

Training Checklist for the Examination of Fire Debris Evidence

MODULE 1: PREPARATION FOR ANALYSIS OF FIRE DEBRIS SAMPLES

	<u>Date</u> <u>Completed</u>	<u>Initials</u>
Read literature pertaining to this module		

In-depth casework participation with a qualified Forensic Scientist including:

Note taking		
Evidence handling and marking		
Odor detection.		
Extraction procedure selection		

Introduction to instrumentation (GC/FID and GC/MS) and software		
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Extraction practical – 50/50 mix analyzed with all 4 methods		
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Attend an Accelerant Detection Canine training session (if possible)		
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Evaluations:

Written examination		
Practical examination		

MODULE II: ANALYSIS AND INTERPRETATION OF FIRE DEBRIS SAMPLES

	<u>Date</u> <u>Completed</u>	<u>Initials</u>
Read literature pertaining to this module		
Casework assistance with a qualified Forensic Scientist		

Competency in the following:

Operation of the GC/FID		
Operation of the GC/MS		
Calibration of the GC/FID		
Calibration of the GC/MS		
Use of GC/FID and GC/MS hardware and software		
Interpretation of GC/FID and GC/MS data		
Instrumentation maintenance and QA procedures		

Skills Assessments:

Neat gasoline TIC labeling		
Weathered gasoline sample comparisons		
Neat diesel fuel TIC labeling		
Analysis of neat LPD, MPD and HPD samples		
Weathered distillate sample comparisons		
Analysis of headspace samples		
Extractions using materials with inherent petroleum products		
Addition of 10 products for the ignitable liquid library		

Extraction Practicals:

Practical set #1 – 5 simple neat samples, no extraction required		
Practical set #2 – 5 complex neat samples, no extraction required		
Practical set #3 – 5 unburned substrate samples, extraction required		
Practical set #4 – 5 oxygenated samples, GC/MS identification required		
Practical set #5 – 5 burned substrate samples, extraction required		

Evaluations:

Written examination		
Oral examination on instrumentation		
Practical examination		

MODULE III: CASEWORK AND COURTROOM PREPARATION

	<u>Date Completed</u>	<u>Initials</u>
Read literature pertaining to this module		
Casework assistance with a qualified Forensic Scientist		
Preparation of CV or Statement of Qualification		
Preparation of qualifying questions		
Observe pretrial conferences and courtroom testimony (when possible)		

Evaluation:

Written comprehensive examination		
Mock case including completion of a case record and draft report		
Defending mock case in a moot court or roundtable discussion		