

CMPD Crime Laboratory
Blood Alcohol Analysis Training Manual
Stage 3: Laboratory Analysis of Ethyl Alcohol

1 Laboratory Analysis

1.1 Training Goals

The trainee will be proficient in properly testing samples for Ethyl alcohol content.

1.2 Training Objectives

- The trainee will be proficient in the operation, care and routine maintenance of the entire alcohol testing system.
- The trainee will be proficient in diluting samples so that the results fall within the linear range of the method.
- The trainee will understand calibrating the Gas Chromatographic system using the internal standard method.
- The trainee will be familiar with the software used for setup and quantification including; Method editing, Building a sequence table.
- Data reprocessing/analysis, calibrations, report generation, and interpretation of chromatograms.
- The trainee will understand the use and application of Standards, Controls and Internal Standards.
- Trainee will understand Uncertainty of Measurement calculation for each Instrument.

2 Assessment

2.1 To insure that the trainee is proficient in testing alcohol, the following steps may be performed.

2.2 The trainee will test old PT samples. The supervisor or designee will continue to observe trainee. Samples, evidence and test data are initialed by trainee.

The trainee will demonstrate the ability to properly calibrate the instrument using the internal standard method. (see BAC SOP)

3 Readings

3.1 Hamilton Microlab 500 Diluter instruction manual.

3.2 Agilent GC/Headspace Users Manual.

3.3 CMPD Crime Lab BAC SOP.