

**CMPD Crime Laboratory  
Chemistry Section  
Drug Analyst Training Manual  
Section IV: Controlled Substances and Pills**

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**1      Required Knowledge and Skills**

1. Chemical Spot Test
2. Extraction Techniques

**2      Instrumentation**

1. GC/MSD
2. FTIR

**3      Pills Identification**

- 3.1 Protocol for analyzing pills and controlled substances
- 3.2 Preparation of clear, concise, and scientifically accurate reports of analysis

**4      Training**

- 4.1 Lecture and discussion
- 4.2 Chemical spot testing; Pill indexing  
Under direct supervision, the trainee will test 25 case samples by either direct observation of a Forensic Scientist and/or analysis of previously analyzed proficiency samples.
- 4.3 Trainee will be given a competency test (CT) with variety of samples based on trainees previous experience and training. Upon successful completion and documentation of the CT the trainee will have Moot Court.
- 4.4 Following a successful Moot Court, the trainer will make recommendation of final sign-off to the Supervisor(s), Quality Manager, and Director. Once final sign-off is complete the trainee is able to perform casework and sign final reports.

**5      References**

O'Neal, Carol L., et al., *Validation of twelve chemical spot tests for the detection of drugs of abuse*, Forensic Science International, Vol. 109, 2000, pp. 189-201.

**6      Appraisal**

- 6.1 In case the performance of a trainee does not meet acceptable level of competency, the following course of action may be utilized.
  1. Counseling, feedback and re-evaluation in the deficient area.
  2. Further training and re-evaluation in the deficient area.