

Section Two

Urine Toxicology

2.5 Identification of Compounds in Urine

2.5.2 Criteria for Identification of Compounds in Urine

2.5.2.1 BACKGROUND

This method was created to provide clarification of requirements for identification while allowing some flexibility in identification criteria.

2.5.2.2 SCOPE

This method describes acceptable options to meet the requirements for identification of a compound in urine.

2.5.2.3 REQUIREMENTS FOR IDENTIFICATION

2.5.2.3.1 Enzyme Immunoassay (EIA) Screen

2.5.2.3.1.1 A positive indication for the compound of interest is designated when the concentration of the compound exceeds the administrative cutoff. This cutoff is specific for each drug-of-abuse class or compound.

2.5.2.3.1.2 This requirement applies only to compounds possessing sufficient cross-reactivity such that a presumptive presence can be correctly evaluated on the basis of EIA.

2.5.2.3.1.3 The cross-reactivity displayed by individual compounds for a particular assay are provided by the manufacturer. As indicated in Analytical Method 1.0, the decision to proceed with confirmatory testing is at the discretion of the analyst.

2.5.2.3.2 TOXI-LAB[®] Thin Layer Chromatography (TLC) Procedures {Optional}

2.5.2.3.2.1 A positive indication for the compound of interest is indicated if migration and color characteristics meet identification criteria.

2.5.2.3.2.2 Refer to analytical methods in section 2.2 for further information on TLC methods.

2.5.2.3.4 Gas Chromatograph -Mass Selective Detector (GC/MSD) Confirmation

2.5.2.3.4.1 A positive indication for the compound of interest is indicated if the retention time and mass spectral characteristics meet identification criteria.

2.5.2.3.4.2 Refer to individual analytical methods for further information on GC/MSD identification criteria.

2.5.2.4 EXCEPTIONS TO CRITERIA FOR IDENTIFICATION

2.5.2.4.1 Background

The criterion for identification of a compound, that possesses sufficient cross-reactivity to a particular EIA assay, requires a positive EIA screen. Occasionally situations arise that warrant bypassing this protocol. The rationale behind EIA screens is they reduce cost and improve efficiency. Ansys TOXI-LAB TLC procedures, however; are equally as accurate but more labor intensive.

2.5.2.4.2 Acceptable Situations for TLC in Lieu of EIA

2.5.2.4.2.1 **Rush Submittal**

TLC may be used to screen for compounds for which there are appropriate approved methods.

2.5.2.4.2.2 **Instrument Issues**

When the EIA instrument is off-line due to maintenance/repair concerns, TLC may be used for screening purposes.

2.5.2.4.2.3 **TLC Methods**

Examples of TLC methods that could be used in lieu of EIA include opiates (2.2.1-Toxi-A), Carboxy-THC (2.2.4) and methamphetamine (2.2.3-Amine Differentiation),

Revision History

Section Two

Urine Toxicology

2.5 Identification of Compounds in Urine

2.5.2 Criteria for Identification of Compounds in Urine

Revision #	Issue Date	Revision
1	11-27-2001	Reformatted in SOP format
2	05-07-2007	Language updated.

Property of Idaho State Police Forensic Services
Uncontrolled Internet Copy
OBSOLETE DOCUMENT 01/07/2013