

**Wisconsin State Crime Laboratory - Madison
GCMS Drug MU Summary**

DRUG	%EU	CONFIDENCE	LINEAR RANGE	LRL
AMPHETAMINES				
			(ug/L)	(ug/L)
Amphetamine	12	95.45%	40-1000	8.0
Phentermine^				8.0
Methamphetamine	9.8	95.45%	40-1000	8.0
Ephedrine	11	95.45%	40-1000	8.0
Pseudoephedrine	8.2	95.45%	40-1000	8.0
PPA	6.6	95.45%	80-1000	16
MDA	9.7	95.45%	40-1000	8.0
MDMA	9.2	95.45%	40-1000	8.0
COCAINE & METABOLITES				
			(ug/L)	(ug/L)
Cocaine	12	95.45%	40-2000	8.0
Cocaethylene	20	95.45%	10-200	2.0
Ecgonine Methyl Ester	13	95.45%	25-500	5.0
Benzoylcegonine	9.1	95.45%	40-2000	8.0
FENTANYL				
			(ug/L)	(ug/L)
Fentanyl	13	95.45%	4.0-125	0.80
Norfentanyl	13	95.45%	4.0-125	0.80
OPIATES				
			(ug/L)	(ug/L)
Codeine	13	95.45%	10-500	2.0
Morphine	8.1	95.45%	10-500	2.0
6-Monoacetylmorphine	12	95.45%	10-200	2.0
Hydrocodone	11	95.45%	10-200	2.0
Hydromorphone	17	95.45%	10-500	2.0
Oxycodone	19	95.45%	10-500	2.0
Oxymorphone	19	95.45%	10-500	2.0
CANNABINOIDS				
			(ug/L)	(ug/L)
Delta-9-THC	28	95.45%	1.0-25	1.0*
11-hydroxy-THC^				0.2
Carboxy THC	41	95.45%	5.0-100	1.0

DRUG	%EU	CONFIDENCE	LINEAR RANGE	LRL
MISC DRUGS				
Amitriptyline	12	95.45%	50-1000 ug/L	10 ug/L
Nortriptyline	8.5	95.45%	50-1000 ug/L	10 ug/L
Carisoprodol	9.5	95.45%	1.0-20 mg/L	0.20 mg/L
Meprobamate	9.9	95.45%	1.0-20 mg/L	0.20 mg/L
Chlorpheniramine	8.2	95.45%	25-1000 ug/L	5.0 ug/L
Citalopram/Escitalopram	8.7	95.45%	25-1000 ug/L	5.0 ug/L
Cyclobenzaprine	14	95.45%	25-500 ug/L	5.0 ug/L
Dextromethorphan/Levomethorphan	9.5	95.45%	25-1000 ug/L	5.0 ug/L
Diphenhydramine	14	95.45%	25-1000 ug/L	5.0 ug/L
Fluoxetine	8.4	95.45%	25-1000 ug/L	5.0 ug/L
Norfluoxetine	9.2	95.45%	25-1000 ug/L	5.0 ug/L
Gabapentin	17	95.45%	1.0-20 mg/L	0.20 mg/L
GHB	26	95.45%	5.0-50 mg/L	5.0 mg/L (blood)* 10 mg/L (urine)*
Imipramine	2.2	95.45%	50-1000 ug/L	10 ug/L
Desipramine	8.4	95.45%	50-1000 ug/L	10 ug/L
Ketamine	6.8	95.45%	25-1000 ug/L	5.0 ug/L
Norketamine	8.1	95.45%	25-1000 ug/L	5.0 ug/L
Lamotrigine	22	95.45%	1.0-20 mg/L	0.20 mg/L
Methadone	12	95.45%	25-1000 ug/L	5.0 ug/L
EDDP	6.4	95.45%	25-1000 ug/L	5.0 ug/L
Salicylic Acid	7.8	95.45%	1.0-20 mg/L	0.20 mg/L
Acetaminophen	16	95.45%	1.0-20 mg/L	0.20 mg/L
Phenacetin	15	95.45%	1.0-20 mg/L	0.20 mg/L
Ibuprofen	18	95.45%	1.0-20 mg/L	0.20 mg/L
Naproxen	18	95.45%	1.0-20 mg/L	0.20 mg/L
PCP	12	95.45%	10-100 ug/L	2.0 ug/L
Sertraline	11	95.45%	25-1000 ug/L	5.0 ug/L
Topiramate	4.8	95.45%	1.0-20 mg/L	0.20 mg/L
Tramadol	7.9	95.45%	50-1000 ug/L	10 ug/L
O-desmethyltramadol	8.3	95.45%	50-1000 ug/L	10 ug/L
Trazodone	13	95.45%	1.0-20 mg/L	0.20 mg/L

The traceability for the measurement process includes certified reference material from approved vendors (i.e., Cerilliant and Cayman), calibrated volumetric flask (i.e., class A calibrated), and annual pipette calibration performed by an approved ISO service provider.

*Administratively set LRL

^Qualitative only

TX ML Madison Toxicology Drug MU Summary			
Doc ID: 6711	Revision: 17	Status:	Published
	Effective:	1/21/2025 4:57:28 PM	
Approved following the Wisconsin State Crime Lab Quality System procedures.			

**Wisconsin State Crime Laboratory - Madison
LCMSMS Drug MU Summary**

DRUG	%EU	CONFIDENCE	LINEAR RANGE	LRL/Estimated LOD (blood)	Estimated LOD (urine)	Estimated LOD (plasma)	Estimated LOD (serum)
			(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
BENZODIAZEPINES							
7-Amino-clonazepam	15	95.45%	5.0-240	5.0	4.0		
Alprazolam	13	95.45%	5.0-240	5.0	5.0		
Clonazepam	16	95.45%	5.0-240	4.0	2.5		
Diazepam	14	95.45%	10-1000	8.0	10		
Etizolam	17	95.45%	5.0-240	5.0	5.0		
Lorazepam	21	95.45%	5.0-240	5.0	5.0		
Nordiazepam	13	95.45%	10-1000	10	10		
Oxazepam	13	95.45%	10-1000	5.0	10		
Temazepam	14	95.45%	10-1000	8.0	5.0		
Zolpidem	13	95.45%	5.0-240	2.0*/1.3	0.50		
Alpha-hydroxy-alprazolam	15	95.45%	5.0-240	4.0	4.0		
CANNABINOIDS							
Delta-9-THC	14	95.45%	1.0-100	1.0*	1.0*	1.0*	1.0*
Delta-8/9-11-hydroxy-THC	15	95.45%	1.0-100	1.0	1.0*	1.0*	1.0*
Delta-9-carboxy-THC	13	95.45%	5.0-250	2.5	5.0*	5.0*	5.0*
Delta-8-THC	17	95.45%	1.0-100	0.50	1.0*	1.0*	1.0*
Delta-8-carboxy-THC	12	95.45%	5.0-250	2.5	5.0*	5.0*	5.0*

DRUG	Estimated LOD (blood)	Estimated LOD (urine)
		(ug/L)
Benzodiazepines Qualitative Only Drugs		
7-Amino-flunitrazepam	5.0	5.0
Flunitrazepam	5.0	5.0
Midazolam	8.0	8.0
Alpha-hydroxy-etizolam	5.0	5.0
Triazolam	5.0	2.5
Alpha-hydroxy-triazolam	5.0	5.0
Bromazepam	2.5	5.0
Bromazolam	5.0	5.0
Chlordiazepoxide	5.0	5.0
Clobazam	5.0	5.0
2-Hydroxy-ethyl-flurazepam	4.0	4.0
Clonazolam	5.0	5.0
8-Amino-clonazolam	5.0	5.0
Alpha-hydroxy-clonazolam	5.0	5.0
Delorazepam	4.0	2.5
Demoxepam	5.0	2.5
Diclazepam	2.5	1.0
Estazolam	10	5.0
Flualprazolam	5.0	5.0
Flubromazepam	5.0	5.0
Flubromazolam	5.0	5.0
Alpha-hydroxy-flubromazolam	5.0	5.0
Flurazepam	5.0	5.0
Lormetazepam	5.0	5.0
Nimetazepam	5.0	5.0
Nitrazepam	2.5	4.0
Norchlordiazepoxide	5.0	2.5
Phenazepam	5.0	4.0
Pyrazolam	5.0	5.0
Zaleplon	4.0	4.0
Zopiclone	1.0	2.5
Adinazolam	5.0	5.0
Cannabinoids Qualitative Only Drugs		
Cannabidiol (CBD)	0.50	1.0*
THC-O-Acetate	1.0	1.0*
Delta-10-THC	1.0	1.0*

The traceability for the measurement process includes certified reference material from approved vendors (i.e., Cerilliant and Cayman), calibrated volumetric flask (i.e., class A calibrated), and annual pipette calibration approved ISO service provider.

*Administratively set LRL

TX ML Madison Toxicology Drug MU Summary			
Doc ID: 6711	Revision:	17	Status: Published
	Effective:	1/21/2025 4:57:28 PM	
Approved following the Wisconsin State Crime Lab Quality System procedures.			