

**Montana Forensic Science Division - Toxicology Section
Screening Methods Only**

Basic Drug Screen Drugs: Full Scan GC/MS/NPD	
Drug:	Description / Comments:
Alprazolam	Benzodiazapine; anxiolytic
Amitriptyline	Tricyclic antidepressant
Amphetamine	CNS Stimulant; anorectic; drug of abuse
Atropine	Anticholinergic; alkaloid in 'Deadly Nightshade'; parasympatholytic
Bupivacaine	Long acting local anesthetic
Bupropion	Antidepressant; unstable
Bupropion metabolite	Bupropion metabolite (approx. 3 similar metabolites)
Caffeine	Mild CNS Stimulant
Chlordiazepoxide	Tranquilizer; metabolizes to nordiazepam
Chlorpheniramine	Antihistamine
Chlorpromazine	Antipsychotic
Citalopram	SSRI - Antidepressant
Clonazepam	Benzodiazepine; Anticonvulsant, anxiolytic
Clozapine	Antipsychotic
Cocaethylene	Active drug formed in the body after / during alcohol and cocaine use
Cocaine	CNS Stimulant; drug of abuse; local anesthetic
Codeine	Narcotic analgesic
Cotinine	Nicotine metabolite
Cyclobenzaprine	Muscle relaxant (Flexiril)
Desipramine	Active antidepressant and metabolite of Imipramine
Dextromethorphan	Antitussive; Analog of codeine
Diazepam	Benzodiazapine; anxiolytic; muscle relaxant; anticonvulsant
Diltiazem	Double peaks - Calcium channel blocker for angina treatment, HTN
Diphenhydramine	Antihistamine
Doxepin	Tricyclic antidepressant
Doxylamine	Antihistamine
Ecgonine methyl ester	Cocaine metabolite
EDDP	Methadone metabolite
Ephedrine	Mild CNS Stimulant; nasal decongestant; bronchodilator
Fentanyl	Narcotic analgesic
Fluoxetine	SSRI - Antidepressant
Flurazepam	Benzodiazepine; hypnotic
Hydrocodone	Narcotic analgesic
Hydroxyzine	Antihistamine
Imipramine	Tricyclic antidepressant
Ketamine	Dissociative anesthetic; anesthetic induction; drug of abuse
Lamotrigine	Anticonvulsant / antipsychotic
Levorphanol	Dextromethorphan metabolite; Opiate substitute
Lidocaine	Local anesthetic
MDA	Designer amphetamine; psychotropic amphetamine
MDEA	Designer amphetamine; psychotropic amphetamine
MDMA	Designer amphetamine; psychotropic amphetamine
Meperidine	Narcotic analgesic
Metaxalone	Muscle relaxant

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Drug:	Description / Comments:
Methadone	Analgesic; morphine substitute
Methamphetamine	CNS Stimulant; anorectic; drug of abuse; nasal decongestant
Methaqualone	Sedative; hypnotic
Methcathinone	CNS Stimulant; related to cathinone (Khat)
Methylphenidate	Treats depression and narcolepsy; drug of abuse
Metoclopramide	Treats gastroesophageal reflux; treats nausea (chemotherapy)
Metoprolol	Antihypertensive
Midazolam	Benzodiazepine; pre-operative sedative/ hypnotic; induction
Mirtazapine	Tetracyclic antidepressant
Nicotine	Recreational drug; mild CNS stimulant; (tobacco)
Nor-clozapine	Clozapine metabolite
Nor-diazepam	Diazepam metabolite
Nor-doaxepin	Doxepin metabolite
Nor-fluoxetine	Fluoxetine metabolite
Nor-meperidine	Meperidine metabolite
Nor-promethazine	Promethazine metabolite
Nor-propoxyphene	PPX metabolite; (3 breakdown peaks)
Nor-sertraline	Sertraline metabolite
Nortriptyline	Active antidepressant and metabolite of Amitriptyline
Nor-venlafaxine	Antidepressant
Nor-verapamil	Verapamil metabolite
Olanzapine	Antipsychotic (Xyprexa)
Oxcarbazepine	Anticonvulsant (Epilepsy)
Oxycodone	Narcotic analgesic
Paroxetine	SSRI - Antidepressant
Phencyclidine (PCP)	Dissociative anesthetic; veterinary tranquilizer; drug of abuse
Pheniramine	Antihistamine
Phentermine	Anorectic agent; mild CNS stimulant
Phenylpropanolamine	Anorectic agent; mild CNS stimulant
PMA	Designer amphetamine; MDMA adulterant
Procaine	Local anesthetic; cocaine adulterant
Promethazine	Antihistamine; antiemetic; sedative
Propofol	Short-acting IV hypnotic; induction; also veterinary sedative
Propoxyphene	Mild narcotic analgesic
Pseudoephedrine	Nasal decongestant; bronchodilator
Quetiapine	Antipsychotic; neuroleptic
Quinidine	Antiarrhythmic agent
Quinine	Anti-malarial agent; adulterant in heroin
Scopolamine	Antimuscarinic; CNS depressant; treats motion sickness
Sertraline	SSRI - Antidepressant
Strychnine	CNS Stimulant/ convulsant
Temazepam	Benzodiazepine; hypnotic
Tramadol	Narcotic analgesic
Tramadol (N-desmethyl)	Tramadol metabolite
Tramadol (O-desmethyl)	Tramadol metabolite

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Drug:	Description / Comments:	
Trazadone	Antidepressant	
Triazolam	Benzodiazepine; hypnotic	
Trimipramine	Tricyclic antidepressant	
Venlafaxine	Antidepressant	
Verapamil	Anti-angina; anti-HTN	
Zolpidem	Hypnotic; sleep aid	
Notes: This is not an exhaustive list, there could be drugs found in this assay that are not listed.		
Notes: Detection of all drugs are extraction specific and can vary from experiment to experiment.		
Acid/Neutral Drug Screen: Full Scan GC/MS/FID		
Drug:	Description / Comments:	
Acetaminophen	Pain Relief	
Butalbital	Barbiturate; CNS Depressant	
Carbamazepine	Anti-seizure	
Carisoprodol	Muscle Relaxant	
Haloperidol	Antipsychotic	
Ibuprofen	Pain Relief	
Levetiracetam	Anti-seizure	
Meprobamate	Muscle Relaxant	
Pentobarbital	Barbiturate; CNS Depressant	
Phenobarbital	Barbiturate; CNS Depressant	
Phenytoin	Anti-seizure	
Secobarbital	Barbiturate; CNS Depressant	
Valproic Acid	Anti-seizure	
Notes: This is not an exhaustive list, there could be drugs found in this assay that are not listed.		
Notes: Detection of all drugs are extraction specific and can vary from experiment to experiment.		
URINE ELISA		
Assay	Analyte	Cutoff (ng/mL)
Cocaine	Benzoyllecgonine	150
Benzodiazepines	Oxazepam	100
Barbiturates	Secobarbital	200
Opiates	Morphine	200
THC	Carboxy-THC	20
Methamphetamine	Methamphetamine	200
Amphetamine	Amphetamine	200
Oxycodone	Oxycodone	200

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BLOOD ELISA		
Assay	Analyte	Cutoff (ng/mL)
Cocaine	Benzoyllecgonine	50
Benzodiazepines	Oxazepam	50
Barbiturates	Secobarbital	100
Opiates	Morphine	20
THC	Carboxy-THC	10
Methamphetamine	Methamphetamine	20
Amphetamine	Amphetamine	20
Oxycodone	Oxycodone	25
Fentanyl	Fentanyl	2
Buprenorphine	Buprenorphine	2
Benzodiazepine Screen by LC/MS/MS		LOD
7-aminoclonazepam		10 ng/mL
7-aminoflunitrazepam		10 ng/mL
alpha hydroxyalprazolam		10 ng/mL
alprazolam		10 ng/mL
chlordiazepoxide		10 ng/mL
Clonazepam		10 ng/mL
diazepam		10 ng/mL
flunitrazepam		10 ng/mL
lorazepam		10 ng/mL
midazolam		10 ng/mL
nordiazepam		10 ng/mL
oxazepam		10 ng/mL
temazepam		10 ng/mL
zolpidem		10 ng/mL
etizolam		10 ng/mL
Opiate Screen by LC/MS/MS		LOD
morphine		10 ng/mL
oxymorphone		10 ng/mL
hydromorphone		10 ng/mL
codeine		10 ng/mL
oxycodone		10 ng/mL
noroxycodone		10 ng/mL
hydrocodone		10 ng/mL
6-acetylmorphine		Blood: 2 ng/mL Urine: 10ng/mL
fentanyl		2 ng/mL
norfentanyl		2 ng/mL
herion		10 ng/mL
buprenorphine		2 ng/mL
norbuprenorphine		2 ng/mL

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Amines Screen by LC/MS/MS		LOD
amphetamine		Blood: 10 ng/mL Urine: 20ng/mL
methamphetamine		Blood: 10 ng/mL Urine: 20ng/mL
ephedrine		Blood: 10 ng/mL Urine: 20ng/mL
psuedoephedrine		Blood: 10 ng/mL Urine: 20ng/mL
mda		Blood: 10 ng/mL Urine: 20ng/mL
mdma		Blood: 10 ng/mL Urine: 20ng/mL
phentermine		Blood: 10 ng/mL Urine: 20ng/mL