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Current Cutoff Levels for Toxicology Tests

Immunoassay Initial Test (FORENSIC CUTOFFS)		
Drug Class	**Immunoassay Initial Screen Cutoff**	**Analyte the Immunoassay is Most Reactive To**
Cannabinoids	50 ng/mL	11-nor-Delta-9-THC-9-COOH
Cocaine	150 ng/mL	BZE
Amphetamine/ Methamphetamine	500 ng/mL	+(d) Methamphetamine.
Ecstasy	500 ng/mL	MDMA
Opiates (2000 Cutoff)	2000 ng/mL	Morphine
Opiates (300 Cutoff)	300 ng/mL	Morphine
Phencyclidine	25 ng/mL	Phencyclidine
Barbiturates	200 ng/mL	Secobarbital
Benzodiazepines	200 ng/mL	Lormetazepam
Buprenorphine	5 ng/mL	Buprenorphine
Methadone	300 ng/mL	Methadone
Ethanol	0.010 g/100 mL	Ethanol
Oxycodone	100 ng/mL	Oxycodone
Oxidants	200 ug/mL	Nitrite
Cotinine	250 ng/mL	Cotinine

Critical Value Testing*			
Test	**Cutoff**	**Analyte(s) Tested For**	**Critical/Action Level**
Ethylene Glycol	10 mg/dL	Ethylene Glycol	20 mg/dL
Volatiles	0.010 g/100 mL	Ethanol, Methanol, Acetone, Isopropanol	Methanol: 0.020 g/100 mL Isopropanol: 0.400 g/100 mL

Forensic Workplace Confirmation Testing Cutoffs (GC-MS, GC, LCMSMS, or LCMS QToF Methods)		
Drug Class	**Cutoff**	**Analyte(s) Confirmed**
Cannabinoids	15 ng/mL	Delta-9-THC-COOH
Cocaine	100 ng/mL	BZE (Benzoylecgonine)
Amphetamines	250 ng/mL	Amphetamine, Methamphetamine, MDA, MDMA (Ecstasy)
Opiates (2000 Cutoff)	2000 ng/mL	Codeine and Morphine
Opiates (300 Cutoff)	300 ng/mL	Codeine, Morphine, Hydrocodone, and Hydromorphone
Phencyclidine	25 ng/mL	Phencyclidine
Barbiturates	300 ng/mL	Butalbital, Amobarbital, Pentobarbital, Secobarbital, and Phenobarbital
Benzodiazepines	See analyte list	***300 ng/mL Cutoff***: Lorazepam, Desalkylflurazepam, Nordiazepam, 7-Aminoflunitrazepam, Oxazepam, Temazepam, 7-Aminoclonazepam, Diazepam ***100 ng/mL Cutoff:*** Alphahydroxytriazolam, Alphahydroxyalprazolam, Alphahydroxymidazolam
Buprenorphine	10 ng/mL	Buprenorphine, Norbuprenorphine
Methadone	300 ng/mL	EDDP (Methadone metabolite) and Methadone
Propoxyphene	300 ng/mL	Norpropoxyphene (Propoxyphene metabolite)
Ethanol	0.010 g/100 mL	Ethanol
Oxycodone	100 ng/mL	Oxycodone and Oxymorphone
Oxidants	200 ug/mL	None – just confirms that the sample had oxidizing adulterants added that may have affected the test outcome
Fentanyl	20 ng/mL	Fentanyl
Ketamine	100 ng/mL	Ketamine
6-MAM	10 ng/mL	6-Monoacetylmorphone (Heroin Metabolite)
Meperidine	100 ng/mL	Meperidine
Tramadol	100 ng/mL	Tramadol
Cotinine	200 ng/mL	Cotinine and Nicotine

Clinical/Medical/Pain Clinic Confirmation Cutoff Levels (GC-MS, GC, LCMSMS, or LCMS QToF Methods)*		
Drug Class	**Cutoff**	**Analyte(s) Confirmed**
Cannabinoids	3 ng/mL	Delta-9-THC-COOH
Cocaine	20 ng/mL	BZE
Amines	100 ng/mL	Amphetamine, Methamphetamine, Ephedrine, Pseudoephedrine, Phenylpropanolamine, MDA, and MDMA (Ecstasy)
Opiates (300)	50 ng/mL	Codeine, Morphine, Hydrocodone, and Hydromorphone
Phencyclidine	4 ng/mL	Phencyclidine
Barbiturates	Listed in () next to analyte. Unit = ng/mL	Butalbital(30), Amobarbital(30), Pentobarbital(60), Secobarbital(60), and Phenobarbital(60)
Benzodiazepines	25 ng/mL	Desalkylflurazepam, Nordiazepam, 7-Aminoflunitrazepam, Oxazepam, Temazepam, Diazepam, 7-Aminoclonazepam, Lorazepam, Alphahydroxytriazolam, Alphahydroxyalprazolam, Alphahydroxymidazolam
Methadone	Listed in () next to analyte. Unit = ng/mL	EDDP (30), Methadone (60)
Ethanol	0.010 g/100 mL	Ethanol
Oxycodone	30 ng/mL	Oxycodone and Oxymorphone
Oxidants	200 ug/mL	None – just confirms that the sample had oxidizing adulterants added that may have affected the test outcome
Ketamine	30 ng/mL	Ketamine
Fentanyl	4 ng/mL	Fentanyl
6-MAM	2 ng/mL	6-Monoacetylmorphone (Heroin Metabolite)
Meperidine	10 ng/mL	Meperidine
Tramadol	10 ng/mL	Tramadol
Nicotine/Cotinine – Serum and Urine	2 ng/mL	Cotinine, Nicotine
Buprenorphine	Listed in () next to analyte. Unit = ng/mL	Buprenorphine(2), Norbuprenorphine(5)
Methylphenidate	Listed in () next to analyte. Unit = ng/mL	Methylphenidate(10), Ritalinic Acid(25)

*NOTE: These tests use the laboratory's current experimentally determined Limit of Quantitation (LOQ) as the cutoff. These LOQ values change occasionally. Call the lab if there are questions.