed bags, plastic sample bottles, or other containers appropriate for the evidence being submitted. The inner packaging should preserve the evidence (i.e. leaking, contamination). Example: Place suspected small crack rocks in a zippered bag and seal in an envelope for submission.
3. Over packaging evidence results in longer processing time and is subject to the return of the evidence without analysis. Inner packaging should only contain the evidence. Additional packaging should only be added if this packaging is leaking. An example of over packaging is: 9x12 envelope containing a padded 6x9 envelope containing two items of zip lock bags each containing small crack rock like substances. The 9X12 envelope is not needed in this example. It is recommended you place agency item

number, initials, and date on inner packaging. Always follow your department's procedures for marking and packaging evidence.

4. Ensure each item is listed on the Laboratory Submission Form (LAB-06).
5. If more than one defendant is associated with the case, note which item is associated with which individual on the Submission Form.
6. After the physical evidence is carefully placed in an outer container, it is ready for sealing. The DPS Crime Laboratories require a proper seal to be placed on the outer container of ALL evidence in the care, custody, and control of the laboratories. (See the *Collection and Packaging* section of this Handbook in PEH-02-01.)

Marihuana and other Plant Substances

COLLECTION

Fresh substances (marihuana, mushrooms, cactus, etc.) shall be dried thoroughly before being submitted.

1. Do not include the roots and dirt with the substance.
2. Leaves and stems shall be stripped from large stalks for submission. Large stalks, dirt, or roots are not included in the weight.

Large drug seizures which may have been soaked in flammables, volatiles or other hazardous substances should be handled in an appropriate manner. Contact your laboratory before bringing the evidence to the laboratory facility to discuss the venting of gasoline or other noxious fumes.

SPECIAL PACKAGING REQUIREMENTS

1. Package freshly dried substances in paper bags or boxes to allow for continued drying before submission.
2. Large drug seizure evidence should be sub-divided in containers weighing no more than thirty (30) pounds. Individual bundles weighing more than thirty pounds do not have to be subdivided.
3. Contact your laboratory regarding their preferences on types of containers for the submission of evidence.

If the evidence is being submitted for controlled substance analysis and latent print processing, then gloves should be worn and handling of packaging minimized to preserve latent print evidence.

Biohazardous Evidence

COLLECTION

Syringes **will not** normally be examined by the DPS Crime Laboratories. Only the prosecuting attorney may request the examination of syringes or the presumed content of a syringe.

1. Leave any liquid contents in the syringe. Do not attempt to transfer the contents of the syringe to another container.
2. Liquids from a syringe will be treated the same as a syringe. It will not be examined unless requested by the prosecuting attorney.

3. If you believe you have retrieved the contents of a syringe already in another container, consider it to be a biohazard and treat it with the same precautions.

Drug evidence confiscated from a body cavity, mouth, toilet or other infectious environments is considered a biohazard and should be labeled and treated as such.

SPECIAL PACKAGING REQUIREMENTS

1. DPS Crime Laboratories require the submission of syringes in an approved safety container.

Syringe safety container

2. Mark all layers of packaging, containers and Submission Form with universal biohazard labels.
3. Explain in large print on the Submission Form that the evidence contains a syringe(s) or the contents of a syringe, in addition to using the universal biohazard label.
4. When submitting evidence retrieved from a body cavity, explain in large print on the Submission Form, in addition to using the universal biohazard label.

Clandestine Laboratory Chemicals

SAFETY CONSIDERATIONS

The greatest safety hazard associated with clandestine laboratories is chemical exposure. The chemicals can cause severe chemical burns and/or may be toxic.

Officers not trained in clandestine laboratory safety should contact their local DPS Crime Laboratory for advice on handling chemicals. The use of personal protective equipment such as eye protection, protective clothing, SCBA (Self-Contained Breathing Apparatus) or air purifying respirators, and nitrile gloves is recommended.

Appropriate safety apparel should be used during collection and handling of evidence.

It is extremely important to follow your own department's safety procedures for collecting and handling evidence.

COLLECTION

Please contact your local DPS Crime Laboratory for advice on collecting, sampling, and packaging evidence from a clandestine laboratory, as well as any restrictions it may have regarding submission.

Ensuring the exhibits do not spill or contaminate other exhibits is very important with this type of evidence.

In this circumstance double packaging may be necessary.

1. Package all liquids in a sturdy plastic bottle with secure plastic lids or a glass jar with a plastic lid. Lids may be sealed with chemical tape or duct tape. Do not use metal lids on jars or bottles. Acidic liquids should not be placed into a plastic bottle. Verify pH of liquid; if acidic, use a glass container.
2. Label packaging clearly. Item numbers are the minimum that should be on each piece of evidence. Placing a piece of 2-inch packing tape on the bottle, writing the information on the bottle, and placing a second piece of tape over the label is frequently effective in preventing organic solvent fumes from dissolving the handwritten label. Place individual items in separate sealed plastic zipper bags. Prop bottles upright to reduce the risk of spillage.
3. Place solids in sturdy plastic bottles or plastic zipper bags and handle as described in steps 1 and 2 above. It is not necessary to submit large samples of iodine, lithium, or red phosphorous. Approximately 1 gram (the weight of a package of artificial sweetener) in a sturdy plastic bottle will suffice.
4. It is not necessary to submit large samples of organic solvents not believed to contain controlled substances.
5. Do not submit items still in factory-sealed containers when discovered.
6. Do not submit any compressed gas tanks (i.e. propane or ammonia).

SPECIAL PACKAGING REQUIREMENTS

1. DPS Crime Laboratories require the submission of clandestine laboratory samples in heavy-duty plastic bottles. Please contact your local Laboratory for information on ordering appropriate containers.
2. Some DPS Crime Laboratories have specific requirements on the outermost container for clandestine laboratory samples. Please contact your local Laboratory for their needs.
3. All outer containers in which liquid samples have been placed should be labeled to clearly indicate which end is the top.

Preparer

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Concurrence

Brady W. Mills Date: 09/30/2015
Deputy Assistant Director

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00	05/04/2007	Original Issue
01	05/16/2012	Major Revision – Safety Considerations and Packaging
02	10/15/2015	Major Revision – All sections

INTRODUCTION

Alcohol and/or toxicology drug analysis of biological specimens is performed by the Department of Public Safety Crime Laboratory to support investigations of traffic DWI enforcement, homicide, and drug-facilitated sexual assaults. Typical evidence samples include blood collection kits and/or urine collection kits.

The DPS Toxicology Laboratory does not detect and/or confirm the following: antibiotics, Lithium, vitamins, Psilocybin (mushrooms), diabetic medications, diuretics, Mescaline (peyote), GHB, LSD, heart and blood pressure medications, and synthetic cannabinoids (including "K2" and "spice").

Inform the laboratory of any suspected substances that may have been used by the subject including those above. For information concerning these and other drugs/medications, refer to common reference materials (e.g., Physician's Desk Reference [PDR] or www.drugs.com). Designer drugs and other substances (such as bath salts) are continually being produced to avoid law changes and maintain the desired effects of illegal substances. However, the laboratory may not have the capability to detect and/or confirm some substances.

The Austin Toxicology Laboratory may be contacted for additional information at [GRP_AustinTox@dps.texas.gov] or 512-424-5793.

SUBMISSION OF BIOLOGICAL SAMPLES

- Use DPS approved collection kits for collection and submission.
- It is laboratory policy to perform only one alcohol analysis per subject per incident for any traffic case.
    - No blood alcohol analysis will be performed on a specimen collected from a subject on whom a valid breath alcohol test was obtained.
    - If multiple blood samples are submitted, the sample collected closest in time to the incident will be analyzed for alcohol, unless it is specifically noted/requested to analyze a particular sample.
    - If a gray top tube is submitted with other types of blood tubes, then only the gray top tube will be analyzed for alcohol regardless of the collection time (unless specifically noted/requested to test a different tube).
    - If both blood and urine are submitted, only the blood will be analyzed for alcohol.
- If a laboratory has already analyzed the sample for alcohol, it will typically not be re-analyzed for blood alcohol by a DPS laboratory, except for quality assurance purposes, by court order or with the approval of the Deputy Assistant Director/Assistant Laboratory Director.
- If multiple kits from the same individual are collected, **DO NOT separate the kits** or samples as this decreases the efficiency of our case process. Submit the kits ONLY to the laboratory in your service area to ensure the case remains under the same case number. The additional kits/samples should be noted on the laboratory submission form.

- **Inform the laboratory on the submission form if particular types of drugs are suspected to have been used by the subject**. It must be noted on the laboratory submission form if toxicology drug analysis is also requested. This information will assist the laboratory in directing the analysis of your samples.
- Mail or personally submit the blood and/or urine kit to a DPS Crime Laboratory as soon as possible.
- Kits should be submitted **without additional packaging**.

Submit all kits/samples for alcohol analysis to the appropriate DPS Crime Laboratory for your service area (see PEH-01-03 Figure 6 Laboratories Examining Blood Alcohol Evidence). Failure to submit the evidence to the proper laboratory may result in a delay in processing the evidence.

EXCEPTION: When ONLY Toxicology Drug Analysis is requested and Alcohol and/or Volatile analysis is NOT being requested for the same subject, submit samples and requests to the DPS Crime Laboratory in Austin.

All alcohol concentration requests for sexual assault cases should be sent to the Austin Crime Laboratory for analysis. The Austin Crime Laboratory Toxicology section will analyze the specimens for both alcohol/volatile and drug toxicology analysis, as requested.

- **Inform the laboratory on the submission form if particular types of drugs are suspected to have been used by the subject.**
- If the presence of **Cocaine** or **Flunitrazepam (Rohypnol)** is suspected in a blood sample, keep the sample refrigerated or submit as soon as possible. Refrigeration retards the degradation of these drugs in the sample.
- For information regarding our detection capability, contact the Austin Toxicology Laboratory.

TYPE OF TESTING PERFORMED

Alcohol and Volatile Analysis

An alcohol laboratory report will list the alcohol concentration and/or the presence of volatile compounds. Volatile analysis may include compounds that are abused as inhalants. If continued analysis is necessary for toxicology drug analysis, the laboratory in your service area will forward the appropriate samples to the Austin Crime Laboratory and indicate its disposition on the report.

If toxicology drug analysis was requested and the alcohol concentration is determined to be less than 0.100 grams per 100 milliliters, it will be forwarded to the Austin Crime Laboratory for drug analysis.

If toxicology drug analysis was requested and the alcohol concentration is determined to be equal to or greater than 0.100 grams per 100 milliliters (or equivalent breath test), drug analysis will not be performed unless it is a non-traffic offense (e.g., death investigation or drug facilitated sexual assault) or is a traffic incident that involves a deceased victim and living suspect. The request and offense must be documented on the laboratory submission form.

NOTE: By policy, the DPS will perform alcohol analysis on only one specimen (breath or blood) per subject per incident for any traffic case.

Toxicology Drug Analysis

The DPS Crime Laboratory performs a screen for eight classes of drugs to determine the presumptive presence of drugs in the sample. Immunoassay screening does not identify any specific drug and will be followed with confirmation to identify the specific drugs present. Cases which fall below screen cut-off levels are reported as "no drug detected" unless additional information is provided to indicate significant impairment or the involvement of a drug not detectable by the immunoassay screen**.**

All drugs reported undergo identification by GCMS (Gas Chromatography-Mass Spectrometry) and/or LCMS (Liquid Chromatography-Mass Spectrometry).

A toxicology laboratory report will list the identity of the drug(s) detected. The concentration of some drugs detected in blood samples may also be reported.

The report will not include the following non-prescription drugs which may be detected during analysis: caffeine, nicotine, acetaminophen (Tylenol), nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil) and naproxen (Aleve).

A note will be included on the report for drugs or class of drugs suspected by your initial investigation that could not be excluded by our methodology. The note is to inform you that a drug from this drug class may have been present but the laboratory was unable to detect it or it was at a concentration below the reporting criteria, or it simply was not present. Further explanation can be provided by the laboratory if desired, contact the Austin Toxicology Laboratory.

Blood

The DPS Crime Laboratory measures the concentration (amount) of the common drugs that can cause driving impairment. The concentration can be compared to literature values to support impairment cases.

Urine

Some drugs undetected in blood may be detected in urine due to higher concentrations and the presence of metabolites (the products of drug metabolism in the body).

For urine specimens, the concentration (amount) of drug is not reported - only the fact that the drug has been detected is reported.

Detection of Additional Drugs

Information regarding significant **impairment or additional suspected drugs should be listed on the submission form.** The list of suspected drugs is evaluated to employ methodology within our capabilities for detection. Cases where specific drugs are listed as suspected but are not detected by immunoassay screening may undergo additional screening by GCMS (Gas Chromatography-Mass Spectrometry) or LCMS (Liquid Chromatography-Mass Spectrometry). The report will include a note if a suspected drug cannot be excluded by DPS methodology.

RECOMMENDATIONS REGARDING OFFENSE

TRAFFIC OFFENSES

For a traffic-related offense, a blood sample is preferred over any other specimen type. If only urine is submitted, it should have the support of a DRE (Drug Recognition Expert) evaluation for prosecution. Testimony from urine analysis is limited. Drugs detected in urine show prior usage of drugs and may not match drugs in the blood when the urine specimen

was taken. Drug detection in blood shows the influence of the drug(s) at the time the sample was taken.

DEATH INVESTIGATIONS

In death investigations, the Toxicology Section normally performs analysis of blood, vitreous, and/or urine specimens.

- **Blood** is analyzed to evaluate any impact of drugs on the cause of death or to determine contributing factors for other death causes.
- **Vitreous** is analyzed primarily to support the blood alcohol level or analyzed when the blood is contaminated.
- **Urine** is analyzed primarily to support the drug detection in blood or to evaluate the time of drug usage relative to time of death.

If there is a question about a particular situation, call the Austin Crime Laboratory Toxicology Section to determine the appropriate specimens to be submitted.

SEXUAL ASSAULT INVESTIGATIONS

In sexual assault investigations, the Austin Crime Laboratory Toxicology Section normally performs alcohol analysis of blood and/or urine specimens and toxicology drug analysis on urine specimens. The Austin Crime Laboratory Toxicology Section will perform toxicology drug analysis of blood if that is the only specimen submitted for a sexual assault investigation. Urine provides the longest window of detection for drug facilitated sexual assaults. The sooner a specimen is collected the greater the chance of detecting drugs which may have been used. Most drugs are detectable in blood within 12 hours, however some may be quickly eliminated. Most drugs are detectable in urine within 72 hours.

Both alcohol and toxicology drug analysis are recommended in sexual assault investigations where victims report impairment or unconsciousness.

The Toxicology/Blood Alcohol Kit Laboratory Submission Form (LAB-12) is preferred to request type of analysis and specify the time of incident and time of sample collection. If the general Laboratory Submission Form (LAB-06) is used, please indicate clearly the analysis requested. “Toxicology” will be interpreted as a request for both alcohol and drug analysis. The date and time of offense and the date and time of sample collection must be added to the Laboratory Submission Form (LAB-06).

- **Blood -** Collect the blood in 10 mL gray-top vacutainer vials containing a preservative and an anticoagulant. The DPS Blood Specimen Kit (680-93-8050) contains gray-top vacutainer vials and protective materials for safe shipping and handling. The sample should be refrigerated until transported to the laboratory.
- **Urine -** If the specimen is collected in a urine collection cup, transfer to a leak proof bottle. The DPS Urine Specimen Kit (680-93-8060) contains a secure bottle and protective materials for safe shipping and handling.

Important: Collect a gray top blood tube and urine specimen separately from any DNA specimens and send to the Austin Crime Laboratory for alcohol and drug content toxicology.

SAFETY CONSIDERATIONS

Toxicological evidence is associated with biological fluids and considered a biohazard. Universal Bloodborne Pathogen Precautions should be observed. Treat all biological

samples as if they are infected with a bloodborne pathogen. Personal protective equipment (such as eye protection and gloves) is recommended.

DPS evidence collection kits are designed to meet United States Postal Service regulations. Note instructions in the kit to maintain conformity with the regulations. If a DPS evidence collection kit is not used, assure that the package complies with all postal regulations for shipping biological specimens including protective containers, absorbent material, and biohazard warning labels.

Biohazard Warning Label

Additional information regarding packaging and air shipment requirements of a biological sample can be acquired from IATA (International Air Transportation Association).

DPS BLOOD AND URINE KIT PROCEDURES

Evidence collection kits should be purchased from DPS General Stores.

Blood Specimen Kit	680-93-8050
Urine Specimen Kit	680-93-8060

DPS General Services Bureau
108 Denson Dr.
Austin, TX 78761-5999

Call 512-424-5424 for ordering and price information. Only these approved test kits should be used, as they are prepared according to strict specifications under DPS authority and knowledge of component preservatives and anti-coagulants.

For Blood:

- Only qualified medical personnel should collect blood samples from a person. Refer to the Texas Transportation Code §724.017 for a listing of qualified personnel.
- Cleanse the blood withdrawal site with only a non-alcoholic prep pad.
- Provide a **full gray-top vial of blood**, if possible. A full vacutainer will be about ¾ full of blood. Newer DPS Kits contain 2 gray-top blood vials; both vials should be filled with blood during the blood collection.

For Urine:

- The urine collection **must be witnessed** by the arresting officer or his/her representative. The observation is documented on the paperwork that accompanies the kit.

Blood Kit Packaging

Contents of the DPS blood kit include:

- Pre-sealed **Blood Kit**
- **Kit Instruction Sheet** and **Subject's Consent Form** (to be retained by officer)

- **Toxicology/Blood Alcohol Kit Laboratory Submission Form (LAB-12)**
- Two 10 mL **Blood Collection Vial** (gray-top vacutainers) each containing 100 mg of Sodium Fluoride and 20 mg of Potassium Oxalate
- **Two absorbent pouches** to cushion the blood collection vials and to absorb the blood if breakage should occur
- **Two plastic screw-cap tubes** to hold blood collection vials in the absorbent pouches
- **Foam padding** with two spaces to hold plastic screw-cap tubes
- **Blood Vial Seals** (tamper-evident) for each blood collection vial
- **Integrity Seal (tamper-**evident) to reseal box
- **Mailing Label**
- **Plastic Sleeve on the** outside of the blood specimen mailer box to hold laboratory submission form

BLOOD COLLECTION KIT

Follow these steps to assemble a blood collection kit:

STEP 1: Complete the Subject Consent Form and ensure that both the subject and witnesses sign the form where indicated. This form should be retained for your records.

STEP 2: Complete information requested on the Toxicology/Blood Alcohol Kit Laboratory Submission Form (LAB-12) and the Blood Vial Seal(s).

STEP 3: After the specimen(s) has been collected by a qualified professional as described by the Texas Transportation Code, verify the information on the Blood Vial Seal(s) (especially the subject's name), remove the backing from the seal(s), affix the circle on the seal to the rubber stopper, and press the ends of the seal down the sides of each blood vial.

Note: The second blood tube is a precautionary measure to provide an additional evidence sample for testing.

STEP 4: Insert each blood collection vial into an absorbent pouch.

STEP 5: Place each absorbent pouch containing a blood vial into a plastic screw-cap tube and close the lid.

STEP 6: Place both plastic screw-cap tubes in the foam holder inside the box.

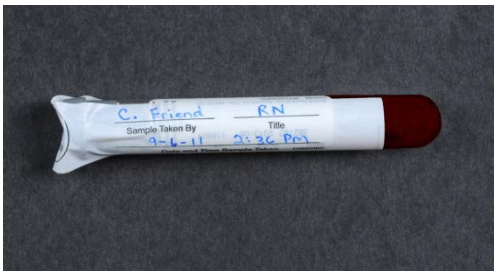
STEP 7: Close the box lid and seal the box with the enclosed Integrity Seal. Initial and date the seal.

STEP 8: Completely fill out the self-adhesive mailing label (see listing of DPS labs on the back of the instruction sheet). For the mailing of biological specimens, it is **very** important that your name and phone number are included in the return address. Affix this label to the top of the sealed box. Postage will be necessary if the box is mailed to the laboratory.

STEP 9: Check the submission form for completeness, refold, and insert the submission form into the plastic sleeve attached to the outside of the box and seal. If appropriate, include the lab copy of the DIC-23A in with the submission form. <u>No paperwork should be placed inside the box.</u>

STEP 10: Protect the specimen from extreme temperatures. If submission is delayed, it is recommended to refrigerate the sample. Submit blood kit to the appropriate laboratory as soon as possible for analysis.

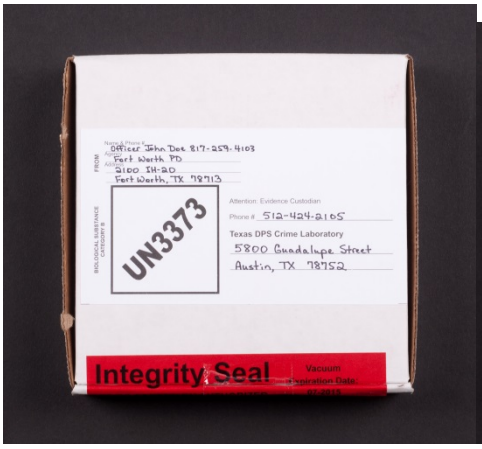
STEP 11: For ALR cases, submit both DIC-23A and Case documents to: Enforcement and Compliance Service, PO Box 4040, Austin, Texas 78765.



STEP 3

STEPS 4 and 5

STEP 6



STEP 7 and 8 **STEP 9**

In the absence of a kit, have the medical personnel use **"gray-top"** vials. Submit with a current Toxicology/Blood Alcohol Kit Laboratory Submission Form (LAB-12). This form can be downloaded from the DPS website. The package must comply with all postal regulations for shipping biological specimens including protective containers, absorbent material, and biohazard warning labels. To maintain the integrity of the sample, a tamper evident seal and proper labeling must also be used.

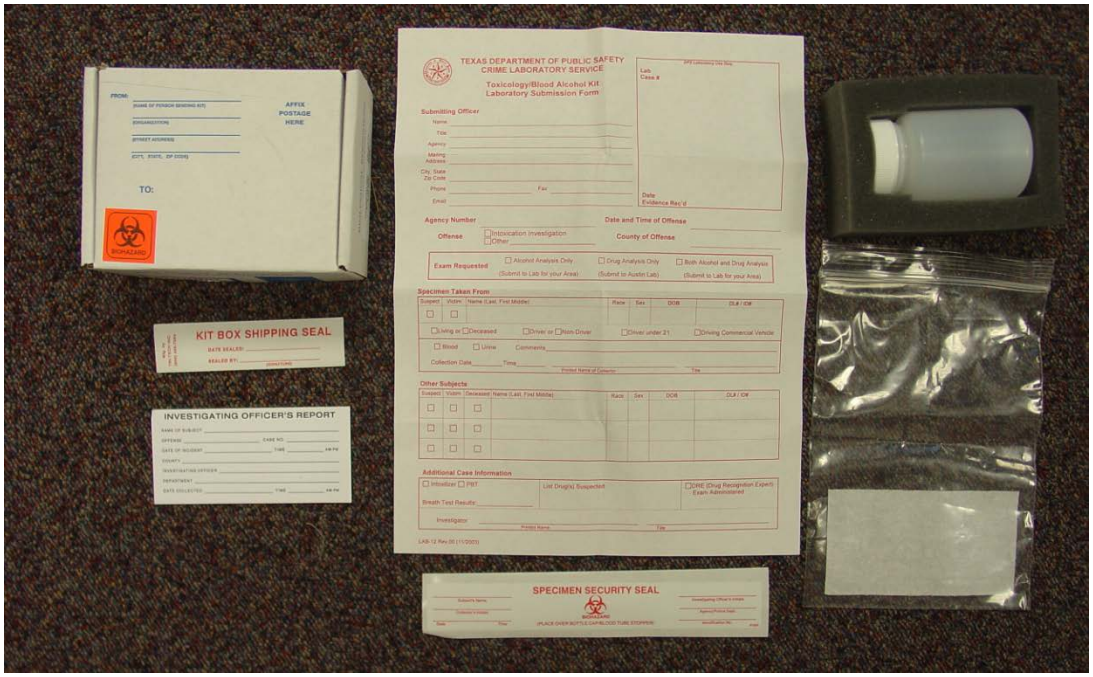
The vacuum expiration date of the vial is listed on both the vial and the box seal. If the expiration date on the blood collection vial has passed, have the medical personnel use unexpired gray-top vial(s) and replace the gray-top vial(s) in the kit. Note the replacement vial expiration date in the "Comments" of the laboratory submission form and near the vacuum expiration date printed on the box seal. If a replacement vial is unavailable, please be aware that the vial may collect less blood than normal and testing may have to be limited.

Urine Kit Packaging

Contents of the urine kit include:

- Pre-sealed **Urine Kit**
- **Kit Instruction Sheet** and **Subject's Consent Form** (to be retained by the officer)
- Toxicology/Blood Alcohol Kit Laboratory Submission Form (LAB-12)

- **Foam padding** with space to hold specimen bottle
- 100 mL **Urine Specimen Bottle**
- **Plastic specimen bag** containing a liquid adsorbent pad
- Investigating **Officer's Report (with Chain of Custody) Label** for plastic bag
- **Specimen Security Seal** (tamper-evident) for specimen bottle
- **Kit Box Shipping Seal** (tamper-evident) to reseal box



URINE COLLECTION KIT

Follow these steps to assemble a urine collection kit:

STEP 1: Complete the Subject's Consent Form and ensure that both the subject and witness sign the form where indicated. This form should be retained for your records.

STEP 2: Complete information requested on the Toxicology/Blood Alcohol Kit Laboratory Submission Form (LAB-12), Investigating Officer's Report label, and Specimen Security Seal.

STEP 3: The urine collection must be witnessed by the arresting officer or his/her representative.

STEP 4: Give the subject the specimen bottle and instruct subject to remove bottle cap and then partially peel back or remove the bottle integrity seal.

STEP 5: Instruct subject to fill the bottle at least half-full by voiding directly into the bottle and then return the specimen bottle directly to the arresting officer or representative.

Note: Subject may urinate into a non-waxed paper or plastic cup, and the specimen can then be poured into the specimen bottle by you.

STEP 6: Immediately after receiving the specimen bottle, replace bottle cap and tighten to prevent leakage.

STEP 7: Verify the information on the Specimen Security Seal, remove backing from the seal, affix center of seal on the bottle cap, and press ends of seal down both sides of the bottle. The collection witness should initial the specimen seal.

STEP 8: Affix the Investigating Officer's Report Label to the plastic bag.

STEP 9: In order to comply with US Postal regulations, place the specimen bottle into the foam holder, insert into the ziplock bag provided with the liquid absorbing sheet, and press the ziplock seal closed to prevent any leakage.

Note: Do not remove the liquid absorbing sheet.

STEP 10: Insert the ziplock bag containing the urine specimen into the mailing box and close the lid. Secure the lid of the box with the Kit Box Shipping Seal where indicated, initial and date so that the writing goes across the seal and the box.

NOTE: The kit instructions describe placing the completed submission form on top of the ziplock bag.

Crime Laboratory personnel request that the completed submission form be placed inside an envelope and taped to the <u>outside</u> of the mailing box. Do not place the submission form in the box.

STEP 11: Completely fill out the mailing information on top of the box (see listing of DPS labs and associated service areas).

STEP 12: Submit urine mailer to the appropriate laboratory as soon as possible for analysis. If submission is delayed more than a few days, refrigeration of the sample is recommended. Postage will be necessary if the box is mailed to the laboratory.

STEP 13: For ALR cases, submit both DIC-23A and Case documents to: Enforcement and Compliance Service, PO Box 4040, Austin, Texas 78765.

Preparer

Forrest W. Davis Date: 07/23/2014
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 08/04/2014
Laboratory Director

Version #	Effective Date	Brief Description of Change(s)
00	05/04/2007	Original Issue
01	07/09/2010	Major Revision – All sections
02	05/16/2012	Major Revision – All sections
03	08/08/2014	Major Revision – All sections

INTRODUCTION

DPS Crime Laboratories provide biological case screening for the presence of blood and/or body fluids and STR (short tandem repeat) nuclear-based DNA testing on evidence from criminal investigations. Examinations performed will be based on the type of case submitted and the quality and quantity of biological material present.

Biological evidence may be submitted to the Regional Crime Laboratories in Austin, Corpus Christi, El Paso, Garland, Houston, Laredo, Lubbock, Tyler, Weslaco, and Waco.

Successful DNA results are dependent on the amount and condition of the evidentiary material. Factors such as extreme or environmental conditions to which the material has been exposed, substrate on which the material is found, and the exposure of the sample area to multiple individuals may affect DNA results and should be considered prior to submitting evidence for processing. For example, it is highly unlikely to obtain a DNA profile from the individual who originally loaded fired ammunition components (bullets or cartridge cases).

The following determinations may be requested when submitting evidence for biological screening/DNA examinations:

- **Presence of biological material (e.g. blood, semen, or other DNA-yielding stains)**
- **Presence of human DNA**
- **Comparison of DNA profiles obtained from questioned or crime scene samples to DNA profiles from known or reference samples.**
- **Preservation of trace evidence**

A laboratory report will be issued explaining results of analysis and relevant conclusions. For a DNA report, the laboratory will summarize the results of comparisons of DNA profiles which may include the significance of associations with known references.

Additionally, a DNA profile may be entered into the Combined DNA Index System (CODIS) database that contains DNA profiles from known individuals and forensic case samples. Profiles can be searched against other profiles for the purpose of helping to generate investigative leads.

Please note that the submission of elimination samples, such as reference samples from a consensual partner in the case of a sexual assault, is requested prior to the entry of crime scene samples into CODIS. These standards should be collected during the initial investigation, packaged separately from the evidence, and should be submitted at the same time as the evidence if possible in order to facilitate timely laboratory response.

The Department of Public Safety in collaboration with other criminal justice stakeholders has established "Best Practices for Collection, Storage, Preservation, and Retrieval of Biological Evidence". These best practices relate to the statutory requirements provided under Article 38.43 Code of Criminal Procedure for the storage of biological evidence and illustrate types of biological evidence, manner of collection, considerations for preservation, and disposition. These are published on the DPS website:

Best Practices for Collection, Storage, Preservation, and Retrieval of Biological Evidence

(PDF) http://www.dps.texas.gov/CrimeLaboratory/documents/labBP01BestPractice.pdf

SAFETY CONSIDERATIONS

At a minimum, nitrile or other non-porous polymer gloves must be worn when recovering and packaging biological evidence. Additional personal protective equipment such as eye protection, face masks, head/hair covering, and lab coats may be beneficial for personal safety and to avoid contamination of the evidence.

All biological stains and reference samples should be treated as a biohazard (requiring universal bloodborne pathogen precautions). These samples could potentially expose the handler to HIV, Hepatitis B and C, or other pathogens.

If blood samples or biological substances are shipped, please ensure that the package complies with all postal regulations for shipping Biological Substances Category B including protective containers, absorbent material, and biohazard warning labels.

UN3373 **Shipping Label**

Biohazard Warning Label

Additional information regarding packaging and shipment requirements of a biological substance category B can be acquired from the carrier service.

Please see guidelines from US Postal Service for their specific instructions, http://pe.usps.gov/text/pub52/pub52apxc_019.htm

COLLECTION

The use of proper collection and evidence handling procedures reduces the possibility of evidence contamination and DNA degradation. Therefore, observe the following guidelines:

- Do not package known reference samples in the same packaging as questioned samples.
- Package individual items of clothing from the same person in separate containers.
- If the exact location of evidentiary DNA on an item is important, wrap the item in clean white paper and roll it up on itself prior to placing in a bag in order to prevent transfer of evidence from one location on the item to another location.
- Do not package evidence collected from one individual with evidence collected from a second individual.
- Do not package crime scene evidence with evidence collected from an individual.
- Wear gloves and change frequently, or when they become soiled.

- Avoid talking, coughing, or sneezing over the unpackaged evidence.

Collection of Evidentiary Samples

Observe the following steps to collect evidence samples:

- Document and photograph the removal of stains.
- Use sterile swabs to absorb wet stains from non-absorptive surfaces.
- Cut out questioned stains from large items such as car seats and bedding.
- Dampen a sterile swab, using sterile water, to collect dry stains from walls or other larger items. Do not scrape dried stains. They can flake into dust and become static, making the particles difficult to handle.
- **IMPORTANT:** Air dry any wet items or swabs before packaging and sealing. If items cannot be dried prior to submission, the laboratory must be consulted.
- The collection of control swabs from the scene is not required. If submitted, these samples will not be processed through DNA analysis.

Collection of Known Reference Samples

- Collect blood standards in purple top blood tubes labeled with the individual's name. Purple top blood tubes contain a chemical preservative, EDTA. Verify that the collection is prior to the expiration date on the tube.
- Collect buccal samples (swabbings of the inner cheeks of the mouth) onto at least two sterile cotton swabs and air dry prior to packaging. Buccal swabs from one individual do not need to be labeled as to the side from which they were collected and may be packaged together. To avoid possible contamination, allow the individual to collect the sample him/herself in the presence of a witness. The packaging should list the individual's name.
- Information of suspected blood transfusions of the victim and/or suspect should be provided to the laboratory.

PRESERVATION AND PACKAGING

Questioned stains and known reference samples naturally degrade. However, the degradation process may by be slowed by proper collection and preservation:

- Thoroughly **dry the wet or moist items**, such as clothing or swabs, before packaging.
- **Refrigerate liquid biological samples** until submission to the laboratory.
- **Freeze tissue samples** until transporting to the laboratory for submission.
- Package items in **white paper**. <u>Do not use plastic packaging for biological evidence.</u>
- Store the packaged items in a cool, dry area. Avoid sunlight, heat, and excessive humidity.
- **Refrigerate sexual assault kits** if they contain liquid samples, such as blood, until submitted to the laboratory. If uncertain, the kits should be refrigerated. <u>Do not freeze the kits. Do not store the kit in hot conditions, such as the trunk of a car. The heat may cause any blood tubes within the kit to explode.</u>

- Label and seal all packaging properly. **IMPORTANT:** Mark all packages with biological hazard stickers.

Biohazard Warning Label

- **Contact your local laboratory for specific instructions on collection, packaging, and submission procedures.**

SUBMISSION OF BIOLOGICAL EVIDENCE

When submitting evidence to a DPS Crime Laboratory, please follow the DNA case and evidence acceptance policy - Criteria for DNA Evidence Submission, PEH-02-04A.

Generally, for bulky items such as bedding, mattresses, car seats, etc., please contact the laboratory prior to submission to determine relative importance, facilitate processing, and reduce storage space requirements.

Submit applicable supporting documentation:

- Offense reports and witness statements with the evidence
- Autopsy reports or medical records from the victim, when available and where applicable.
- Photographs and sketches of the crime scene, as necessary.

Note: If the investigation and medical records and photographs are not submitted with the evidence, the examination of the case may be delayed while the analyst waits to receive these items from the submitting agency.

Submission of Evidence from Sexual Assaults

In the state of Texas, licensed physicians and Sexual Assault Nurse Examiners (SANE nurses) are authorized to collect samples from sexual assault victims.

Typical sexual assault kits may include the following:

- Orifice swabs (vaginal/oral/rectal) from victim (generally four per orifice) air dried at room temperature. Each orifice swab collection should be performed with multiple swabs simultaneously, unless conditions warrant otherwise. If the swabs are not collected simultaneously, they should be marked as to the order of collection.
- Vaginal, oral, or anal smears from victim
- Penile swabs from victim (if the victim is male). This consists of rubbing the outside of the penis with the swabs and is not the same method as collection of swabs for testing for STDs.
- Blood specimen from victim (one purple top [EDTA] tube or a one inch spot on FTA paper)
- Buccal specimen from victim (two swabs) air dried at room temperature
- Swabbings of areas of the victim's body which were either licked or bitten by the suspect during the assault (note location and supply the reasoning for their collection).

- Pubic hair combings from victim (note reason if not collected)
- Head hair combings from victim (note reason if not collected)
- Pulled pubic hair standard from victim (note reason if not collected)
- Pulled head hair standard from victim (note reason if not collected)
- Fingernail clippings from victim
- Undergarments from victim (especially panties immediately worn after the assault)

Other evidence may include:

- Blood specimen from suspect (one purple top [EDTA] tube or a one inch spot on FTA paper
- Buccal sample from suspect (four swabs) air dried at room temperature
- Penile swabs from suspect (only if apprehended a short time after the assault occurred)
- Pubic hair combings from suspect (only if apprehended a short time after assault has occurred)
- Pulled pubic hair from suspect
- Pulled head hair from suspect, when applicable
- Clothing from suspect, when applicable
- Fingernail clippings or swabs of the suspect's fingers/hands, if victim was injured.
- Swabs of the suspect's fingers (only if apprehended a short time after assault has occurred).

Additional samples that may be collected from the victim if it is suspected that the victim may have been drugged: blood sample collected in a gray top tube and a urine specimen. These samples should be packaged separately from the victim's sexual assault kit and preferably in the DPS sanctioned blood and urine collection kits respectively. If blood alcohol and/or toxicological drug analysis is requested on the blood specimen within the kit, the request must be noted on the submission form. See PEH-02-03 Toxicology and Blood Alcohol Evidence for handling and submission information.

Include the information listed on the Sexual Assault Information Form (LAB-24) with the submission of the sexual assault evidence.

Note: The Sexual Assault Information Form (LAB-24) is an aid for laboratory personnel to interpret items of evidence submitted by police officers or medical personnel. This may be completed or a similar form may be found in the Texas Evidence Collection protocol published by the Office of Attorney General's Sexual Assault Prevention and Crisis Service Division. The following is a link to the protocol:

http://www.oag.state.tx.us/AG_Publications/pdfs/evidence_collection.pdf

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

Version #	Effective Date	Brief Description of Change(s)
00	05/04/2007	Original Issue
01	07/09/2010	Major Revision – All sections
02	05/16/2012	Major Revision – Introduction, Collection, Preservation and Packaging, and Submission of Biological Evidence
03	08/16/2016	Major Revision – Introduction, Safety Considerations Minor Revision – Submission of Biological Evidence

INTRODUCTION

The DPS Crime Laboratories test and examine evidence received from more than 2,000 Law Enforcement Agencies statewide. In recent years, biological evidence and DNA testing have been very successful in matching individuals to crime scene evidence. Due to this success, the number of biology/DNA cases submitted to the Crime Laboratory continues to rise. This has resulted in an increased turnaround time for DNA cases to be completed. The Laboratory is instituting a number of changes in order to reduce the time to complete DNA cases and, therefore, better serve our customers in the criminal justice system.

Some of the changes being implemented include: increased automation, additional DNA personnel, streamlined procedures, and the case acceptance policy provided below. Only with all of these changes will the Laboratory be able to provide the timely service that our customers deserve.

POLICY

The Crime Laboratory will limit the type of cases analyzed for DNA evidence and will limit the number of items or samples that can be submitted for a case based on the type of offense committed. For all cases accepted, the number of items that will be tested in each case will be limited to the minimum number necessary to answer the relevant questions in the case. **It is imperative that agencies submit DNA evidence as soon as possible after it has been collected so that the Laboratory can provide timely service.**

- **The Laboratory does not accept paternity cases.**
- **The laboratory does not perform DNA testing on drugs or drug paraphernalia.**
- **Evidence of "touch" DNA including swabs of: steering wheels, shift knobs, door handles, switches, counters, keys/locks, ammunition/cartridge cases, prints/smudges, etc., will not be accepted.**

SAMPLE SUBMISSION LIMITS

The type and number of items or samples that will be accepted will be based on the type of offense.

Reference Samples

The known standards from suspects, victims, or elimination standards (including consensual sex partners) will not count against the number of items that may be submitted. These standards should be collected during the initial investigation, packaged separately from the evidence, and should be submitted at the same time as the evidence if possible.

Burglary or Property Crimes

Submission is limited to two (2) items. These must be swabs of blood from the crime scene or items/swabs of items left at the scene such as: cigarette butts, clothing, gloves, or drink containers. More than two items may be accepted if the circumstances (such as multiple perpetrators) dictate the need for additional analysis.

Sexual Assaults

The initial submission will be limited to the sexual assault evidence collection kit, one pair of underwear, and one condom (if applicable). If the kit is positive, no additional submissions

will be allowed unless circumstances (such as multiple perpetrators) dictate the need for additional analysis.

If the SA kit is negative, a second submission of up to five (5) items such as clothing or bedding will be accepted.

Homicides

The initial submission of biological evidence is limited to ten (10) items which the investigator and/or D.A. believe will be informative. It is recommended that the investigating agency have a conference, either in person or electronically, with the Laboratory prior to evidence submission to determine which items will be most probative to the case.

Serology screening and/or testing will be performed on the ten items in the first submission and the five (5) samples which indicate the highest chance for success will be forwarded for DNA testing. If informative results are obtained, additional items will not be examined unless circumstances (such as multiple perpetrators) dictate the need for additional analysis. If informative results are not obtained from DNA analysis of the first five samples then the second five will be tested.

If no informative results are obtained from the items in the first submission, then a second submission of ten (10) additional items will be allowed. Those items will be processed as above.

- **A written request from the Prosecutor, including sufficient justification, must be received by the Laboratory before any decisions on performing additional testing will be considered once informative results have been obtained.**
- **Additional samples will not be tested to merely disprove all possible scenarios.**

Other Crimes Against Persons

Submission is limited to two (2) items. Submission/analysis of additional items will be determined on a case by case basis with the respective laboratory.

DNA Analysis for Court

The Laboratory understands the evolving nature of criminal investigations and court schedules, however fulfilling requests for extremely short turnaround times are not possible from a laboratory standpoint without severe negative impacts to the timeliness of other case reports. The Laboratory cannot provide accurate and complete information without sufficient time to perform the testing and review the results. Notice must be given to the Laboratory at least **60 days prior** to the date the results are needed for court purposes. This will allow the laboratory to perform the analyses in the most effective manner.

Preparer

Forrest W. Davis Date: 04/19/2012
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 04/24/2012
Laboratory Director

Version #	Effective Date	Brief Description of Change(s)
00	05/16/2012	Original Issue

INTRODUCTION

Trace evidence is composed of several different sub-disciplines. This section outlines the information that laboratory examinations may provide for the major sub-disciplines of trace evidence: hair, fiber, paint, glass, footwear and tire impressions, gunshot primer residue (GSR), and lamp filaments. Collection and packaging procedures are also provided. If analysis is requested in areas including physical/fracture matches, other materials and unknown substances, please contact the laboratory in your service area for specific instructions on collection, packaging and submission procedures.

SUBMISSION CONSIDERATIONS

Trace evidence consists, in most cases, of small minute material that is transferred from one source to another. This exchange of material can link a suspect, victim, crime scene, and/or object. This exchange can, therefore, become a critical piece of information during both the investigative and prosecutorial phases of a case. While it is extremely important to collect as much trace evidence as possible, the probative value of such evidence may be limited due to the facts of a particular case or the type of material collected.

The following are some examples of items which may have limited probative value:

- Textiles from commonly shared environments
- Tapelifts from locations, e.g. vehicle interiors, with which the individual is known to be associated
- Impressions from common residences
- Widely produced items with limited characteristics such as blue denim and white/colorless cotton
- Evidence that is superseded by other more probative results

In order to provide customers with the highest level of service, the DPS Crime Laboratory reserves the right to limit the amount of testing on trace evidence submissions based on case circumstances.

SAFETY CONSIDERATIONS

Trace evidence is often associated with biological fluids and biohazard materials. Universal Bloodborne Pathogen Precautions should be observed. Personal protective equipment such as eye protection, lab coat, and nitrile or other non-porous polymer gloves is recommended.

Razor blades, scalpels, knives and broken glass may be encountered in Trace evidence collection. Personal protective equipment such as eye protection and protective clothing is recommended.

HAIR

Hair evidence can be encountered in a wide variety of crimes and can provide strong corroborative information for placing an individual at a scene. However, based upon microscopic comparisons, hair cannot be individualized to a single person to the exclusion of all other individuals. Microscopic comparisons will only be performed on head and pubic hairs since body hairs do not contain a sufficient number of characteristics for comparison.

The following determinations may be made during a hair examination:

- **Human versus non-human**
- **Animal species**
- **Body origin (head, pubic, body, etc.)**
- **Racial characteristics**
- **Alterations to human hair (bleached, dyed, burned, etc.)**
- **Similarity between evidence hairs and standards**
- **Possible use of hair for DNA analysis**

Collection of Evidentiary Hair Samples

- Submit the whole item for processing, if possible.
- Picking method – gloved fingers or tweezers are used to remove evidence hairs.
- Adhesive lift method – fingerprint tape, cellophane tape or other clear adhesive tape is patted over the item to recover surface debris.
  - Use multiple strips of tape on larger items so tape does not become "overloaded".
  - Place tape strips onto clear, colorless plastic sheets and label.
- Combing method – a comb is used to thoroughly comb an individual's hair to recover transferred hair evidence.
  - Cotton can be placed in the teeth of the comb to improve recovery.
  - The individual must stand over a clean sheet of paper to collect the debris.
- Vacuuming method – a portable vacuum equipped with special traps is used to lightly vacuum the surface of interest.

Collection of Hair Standards

- Obtain standards from all possible sources (suspect, victim, and other individuals common to an environment).
- Obtain standards as soon as possible after the crime. Hair characteristics change naturally over time so the most meaningful comparisons are those conducted close to the time of the incident in question.
- Obtain a representative hair standard by pulling and combing hairs from different areas of the head and/or pubic region. A representative hair standard consists of at least 25 hairs, with roots, that represent the variation of the all the hairs in the region. It is strongly recommended that greater than 25 hairs be collected. Please note that collecting more hairs, up to 100, will ensure all variation is represented. An insufficient hair standard may adversely affect our ability to perform a meaningful comparison.
- Consideration should be made to obtain known reference standards for possible DNA analysis.

Packaging Hair Evidence

- Single hairs or small amounts of hair can be placed into paper folds. Paper folds should be placed into paper envelopes with sealed corners.
- Adhesive lifts that have been put onto plastic sheets can be placed into paper envelopes.
- Combs and combings can be folded into the collection paper and placed into paper envelopes with sealed corners.
- Vacuum traps can be covered with a lid or cap and placed into separate containers such as paper bags.
- Hair standards from each body region should be placed into separate containers.
- Hair from different individuals should be packaged separately.
- Evidence hairs and hair standards should be packaged separately.
- All packaging should be labeled and sealed properly.
- Hair evidence may be submitted to the DPS Crime Laboratories in Austin, Garland, Houston, and Lubbock.

FIBERS

Fiber transfers most often occur from carpet, blankets, sweaters and damaged clothing and can be important in many different types of cases. Fiber evidence can be recovered from such surfaces as clothing, fingernails, hair combings, weapons, bullets, bedding, seating and automobile parts. As fibers shed, they can adhere to clothing or other surfaces for a short period of time and can then be used to establish a link between a suspect, victim and the crime scene.

The following determinations may be made during a fiber examination:

- **Fiber type**
- **Possible product uses (carpeting, clothing, etc.)**
- **Similarity between evidence fibers and standards**
- **Fabric physical match (jigsaw match) back to source**

Collection of Evidentiary Fiber Samples

- Submit the whole item for processing, if possible.
- Picking method – gloved fingers or tweezers are used to remove fibers.
- Adhesive lift method – fingerprint tape, cellophane tape or other clear adhesive tape is patted over the item to recover surface debris.
  - Use multiple strips of tape on larger items so tape does not become “overloaded”.
  - Place tape strips onto clear, colorless plastic sheets and label.
- Combing method – a comb is used to thoroughly comb an individual’s hair to recover the transferred fiber evidence.
  - Cotton can be placed in the teeth of the comb to improve recovery.

- The individual must stand over a clean sheet of paper to collect the debris.
- Vacuuming method – a portable vacuum equipped with special traps is used to lightly vacuum the surface of interest.

Collection of Fiber Standards

- If the fiber source can be transported and packaged, submit the whole item for analysis.
- If the fiber source cannot be transported or packaged, cut representative samples from various areas for submission.
- Sample from areas that are visually different (different colors, faded areas, worn sections, etc.); samples should be at least 1 square inch in size.

Packaging Fiber Evidence

- Single fibers or small amounts of fibers can be placed into paper folds. Paper folds should be placed into paper envelopes with sealed corners.
- Adhesive lifts that have been put onto plastic sheets can be placed into paper envelopes.
- Combs and combings can be folded into the collection paper and placed into a paper envelope with sealed corners.
- Vacuum traps can be covered with a lid or cap and placed into separate containers.
- Fiber standards can be placed into paper envelopes with sealed corners.
- Fiber standards from different areas should be packaged separately.
- Evidence fibers and fiber standards should be packaged separately.
- All packaging should be labeled and sealed properly.
- Fiber evidence may be submitted to the DPS Crime Laboratories in Austin, Garland, Houston, and Lubbock.

PAINT

Paint evidence is most often encountered in burglary and hit and run cases. Paint recovered from burglary tools may be compared to known paint from the scene. Paint recovered from the clothing or vehicle of a hit and run victim may be used to identify the make and model of the suspect vehicle or can be compared directly to a vehicle suspected of involvement.

The following determinations may be made during a paint examination:

- **Paint type (automotive, architectural, etc.)**
- **Possible make and model of vehicle using automotive paint database**
- **Similarity between evidence paint and standards**
- **Fracture physical match of paint samples**

Collection of Evidentiary Paint Samples

- If the item containing the evidence sample can be transported and packaged, submit the whole item for analysis.

- Clean forceps or tweezers can be used to remove chips of transferred paint.
- Clean scalpels, razor blades and knives can be used to scrape smeared paint from surfaces. The paint smears should be collected into a paper fold prior to packaging.
- Avoid using adhesive tapes to collect paint samples as the adhesive may interfere with analysis.

Collection of Paint Standards

- If the paint source can be transported and packaged, submit the whole item for analysis.
- A clean scalpel, razor blade or knife can be used to remove representative samples of paint from the paint source for submission.
- Sample from all damaged areas separately.
- Sample from areas that are visually different (different colors, different layer sequence, different substrates, etc.).
- Samples should be at least 1 square inch in size.
- Samples should include all paint layers present down to the substrate.
- Samples should be collected by carving or chipping the paint samples instead of scraping the paint in order to ensure all layers are present.

Packaging Paint Evidence

- Evidence paint chips, smears and paint standards should be collected into paper folds. Paper folds should be placed into envelopes with sealed corners.
- Paint standards from different areas should be packaged separately.
- Evidence paint and paint standards should be packaged separately.
- All packaging should be labeled and sealed properly.
- Paint evidence may be submitted to the DPS Crime Laboratories in Austin, Garland, Houston, and Lubbock.

GLASS

Glass evidence is most often encountered in burglary and hit and run cases. Glass recovered from burglary tools or from a suspect's clothing, shoes and hair may be compared to known glass from the scene. Glass recovered from the clothing of a hit and run victim may be compared to the known glass from the suspect vehicle.

The following determinations may be made during a glass examination:

- **Glass type (tempered glass, container glass, etc.)**
- **Direction of force used to break the glass**
- **Order and direction of projectiles fired through the glass**
- **Similarity between evidence glass and standards**
- **Fracture physical match of glass samples**

Collection of Evidentiary Glass Samples

- If the item containing the evidence glass can be transported and packaged, submit the whole item for analysis.
- If direction of force for glass analysis is considered:
  - Photograph the glass before moving it.
  - Write “inside” and “outside” on the glass.
- Clothing items that may contain glass should be handled as little as possible to avoid dislodging glass evidence.
- Clean forceps or tweezers can be used to remove pieces of glass from various surfaces.
- Adhesive tape can be used to remove small pieces of glass from various surfaces and should be placed onto clear plastic sheets for storage.
- Combing method – a comb is used to thoroughly comb an individual’s hair to recover the transferred glass evidence.
  - Cotton can be placed in the teeth of the comb to improve recovery.
  - The individual must stand over a clean sheet of paper to collect the debris.
- Large pieces of glass should be kept intact for possible physical match.

Collection of Glass Standards

- If the glass source can be transported and packaged, submit the whole item for analysis.
- Sample from **all** damaged areas separately.
- Sample several areas in large windows and glass pieces to account for variations that may exist.
- Both panes in double paned glass (windshields, structural glass, etc.) should be sampled.
  - Sample several areas within each pane to account for variations that may exist.
  - Label glass pieces with orienting marks (up/down, inside/outside, etc.)

Packaging Glass Evidence

- Glass pieces should be packaged in containers such as boxes and padded envelopes to protect broken and fractured edges from additional breakage.
- Evidence glass and glass standards can be placed into envelopes with sealed corners.
- Glass that has been taped to plastic sheets can be placed into envelopes.
- Glass from different areas and items should be packaged separately.
- Evidence glass and glass standards should be packaged separately.
- All packaging should be labeled and sealed properly.
- Glass evidence may be submitted to the DPS Crime Laboratory in Austin.

IMPRESSION EVIDENCE (FOOTWEAR AND TIRE IMPRESSIONS)

Footwear and tire impressions are routinely present at crime scenes and are frequently overlooked. Examinations of impression evidence can provide valuable investigative leads and if properly documented and collected, can allow for a comparison to a suspected source.

Two-dimensional impressions are those with no significant depth. A thin deposit/removal of dust, mud, blood, or other material from a shoe/tire onto/from a hard surface may create these impressions. Some two-dimensional impression will be clearly visible while others may be partially or totally latent.

Three-dimensional impressions are those that have a significant depth to them, in addition to the length and width of the impression. Three-dimensional impressions are most commonly found in soil, sand, or snow and the detail within the impression may vary according to the substrate.

The following determinations may be made during an impression evidence examination:

- **Type, make, and model of shoe/tire**
- **Similarity between evidence shoe/tire and standards**

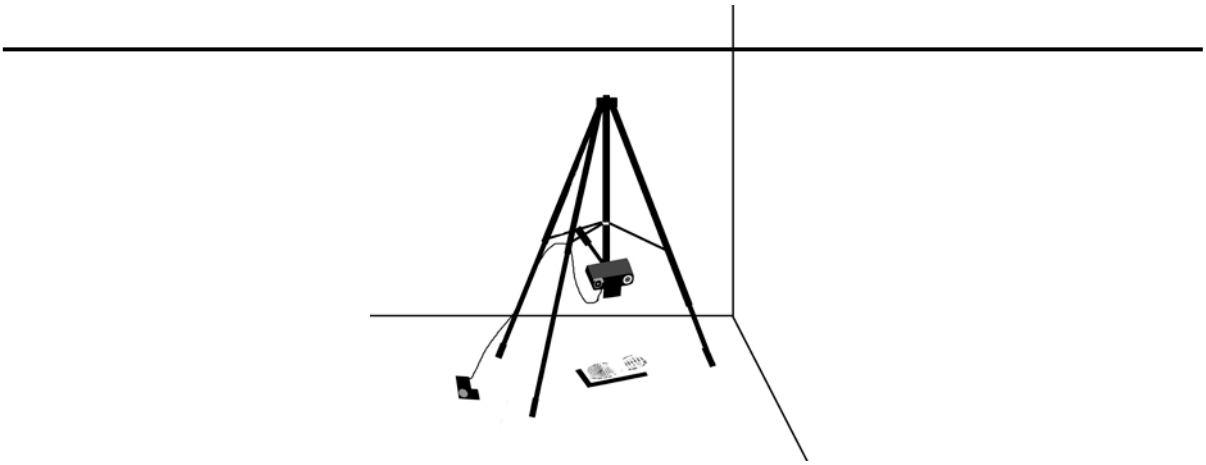
Possible identification of shoe/tire with randomly acquired featuresCollection of Imprint/Impression Evidence

Always photograph the impression evidence prior to any processing or removal from the scene.

- **Photography Methods and Guidelines**

1. Take overall photographs to document location of impression.
2. Camera should be placed on a tripod directly over and perpendicular to the impression (refer to Figure 1).
3. A flat, rigid ruler should be placed alongside and at the same depth as the impression. If a scale is not included in the photograph, a size comparison cannot be performed by the laboratory.
4. Camera height should be adjusted so that the impression and scale fill the frame.
5. Elongated impression such as tire treads should be photographed using overlapping exposures.
6. Side lighting at various angles and directions can illuminate an impression more clearly. A shade may need to be used to block sunlight.
7. Take several photographs to ensure quality images are obtained.
8. Impressions captured with digital cameras should be taken and stored in the highest resolution lossless format that is available (i.e. RAW or TIFF). Failure to do so can result in poor quality images that are unsuitable for comparisons.
9. Digital images of impression evidence should be submitted for examination regardless of the resolution or format available to the agency. If the digital image is of poor quality, it will be returned without analysis.

Figure 1



TWO-DIMENSIONAL IMPRESSIONS

1. Photograph the impression.
2. If the item containing the impression can be removed and transported, submit the whole item for analysis. Care should be taken to not disturb the impression during the removal process.
3. Locate latent impressions with oblique lighting. This can be accomplished by shining a flashlight across the surface at a low angle and viewing any dust impressions that appear.
4. Attempt to enhance or lift the impression only if the item cannot be retrieved from the scene and submitted to the laboratory.
5. Dust and residue impressions may be lifted with an electrostatic lifting device or gelatin lifter. Contact your local laboratory for more information.
6. Trained personnel can use chemical enhancement techniques to detect and improve prints made in blood or other substances. Contact your local laboratory for more information.

THREE-DIMENSIONAL IMPRESSIONS (CASTING)

1. Photograph the impression.
2. Use casting material (e.g., dental stone or die stone) to cast the impression. Plaster of Paris is no longer recommended as an acceptable casting material.
3. Two (2) pounds of casting material can be placed into a large re-sealable plastic bag for mixing and use at a scene. This amount should be sufficient for an average-sized shoe impression.
4. Specific mixing instructions will vary based on the casting material being used. The mixture should have the consistency of pancake batter. Add more water or casting material as needed.
5. Carefully pour the mixture into (without disturbing/distorting any features) or next to the impression and allow the casting material to gently flow into it. Fill the impression completely so that the casting material overflows.

6. When the cast is firm but still soft, identifying marks can be scratched into the back. A permanent marker can also be used when the cast is dry.
7. Allow the cast to dry for a minimum of 20 minutes in warm weather and longer in cold weather.
8. Carefully lift the cast. Do not clean the cast as this will be done in the laboratory.
9. Package the cast in a paper bag or cardboard box (never plastic) and allow it to dry for an additional 48 hours before final packaging.
10. Tire impressions should be cast to include a minimum of three feet of the impression. Mix the casting material in the same ratio as before with 2-3 times the amount of casting material. Use a bucket to accommodate the extra material for mixing and pouring.

SHOE/TIRE STANDARDS

- Document the footwear of any medical or law enforcement personnel who have entered the scene for elimination purposes. Photographic documentation with a scale is usually sufficient.
- Footwear from the victim, suspect and other individuals who may have entered the scene should be collected and submitted to the laboratory.
- Tires should remain mounted on a vehicle so that position, wear and load can be duplicated. The vehicle may be towed to laboratory for processing or can be done on-site by trained personnel.

TIRE TREAD STANDARDS

1. Use a smooth, clean, flat surface such as a board or concrete floor.
2. Tape butcher paper to the board or floor that is a wider width than the tires. The paper should be long enough to document one revolution of the tire.
3. Apply a thin film of silicone spray or petroleum jelly over the tread of the tire.
4. Roll the tire, still mounted to the vehicle, along the paper. Mark where one revolution begins and ends, inside/outside of tire, position of tire, and direction of travel.
5. Apply magnetic powder to the paper and shake the paper to remove the excess.
6. Spray the powdered tread pattern with a light coat of hairspray (or other appropriate fixer) from a height of about 12 inches to prevent smudging and loss of detail.
7. Roll all four tires and consider the need to roll the spare tire.
8. It may be helpful to photograph the tread pattern of each tire with a scale.
9. Be sure to document the tire's manufacturer, size, DOT number and any other pertinent information located on the tire.
10. Consideration should be given to retaining and/or submitting the actual tires for further examinations, if needed by the laboratory.

Packing Imprint/Impression Evidence

Photographs and negatives should be submitted to laboratory.

- Whenever possible, collect the whole item containing the impression and submit to the laboratory.
- Various packaging materials can be used depending on the size of the object.

- Ensure that the impression is protected so that it cannot be rubbed away. Securing the object inside the packaging can help protect the impression.
- Casts that have been fully dried for at least 48 hours can be packaged in paper or plastic with sufficient packing material to prevent breakage.
- Paper containing rolled tire impressions can be rolled up and submitted in various packaging materials.
- All packaging should be labeled and sealed properly.
- Impression evidence may be submitted to the DPS Crime Laboratories in Austin, Garland, Houston, and Lubbock.

GUNSHOT PRIMER RESIDUE (GSR)

Gunshot primer residue is composed of antimony, barium and lead, components of most primer mixtures. This residue may be deposited on the shooter's hands, depending on the type, caliber, and condition of the weapon used and the environmental conditions at the time of the shooting. This type of analysis is done on samples obtained from the hands of persons suspected of recently discharging a firearm. The Austin Crime Laboratory conducts analysis for GSR by SEM-EDS (Scanning Electron Microscopy-Energy Dispersive Spectrometry) that allows for the identification of GSR particles based on morphology and composition. Because only a few microscopic particles are required, samples analyzed by this method have a much higher positive result rate than traditional acid swab samples.

Characteristic GSR particles are composed of lead, barium, and antimony. Lead/barium/antimony containing particles have been reported from stud guns, "crackering ball" fireworks, nail staplers, airbags, and brake linings.

Indicative GSR particles are composed of lead and barium, lead and antimony, or barium and antimony. Lead/barium containing particles have been reported from stud guns, automobile brake mechanics, lead acid battery assemblers, fireworks technicians, "crackering ball" fireworks, tires, furniture finisher, automotive electricians, automotive motor repair mechanics, disk brake hubs, and brown recycled butcher paper. Lead/antimony containing particles have been reported from lead smelting, lead acid battery assemblers, blast furnace operator foreman, stud guns, fireworks technician, "cracker bomb" fireworks, car battery salesman, car tire replacement worker, scrap iron dealer, car radio installers, automobile electricians, brake repair automotive mechanics, and gas station attendant. Antimony/barium containing particles have been reported from stud guns, fireworks technician, car radio installers, automobile electricians, automotive motor repair mechanics, automotive brake repair mechanics, disk brake hubs, and gas station attendants.

Please note that many of the particles listed above can be distinguished from actual characteristic and indicative GSR particles based upon morphology and/or other elemental properties.

GSR kits and evidence must be submitted in accordance with DPS Crime Laboratory policy. Please see PEH-02-05A Criteria for Gunshot Primer Residue Evidence Submission. GSR kits and evidence are to be submitted to the Austin Crime Laboratory.

The following determinations may be made during a GSR examination:

- **Identification of GSR particles from the hands of suspected shooters**

Gunshot primer residue analysis **does not** give an indication of the distance from which a firearm is fired (i.e., Distance Determination). Refer to PEH-02-09, Firearms and Toolmarks

Evidence Collection for the information and evidence required to determine an approximate distance between clothing and a fired weapon.

LAMP FILAMENTS

It may be important to determine if the lights of a vehicle were on or off at the time of an accident. An examination of the filament(s) inside the vehicle lamps may allow this determination to be made.

The following determinations may be made during a filament examination:

- **Lamp on or off at time of damage**
- **Lamp burned out**

Please note that the laboratory is unable to examine high intensity discharge (HID) lamps or light emitting diode (LED) lamps.

Collection of Lamp Filament Evidentiary Samples

- Document the light switch position ("on" or "off"). Never turn the switch on to see if the lights work. Never attempt to start the vehicle prior to collecting the lights.
- Check for blown fuses or broken wiring in the light circuit. Notify the laboratory of these occurrences.
- Mark each lamp as to its location, function and orientation.
- Lamps located within and closest to the damage should be collected when possible.
- When possible, collect the entire lamp assembly. Cut the wiring and submit the entire assembly intact.
- If the lamp is broken, search the assembly area to ensure that all filaments, filaments posts and glass pieces are present.
- If the assembly cannot be removed, either cut the wiring and submit the bulb and socket, or remove each bulb from its socket.

Packaging Lamp Filament Evidence

- Carefully package lamps separately.
- Be careful not to contact and damage the fragile filaments.
- Disposable foam cups or small boxes are acceptable packaging. Use cotton or tissue padding as needed.
- All packaging should be labeled and sealed properly.
- Vehicular lamp evidence may be submitted to the DPS Crime Laboratories in Austin, Garland, and Houston.

UNKNOWN SUBSTANCES

In some instances, the identification or comparison of unknown substances and other materials may be beneficial to an investigation. The laboratory offers limited analytical capabilities in these matters. Common substances analyzed may include white powders, liquids, lubricants, and residues. In order to provide the best analysis of your sample, possible known sources of the question material should be submitted to the laboratory. The

laboratory cannot analyze the following types of items; solid food products, ignitable liquids, and biological or chemical toxins. All unknown substance cases will be evaluated on a case by case basis to determine if the laboratory can provide analytical information. Please contact the laboratory if there are questions about the nature of a sample and to determine if we can provide any service.

Packaging Unknown Substances

- Carefully package all question samples separately in an appropriate container
- Liquid samples should be sealed in a leak proof container such as glass jar or screw top vial
- Dry powder samples may be packaged in a druggist fold, zip-lock bag, or other fully sealed container. Samples should not be placed loose in an envelope, as the sample can be lost or contaminate other items.
- Volatile samples should be packaged in a manner which prevents evaporation. Paper packaging and zip-lock bags are not appropriate for such samples.
- Perishable items should be refrigerated or frozen and submitted to laboratory as soon as possible.
- If a sample must be transferred from its original container for submission to laboratory, please submit the original container in a separate sealed package along with its contents.

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

Version #	Effective Date	Brief Description of Change(s)
00	05/04/2007	Original Issue
01	07/09/2010	Major Revision – Hair, Glass, Gunshot Primer Residue Minor Revision – Impression Evidence (Footwear and Tire Impressions)
02	05/16/2012	Major Revision – Introduction, Hair, Fibers, Paint, Impression Evidence, Gunshot Primer Residue, Lamp Filaments Minor Revision – Glass
03	08/08/2014	Minor Revision – Impression Evidence (Footwear and Tire Impressions)
04	08/16/2016	Major Revision – Safety Considerations, Hair, Fiber, Paint, Impression Evidence, Lamp Filaments, and Unknown Substance

POLICY

Analysis for gunshot primer residue is performed on **SEM stubs only**. **Effective April 1, 2010, only two stub GSR kits will be accepted for analysis.**

Gunshot residue kits will only be analyzed if the accompanying **GSR Kit Information Form (LAB-17)** is properly filled out **(i.e. subject's name, date and time of incident, and date and time of collection)**. It is requested that a copy of the GSR Kit Information Form be attached to the laboratory submission form outside of the evidence packaging.

A case scenario or offense report is also required for GSR evidence. The submitting officer will be notified if the information provided in a GSR case is insufficient for the analysis to be performed. After this notification, the officer will have 30 days to respond and provide the needed information or the case will be closed without analysis.

Please allow at least 60 days for the analysis of GSR cases following notification for pending court dates. Results may not be available in cases involving insufficient notification prior to court dates.

The strength of a GSR test is to associate an individual with a firearm discharge who has not already otherwise been so associated. GSR analysis is best utilized as an investigative tool in the following scenarios:

1. To support or refute a statement
    a. Suspect claims he/she did not shoot a gun and/or was not near a shooting; suspect does not have gun on person at the time of arrest.
    b. Witness claims he/she saw suspect shoot a gun but suspect has not provided any additional information; suspect does not have gun on person at the time of arrest.
2. To answer lingering questions after other analysis has been performed
    a. No DNA, latent prints, or firearms analyses have indicated one suspect over another.
    b. Firearms analysis has identified which gun was used to shoot the victim, but no latent prints were recovered from the gun

Our laboratory will evaluate all information provided by the submitting agency. **If the laboratory determines that GSR analysis will not yield results with useful interpretations, the evidence will be returned without analysis and a report issued explaining the laboratory's decision.** The agency may re-submit the evidence if they can provide further case information that will justify the need for the analysis.

It is DPS Laboratory policy to not perform analysis for gunshot primer residue on samples from **shooting victims**. The strength of a GSR test is to associate an individual with a firearm discharge who has not already otherwise been so associated. A shooting victim clearly has been associated with a firearm discharge, and the results of a GSR test usually

cannot offer any more information than what is already known. Since more gunshot primer residue escapes from the barrel than from near the handle, the majority of both homicide and suicide victims have gunshot primer residue on their hands. Conversely, a small percentage of both homicide and suicide victims have no gunshot primer residue on their hands. Therefore, neither the presence nor the absence of gunshot primer residue on a victim's hands would provide definitive interpretation of either homicide or suicide.

It is also DPS Laboratory policy to not perform analysis for gunshot primer residue on samples from an individual's hands if the samples were collected **more than four hours after the shooting**. Any gunshot primer residue deposited on a living person as a result of the shooting will be reduced by normal activity so that after four hours, no meaningful conclusion can be obtained from the analysis of the samples. Additionally, GSR samples should be taken before the subject's hands are bagged or before the subject is placed into a police vehicle. **Hand bags are treated as a barrier to the outside environment and will not be processed for GSR.**

Please note that the DPS Laboratory will only process GSR kits in cases involving crimes against persons such as homicide, attempted homicide, aggravated assault, and questioned death/death investigation cases. Cases such as discharge of a firearm in certain municipalities, robbery, and possession will generally be returned without analysis. The laboratory is also no longer running suicide cases (victim or suspect kits) for GSR analysis. Please provide a detailed scenario (i.e. police report) with your submission so that we can accurately assess each case.

Hand stubs collected within 4 hours of the incident in question are the most significant evidence. However, if hand stubs were not collected within 4 hours or if the hand stubs are negative and there is a reasonable suspicion that the suspect could have removed the GSR from his hands, the laboratory may consider analyzing the suspect's clothing. **Only clothing that has already been associated with both the suspect and the incident will be analyzed.**

If a case falls outside of the described policies listed above, but analysis is still requested, the laboratory will require the request in writing from an attorney or court order. The laboratory report will specify laboratory policy where applicable and state that the analysis was performed at the written request of the requestor. Results will be reported as inconclusive in these cases as no interpretation can be provided.

If requested, items being processed by other sections of the laboratory, such as clothing, will be processed to preserve GSR. These stubs may be returned without analysis. If analysis is still necessary, please re-submit the stubs to the laboratory along with written justification for their analysis.

Please do not store or package GSR evidence (or other trace evidence items) in paper composed of recycled material. This type of paper can contain particles of paint, heavy metals, and other debris that can interfere with and prolong our analysis. Prior studies have indicated that packaging materials such as boxes and paper bags are suitable packaging and do not contain such particles.

Instant Shooter Identification (ISId) Kits will be returned without analysis. Our laboratory has not validated the Instant Shooter Identification Kit or a method of analysis for it.

Atomic Absorption (AA) Kits will be returned without analysis. Our laboratory no longer has the proper instrumentation to analyze AA kits.

Gunshot primer residue analysis does not give an indication of the distance from which a firearm is fired (i.e., **Distance Determination**). Refer to PEH-02-09, Firearms and Toolmarks Evidence Collection for the information and evidence required to determine an approximate distance between clothing and a fired weapon.

Preparer

Forrest W. Davis Date: 07/23/2014
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 08/08/2014
Laboratory Director

Version #	Effective Date	Brief Description of Change(s)
00	07/09/2010	Original Issue
01	05/16/2012	Major Revision – Policy
02	08/08/2014	Major Revision – Policy

INTRODUCTION

Latent print evidence is sometimes considered the most fragile evidence which may be collected at a crime scene. Latent prints may be destroyed by excessive handling or by improper packaging of the evidence. Special precautions and care must be taken in order to minimize the degradation of latent print evidence.

Factors such as extreme or environmental conditions to which the evidence has been exposed, the substrate surface, and the handling of the evidence should be considered prior to submitting evidence for processing.

If there are no suspects in a case AND no evidence to be processed, the case should be submitted to the Latent AFIS Section. Indicate "AFIS" as the "Exam Requested" on the laboratory submission form.

For latent print processing requests, the examiner will determine the proper scope and order of latent print processing and preservation techniques performed. Visual examinations for latent, patent, or plastic prints will precede latent print development techniques on all evidentiary items submitted. Texas DPS laboratories will only use Latent Print Section approved and validated development techniques which include visual, physical, and chemical processes on porous, non-porous, adhesive, and bloody evidentiary items. For other special requests, the submitting agency should contact the laboratory.

If evidence is processed for latent prints by the submitting agency prior to its submission to a Texas DPS Laboratory, notations regarding prior processes performed should be indicated on the submission form to assist the laboratory on further processing and preservation.

All suitable latent prints observed or further developed by a Texas DPS Laboratory will be preserved via lifting, digital scanning, or digital photography. For clarification, DPS defines a suitable latent print as having sufficient friction ridge detail and clarity for a conclusion to be reached.

Conclusions that may be reached and reported for suitable latent prints include: Identification, Exclusion, or Inconclusive.

- Identification is the decision that there are sufficient features in agreement between a latent print and a known print to conclude the two prints originated from the same source. Identification of a latent print to one source is the decision that the likelihood the latent print was made by another (different) source is so remote that it is considered a practical impossibility.
- Exclusion is the decision that there are sufficient features in disagreement between a latent print and a known print to conclude the two prints did not originate from the same source. Exclusion of a subject can only be reached if all relevant comparable anatomical areas are represented and legible in the exemplars.
- Inconclusive is the decision that may result when an identification or exclusion cannot be reached due to the following scenarios:
    - Absence of complete and legible known prints (poor quality exemplars and/or lack of comparable areas
    - Corresponding features between a latent print and a known print are observed but are not sufficient to identify
    - Dissimilar features are observed between a latent print and a known print but are not sufficient to exclude

Preserved suitable latent prints will be compared to submitted exemplars or those on file at Texas DPS Crime Records Service. Comparisons will be limited to the requested analysis and the provided suspect, victim, and elimination information.

SAFETY CONSIDERATIONS

Universal and general precautions should be observed when attending and processing crime scenes and handling evidence. Wear personal protective equipment such as eye protection and gloves. Evidence such as sharps (knives, razor blades, scalpels, broken glass, needles, etc.) may possess blood borne pathogens. Some of these items also pose additional risk and can cause bodily injury to self or others. Special care in handling and packaging must be followed in order to prevent injury.

All weapons should be submitted to the laboratory unloaded. **If for any reason the weapon is loaded, advise the laboratory of this fact at the time of submission.**

COLLECTION

Physical evidence collected from crime scenes can be submitted for latent print processing. Collect this evidence by handling it in a way that an individual would not normally handle. Handling evidence with a gloved hand on textured or grooved surfaces is good practice. Avoid excessive handling.

Oftentimes, items that are permanent such as residential doors, windows, and vehicles are processed at the scene with black powder. Developed latent prints should be lifted with fingerprint tape, and preserved on a lift card. Lifts made at a crime scene should be submitted for latent print examination.

Considerations for lifting latent prints developed with powders

Documenting the latent lift card is absolutely necessary; see below statements and representative figures for clarification.

Place an arrow on front of the lift card to show upward direction of the item from which the lift was made **(Figure 1)**.

Figure 1: Lift Side of Lift Card

On back of each lift card, record the following information **(Figure 2)**:

- Date
- Location from which latent print was lifted
- Case #
- Initials, signature, or employee number of person lifting print
- Diagram or sketch with "X" showing the location of the lift and draw an arrow to show orientation
- 1st lift, 2nd lift, etc. if multiple lifts are made of the same latent prints

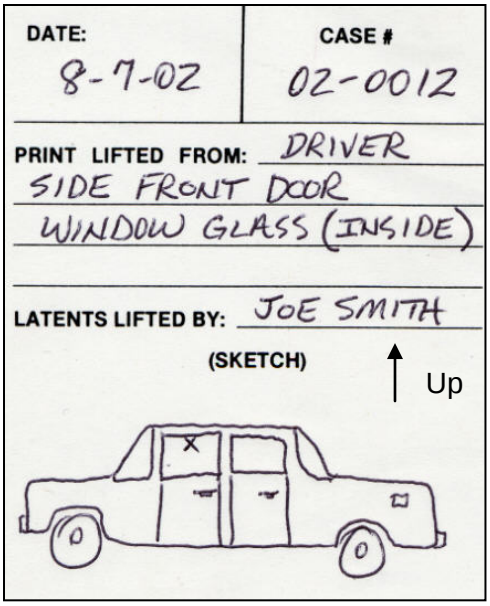


Figure 2: Documentation Side of Lift Card

If your fingertips accidentally show on the sticky side of the tape, place an "X" and your initials over your own prints **(Figure 3)**.

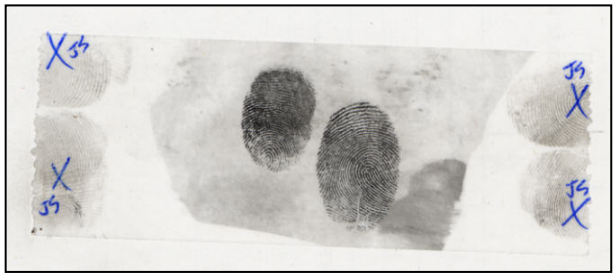


Figure 3: Front of Lift Card

When submitting latent print evidence to the laboratory, a fully rolled and clear set of fingerprints and palm prints should be submitted for comparison, if available. If fingerprints and palm prints are not available, the investigator should provide the name, race, sex, date of birth, Driver's License/Identification Number, Social Security number, and whenever possible, the State Identification number (SID #) of the suspect(s),victim(s), and any individual(s) for elimination so that the examiner can check for any exemplars on file at DPS.

Considerations for collecting/obtaining known exemplars

A fingerprint card should have all ten fingers properly inked and fully rolled nail to nail with minimal smears, along with plain impressions at the bottom. If a finger is not printed due to an injury (temporary or permanent), document "INJURY" in the corresponding box. The highlighted areas should be filled out on this card for these prints to be used in latent print comparison **(Figure 4)**.

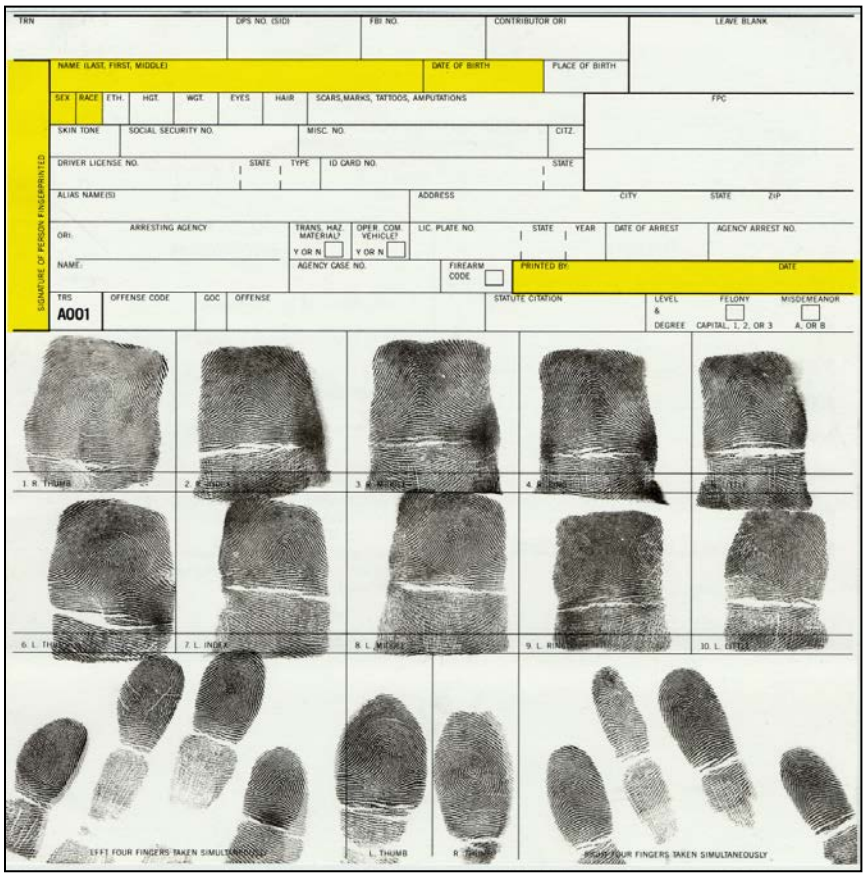


Figure 4: Fingerprint Card

For Major Case Prints (Complete Friction Ridge Exemplars), each finger and thumb should have the center, both sides, and the extreme tips inked as shown **(Figure 5).**

Figure 5: Example of Major Case Prints (Example of single finger)

Palms should be completely rolled from the tips of the fingers to the wrist crease and also the side of the hypothenar area (known as the check writer's palm) **(Figure 6).**

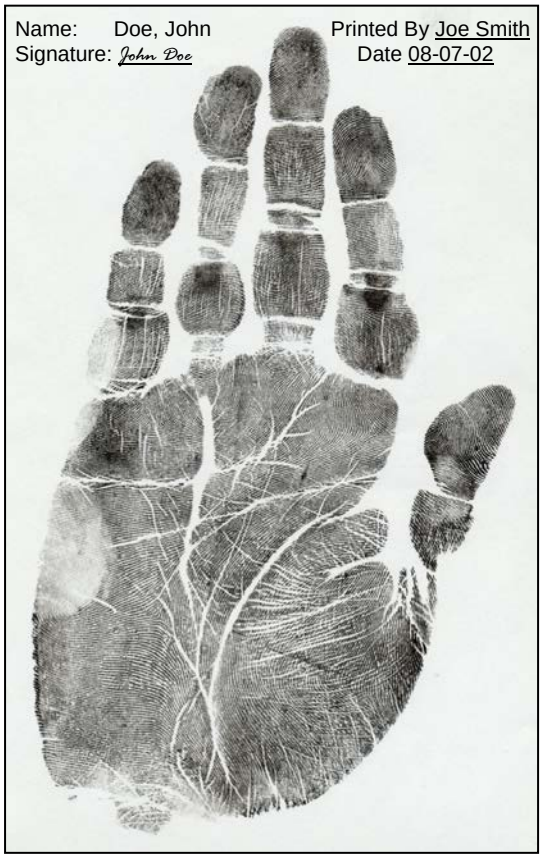


Figure 6: **Left Palm Exemplar** (Check Writer's palm not shown)

Documentation that should be present on the palm print exemplars includes:

- Name of person printed
- Signature of person printed
- Name of person obtaining prints
- Date

PACKAGING

Avoid excessive handling of package containing evidence. Also, avoid packaging non-porous items in plastic bags. Be aware that any contact that the evidence has with other surfaces, including the evidence container, may interfere with the recovery of latent prints.

Wet items must be allowed to thoroughly dry prior to packaging to avoid mildew and deterioration.

Whenever possible, each item of evidence to be examined for latent prints should be stored in a separate container. Evidence should be placed in containers which will prevent the evidence from moving around freely. Porous items of evidence such as paper and cardboard may be collected and packaged together in a single container. It is recommended that these items not be treated with any type of latent print development chemical prior to submission. These processes may interfere with further laboratory processing, and any developed latent prints may fade prior to examination. **If these items have been**

chemically treated and are submitted for latent print examination, clearly indicate what chemicals were used on the submission form so any developed latent prints can be preserved prior to possible fading.

Liquids in unsealed evidence containers should be carefully removed prior to submission if there is no request or need for the liquid to be tested by the DPS laboratory. If liquid remains, the container must be sealed to prevent contamination of other surrounding items and to minimize or eliminate any accidental spillage that may occur. Paint cans, plastic buckets, and durable plastic bags can be used in these instances.

Firearms must be secured and should be submitted in a gun box, unloaded. If the firearm is loaded, this should be indicated on the packaging and the laboratory notified upon submission.

Sharps (knives, razor blades, scalpels, broken glass, needles, etc.) must be properly packaged in puncture-resistant containers.

The evidence should not be marked or scribed. These markings may interfere with the development of latent prints or other laboratory analysis. Initials and identifying marks should be placed on the packaging. In some instances evidence tags may be carefully attached to items of evidence. If marking the evidence is required by the submitting agency, initials or identifying marks should be carefully placed to avoid damage to any area which might contain latent prints.

Any items of evidence that have knowingly been affected by a bodily fluid (i.e. a bloody knife in need of prints) must have a biohazard label placed on their containers.

Properly documented exemplars (inked fingerprints, palm prints, etc.) may be packaged together and submitted in flat envelopes. Allow the printers ink to dry prior to placing inside envelope.

Contact a Texas DPS Crime Laboratory if you are unclear which laboratory to submit evidence for latent print examination requests. Submitted items may include: physical evidence, latent print lifts/photographs/digital images, exemplars, etc.

If evidence is submitted to the laboratory for multiple examinations, such as blood, trace evidence, or drug analysis, as well as latent prints, please note this on your submission form and advise the person to whom you are submitting the evidence that this will be a combination submission. The laboratory will determine the order of any examinations performed.

Special Considerations for Digital Images

The use of computers to transfer files containing images is becoming more prevalent. If sending latent prints and inked impressions electronically is considered, call the laboratory for further instructions so that we may receive the best quality image with a secure chain of custody. Regardless of the method of submission, a laboratory submission form must be included with the submission. Texas DPS email regulations prevent large file transfers via email; therefore, original images should be submitted to the laboratory on CD-R or DVD-R.

Generally, filling the frame with the latent print and including a scale when preserving through photography will render a quality image. It is important to consider the camera equipment and the ability to use the equipment properly to attain a well focused and framed image. For reference, highlights regarding Texas DPS policy for laboratory preserved digital evidence are listed below:

- Friction ridge impressions used for comparative analysis should be captured in the highest resolution lossless format available (i.e. RAW or TIFF) at a minimum of 1000 pixels per inch (ppi) or higher resolution when the image is sized 1:1, or by using existing film photographic techniques.
- Grayscale digital imaging should be at minimum of 8 bits.
- Color digital imaging should be at minimum of 24 bits
- A scale (ruler) must be included in each image and must be on the same plane of focus as the friction ridge impression being photographed.
- The unit of measure (inch or centimeter) must be visible on the scale within the image and one entire unit must be visible within the image.
- The entire image must be in focus. The plane of focus of the friction ridge impression must be parallel to the plane of the camera which was used to capture the image.

Digital images of latent prints should be submitted for examination no matter what resolution or format was available for that agency. If the digital image is of poor quality, it may be returned without analysis. If a quality digital image cannot be obtained, submission of the physical evidence is recommended.

DISPOSITION

All DPS laboratory generated lifted latent prints and photographs will be retained in our files for future reference.

Cases with latent lift cards and photographs/images submitted for latent print examination will be retained if there are suitable latent prints present or if suitable latent prints were developed on any processed evidence.

Cases with latent lift cards and photographs/images submitted for latent print examination will be returned if there are no suitable latent prints present.

Submitted exemplars will be retained in DPS files if comparisons were performed.

At the completion of our examination, if suitable latent prints are not identified, the preserved latent prints will be retained in DPS files, and:

- Case will be forwarded to the Latent AFIS (Automated Fingerprint Identification System) Section for a database search (submitting agency request/examiner discretion),

or

- Laboratory will include in the report an option for the submitting agency to contact the reporting forensic scientist/laboratory to formally request an AFIS search.

If latent prints are determined to be not suitable for identification purposes, they are considered not suitable to initiate a search in AFIS. The case will not be forwarded to the Latent AFIS Section even when requested on the submission form.

Special laboratory requests for additional exemplars may be made in the report. These requests must be addressed by the submitting agency for examinations to be complete.

AUTOMATED FINGERPRINT IDENTIFICATION SYSTEM (AFIS)

The Automated Fingerprint Identification System (AFIS) is a computerized system capable of reading, classifying, matching, and storing fingerprints and palm prints. All arrest cards submitted to DPS that are Class A, B, and C are scanned into the system and stored in the database. The database contains criminal records and applicant records.

If there are suspects in a case OR there is evidence to be processed, the case should be submitted to the Latent Print Section. Indicate "LP" as the Exam Requested on the laboratory submission form.

Cases with no suspects and suitable latent, patent, or plastic prints are entered into the system to search for possible matches against the database of fingerprints and palm prints records. Latent prints entered into AFIS may remain in the Unsolved Latent Database (ULDB) for subsequent searching. Upon the identification of a latent print or upon the expiration of the statute of limitations, the latent print may be deleted from the ULDB through an automated or manual process.

Additional searches may be conducted by utilizing the Universal Latent Workstation software to search IAFIS (Integrated Automated Fingerprint Identification System). The IAFIS database consists of the fingerprints and palm prints of criminals and applicants (civil service and government) on file with the FBI. The latent prints entered into IAFIS may remain in the FBI's Unsolved Latent File (ULF) for subsequent searching.

Actual latent prints are preferred. However, if this is not possible, 1:1 photographs of the latent prints can be submitted. They can also be submitted to the laboratory electronically; contact the laboratory for further instructions on how this can be accomplished.

Regardless of the method of collection/submission, a laboratory submission form must be included with the submission. Directions on where to find an electronic version of this form can be found in the Evidence Submission (PEH-01-04) section of this handbook.

As long as there is not a suspect, cases involving checks that have been previously processed or contain an inked impression should be sent to AFIS. Notation of previous processing or the presence of an inked impression should be indicated on the submission form. Any inked impression or suitable latent print(s) will be digitally preserved, and the submitted check will be returned. Elimination fingerprints and palm prints should be submitted whenever possible.

- Cases with lift cards and/or photographs/images submitted for an AFIS search will be retained if there are suitable latent prints present.
- Cases with lift cards and/or photographs/images submitted for an AFIS search will be returned if there are no suitable latent prints present.
- Lift cards in which the victim/officer has been identified and there are no remaining suitable latent prints present for an AFIS search will be returned to the submitting agency.

Preparer

Forrest W. Davis Date: 07/23/2014
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 08/04/2014
Laboratory Director

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00	05/04/2007	Original Issue
01	07/09/2010	Major Revision – All sections
02	05/16/2012	Major Revision – Introduction, Collection, Packaging, Disposition, AFIS
03	08/08/2014	Major Revision – All sections

INTRODUCTION

The Forensic (*or Questioned*) Document Examiner's job is to identify (or eliminate) a subject as the writer of a particular **questioned** handwritten document by comparison of known and questioned handwriting. Additionally, they may be requested to identify the source of a document, identify the machines that produced a document, or ascertain any information related to how a document was created or altered which may be of value in criminal investigation. These examinations may require physical or instrument-assisted analysis of a document.

For admissibility of evidence examination results in Texas criminal courts by either the prosecutor or the defense, it is required that the examination(s), including handwriting comparison, be performed in an accredited laboratory (see Texas Code of Criminal Procedure 38.35).

Questioned Document Examination Services

The following is a listing of the types of examinations available through the Questioned Document section:

Handwriting Identification

Questioned signatures, written entries, or extended writing compared to genuine known writing of subject(s) to determine authorship, identify forgeries or demonstrate handwriting disguise or simulation

Paper Batch and Edge Matching

Microscopic comparison of questioned documents (especially anonymous letters and paper(s) left at a crime scene) and paper found in possession of and/or known to be used by subject(s)

Microscopic comparison of torn edges of questioned documents with paper found in possession of subject(s); perforated edges to stubs in check books, note pads, spirals, etc.

Assembly of torn and machine shredded documents to reveal information on the original document(s)

Envelope Batch Matching

Comparison of questioned envelope(s) to those found in possession of subject(s) for manufacturing batch identification

Document Preparation and Sequence Determination

Any various techniques to determine the sequence of events. This can include, but is not limited to, which written line or typewritten entry was applied to a document first, sequence of photocopy preparation, sequence of folding and writing, or to address any other problem in which the sequence of events in the preparation of a document is in question.

Examination and Preservation of Charred and Saturated Documents

Separation and preservation of charred documents to reveal information contained in original documents

Latent Writing Impression Restoration

Detection and restoration of indented writing (indentations may be made by writing on an overlaying page, especially in notepads, checkbooks, etc.). **IMPORTANT**: Do not "shade"

the impression with a pencil, or any other material or instrument, and do not address an envelope after inserting the questioned document.

Image Enhancement

Image Enhancement includes procedures for the non-destructive restoration, recording and visualization of images, and any other various techniques that are computer aided to help establish the origin and authenticity of a document

Identification and Analysis of Conventional and Digital Print Processes

Determine the print process of a document and whether or not two or more documents were produced by the same printing unit

Document Authentication

Any various techniques to compare genuine known documents with suspected counterfeit documents especially official government licenses, certificates, etc.

Ink Comparison

A non-destructive process for comparing parts of document entries for evidence of alteration or for comparison of questioned entries with writing instruments found in possession of subject(s). The procedure can differentiate inks which are identical to the unaided eye.

Alteration/Obliteration/Erasure Detection and Restoration

Any various techniques used to detect and demonstrate that a document was altered by addition, reprinting, insertion or retouching. Any various techniques used to restore ink or other obliterating material used to hide underlying information or features on a document. Any various techniques used to detect erasures and restore erased information or features on a document.

Typewriting/Examination of Carbon Ribbon Evidence

Examination of carbon ribbon for presence of questioned text and microscopic confirmation that the ribbon produced the document in question

Miscellaneous Document Examinations

Any numerous other aspects of document examination, some of which may be apparent to an examiner only upon examination of the evidence in question. Examples include rubber stamps, seals, checkwriters and other various document examinations.

SAFETY CONSIDERATIONS

When it is suspected that evidence bears biological or chemical contamination, it is extremely important that at a minimum, nitrile or other non-porous polymer gloves be worn when recovering and packaging this evidence. Personal protective equipment such as eye protection and lab coat are recommended in addition to the gloves.

All biological stains and reference samples should be treated as a biohazard (requiring universal bloodborne pathogen precautions). These samples could potentially expose the handler to HIV, Hepatitis B and C, or other pathogens.

COLLECTION, PRESERVATION AND SUBMISSION

The inherent detail available in document evidence is not readily perceived by the layman. Therefore it is necessary for the investigator to learn what documents to collect and how to preserve them to protect the integrity of the evidence.

Do not process for latent prints. Preserve and protect the evidence for latent prints and advise the laboratory of the request for latent print processing.

Always submit evidence in the condition in which it was found.

Do not staple the evidence.

Do not shade indented writing with pencil or any other material or instrument as this may damage the evidence.

Do not type or write on the evidence (for example, when addressing the evidence mailing envelope with the evidence already inside).

If an identification mark must be placed on evidence, be sure that it is placed in an area that doesn't obscure the questioned portion or possible latent prints.

Evidence Considerations

Questioned Documents (Including Handwriting Evidence): Whenever possible submit originals of all evidence documents. You can retain copies for reference purposes. An original questioned document or known handwriting standard will have microscopic detail that is not represented in a reproduction.

Charred Documents: If the evidence consists of charred documents, they should be submitted in the container in which they were found, if possible. Place the evidence and/or container in which the document was found into a sturdy box with packing material to reduce movement of the charred document. **DO NOT CRUSH**.

Typewriting Evidence: Submit typewriter, if possible, or known typewriter standards that include verbatim samples of the questioned typewritten content/text and samples of each character/key present in the typewriter. Be sure to note the make, model, serial number and date on each page of the submission.

For Carbon (Single Use) Ribbon - Remove the ribbon prior to typing specimen. This is especially important if the ribbon is to be transcribed for questioned text.

For Electronic Typewriters - These may contain information in the memory which can be lost if unplugged. Print stored memory information before unplugging. Please contact the Questioned Document section if you are unfamiliar with this procedure.

Printing Devices: For cases involving printing devices, please consult the Questioned Document Section for the collection and submission of evidence. Information including the device make, model and serial number will be required.

Known Handwriting Standards

Standards (including known handwriting) should be collected during the initial investigation, packaged separately from the evidence, and should be submitted at the same time as the evidence if possible.

Consideration for Handwriting and Hand Printing Standards

Verification - Have acknowledgment of writer or testimony of witness as to the authorship of the exemplars. These matters should be resolved before the standards are submitted to the laboratory for analysis.

Admissibility - Do not submit standards which might be ruled inadmissible in court. For example, do not use standard writings that make references to extraneous offenses. The exceptions in this case would be if it could be determined that when a trial date arrives, the standards could be admitted for reference in document

examination testimony, without allowing the jury to view those standards, or if the inadmissible portions could be redacted and the standards still used for comparison purposes.

Writers - Submit victim(s) and suspect(s) standards as appropriate.

Same Style as Questioned - We must compare cursive handwriting to cursive handwriting and hand printing to hand printing. A comparison of cursive writing to hand printing generally yields few results.

Same Content as Questioned - Dictate or provide typed verbatim questioned text (or other combinations of same word and numerals that appear in questioned).

Known Signatures - Obtain any suspect(s) or victim(s) signatures from normal course of business documents such as cancelled checks, employment records, fingerprint cards, etc.

All Questioned Handwriting - Identification of which might be useful to the case and should be compared with the standards.

Handedness - Obtain right and left hand standards, or from dominant and unaccustomed hand.

Recognize Disguise - Note that if the exemplars are written more slowly and with less penmanship than other known writings, it could be an attempt at disguise. Conversely, note that if the exemplars are written hastily and with less penmanship than other known writings, it could also be an attempt at disguise.

Compensate for Disguise - Do not let the suspect view the questioned document(s). Obtain extensive exemplars (at least 20 full pages repeating the questioned items verbatim). Supplement exemplars with normal course of business handwriting standards.

Duplicate Writing Conditions - Note the type of paper and size, writing instrument, spacing, etc., that may exist in the questioned document(s). Replicate these conditions as much as possible when obtaining exemplars/request writing.

Contemporaneousness - Standards should be written around the same time frame as the questioned document(s). This especially important in cases that involve children, adolescents or the elderly.

Provide Information - Be sure to include information regarding the writer's health, drug use, ambidexterity, etc., during exemplar execution and at time the questioned document(s) was produced.

Packaging

Documents may be packaged into an appropriately sized envelope.

Do not fold document evidence to fit into a smaller envelope. Do not try to overfill the envelope.

Please limit the number of internal packages. We ask that you place all the documents into one outer container for submission to the laboratory. You may distinguish which documents are questioned and which are known by either binding the documents together (do not staple) or marking a Post-it with “Questioned” or “Known” before placing them on the document.

Mark on the outer packaging BEFORE inserting evidence.

If necessary, use protective covers and padding when packaging.

Submission

The DPS Crime Laboratory has a standard issued laboratory submission form (LAB-06). It is important to indicate which items are in question and which items are known. Requested analysis should be specific and included in the Exam Requested portion as well as any basic case information. A link to the laboratory submission form can be found below: http://www.txdps.state.tx.us/internetforms/Forms/LAB-06.pdf

REPORT WORDING

Questioned Document reports include wording that has been standardized in the Forensic Document discipline.

Identification: This is the highest degree of confidence expressed in handwriting comparisons. The analyst has no reservations and is certain, based on evidence contained in handwriting, that the known writer actually wrote the writing in question.

Strong probability: The evidence is very persuasive, yet some critical feature or quality is missing so that an identification is not in order. The analyst is virtually certain that the questioned and known writings were written by the same person.

Indications: A body of writing has few features which are of significance for handwriting comparisons purposes, but those features are in agreement with another body of writing. Additional limiting wording may be added to clearly state that this opinion is far short of *identification*.

Inconclusive: This is the zero point on the confidence scale. It is used when there are significant limiting factors or the evidence does not provide a basis for identification or elimination.

Indications did not: This carries the same confidence as indications, a very weak opinion. Additional limiting wording may be added to clearly state that this opinion is far short of *elimination*.

Strong probability did not: This carries the same confidence as strong probability. The analyst is virtually certain that the questioned and known writings were not written by the same person.

Elimination: This, like *identification*, is the highest degree of confidence expressed in handwriting comparisons. The analyst denotes no doubt and is certain that the questioned and known writings were not written by the same individual.

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

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00	05/04/2007	Original Issue
01	07/09/2010	Major Revision - Introduction, Collection, Packaging
02	05/16/2012	Major Revision - Introduction, Collection, Preservation, and Submission, Report Wording, Packaging
03	08/08/2014	Minor Revision – Packaging
04	08/16/2016	Major Revision – Introduction, Safety Considerations, Collection, Preservation, and Submission

INTRODUCTION

Nearly every home has multiple computers or mobile electronic devices. When discovered at a crime scene, these devices should be considered as possible evidence; they can be used to store evidence of homicide, sexual assaults, questioned death, child pornography, records of drug transactions, financial and other crimes. Examples of some of the commonly submitted types of digital evidence include: computer towers and laptops, iPads or other tablets, iPods, PDAs, cellular telephones and smart phones, peripheral devices such as USB drives (or thumb drives), camera cards and Global Positioning Systems (GPS devices). The examination of these items is performed in the Digital and Multimedia Evidence Section.

SAFETY CONSIDERATIONS

Although electronic devices do not typically contain biological materials, do not attempt to handle without protective equipment. When it is suspected that materials for collection have been contaminated with biological fluids, it is important that nitrile or other non-porous polymer gloves be worn when recovering and packaging this evidence. Personal protective equipment such as eye protection and lab coat are also recommended.

All biological stains and reference samples should be treated as a biohazard (requiring universal bloodborne pathogen precautions). These samples could potentially expose the handler to HIV, Hepatitis B and C, or other pathogens.

COLLECTION

When an electronic device is used to store illegal or incriminating information, some users may devise methods to destroy the data if an unauthorized person attempts to access the system. Therefore, it is essential that precautions are taken to preserve the evidence when seized.

When electronic devices are seized as evidence, be sure to control access to them so as not to potentially delete or alter evidence; a single key stroke could execute a program that erases information. If a computer is involved, never turn it on. If a computer is on, photograph any information that may be displayed on the screen. Photograph the back to record which components and possible peripherals are attached to the computer. Once the state of the computer is determined and documented, unplug the power cord from the back of the computer, not the wall. **Do not attempt to shut down using the on/off button as it may be rigged to damage the hard drive or other components when activated.** If a laptop is powered “on”, photograph the screen and unplug the power source. Push and hold the power button for several seconds to turn it off. Do not attempt a normal shutdown. Collect the laptop’s power adapter and supply cord and **remove the battery, if possible, at the time of the seizure** of the computer. Often the power adapter for a laptop is not interchangeable with other laptops.

If it appears that computers in a business location have been networked, call the Austin Regional Laboratory and speak with an analyst in the Digital Multimedia Evidence/Computer Forensics section. Do not attempt to disconnect networked computers without contacting a forensic computer examiner.

When conducting a search of the crime scene in which a computer is involved, be sure to look for all computer hardware, software, disks, manuals, and other pieces of paper near the computer. Confiscate any and all of these types of items as they may contain information

valuable to the case. Upon submission of these items to the lab, please identify where each item was found at the scene and more importantly, which items have the most probative value.

When cell phones or other mobile devices are submitted, **they should be off and the battery should be removed** if easily accessible at the time of seizure. If a cell phone or other mobile device is left powered on, it is possible that data can be deleted if the signal reaches the network. Additionally, if a battery dies while a mobile device is stored in the lab, it is possible that a PIN code will be enabled once the device is powered on again. Care should be taken so that the power button on mobile devices cannot be inadvertently bumped and turned on. If any mobile device is left on while stored in the evidence vault, the possiblilty of it connecting to a data network is great. The user of the mobile device would then be able to remotely delete the contents of the device therefore preventing the recovery/extraction of the data. Mobile devices almost always provide added security using a passcode or pattern / gesture lock setting. For this reason, it is extremely important upon collection of the device, to ask the user for that passcode or pattern lock immediately.

PACKAGING

Computers and other digital or mobile devices are sensitive to a variety of environmental conditions: temperature, physical shock, static electricity, and magnetic fields, just to name a few. Therefore these devices should be protected from the extremes of these environmental conditions when transported.

A box containing antistatic packing material to cushion the device is the preferred method of packaging. This could also include, if available, the original box and packaging material in which the device was brought home from the store. Once the container is properly sealed (either with tape or heat sealed), any attempts to access the computer will be evident.

The preferred method of packaging digital media and other mobile devices is:

1) Ensure device is OFF,
2) Remove the battery if easily accessible (no need to disassemble the device, such as unscrewing the back of an iPhone or iPad),
3) Place into a protective, non-static wrapping such as the antistatic bubble wrap bags seen in the photo below (this packaging can be provided by our laboratory upon submission),
4) Then place into a properly sealed envelope or box for submission.

Consider the following when transporting digital evidence to the laboratory.

The radio in the trunk of most patrol vehicles produces a strong magnetic field which has the potential to destroy all of the evidence just collected, and during the summer in Texas, the trunk can build up heat. Be sure to protect the computer from any and all environmental threats.

CRITERIA FOR EXAMINATION

When submitting evidence to a DPS Crime Laboratory, please follow the DME case and evidence acceptance policy - Criteria for DME Evidence Submission, PEH-02-08B.

No Examination Started Without Valid Digital Multimedia Search Warrant

Search Warrants and/or Consent to Search forms are required in all Digital Multimedia Evidence (DME) cases, without exception. Because digital evidence examination is a more intrusive search than a "plain sight" search, it is not acceptable for the Search Warrant to simply give the authority for an officer to seize the devices in a specified location. The wording on the search warrant or consent form must specifically state that the data which resides on the seized digital media will be forensically examined (recovered and searched) by the DPS Crime Laboratory. Refer to PEH-02-08A for a template including the proper terminology for search/seizure warrants.

In an effort to effectively manage caseload and turnaround time for customers, detailed case-specific information and the required DME Triage Form (LAB-23) must accompany all DME submissions.

30-Day Rule

The submitting officer will be notified if the information provided, the Search Warrant, or the Consent to Search form is inadequate to initiate examination of the evidence. After this notification, the officer will have 30 days to respond and provide what is needed or the case will be closed without examination and the evidence returned. This evidence may be resubmitted at a later time with the required documentation.

Examination Limits for Possession of Child Pornography/Sexual Assault

For straight-forward cases involving the sexual assault of a child or possession of child pornography, all data that can be attributed to a username account will be examined. If notable data is recovered, an archived copy will be saved and a report will be issued. If notable data is not recovered in these areas, a further search of Unallocated Space (UA) will be conducted. If more evidentiary data is needed at the time of trial and with the proper notification, a search for this data can be conducted from the archived evidence files.

Examination Limits for Non-Child Pornography/Sexual Assault of Child Cases

For cases other than Child Pornography and/or Sexual Assault (such as homicide, theft, burglary, etc.) which have the potential for the examination to extend to all areas of the digital media, specific information and search terms should be included with the request. Examples of ways to detail a request include:

a) *Description of email correspondence between subject and victim (including known email addresses or nicknames of the subjects involved)*

b) *Specify if pictures of a subject's family or other images are a suspected element of a case.*

c) *Description of suspect documents containing information such as financial information, bank accounts, credit card numbers, etc.*

d) *Indicate a specific time frame.*

The more specific and unique the information provided, the more quickly the case can be examined and reported. Include agency case reports and statements from subjects involved which can be helpful in determining keywords.

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

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00	05/04/2007	Original Issue
01	07/09/2010	Major Revision – All sections
02	05/16/2012	Major Revision – All sections
03	08/08/2014	Major Revision – All sections
04	08/16/2016	Minor Revision – Introduction, Safety Considerations, Collection, Criteria for Examination

POLICY

Search Warrants and/or Consent to Search forms are required for all Digital Multimedia Evidence (DME) cases, without exception. The search warrant or consent to search form should specifically contain the terminology requesting a "forensic examination" of the submitted evidence by the TXDPS Crime Laboratory.

THE FOLLOWING LANGUAGE IS USED TO DESCRIBE COMPUTER SYSTEM AND RELATED EQUIPMENT TO BE SEIZED AND ANALYZED

Digital media consists of computer hardware, computer software, computer data, and computer related documentation which can collect, analyze, create, display, convert, store, conceal, or transmit electronic, magnetic, optical, or similar digital impulses or data.

Computer hardware includes, but is not limited to, all data processing devices such as central processing units, memory typewriters, and self-contained "laptop" or "notebook" computers; internal and external storage devices and media such as hard disk drives, magnetic media disks and drives, magneto-optical disks and drives, tape cartridges and drives, optical disks and drives such as CD-ROM, CD-WORM, CD-R, CD-RW, and DVD, floptical disks and drives such as Zip, Jazz, Sparq, Syjet, and Bernoulli, transistor-like binary devices, and any external input/output devices such as mice, keyboards, monitors, scanners, printers, modems, cables, connections, recording equipment, microphones, RAM or ROM units, acoustic couplers, automatic dialers, speed dialers, programmable telephone dialing or signaling devices, cellular telephones, iPads, iPods, and electronic tone-generating devices; as well as any devices, mechanisms, or parts that can be used to restrict access to computer hardware (such as physical keys and locks).

Computer software includes, but is not limited to, digital information which can be interpreted by a computer and any of its related components, which may be stored in electronic, magnetic, optical or other digital form. It commonly includes programs such as operating systems, applications, utilities, compilers, interpreters, and communications programs.

Computer data, which is digital information, is created with the use of computer software and stored electronically and/or magnetically in computer hardware. This computer system(s) may contain files with records; namely, correspondence, notes, papers, ledgers, personal telephone, address books, memoranda, telexes, facsimiles, and documents. It may also contain graphical images and photographs.

Computer related documentation, that is, written, recorded, printed, or electronically stored material which explains or illustrates how to configure or use computer hardware, software, or other related items

Based upon affiant's knowledge, training, and experience, and consultations with _____, who is trained and experienced in the search, seizure, and analysis of computer related evidence, affiant knows that it is necessary to seize most or all electronic and electro-magnetic storage devices (along with related peripherals) to be searched later by a person(s) trained to conduct computer evidence analysis. It may also be necessary to transport the actual computer hardware, software, and documentation, or duplicate copies of the data contained in each of these items, out of this county for complete and thorough examination by trained personnel in a laboratory or other controlled environment. This is true based on the following:

1. The volume of evidence. Computer storage devices (like hard disks, diskettes, tapes, and compact disks) can store the equivalent of thousands of pages of criminal evidence; he or she might store it in random order with deceptive file names. This may require searching which particular files are evidence or instrumentality of crime. This sorting process can take weeks or months, depending on the volume of data stored, and it would be impractical to attempt this kind of data search on site.
2. Technical requirements. Searching computer system(s) for criminal evidence is a highly technical process requiring expert skill and a properly controlled environment. The vast array of computer hardware and software available requires even computer experts to specialize in some computer system(s) and applications, so it is difficult to know before a search which expert is qualified to analyze the system(s) and its data. In any event, however, data search protocols are exacting scientific procedures designed to protect the integrity of the evidence and to recover even “hidden”, erased, compressed, password-protected, or encrypted files. Since computer evidence is extremely vulnerable to inadvertent or intentional modification or destruction (both from external sources and from destructive code imbedded in the system(s) as a “booby trap”), a controlled environment is essential to the complete and accurate analysis.

Based on the above mentioned facts, your affiant has probable cause to believe that the personal computer system(s) of [name of the suspect, witness, victim] may contain files and/or data with records – namely, correspondence, notes, papers, ledgers, personal telephone and address books, telephone toll records, telephone message slips, memoranda, telexes, facsimiles, documents, and photographs relevant to or which describe criminal conduct and suspected criminal activity, specifically, [describe offense(s) being investigated]

Wherefore, affiant asks for the issuance of a warrant that will authorize affiant to search for and seize said computer system(s), computer hardware and media, computer software, and computer documentation. Furthermore, said items are to be analyzed by a trained computer evidence recovery specialist in order to retrieve, restore, and/or reproduce any or all information believed to be evidence of said offense(s).

(OPTIONAL if return of computer system(s) is essential, i.e. business environments, etc.)

If after examining the computer hardware, software, and documentation, investigators determine that any or all of these items are no longer necessary to retrieve, analyze, and preserve the data evidence, they will be returned to [suspect, witness, victim] within a reasonable time.

Preparer

Forrest W. Davis Date: 04/19/2012
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 04/24/2012
Laboratory Director

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00	07/09/2010	Original Issue
01	05/16/2012	Major revision - Policy and Section for Language Used to Describe Computer System and Related Equipment to be Seized and Analyzed

INTRODUCTION

Mobile and digital devices have penetrated daily lives, so much so, that it has changed the way criminals choose to communicate and commit crimes. As a result of this technological explosion, cases involving this type of evidence routinely require weeks to months to complete analyses in compliance with best practices, as well as investigative searches based on parameters supplied by customers. It is not unusual to receive multiple terabyte evidence hard drives in priority cases where there is a victim in harm's way. The Austin Regional Crime Laboratory examines evidence received from more than 2,000 Law Enforcement Agencies statewide. In an effort to reduce backlog and effectively manage current caseload and turnaround time for customers, the Digital & Multimedia Evidence Section has established acceptance policies and evidence prioritization criteria for **Digital & Multimedia Evidence (DME)/Computer Forensics cases**.

Some of the changes being implemented include: streamlined procedures, installation of a new analysis and archival server system, and the case acceptance policy provided below. With all of these changes, the laboratory will be able to provide a more timely service to meet customers' need.

POLICY

Search Warrants and/or Consent to Search forms are needed in all DME cases without exception. These need to include specific words in order to avoid any unforeseen problems at the time of trial. Digital evidence examination is a more intrusive search than a "plain sight" search and it is therefore not acceptable for the Search Warrant to simply give the authority for an officer to seize the computers in a specified location.

The wording on the Search Warrant or Consent Form should specifically state the data which resides on the seized digital media will be forensically examined (recovered and searched) by the DPS Crime Laboratory. Templates are available (See PEH-02-08A).

The submitting officer will be notified if the information provided on the Search Warrant or Consent to Search form is inadequate for examination of the evidence or if one is not provided at the time of the evidence submission. After this notification, the officer will have 30 days to respond and provide what is needed or the case will be closed without examination and the evidence returned. Evidence may be resubmitted to the laboratory for examination after the acceptable search warrant or consent to search form(s) has been obtained.

Detailed, case specific information and the required triage information form must accompany all DME submissions. There are potentially millions of files to be examined in some DME cases. The more case specific information the analyst has initially, the quicker the data can be both examined and reported. For certain cases in which the analyst is not provided enough case specific information to determine all of the data that would be pertinent to the investigation, some types of files will be copied out in bulk for the customer to review instead. (*For example, if we are not supplied enough information about a homicide case, we may copy out and report ALL of the email contained logically on the media, and ALL of the internet history. This can potentially be a large amount of data that the customer will have to review.)*

Based on the location at the crime scene and the evidence item's proximity to the suspects involved, customers will be limited to initially submitting the <u>two (2)</u> most

probative items of evidence (i.e. devices) in each DME case. While it is extremely important to collect ALL of the digital media that could potentially contain evidence of a crime at the scene, customers should document the location of each piece of digital evidence and determine which two (2) items are most likely to contain the information. (*For example, the laptop a suspect is carrying with him/her and the cellular telephone in his/her pocket at the time of the arrest may possibly contain the data officers are looking for, whereas the older desktop computer located in the closet and not attached to a keyboard or monitor is possibly less likely to contain the data.)* Once the first two (2) items have been examined and reported on, if the examination does not produce adequate investigative information, the next two (2) items may then be submitted for examination. This policy will prevent an analyst from spending potentially many months on one case while other priority cases stay in the backlog awaiting examination.

Regarding the types of crimes involving digital evidence that will be accepted by the laboratory, priority will be given to those types of crimes in which a person is in immediate danger or in harm's way. Those types of crimes which will be accepted and given priority are homicide, suicide, questioned death, sexual assault/violent crimes, child pornography or crimes against children, persons in harm's way, improper photography/video, officer-involved, and internal investigations. Cases involving offenses not listed above generally will not be accepted or will be returned without analysis. These cases, however, may be evaluated and accepted on a case by case basis.

At least 60 days' notice is required for any rush requests. The evidence must already be in the laboratory for this timeline to apply. Rush cases will be prioritized based upon their submission date, offense type, statute of limitations, court date, and whether there is a victim currently in harm's way. While the laboratory makes every effort to meet requested timelines, even with 60 days' notice, there is no guarantee that the case can be completed for a scheduled court date. Please give as much advanced notification as possible. Additionally, if a case has been disposed of prior to completion of the examination and report, please contact the laboratory as soon as possible.

These policy revisions are subject to change based upon backlog considerations and overall customer needs. If you have any questions, please contact Jennifer Land, Digital & Multimedia Evidence Section Supervisor, at 512-424-2105 or Jennifer.Land@dps.texas.gov.

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

Version #	Effective Date	Brief Description of Change(s)
00	05/16/2012	Original Issue
01	08/16/2016	Minor Revision – Introduction and Policy

INTRODUCTION

A Forensic Firearms request is for the examination of any fired evidence and/or any firearm that exceeds the basic determination of its capability to discharge. A Toolmarks request is for the examination of a tool and a surface suspected of having been contacted by the tool to determine the presence of unique microscopic characteristics on the surface imparted to it by the tool.

*Distance determination examination can only be performed when there is a suspected bullet hole in the submitted clothing. Evidence submission must include the medical and/or autopsy report/photos (number of wounds, location of wounds, entry vs. exit, presence of stippling of gunpowder particles, etc.), scene photos (showing how the victim was wearing the garment, presence of outer clothing, etc.), offense report, the suspected firearm, the exact ammunition fired, and all fired ammunition components from the shooting event. If a suspected firearm has not been recovered, the Firearms Section will not perform a distance determination. This is in order to preserve the evidentiary value of the clothing in the event that a suspect firearm is located at a later time.

For the detection of Gunshot Primer Residue from the hands of persons suspected of recently discharging a firearm, refer to PEH-02-05 Trace Evidence Collection.

The following is a list of the items most commonly submitted for analyses:

- Projectiles
- Cartridge cases
- Cartridges
- Firearms
- Pellets
- Shotshells
- Wads
- Bolt cutters
- Locks
- Victim's clothing

Commonly submitted evidence items

FIREARMS EXAMINATION

SAFETY CONSIDERATIONS

To ensure the safe handling, storage, and submission of firearms, follow these safety steps:

- Keep the **firearm unloaded** at all times if possible. Package and submit an unloaded firearm.
- Keep the action closed.
- Insertion of a plastic zip tie through the magazine well and the ejection port will allow the action to close while ensuring that the weapon is not loaded.

If loaded firearms must be submitted, the laboratory personnel accepting the evidence must be notified of the loaded state of the weapon at the time of submission. Under no circumstances should a loaded firearm be submitted via mail or other shipping mechanism.

When it is suspected that the evidence being collected has been contaminated with biological fluids, it is extremely important that at a minimum, nitrile or other non-porous polymer gloves be worn when recovering and packaging this evidence. Personal protective equipment such as eye protection and lab coat are recommended in addition to the gloves.

All biological stains and reference samples should be treated as a biohazard (requiring universal bloodborne pathogen precautions). These samples could potentially expose the handler to HIV, Hepatitis B and C, or other pathogens.

COLLECTION

The collection process is relatively simple and not damaging to any firearms related item. Any damage that has occurred has normally been a result of firing, impact, or accidental. However, "damage" can occur when attempting to mark the items. While marking of the actual item can be accomplished without affecting any analysis, it is strongly recommended that the evidence NOT BE marked. "Damage" can occur in the form of altering or affecting any microscopic marks or patterns that may be present and useful for analysis and comparison.

PACKAGING

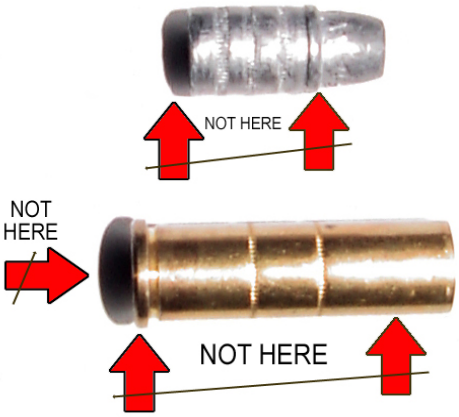
The purpose of correctly packaging firearms is to protect the breechface and bore from damage. Proper packaging techniques include:

- Attach an evidence tag to the trigger guard.
- Loaded magazines and unfired cartridges should be removed from the firearm, placed in a container, and the evidence secured with the associated firearm.
- Firearms should be placed in a box and secured with plastic zip-ties to the bottom of the box. Boxes can be obtained through gun dealerships, various box companies, or law enforcement evidence handling suppliers such as Kinderprint or Sirchie.
- **DO NOT** place metal in the bore, breech or magazine well.
- Legibly mark the contents of each package.
- When practical, place all containers from a case in a common container. Seal the outer container with tamper-evident or filament tape so that the opening of the container would be evident.
- Outermost packaging must be properly <u>sealed with date and initials</u>.
- Affix appropriate BIOHAZARD or HAZARDOUS MATERIAL labels to the container.
- Firearms recovered in water should be submitted in a container of the same water or should be immediately treated with a water displacing lubricant such as WD-40 or immersed in diesel fuel.

Examples of methods of packaging individual evidence items

If it is absolutely necessary to mark the evidence item, it MUST be marked in a safe area. DO NOT mark in the following locations:

- Bearing surface (sides and/or body) of projectiles
- Base of cartridge case
- Body of cartridge case



Note location of areas that cannot be marked

Containers can vary from empty film canisters, to coin envelopes, to plastic bags, etc. The important consideration is to protect the item to be examined from loss or contamination. Again, the container should be sealed, dated and initialed, with a description of the item contained within.

If mailing live ammunition, the outside of the container must be labeled ORM-D, CARTRIDGES SMALL ARMS. It is recommended that the local carrier be contacted to determine if they have additional regulations that must be followed. Ammunition and firearms must be shipped in accordance with U.S. Department of Transportation regulations. More information can be found on its website.

For evidence containing biological substances, please see PEH-02-01 for packaging and shipping considerations.

EVIDENCE AND POSSIBLE EXAMINATIONS

The following is a listing of items that might be submitted for examination with the results that may be determined.

Possible Types of Evidence	Possible Examinations/Determinations
Projectile	Caliber Weapon type Possible manufacturer
Cartridge case	Caliber Weapon type Possible manufacturer Possible reload Entry into NIBIN database
Multiple projectiles	Same as projectile – plus if fired from same firearm or multiple firearms
Multiple cartridge cases	Same as cartridge case – plus if fired from same firearm or multiple firearms
Fired projectile or Cartridge case and firearm	If fired from or in the submitted firearm
Shot pellets / shot wads	Size of shot pellets Gauge of shotgun Gauge of wad Possible pellet size contained in wad
Clothing and firearm	Approximate distance weapon was from clothing*
Clothing and shotgun	Approximate distance shotgun was from clothing*

Possible Types of Evidence	Possible Examinations/Determinations
Firearm	General condition and if mechanically functional Amount of pressure required to release hammer or firing pin Restoration of obliterated serial numbers Determination of illegal modifications Test firing to obtain test specimens for comparison Test fire for acquisition into the NIBIN database (comparison to other shooting incidents)
BB Guns / Air Guns	No analysis (unless rifled)

Unfired ammunition submitted in forensic casework may be consumed in the generation of test fires. When this occurs, annotation in the laboratory report will denote how many of the cartridges were consumed during analysis. In general, these consumed cartridges are retained by the laboratory and will not be returned to the submitting agency. If consumption of the ammunition in the generation of test fires would result in depletion of all the submitted unfired ammunition, the submitting agency will be contacted and permission will be received prior to depletion (with the exception of Distance Determination, see below).

Note that consumption of unfired ammunition submitted in reference to Distance Determination is considered a necessary component of that analysis, and contacting the submitting agency is not required when depleting ammunition under these circumstances. However the number of cartridges consumed during analysis will still be noted on a report involving Distance Determination.

*At present, Distance Determination analysis is only performed by the Austin and Tyler Regional Laboratories. Evidence for Distance Determination analysis may be submitted to any DPS Laboratory with a Firearms and Toolmarks section (as indicated by PEH-01-03 Table 1) and it will be forwarded as appropriate.

For DPS officer-involved shootings or internal investigations, the evidence will be forwarded to a DPS Crime Laboratory capable of performing the requested service(s) that is outside the normal service area of the parties involved in the investigation.

TOOLMARK EXAMINATION

Manufacturing processes and use cause tools to bear unique microscopic characteristics. Under certain conditions these characteristics can be imparted to surfaces contacted by tools. Submitted tools should be able to produce the mark in question and have a suspect associated with them.

If it is not possible to submit the evidence, a cast of the mark may be submitted. It is recommended, however, that the evidence mark be submitted whenever possible. Photographs locate toolmarks but are of no value for identification purposes.

Possible Examinations		
Toolmark	With Suspected Tool	Determine if Submitted Tool Produced the Mark/Cut
	Without Suspected Tool	No Examination

Occasionally items are submitted that may exhibit multiple marks or cuts (doorframes, doors, cut wire, etc.). In this event, it is extremely important that the evidence marks in question are properly identified. This can be done in various ways. Marks on items can be clearly photographed with the appropriate marks designated. Wires can be taped with the appropriate markings on the tapes. The important consideration is to make sure that the evidence mark in question is analyzed.

Evidence must be **clearly** identified as to the location of the ***actual*** evidence markings. If the evidence is to be removed (i.e. cut wire to be collected for examination), clearly identify either the evidence toolmark or the non-evidence toolmark side prior to removing the physical evidence from its origin. It is also helpful to indicate in the submission documents or on the evidence packaging how the evidence/non-evidence toolmarks are designated (i.e., “non-evidence ends of wire covered with evidence tape”).

DPS does not analyze biological items, such as bone, cartilage, skin, etc., for the purpose of determining if a particular sharp object, such as a knife, may have been used. If assistance is needed in locating a laboratory that does this type of examination, contact the Regional DPS Lab in your service area for a list of possible options.

Range of Conclusions

Firearms and Toolmarks reports will contain some or all of the following conclusions. The interpretation of individualization/identification is subjective in nature, founded on scientific principles and based on the examiner's training and experience. The statement that "sufficient agreement" exists between two toolmarks means that the agreement is of a quantity and quality that the likelihood another tool could have made the mark is so remote as to be considered a practical impossibility.

Identification: Agreement of a combination of individual characteristics and all discernible class characteristics where the extent of agreement exceeds that which can occur in the comparison of toolmarks made by different tools and is consistent with the agreement demonstrated by toolmarks known to have been produced by the same tool.

Inconclusive:

A. Some agreement of individual characteristics and all discernible class characteristics, but insufficient for an identification

B. Agreement of all discernible class characteristics without agreement or disagreement of individual characteristics due to an absence, insufficiency, or lack of reproducibility

C. Agreement of all discernable class characteristics and disagreement of individual characteristics, but insufficient for an elimination

Elimination:

Significant disagreement of discernible class characteristics and/or individual characteristics

Unsuitable:

Unsuitable for examination

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

Version #	Effective Date	Brief Description of Change(s)
00	05/04/2007	Original Issue
01	07/09/2010	Major Revision – Introduction , Firearms Examination, NIBIN
02	05/16/2012	Major Revision – Introduction, Firearms Examination, Toolmark Examination, NIBIN
03	10/16/2012	Major Revision – NIBIN practice change, Range of Conclusions
04	08/08/2014	Minor Revision – Toolmark Examination, NIBIN
05	08/16/2016	Major Revision – Introduction, Firearms Examination, Toolmark Examination

INTRODUCTION

The National Integrated Ballistic Information Network (NIBIN) is a national database in which digital images of cartridge cases are compared to one another. When test fired or evidence cartridge cases are entered in the database, they will correlate with previous and future evidence that has been entered, which may result in a possible link to another crime.

The purpose of NIBIN is to link unrelated firearm offenses and provide investigative leads for law enforcement.

Evidence that is entered into the NIBIN database should be kept by the agencies for a minimum of four years because confirmations of any hits must be made with actual evidence. Images of fired evidence from one crime may be in the system for years before the firearm is recovered from another crime and entered into the database.

*Please notify the laboratory if the firearm is returned or otherwise reintroduced to the public.

SAFETY CONSIDERATIONS

When it is suspected that evidence being collected has been contaminated with biological fluids, it is extremely important that at a minimum nitrile or other non-porous polymer gloves be worn when recovering and packaging this evidence. Personal Protective equipment such as eye protection and a lab coat are recommended in addition to gloves.

All biological stains and reference samples should be treated as a biohazard (requiring universal bloodborne pathogen precautions). These samples could potentially expose the handler to HIV, Hepatitis B and C, or other pathogens.

ACCEPTABLE EVIDENCE FOR NIBIN ENTRY

A forensic firearms examination is a request for the examination of any fired evidence and/or any firearm that exceeds the basic determination of its capability to discharge. Firearms evidence submitted for forensic examination will also be evaluated for NIBIN suitability. **DPS accepts evidence for forensic firearms examination from any law enforcement agency.**

A NIBIN request is a request for a firearm solely submitted to be test fired and entered into the NIBIN database or test fired cartridge case(s) from a known firearm solely submitted to be entered into the NIBIN database. **DPS will only accept evidence from outside agencies for the sole purpose of entry into NIBIN when there is a reasonable suspicion that the firearm may have been used in a previous firearms related offense. Outside Agencies are encouraged to submit test fired cartridge cases from known firearms which fail to meet this criterion directly to the ATF. Refer to the ATF submission guidelines which should be available at its website https://www.atf.gov/**

Firearms

Types of firearms most suitable for NIBIN entry include:

- Pistols
- Shotguns
- Rifles

Derringers and revolvers do not usually make viable entries for the database. Officers' firearms are not typically entered into NIBIN.

COLLECTION AND PACKAGING

For guidance on the collection and packaging of evidence, please see the Firearms and Toolmarks section of the Physical Evidence Handbook.

SUBMISSION

Use the current Laboratory Submission Form (LAB-06) for the submission of evidence for NIBIN entry.

DPS officers should additionally submit in accordance with the DPS General Manual Chapter 24.05.10.

Preparer

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Concurrence

Brady W. Mills Date: 08/15/2016
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00	05/04/2007	Original Issue
01	05/16/2012	Major Revision – Collection, Submission Minor Revision – Packaging
02	10/16/2012	Major Revision – Process and Location
03	08/08/2014	Minor Revision – All sections
04	08/16/2016	Major Revision – All sections

INTRODUCTION

Forensic photographers use photography and videography to aid in documentation and reconstruction of crime scenes with specialized techniques. An example of forensic photography performed by the section is luminol blood visualization which allows crime scene investigators to see latent blood traces that are invisible to the naked eye. This technique is very sensitive and requires explicit photographic protocol to produce satisfactory results. The photographers also provide technical support to Crime Lab personnel with detailed evidence exemplars, presentations, and photographic documentation of crime scenes, including aerial views.

The section may also perform Image Enhancement which involves the application of digital techniques to isolate, clarify, or enlarge areas of interest for further examination or presentation in court.

Digital/Multimedia Evidence Audio/Video Analysis is also performed in the section and involves the digital enhancement of video and audio tapes from various sources (such as law enforcement in-car cameras, and surveillance cameras) and in various formats (such as mpeg, avi, wmv, mov, etc.), as well as from different media types such as analog films or tapes, or from the newer digital storage devices.

When audio or video evidence is discovered at a Crime Scene or incident, recordings captured or saved on CDs, DVDs, thumb drives, memory cards, DVRs (Digital Video Recorders), hard drives, or other media, should be considered as possible evidence. They can be used to store evidence of homicides, sexual assaults, burglaries, robberies, theft, use of force, and other crimes or incidents. Because technology advances rapidly, the seizure methods can also change.

SAFETY CONSIDERATIONS

Although DVRs and video/audio media are devices which do not typically contain biological materials, do not attempt to handle without protective equipment. When it is suspected that materials for collection have been contaminated with biological fluids, it is important that nitrile or other non-porous polymer gloves be worn when recovering and packaging this evidence. Personal protective equipment such as eye protection and lab coat are also recommended. All biological stains and reference samples should be treated as a biohazard (requiring universal bloodborne pathogen precautions). These samples could potentially expose the handler to HIV, Hepatitis B and C, or other pathogens.

Also ensure that the evidence does not need to be tested for latent fingerprints or DNA before the evidence can be handled.

ANALYSIS SERVICES AVAILABLE

The following is a listing of the types of examinations available through the Digital & Multimedia Evidence Section:

Audio Enhancement

Audio analysis and/or enhancement (“clarification”) is a process that is intended to improve the audible characteristics of a digital or analog signal from a videotape, CD disk, audiotape (regular or micro cassette), DVD, answering machine, or other media containing audio.

The Laboratory is able to enhance audio (any format) if the undesirable noise is in one particular frequency, such as an electronic hum or a frequency caused by wind noise. The Laboratory does not have the capability to discard ambient sounds in multiple frequencies (such as pots and pans) or other background sounds that are common in recordings made in noisy locations (such as a restaurant).

The Laboratory does not perform audio authentications or voice comparisons.

*This section is currently testing new and improved software to provide better quality enhancement of audio files in the near future.

Video Enhancement

Video enhancement ("clarification"), image restoration, and other image processing activities are intended to improve the visual appearance of features in images captured from video.

The laboratory provides the following services:

- Provides enhancement frame-by-frames of subjects or license plates from videos
- Generate PowerPoint presentations for court
- Repair damaged analog videotapes and transfer any media to various formats.
- Retrieve data from Digital Video Recorders (DVRs or their hard drives)
- Digital stills or video documentation of crime scenes and court testimony
- Format photos for possible submission to the DPS Driver License (DL) Facial Recognition Database or determine whether or not they are suitable for submission

The Laboratory does not provide subject identifications or comparisons from video to DL or other photos.

Photography / Image Enhancement

The laboratory provides the following services:

- Subject lineups or subject comparison exhibits for court
- Evidentiary enlargements, presentations, and exhibits for court or display
- Life-size skull photos for facial reconstructions
- Statewide Crime Scene Response documentation with the Crime Lab and courtroom testimony
- High resolution evidentiary photography in the DPS Crime Laboratory Studio
- Photographic support for DPS Recruit Schools
- Maintain historical image files including all the officers killed in the line of duty
- Images for the DPS Museum and the Ranger Museum
- Images for cold case requests
- Shoot aerials for court requests or at crime scenes
- Teach Forensic Photography Classes and provide support for all forensic training provided by the DPS Crime Laboratory

The Laboratory does not provide services for subject identifications.

COLLECTION AND SUBMISSION

When filling out the submission form, the more specific and unique the information provided, the more quickly the case can be examined and reported. You may include agency case reports and statements from subjects involved which can be helpful in the analysis. Also ensure that if there is a time/date stamp on the footage, the correct information is submitted as to when the subject or vehicle shows up on the footage for forensic examination.

Consider the following when transporting digital evidence to the Laboratory:

- Always protect evidence against excessive heat or moisture. Do not store evidence in the trunk of a car.
- The radio in the trunk produces a strong magnetic field which has the potential to destroy evidence.
- Protect computers from environmental threats.

Audio/Video

The Forensic Video Analysis Unit will analyze DVR's when submitted, but if only the hard drive is submitted, the evidence must be submitted to the Computer Forensic Section of the DPS Crime Lab. If it is suspected or known that footage or information was deleted from the DVR or hard drive, this evidence must also be submitted to the Computer Forensic Section to attempt to recover the information.

If it appears that DVRs in a business location need to be removed from the location, remove and submit the power cord, operations manual, technical support information, software, and any other peripherals that may be necessary for the analyst to view and perform analysis of the evidence. Also, if a password is required to access the footage, submit the password. Do not attempt to disconnect networked computers without contacting a forensic computer examiner.

For analog and digital evidence, always submit the original if possible as copies will be degraded. Often copies can produce compression artifacts resulting in degradation of quality of the enhancement.

For any questions, call the Laboratory in Austin and speak with an analyst in the Digital & Multimedia Evidence Section.

Photography

On subject enhancement submissions, the enhanced subject will be returned to the submitting officer.

Submission of subject photos to the DPS Image Verification System (DL Database) must be done by the officer as this is a function of the Driver's License Division. Requirements for formatting of photographs for entry into to the DPS DL Database:

- Face substantially fills the frame of the image (optimum is chin to hairline being 80% of the image height)
- Recommended minimum of 64 pixels of real resolution between the pupils of the eyes (scaling up doesn't help the results)
- Minimum overall image resolution of 128 X 128 pixels and a maximum of 1024 X 1024 pixels
- Images can be color or grayscale

- Forward facing pose with the face fully visible, avoid hair in the face area
- Neutral expression helps to match against other images with a non neutral expression
- Avoid eyeglasses and headwear when possible

Preparer

Katherine G. Sanchez Date: 08/10/2016
Quality Assurance Coordinator

Concurrence

Brady W. Mills Date: 08/15/2016
Deputy Assistant Director

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00	05/16/2012	Original Issue
01	08/16/2016	Minor Revision – Safety Considerations Major Revision – Analysis Services Available, Collection and Submission

SPECIFIC INSTRUCTIONS FOR COLLECTING AND PACKAGING EVIDENCE

EVIDENCE	EXAMINATION NEEDED	AMOUNT NEEDED	PACKAGING
Audio	Audio enhancement	All	Carefully packed in box or envelope
Automobiles and parts (not including lamps)	General examination for evidence such as blood, hair, or other trace evidence	Entire vehicle if possible.	Vehicles should be kept protected until laboratory personnel can examine the vehicle. If vehicle is being transported to the laboratory, precaution should be taken to protect any evidence on the outside of the vehicle during transport. Clean, well-packed boxes.
Biological Tissue	DNA analysis	All	Refer to Biological Screening/DNA Evidence Collection section.
Blood	Alcohol/drugs	10 mL	Use commercial blood collection tube kits. Blood must be taken by qualified medical personnel. **Do not use alcohol** as a sterilizing agent. Refrigerate sample if submission is delayed.
Blood and Bloodstains	DNA analysis	Variable and depending on pattern	Refer to Biological Screening/DNA Evidence Collection section.
Bones	DNA analysis	All	Clean, well-packed box
Bullet Holes	Entrance/exit holes, muzzle distance	Entire garment or substance	Air-dry away from heat or sun. Handle as little as possible. Clean, well-packed box, so that bullet hole is protected from rubbing or shaking

EVIDENCE	EXAMINATION NEEDED	AMOUNT NEEDED	PACKAGING
Bullets and Cartridge cases	If fired from a particular weapon, presence of blood and foreign matter	All	Well-packed in cotton or other clean packing, not airtight
Clothes	Fiber/fabric comparison, physical fracture match, GSR, Paint, Biological Screening/DNA	All	Carefully packed in box, envelope, bag
Computers	Data recovery	All	In a box containing antistatic packing material to cushion the computer
Drugs	Chemical analysis to identify controlled substances	All	Original containers, plastic bags, heat sealed plastic bags, envelopes, boxes, or bottles
Mobile and Digital Devices	Data recovery/extraction	All	Carefully packed in box or envelope
Fibers	Characterization and comparison	All, plus a large amount of known if comparison is to be made	Carefully package using folded paper. Place paper in well-sealed envelope or box.
Fingernail Deposits	Presence of blood, hair, tissue other trace evidence	All	Use clean nail clippers. Separate left and right hands. Gently use a separate toothpick (or similar item) for each finger. Place each in a separate, well-sealed container.
Firearms	Comparison with evidence bullets or cartridge cases, Serial number restoration, Trace Evidence, DNA, Latent Prints	Evidence projectiles and fragments, cartridge cases, weapon	Be sure all weapons are unloaded. Label and package all items individually.

EVIDENCE	EXAMINATION NEEDED	AMOUNT NEEDED	PACKAGING
Glass	Comparison, physical and chemical properties, physical matching, side of break	All	Clean cardboard boxes, well-packed and sealed to prevent sifting and contamination. Samples to be compared to be packaged separately.
GSR kits	Gunshot primer residue	Palm and back both hands	Commercial SEM-EDS kits only
Hair	Origin (human or other species), comparison	All of questioned. Known to be a minimum of 25 hairs from area in question.	Tape lifts placed on plastic sheeting, sealed in a envelope. Keep known and unknown separate.
Handwriting	Examination and comparison of questioned and known	All of questioned. Known to be a minimum of 25 pages including normal course of business	Documents may be packaged into an appropriately sized envelope. Do not address with document in envelope.
Ink	Characterization, comparison	All including suspect writing instrument	Original container. If on paper, package carefully in box/envelope.
Knives	Trace evidence, DNA, Latent Prints, Toolmarks	All	Packaged so as to prevent injury to handlers and to preserve materials present

EVIDENCE	EXAMINATION NEEDED	AMOUNT NEEDED	PACKAGING
Paint	Physical and chemical properties, comparison	Area collected should be one square inch. Need control samples from both suspect and victim cars at impact sites. Collect down to metal or wood surface. Collect flaked paint from scene. Hit and run - victim's clothing should be submitted.	Small, clean, non-metallic containers. Paint may be packaged in folded paper. It may then be placed in well-sealed envelope. Clothing should be placed in well-sealed paper bags and well-packaged box.
Paper	Comparison and characterization	All	Cardboard carton and well-sealed envelopes
Rope	Comparison and characterization	All	Clean cardboard box or bag
Semen stains	Presence of semen, DNA analysis	All	All articles to air-dry away from heat or sun. Pack carefully in paper bags or boxes.
Shoes/shoeprints	Comparison	All	Clean, well-cushioned containers (shoes, photos, casts)
Stains, other	Comparison and characterization	All	Same as bloodstains
Tools	Comparison, foreign material, serial number restoration	All	Cardboard carton, well-packed with protective covering on suspect area of tool
Urine	Alcohol, Drugs	10 mL	Use commercial urine collection test kits. Collection should be observed to maintain chain of custody. Refrigerate sample if submission is delayed.

EVIDENCE	EXAMINATION NEEDED	AMOUNT NEEDED	PACKAGING
Vehicle Lamps	Determine on or off at damage	All bulbs from the damaged area	Well-cushioned packaging in a box or other rigid container. Hand-deliver.
Vitreous Fluid	Alcohol, Drugs	All	Use small container to minimize headspace. Refrigerate sample if submission is delayed.
Video	Video enhancement	All	Carefully packed in box or envelope

Preparer

Forrest W. Davis Date: 04/19/2012
Quality Assurance Coordinator

Concurrence

D. Pat Johnson Date: 04/24/2012
Laboratory Director

Version #	Effective Date	Brief Description of Change(s)
00	05/04/2007	Original Issue
01	05/16/2012	Major revision – Instructions for collecting and packaging evidence

TEXAS DEPARTMENT OF PUBLIC SAFETY
CRIME LABORATORY

Laboratory Submission Form

LAB-06 Rev.01 (05/2013) p.1 Issued by: QAC

☐New ☐Additional ☐Resubmission
☐Corrected Copy

Agency _____

Agency Case # _____

Offense _____

Offense Date _____

Offense County _____

Date Resubmitted_____

DPS Laboratory Use Only

DPS Lab Case #/Date Evidence Received

☐Drop Box ☐Mail/Certified ☐Other_____

Printed Name _____ Agency _____

Signature _____ Date _____

Case Contact Person Information

Title/Full Name _____ **Badge Number** _____

Physical Address _____ **Phone** _____ **Fax** _____

City, State, Zip _____ **Email** _____

Individual (S=Suspect, V=Victim, E=Elimination)

S / V / E	Name (Last, First, Middle)	Sex	Race	DOB	State	Driver License #	State ID #

Description of Evidence Submitted

(Attach Brief Synopsis/Offense Report For All Cases Except Drug/Blood Alcohol Cases)

Agency Item #	# of Items	Description of Evidence *Please indicate if item is Probable Cause*	Source	Type of Exam(s) Requested

TEXAS DEPARTMENT OF PUBLIC SAFETY
CRIME LABORATORY

Sexual Assault Evidence Submission Certification

LAB-06A Rev.00 (08/2011) p.1 Issued by: QAC

Agency Case Number _____ **Agency** _____

This evidence is being submitted by _____
(printed name of person making submission)

in connection with a criminal investigation.

Signature of person making submission _____

For DPS Crime Laboratory use only:

TEXAS DEPARTMENT OF PUBLIC SAFETY
CRIME LABORATORY

Gunshot Residue Kit Information Form

LAB-17 Rev.00 (01/2010) p.1 Issued by: QAC

Fill out all information requested then return yellow copy to kit, submit white copy with Submission Form, and retain pink copy.

Collecting Officer's Name: _____ Phone No.: _____

Fax No.: _____

Collecting Agency's Name: _____ Agency Case No.: _____

Offense: ☐ Homicide ☐ Suicide ☐ Assault ☐ Drive By ☐ Other _____

Subject Information

Subject's full name (Last, First Middle)	DOB

Subject is: ☐ Suspect ☐ Victim Was subject shot? ☐ Yes ☐ No

Subject is: ☐ Right-handed ☐ Left-handed ☐ Unknown

Any debris and/or blood on subject's hands? ☐ Yes ☐ No

If yes, describe: _____

Has subject washed his/her hands since shooting? ☐ Yes ☐ No ☐ Unknown

Was the subject in possession of a firearm when detained? ☐ Yes ☐ No

Subject's occupation: _____

Subject's hobbies: _____

Brief description of subject's activity between the time of the shooting and the time of the GSR collection:

_____

_____

_____

_____

Shooting Information

Date and time shooting occurred: Date _____ Time _____ ☐ am ☐ pm

Date and time of evidence collection: Date _____ Time _____ ☐ am ☐ pm

Place (example – in kitchen, parking lot, indoors, outdoors): _____

***Note: If cartridge manufacturer is unknown, draw head stamp here:**

Type of firearm used: _____ Caliber: _____

Manufacturer of ammunition:* _____ Caliber of ammunition used: _____

Number of shots fired: _____

Base of Cartridge

Collecting Officer _____ _____ _____ ☐ am ☐ pm

Signature Date Time

White copy – submit with Submission Form Yellow – placed inside Gunshot Residue Kit Pink copy – retained by collecting officer

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TEXAS DEPARTMENT OF PUBLIC SAFETY
CRIME LABORATORY

Digital Media Evidence Information Form

LAB-23 Rev.01 (07/2013) p.1 Issued by QAC

DPS Laboratory Case Number:

Submitting Officer's Signature _____ Phone # _____

Submitting Officer's Name _____ Fax # _____

Agency's Name _____ Agency Case # _____

Required Information for Digital Media Evidence Submissions

1. Are there known victims in this case?	☐Yes ☐No ☐Unknown
If yes, is the suspect or suspects an immediate threat to the victim or other potential victims?	☐Yes ☐No
2. Is the suspect currently incarcerated?	☐Yes ☐No

Policy requires a valid digital media search warrant or consent to search prior to analysis.

3. Does your search warrant or consent form include specific verbiage allowing laboratory personnel to forensically recover/extract data stored on the submitted media?	☐Yes ☐No
PLEASE NOTE: If a valid search warrant or consent to search is not received, analysis cannot begin on the case and a 30 day waiting period will begin from the date of submission.	
4. Cell Phone(s) Submitted	☐Yes ☐No
If yes, do you grant permission to us to conduct a manual examination of the cell phone(s)? Cell phone data extraction occasionally requires manual examination meaning the screen is photographed while navigating the phone.	☐Yes ☐No

List the specific types of files to be searched in this case. Please be as detailed as possible.

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TEXAS DEPARTMENT OF PUBLIC SAFETY
CRIME LABORATORY

Sexual Assault Information

LAB-24 Rev.00 (05/2012) p.1 Issued by: QAC

1. Did the victim have sexual contact with anyone other than the assailant in the week prior to the assault? YES or NO
   a) If YES, was it within the last 24 hours?
   b) If YES, how many hours prior to the assault?
   c) If YES, was a condom used?
2. What is the physical description of the suspect, even if name is unknown?
3. Was the victim's clothing worn?
   a) Before the attack? YES or NO
   b) After the attack? YES or NO
   c) Both before and after? YES or NO
4. How much time elapsed between the sexual assault and the examination?
5. Did the suspect put their mouth on the victim's genitals? YES or NO
6. Did the suspect lick, bite, or otherwise salivate on any other portion of the victim's body?
   YES or NO
7. Did the suspect's penis:

	Penetrate?	Ejaculate?
The vagina	YES or NO	YES or NO
The mouth	YES or NO	YES or NO
The rectum	YES or NO	YES or NO

8. Was a condom used during the assault? YES or NO
9. Was the suspect injured during the assault? YES or NO
   a) If YES, how was bleeding involved?
   b) Where was bleeding involved?
10. Date of last menstrual period (if applicable).
11. Are there indications that a lubricant was used (e.g. K-Y jelly)? YES or NO
12. Is it suspected that drugs may have been involved? YES or NO
    a) If yes, approximate date and time when it is thought they may have been taken:
    b) Date and time of sample collection

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