

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

DRUGS ANALYZED/QUANTIFIED BY CCRFSL/CCMEO TOXICOLOGY

VOLATILES SCREENING AND CONFIRMATION by GC/FID: Ethanol, Methanol, Acetone, Isopropanol. **VOLATILES by GC/MS:** includes (but not limited to) Acetaldehyde, Acetone, Chloroform, Dichloromethane, Ethanol, Ethyl Acetate, Isopropanol, Methanol, Toluene

ACIDIC/NEUTRAL DRUGS by GC/MS and GC/FID: Butalbital, Caffeine, Carbamazepine, Carisoprodol, Ibuprofen, Levetiracetam, Meprobamate, Metaxalone, Pentobarbital, Phenobarbital, Phenytoin

CARBON MONOXIDE by CO-Oximetry: Carbon Monoxide (Carboxyhemoglobin)

GLYCOLS CONFIRMATION by GC/MS: Ethylene Glycol, Propylene Glycol

GABAPENTIN/PREGABALIN CONFIRMATION by LC-MS/MS: Gabapentin, Pregabalin

EMIT® SCREEN: Amines (Target = d-Amphetamine); **Benzodiazepines** (Target = Oxazepam); **Cocaine** (Target = Benzoylcegonine (cocaine metabolite)); **Cannabinoids** (Target = 11-nor- Δ^9 -THC-COOH (marijuana metabolite)); **Opiates** (Target = Morphine); **Phencyclidine** (Target = Phencyclidine); **Fentanyl** (Target = Fentanyl)

ELISA (Enzyme-Linked Immunosorbent Assay) SCREEN: **Amphetamine** (Target = d-Amphetamine); **Barbiturates** (Target = Pentobarbital); **Benzodiazepines** (Target = Alprazolam); **Cannabinoids** (Target = 11-nor- Δ^9 -THC-COOH (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)

BASIC DRUGS by GC/MS (screening and confirmation): includes common antidepressants, opioids/narcotic analgesics, CNS stimulants, antipsychotics, antiarrhythmics, dissociative anesthetics, antihistamines, hypnotics/sedatives/anxiolytics, muscle relaxants, cathinones, and other agents

ACETAMINOPHEN and SALICYLATES SCREEN by Colorimetry (Qualitative): Acetaminophen, Salicylates

PHENCYCLIDINE (PCP) CONFIRMATION by GC/MS: Phencyclidine

CLINICAL CHEMISTRIES: Sodium, Potassium, Chloride, Glucose, Urea (as VUN), Creatinine, Magnesium, Calcium, Lactate

COCAINE AND METABOLITES CONFIRMATION by GC/MS: Benzoylcegonine, Cocaine, Cocaethylene

CANNABINOIDS CONFIRMATION by LC-MS/MS: Δ^9 -THC, 11-OH- Δ^9 -THC (marijuana metabolite), 11-nor- Δ^9 -THC-COOH (marijuana metabolite).
CANNABINOIDS CONFIRMATION by GC/MS: TOTAL 11-nor- Δ^9 -THC-COOH (marijuana metabolite)

OPIOIDS CONFIRMATION by GC/MS: Morphine, 6-Acetylmorphine (heroin metabolite), Codeine, Hydrocodone, Dihydrocodeine, Hydromorphone, Oxycodone; Oxycodone; Oxycodone

BENZODIAZEPINES CONFIRMATION by LC-MS/MS: (\pm)-Zopiclone, 2-Hydroxyethylflurazepam, 3-Hydroxyflunitrazepam, 4-Hydroxyalprazolam, 7-Aminoclonazepam, 7-Aminoflunitrazepam, Alprazolam, Bromazepam, Clobazam, Clonazepam, Clonazepam, Delorazepam, Deschloroetizolam, Diazepam, Diclazepam, Estazolam, Etizolam, Flualprazolam, Flubromazepam, Flubromazepam, Flunitrazepam, Flunitrazepam, Lorazepam, Lormetazepam, Meclonazepam, Methylclonazepam, Midazolam, N-Desalkylflurazepam, N-Desmethylclobazam, N-Desmethylflunitrazepam, Nitrazepam, Nitrazepam, Nordiazepam, Oxazepam, Phenazepam, Temazepam, Triazolam, Zaleplon, Zolpidem, α -Hydroxyalprazolam, α -Hydroxymidazolam and α -Hydroxytriazolam

AMINES CONFIRMATION by LC-MS/MS analysis: (\pm)-Amphetamine, beta-Phenethylamine, 3,4-Methylenedioxy-N-ethylamphetamine (MDEA), (\pm)-Methamphetamine, Methylenedioxyamphetamine (MDA), Methylenedioxymethamphetamine (MDMA), Phentermine, Ephedrine/Pseudoephedrine

FENTANYL and ANALOGUES CONFIRMATION by LC-MS/MS: N-Methyl norfentanyl, Norfentanyl, Norcarfentanil, Methoxyacetyl fentanyl, Acetyl fentanyl, Beta-hydroxy fentanyl, Benzyl fentanyl, 4-ANPP, p-Methoxyacetyl fentanyl, Acryl fentanyl, Alfentanil, Fentanyl, *para*-Fluoro acryl fentanyl, *para*-Fluoro fentanyl, Cyclopropyl fentanyl, 2-Furanyl fentanyl, Fentanyl carbamate, (\pm)-*trans*-3-Methylfentanyl, Crotonyl fentanyl, Carfentanil, (\pm)-*cis*-3-Methylfentanyl, Butyryl fentanyl, *para*-Fluoroisobutyryl fentanyl (FIBF), Sufentanil, Phenyl fentanyl, Cyclopentenyl fentanyl, *para*-Fluorofuranyl fentanyl, Valeryl fentanyl, Isobutyryl fentanyl, Isovaleryl fentanyl

SENT TO REFERENCE LABS: Synthetic Cannabinoids, Cathinones, Cyanide, GHB, LSD, Psilocin, Valproic Acid, heavy metals (Antimony, Arsenic, Lead, Barium, Cadmium, Bismuth, Mercury, Selenium), or any other compounds not listed above

ABBREVIATIONS: UNS = Specimen unsuitable for testing; QNS = Quantity insufficient for analysis; < = less than; > = greater than; LRL = Lower reporting limit; C.L. = Confidence Level
UNITS FOR VOLATILES: 100 mg/dL = 0.100 g/dL = 0.100 g%. **UNITS:** 1 mg/L = 1000 μ g/L = 1000 ng/mL