Training Guidelines for the Fire Debris Analyst

Lesson Plan (Module) 14

Date: December 2004 **Instructor:** Qualified Instructor

Subject: Report Writing **Total Time:** 3 hours

Learning Objectives

> Demonstrate a basic understanding of report writing

Compose a report that meets the recommendations of this training module

Suggested Reading

 ASTM E1618 "Standard Test Method for Ignitable Liquid Residues in Extracts from Fire Debris Samples by Gas Chromatography-Mass Spectrometry" ASTM International, current revision

- 2. <u>Kirk's Fire Investigation</u>, DeHaan, John, Chapter 17, Brady Publishing, Prentice-Hall, 5th Edition, 2002, ISBN: 0130604585
- 3. <u>Physical and Technical Aspects of Fire and Arson Investigation</u>, Carroll, John R., Chapter 16, Charles C. Thomas Pub. Ltd., 1979, ISBN: 039803785

Introduction

Effective and accurate report writing is an essential function and responsibility of every analyst. This training module discusses format, content, style and distribution of examination reports. It is understood that each laboratory has unique policies that dictate the format and content of a report.

Outline

- 1. Identifying case reference numbers
 - a. The unique reference number provided by the examining laboratory should be prominently displayed.
 - b. The reference number provided by the submitting agency should also be displayed for their convenience
- 2. Submitting agency

The name of the submitting agency should be listed on the report. Contact information, such as address, phone, Fax and email is optional. This aids the reader in determining who originated the evidence.

3. Chain of custody information

- a. The chain of custody, while mandatory, may be an optional attachment for the report.
- b. Sample delivery date(s) may be optional in the report.
- c. Disposition of evidence may be optional in the report.

4. Name of person requesting analysis

The name (and title) of the person requesting the analysis of the samples should be listed on the report.

5. Itemized sample list

The laboratory report should provide a complete description of the submitted samples. This information may include the item packaging, condition of seals (i.e. sealed or unsealed) and a visual description of the contents. The location where the samples were collected may also be included. If the submitting agency has provided their own system of identifying the sample, that system may also be incorporated into the itemized list of samples.

6. Purpose of examination

It may be important to include in the report the purpose of your examination, especially when multiple examinations may be requested of various items.

7. Laboratory results and conclusions

- a. The methods of analysis used and the results may be treated in separate sections of the report. The methods may include the preparation techniques and analytical techniques used.
- b. The conclusion should give the analyst's opinion as to whether or not an ignitable liquid was identified in the sample.
- c. If the result was negative for the presence of an ignitable liquid, a disclaimer may be included to the effect that negative results do not preclude the possibility that an ignitable liquid may have been present at the scene. This may help avoid misunderstanding by the readers of the report.
- d. If the result was positive for the presence of an ignitable liquid, the analyst should list examples of commercial products and/or substrates that might contain the ignitable liquid identified.
- e. If additional samples are needed for comparison purposes to complete the analysis of the case, the analyst may request those samples within this block of the report.

8. Name and title of analyst

A signature block containing the printed name of the analyst and appropriate title should be present in the report.

9. Signature of analyst

The original signature of the analyst is desired to authenticate the report.

10. Addenda or attachments

The report may include digital images, evidence lists, a glossary, a chain of custody or a CV either within the body of the report or as attachments.

11. Distribution

The distribution of reports will be dictated by the policies of the laboratory.

Teaching Aids

A laboratory report in the accepted format

Summary

Forensic laboratory reports may contain the following information:

- Date
- Identifying case reference numbers lab and submitting agency
- Submitting agency
- Chain of custody information (optional)
- Name of person requesting the analysis
- An itemized sample list
- Purpose of examination
- Laboratory results and conclusions
- The name and title of the analyst
- The signature of the analyst
- Addenda or attachments, e.g. digital images, evidence list, other documents (CV, COC)
- Distribution

Test Questions

- 1. The name (and title) of the person requesting the analysis of the samples should be listed on the report. **True** or False
- 2. Unique case numbers generated by the laboratory should be reflected on the report. **True** or False
- 3. The analyst's opinion need not be given in the report. True or **False**
- 4. If the result was negative for the presence of an ignitable liquid, a disclaimer may be included to the effect that negative results do not preclude the possibility that

- an ignitable liquid may have been present at the scene. **True** or False
- 5. The date that the samples were delivered to the laboratory may be listed to establish the time interval that the laboratory had custody of the evidence. **True** or False
- 6. If the result was positive for the presence of an ignitable liquid, the analyst should list examples of commercial products and/or substrates that might contain the ignitable liquid identified. **True** or False
- 7. If comparison samples are needed to complete the analysis of the case, the analyst should request those samples. **True** or False