

Toxicology Laboratory Report  
Office of the Cuyahoga County Medical Examiner's Office  
11001 Cedar Avenue, Cleveland, Ohio 44106

**DRUGS ANALYZED/QUANTIFIED BY CCRFSL/CCMEO TOXICOLOGY**

- 1) **VOLATILES:** Acetaldehyde, Acetone, Acetonitrile\*, Butane, Chloroform\*, Dichloromethane\*, Ethanol, Ethyl Acetate\*, Formaldehyde, Isopropanol, Methane, Methanol, Paraldehyde\*, Propane, Toluene\*. **ETHANOL, ACETONE, ISOPROPANOL, and METHANOL CONFIRMATION(s) by alternative GC column and/or alternative specimens. METHANOL is differentiated from FORMALDEHYDE by Colorimetry (Qualitative).**
- 2) **Sedatives, Hypnotics, Anti-Epileptic and Other Acidic/Neutral Drugs:**  
Amobarbital, Butalbital, Caffeine, Carbamazepine, Carisoprodol, Glutethimide, Ibuprofen, Levetiracetam, Mephenytoin, Meprobamate, Metaxalone, Naproxen, Pentobarbital, Pentoxifylline, Phenobarbital, Phenytoin, Primidone, Secobarbital, Theophylline, Topiramate  
**ACIDIC NEUTRALS Screened and Confirmed by GC/MS and Quantified by GC-FID**
- 3) **CARBON MONOXIDE\*(Carboxyhemoglobin) by CO-Oximetry:** Carbon Monoxide, Methemoglobin, Hemoglobin; **CARBON MONOXIDE CONFIRMATION by Spectrophotometry and/or Microdiffusion**
- 4) **GLYCOLS\*:** Ethylene Glycol, Propylene Glycol **Screened and Confirmed by GC/MS**
- 5) **CYANIDE\*:** **Screened and Quantified by Colorimetry**
- 6) **EMIT@SCREEN: SYMPATHOMIMETIC AMINES (SMAs)** (target = d-Amphetamine); **BENZODIAZEPINES** (Target= Oxazepam); **COCAINE** (Target= Benzoylcegonine (a cocaine metabolite)); **CANNABINOIDS** (Target= 11-nor- $\Delta$ -9-THC-COOH (a marijuana metabolite)); **OPIATES** (Target= Morphine); **PHENCYCLIDINE** (Target= Phencyclidine); **FENTANYL** (Target= Fentanyl)
- 7) **ELISA (Enzyme-Linked Immunosorbent Assay) SCREEN: SMAs** (Target = d-Amphetamine); **Barbiturates** (Target = Pentobarbital); **Benzodiazepines** (Target = Alprazolam); **Cannabinoids** (Target = 11-nor- $\Delta$ -9-THC-COOH (a marijuana metabolite)); **Carisoprodol** (Target = Carisoprodol); **Cocaine Metabolite** (Target = Benzoylcegonine); **Fentanyl** (Target = Fentanyl); **Methamphetamine** (Target = d-Methamphetamine); **Oxycodone** (Target = Oxycodone); **Phencyclidine** (Target = Phencyclidine); **Tricyclic Antidepressants** (Target = Nortriptyline); **Methadone** (Target = Methadone); **Opiates** (Target = Morphine); **Zolpidem** (Target = Zolpidem); **Buprenorphine** (Target = Buprenorphine)
- 8) **BASIC DRUGS by GC/MS (Quantitation and Confirmation):** Amantadine, Amitriptyline, Amoxapine, Amphetamine, Atropine, Benztropine, Brompheniramine, Bupivacaine, Bupropion, Bupropion Metabolites, Buspirone, Caffeine, Carbinoxamine, Chlorophenylpiperazine, Chlorpheniramine, Chlorpromazine, Citalopram, Clomipramine, Clozapine, Cocaethylene, Cocaine, Codeine, Cocaine and metabolites, Cotinine, Cyclizine, Cyclobenzaprine, Desalkylflurazepam, Desipramine, Desmethyl Chlordiazepoxide, Desmethyl Clomipramine, Desmethyl Clozapine, Desmethylsertraline, Desmethylvenlafaxine, Dextromethorphan, Diazepam, Diethylpropion, Diphenhydramine, Disopyramide, Diltiazem, Doxepin, Doxylamine, Ecgonine methyl ester, Ephedrine/Pseudoephedrine, Fenfluramine, Fentanyl, Fluoxetine, Fluvoxamine, Guaifenesin, Haloperidol, Hydrocodone, Hydroxyzine, Imipramine, Ketamine, Laudanosine, Lidocaine, Lidocaine mb (MEGX), Loxapine, Maprotiline, Meclizine, Meperidine, Mephentermine, Mesoridazine, Methadone, Methadone primary mb (EMDP), Methadone secondary mb (EMDP), Methamphetamine, Methylene-dioxyamphetamine (MDA), Methylene-dioxyamphetamine (MDMA), Methylene-dioxypropylvalerone (MDPV), Methylphenidate, Metoprolol, Mexiletine, Midazolam, Mirtazapine, Nefazodone, Nicotine, Nordiazepam, Nordoxepin, Norfluoxetine, Normeperidine, Norpropoxyphene, Nortriptyline, Norverapamil, Olanzapine, Orphenadrine, Oxycodone, Papaverine, Paroxetine, Pentazocine, Pentoxifylline, Perphenazine, Phencyclidine, beta-Phenethylamine, Pheniramine, Phendimetrazine, Phenmetrazine, Phentermine, Phenylpropanolamine, Phenytoxamine, Procaine, Promethazine, Propoxyphene, Propranolol, Protriptyline, Pseudoephedrine, Pyrilamine, Quetiapine, Quinidine, Quinine, Sertraline, Thioridazine, Tramadol, Tranylcypramine, Trazodone, Trihexylphenidyl, Trimipramine, Venlafaxine, Verapamil, Zolpidem
- 9) **ACETAMINOPHEN SCREEN:** Acetaminophen **by Colorimetry (Qualitative)**
- 10) **SALICYLATE SCREEN:** Salicylate (Aspirin) **by Colorimetry (Qualitative), SALICYLATE CONFIRMATION by Gas Chromatography**
- 11) **XANTHINES by GC/MS:** Acetaminophen, Caffeine
- 12) **CLINICAL CHEMISTRIES (CHEM7):** Ketones, pH, Specific Gravity, and Electrolytes (Sodium, Potassium, Chloride, TCO<sub>2</sub>, Glucose, Urea, Creatinine)
- 13) **COCAINE CONFIRMATION by GC/MS:** Anhydroecgonine methyl ester, Benzoylcegonine, Cocaine, Cocaethylene, Ecgonine ethyl ester\*, Ecgonine methyl ester
- 14) **CANNABINOIDS by GC/MS:** TOTAL 11-nor- D<sup>9</sup>-THC-COOH (a marijuana metabolite); **CANNABINOIDS by LC/MS/MS:** Cannabinoids (ng/mL; mcg/L): D<sup>9</sup>-THC, 11-OH-D<sup>9</sup>-THC (a marijuana metabolite), 11-nor- D<sup>9</sup>-THC-COOH (a marijuana metabolite)
- 15) **OPIATES by GC/MS (ng/mL):** Morphine, 6-Acetylmorphine (heroin metabolite), Codeine, Hydrocodone, Dihydrocodeine, Hydromorphone, Norcodeine\*, Oxycodone; Oxymorphone. **TOTAL OPIATES by GC/MS-Hydrolysis followed by OPIATES by GC/MS**
- 16) **BENZODIAZEPINE CONFIRMATION by GC/MS:** Alprazolam/ metabolite, Diazepam/ metabolites, Clonazepam, Lorazepam, Midazolam/metabolite
- 17) **SYMPATHOMIMETIC AMINES CONFIRMATION by LC/MS/MS analysis (ng/mL):** Amphetamine, beta-Phenethylamine, MDEA, Methamphetamine, Methylene-dioxyamphetamine (MDA), Methylene-dioxyamphetamine (MDMA), Phentermine, Ephedrine/Pseudoephedrine
- 18) **GHB by GC/MS (mg/L):** Gamma-hydroxybutyric acid (gamma hydroxybutyrate)
- 19) **FENTANYL by GC/MS (ng/mL):** Fentanyl, Sufentanil, Alfentanil, Carfentanil, Acetylfentanyl and **FENTANYL and ANALOGS by LC/MS/MS (ng/mL):** Fentanyl, Norfentanyl, Acetylfentanyl, Furanylfentanyl, 3-Methylfentanyl, Carfentanil, and Acrylfentanyl
- 20) **SENT OUT TO REFERENCE LABS:** Synthetic Cannabinoids and Synthetic Cathinones, Epinephrine, 7-amino Flunitrazepam, Flunitrazepam, IgE, Insulin, LSD, Nefedipine, C-Peptide, Psilocin, Risperidone, Trypsin, Warfarin, Valproic Acid, **HEAVY METAL SCREEN:** (Antimony, Arsenic, Lead, Barium, Cadmium, Bismuth, Mercury, Selenium) or any other drugs not listed above

\*BY REQUEST ONLY; **ABBREVIATIONS:** POS=Positive; NEG=Negative; UNS=Specimen unsuitable for testing; NTDN=Not Done; QNS=Quantity insufficient for analysis; CHEM7=Clinical Chemistry; <=less than; >=greater than; LRL= Lower reporting limit; C.L. = Confidence Level

**UNITS FOR VOLATILES:** 100 mg/dL  $\equiv$  0.100 g/dL  $\equiv$  0.100 g/%. **UNITS:** 1 mg/L = 1000  $\mu$ g/L = 1000 ng/mL

Notification of Customers of Toxicology Capabilities

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