



CUYAHOGA COUNTY MEDICAL EXAMINER'S OFFICE

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DRUGS ANALYZED/QUANTIFIED BY CCRFSL/CCMEO TOXICOLOGY LABORATORY

- 1) **VOLATILES:** Acetaldehyde, Acetone, Acetonitrile*, Butane, Chloroform*, Dichloromethane*, Ethanol, Ethyl Acetate*, Formaldehyde, Isopropanol, Methane, Methanol, Paraldehyde*, Propane, Toluene*.
ETHANOL, ACETONE, ISOPROPANOL, and METHANOL confirmation 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; **ACID NEUTRAL** Confirmation by GC/MS.
- 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 quantified by GC and confirmed by GC/MS.
- 5) **Cyanide*:** Screened and quantified by colorimetry.
- 6) **EMIT®: SYMPATHOMIMETIC AMINES** (target = d-Amphetamine); **BENZODIAZEPINES** (Target= Oxazepam); **COCAINE** (Target= Benzoylcegonine (a cocaine metabolite)); **CANNABINOIDS** (Target= 11-nor- Δ -9-THC-COOH (a marijuana metabolite)); **OPIATES** (Target= Morphine); **PHENCYCLIDINE** (Target= Phencyclidine).
- 7) **ELISA (Enzyme-Linked Immunosorbent Assay)** Screen: **SMAs** (Target = d-Amphetamine); **Barbiturates** (Target = Pentobarbital); **Benzodiazepines** (Target = Alprazolam); **Cannabinoids** (Target = 11-nor- Δ -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).
- 8) **BASIC DRUGS by GC/MS (Quantitation and Confirmation)** Amantadine, Amitriptyline, Amoxapine, Amphetamine, Atropine, Benzotropine, 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 (EDDP), Methadone secondary mb (EMDP), Methamphetamine, Methylene-dioxyamphetamine (MDA), Methylendioxyamphetamine (MDMA), Methylendioxypropylvalerone (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, Phenylpropranolamine, Phenytoin, Procaine, Promethazine, Propoxyphene, Propranolol, Protriptyline, Pseudoephedrine, Pyrilamine, Quetiapine, Quinidine, Quinine, Sertraline, Thioridazine, Tramadol, Tranylcypromine, 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, Theophylline.
- 12) **Clinical Chemistries:** Ketones, pH, Specific Gravity, and Electrolytes (Sodium, Potassium, Chloride, TCO₂, Glucose, Urea, Creatinine).
- 13) **CANNABINOIDS GC/MS:** Cannabinoids (ng/mL; mcg/L): D⁹-THC, 11-OH-D⁹-THC (a marijuana metabolite), 11-nor- D⁹-THC-COOH (a marijuana metabolite), TOTAL 11-nor- D⁹-THC-COOH (a marijuana metabolite).
- 14) **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.
- 15) **BENZODIAZEPINE Confirmation by GC/MS:** Alprazolam/ metabolite, Diazepam/ metabolites, Clonazepam, Lorazepam, Midazolam/metabolite, Triazolam.
- 16) **SYMPATHOMIMETIC AMINES CONFIRMATION** by GC/MS analysis (ng/mL). Amantadine, Amphetamine, beta-Phenethylamine, MDEA, Methamphetamine, Methylendioxyamphetamine (MDA), Methylendioxyamphetamine (MDMA), Methylendioxypropylvalerone (MDPV), Methylphenidate, Metoprolol, Mexiletine, Phentermine, Phenylpropranolamine, Pseudoephedrine.
- 17) **GHB by GC/MS** (mg/L): Gamma-hydroxybutyric acid (gamma hydroxybutyrate).
- 18) **Fentanyl by GC/MS** (ng/mL): Fentanyl, sufentanil, alfentanil.
- 19) **SENT OUT TO REFERENCE LABS:** Synthetic cannabinoids and Synthetic Cathinones, Epinephrine, 7-amino Flunitrazepam, Flunitrazepam, IgE, Insulin, LSD, Nefedipine, C-Peptide, Psilocin, Risperidone, Tryptase, 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; QNS=Quantity insufficient for analysis; NTDN=Not Done; CHEM7=Clinical chemistry; <=less than; >=greater than; LRL= lower reporting limit. **UNITS FOR VOLATILES:** 100 mg/dL \equiv 0.100 g/dL \equiv 0.100 g%. **UNITS:** 1 mg/L = 1000 μ g/L = 1000 ng/mL.