

Sample Report of Forensic Examination

Toolmark Identification

To: _____ (e.g., Chief of Police)
_____ (address)
_____ (city, state, zip) **Report Date:** _____

Attn: _____ (e.g., Detective) **Agency Case No:** _____

Re: _____ **Suspect Name**
_____ **Victim Name**
_____ **Type of Violation** **Lab File No:** _____

Examination Requested: Toolmark Identification

Items of Evidence Received

The following items of evidence were received from _____ (insert agency) in a sealed condition by _____ (registered mail, FedEx, UPS, etc.) on _____ (insert date) by _____ (insert title and name):

Item #	Item Description
#1	Linesman's pliers
#2	Screwdriver
#3	Bolt cutters
#4	Knife
#5	Knife
#6	Hammer
#7	Alarm wire
#8	Cashbox
#9	Safe door
#10	Safe door
#11	Sheet metal section
#12	Sheet metal section
#13	Chain link
#14	Chain link
#15	Chain link
#16	Chain link
#17	Chain link

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Item #	Item Description
#18	Telephone cord
#19	Power line section
#20	Power line section
#21	Power line section
#22	Power line section
#23	Power line section
#24	Railroad spike
#25	Railroad spike
#26	Railroad spike
#27	Railroad spike
#28	Railroad spike
#29	Railroad spike
#30	Railroad spike
#31	Lock mechanism
#32	Bank depository drawer
#33	Wood door casing
#34	Vehicle door
#35	Padlock shackle
#36	Lead bank seal
#37	Screwdriver tip

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Results of Examination

See the following sample report using the above noted evidence items.

Reports should also indicate if any submitted items were not examined and why (e.g., as a result of a conference with the lead investigator).

Identification of a Toolmark with a Tool

- The Item #7 alarm wire was identified as having been cut by the Item #1 lineman's pliers.
- The Item #2 screwdriver was identified as having made the toolmark adjacent to the lock on the lid of the Item #8 cashbox.

Interidentification of Toolmarks with No Tool Submitted

- Impressions in the Item #9 safe door were identified as having been made by the same tool as the impressions in the Item #10 safe door previously submitted by your agency on (date) under Investigative File Number _____. These impressions were made with a flat bladed tool with a tip width of approximately three quarters of an inch. If recovered, such tools should be submitted for comparison purposes.
- The Item #11 section of sheet metal bears shearing marks which were identified as having been made by the same tool as made the cut marks in the Item #12 sheet metal section previously submitted by your agency on (date) under Investigative File Number _____. These marks were made by a tool employing a shearing action, such as tin snips. If recovered, such tools should be submitted for comparison purposes.

Inconclusive Comparison of a Toolmark with Submitted Tool

- The questioned ends of the Item #13 through Item #17 chain links bear toolmarks indicative of having been cut by a tool or tools employing a pinching action, like the Item #3 bolt cutters. However, none of these chain links were identifiable as having been cut by the Item #3 bolt cutters due to a lack of corresponding microscopic marks. Therefore no conclusion could be reached as to whether or not these items were cut by the Item #3 tool.
- The questioned end of the Item #18 telephone cord bears characteristics consistent with - having been cut by a single-bladed tool, such as a knife. However Item #18 bears only extremely limited microscopic marks of value for comparison purposes. No conclusion could be reached as to whether or not Item #18 was cut by the Item #4 or the Item #5 knives.

Inconclusive Intercomparison of Evidence Toolmarks with No Tool Submitted

- The Item #19 through Item #23 sections of copper power line were intercompared to determine if any were cut by a single tool. Due to a lack of sufficient corresponding microscopic characteristics, no conclusion could be reached. It was determined that the questioned ends of each were cut by a tool employing a pinching action.

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- The Item #24 through Item #30 railroad spikes were intercompared to determine if any were removed by a single tool. Due to a lack of sufficient corresponding microscopic marks, no conclusion could be reached as to whether or not any of the questioned spikes were removed by a single tool. It was determined that the underside of the head of each spike bears marks consistent with removal by a tool employing a prying action, such as the large spike removal bars common to railroad use.

Toolmark with No Tool Submitted

- The knob portion of the Item #31 lock mechanism bears toolmarks like those produced by a serrated jawed gripping tool. These toolmarks bear microscopic marks of value for comparison purposes should a suspect tool be recovered. It is noted that the fractured condition of the interior latching mechanism of Item #31 is consistent with that which could be produced by a gripping tool and may have resulted in the compromising of this lock.
- The Item #32 bank depository drawer was found to bear toolmarks consistent with a large flat bladed tool or tools, such as a pry bar or a wrecking bar. The width of the blade(s) of the tool or tools which produced these toolmarks cannot be measured due to a lack of definable borders. However, the toolmarks do bear microscopic marks of value for comparison purposes should a suspect tool or tool(s) be recovered.

Elimination Based on Class Characteristics

- The Item #33 section of wood door casing bears impressions made by a flat-bladed tool with a well-defined tip width of one quarter inch. The tip width of the Item #2 screwdriver is one half inch wide and could not have made the impressions in Item #33.
- The round impression in the submitted Item #34 vehicle door is approximately two inches in diameter. The Item #6 hammer is measurably smaller than the Item # 34 impression and could not have been used to make the impression in the Item #34 vehicle door.

Unsuitable for Comparison

- Examination of the Item #35 padlock shackle determined that it bears no microscopic marks of value for comparison purposes.
- The Item #36 lead bank seal bears no marks of value for comparison purposes,

Fracture

- The Item #37 screwdriver tip was once a part of and broken from the Item #2 screwdriver.

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Disposition of the Evidence

The submitted items will be retained in this laboratory until called for by a representative of your agency.

-OR-

The submitted items will be returned to your agency by (*registered mail, FedEx, UPS, etc.*).

(Signature/ Title)

[Return to Users Guide.pdf](#)

[Link to Sample Worksheet- Tool.pdf](#)

[Link to Sample Worksheet- Toolmark.pdf](#)

[Link to Sample Worksheet- Fracture.pdf](#)