



FORENSIC LABORATORY DIVISION

LUKE N. RODDA PH.D., CHIEF FORENSIC TOXICOLOGIST AND DIRECTOR

REPORT OF FORENSIC TOXICOLOGY ANALYSES

Name:	LEE, Robert	SFOCME Case No.:	2023-0511
Submitter:	Moffatt, Ellen, MD	Submission Date & Time:	04/06/2023 0834 hrs ¹
Sub. Ref. No.:	N/A	Date of Report:	04/19/2023

SPECIMENS ACCESSIONED

SPECIMEN TYPE	SPECIMEN ID	VOL (mL)	COLLECTED	DESCRIPTOR(S)	PROTOCOLS
Blood (Peripheral)	379599	1	04/05/2023 1035 hrs		
Vitreous Humor	379600	5	04/05/2023 1035 hrs	Cloudy.	
Urine	379601	10	04/05/2023 1035 hrs	Cloudy.	
Blood (AM)	L3747	2	04/04/2023 0323 hrs	Lavender top.	LCQB, LCQC
Plasma/Serum (AM)	L3748	1	04/04/2023 0323 hrs	Clear red top.	GCET
Plasma/Serum (AM)	L3749	0.5	04/04/2023 0323 hrs	Clear green top.	

ANALYTICAL RESULTS

SPECIMEN TYPE	SPECIMEN ID	COMPONENTS DETECTED	QUANTITY	UNIT	PROTOCOL PERFORMED
Plasma/Serum (AM)	L3748	Ethanol	0.029 ±0.001	% (w/v)	GCET/GCET
Blood (AM)	L3747	Cocaine	5.5 ±1.2	ng/mL	LCQB, LCQB
Blood (AM)	L3747	Cocaethylene	< 5.0	ng/mL	LCQB, LCQB
Blood (AM)	L3747	Benzoylcegonine	1,200 ±260	ng/mL	LCQB, LCQB
Blood (AM)	L3747	Ketamine	21 ±4	ng/mL	LCQB, LCQB
Blood (AM)	L3747	Norketamine	22 ±5	ng/mL	LCQB, LCQB
Blood (AM)	L3747	Cetirizine/Levocetirizine	< 20	ng/mL	LCQC, LCQC

CASE REVIEW:

DIVISIONAL REVIEW:

APPENDICES:

Appendix 1 – Scope and Reporting Limits for descriptions of Analytical Protocols. Targeted components and reporting limits may be subject to change.

COMMENTS:

Contact the Forensic Laboratory Division for questions regarding the report, comments, or any specific components. Laboratory Request Form and specimens submitted under the name "DOE_2023_98"; Investigator's Report name is "Lee, Robert".
¹One submitted specimen was not accessioned.



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APPENDIX 1 – SCOPE AND REPORTING LIMITS

If applicable, when quantitative results are reported, the respective analytical protocol is listed first.
When Uncertainty of Measurement is provided, it is at the coverage probability of 99.73%.

GCET by HS-GC-FID

Component (Volatiles)	Blood, Urine, Vitreous Humor
Ethanol	0.01 % (w/v)
Methanol	10 mg/dL
Acetone	10 mg/dL
Isopropanol	10 mg/dL

LCQB by LC-MS/MS [ng/mL]

Component	Blood	Urine	Component	Blood	Urine
Amphetamines			Clotiazepam	1	1
Methamphetamine	10	50	Delorazepam	2.5	5
Amphetamine	10	50	Chlordiazepoxide	1	10
Ephedrine / Pseudoephedrine	2.5	10	Diazepam	1	1
Norephedrine / Norpseudoephedrine	2.5	10	Nordiazepam	1	1
3,4-Methylenedioxyamphetamine (MDA)	2.5	10	Temazepam	1	5
3,4-Methylenedioxymethamphetamine (MDMA)	2.5	10	Oxazepam	10	10
Methylphenidate	1	2.5	Diclazepam	1	2.5
Mazindol	1	10	Nitrazepam	1	2.5
Phenmetrazine	5	25	7-Amino Nitrazepam	1	5
Phentermine	25	50	Flunitrazepam	0.5	1
Anesthetic			7-Amino Flunitrazepam	1	2.5
Lidocaine	5	5	Flurazepam	1	1
Anticonvulsants			Lorazepam	5	10
Gabapentin	10	100	Lormetazepam	1	2.5
Lamotrigine	10	10	Midazolam	1	1
Pregabalin	100	250	alpha-Hydroxy Midazolam	1	1
Antihistamines			Desalkyl Flurazepam	1	1
Benztropine	1	1	N-Desmethyl Flunitrazepam	1	2.5
Chlorpheniramine	5	25	Nimetazepam	1	1
Diphenhydramine	1	1	Phenazepam	2.5	5
Doxylamine	2.5	5	Prazepam	0.5	1
Hydroxyzine	1	2.5	Pyrazolam	2.5	5
Promethazine	0.5	1	Triazolam	0.5	5
Barbiturates			alpha-Hydroxy Triazolam	2.5	5
Amobarbital / Pentobarbital	10	25	Clobazam	5	5
Aprobarbital	10	10	Cannabinoids		
Barbital	10	25	Tetrahydrocannabinol (THC)	1	2.5
Butabarbital	10	25	11-Hydroxy THC	1	2.5
Butalbital / Talbutal	10	10	Carboxy THC	2.5	5
Hexobarbital	500	5,000	Tetrahydrocannabinol Acid (THCA)	1	1
Mephobarbital	500	2,500	Tetrahydrocannabivarin (THCV)	1	5
Phenobarbital	10	25	Tetrahydrocannabivarinic Acid (THCVA)	1	1
Secobarbital	10	25	Cannabidiol (CBD)	1	2.5
Thiopental	10	25	Cannabidiolic Acid (CBDA)	1	1
Benzodiazepines			Cannabidivarin (CBDV)	5	5
8-Amino Clonazepam [∞]	0.25	0.75	Cannabigerol (CBG)	1	2.5
Bromazepam	2.5	5	Cannabigerolic Acid (CBGA)	1	1
Bromazolam [∞]	0.5	0.5	Cannabinol (CBN)	1	2.5
Clonazepam [∞]	1	2.5	Cathinones		
Desalkyl Gidazepam [∞]	1	1	3,4-Methylenedioxy alpha-Pyrrolidinohexanophenone (3,4-MDPHP) / N-Cyclohexyl N-Methyl Methylone / N-Cyclohexyl Butylone [∞]	0.1	0.25
Deschloro Etizolam / 4'-Chloro Deschloro Alprazolam [∞]	0.25	0.25	alpha-PHP [∞]	0.1	0.5
Estazolam [∞]	1	1	Etylone [∞]	0.25	2.5
Etizolam	0.5	1	Mephedrone [∞]	0.75	1
Flualprazolam	0.5	1	N-Propyl Butylone / N,N-Dimethyl Pentylone [∞]	0.25	0.5
Flubromazepam	1	1	Pentylone [∞]	0.25	0.5
Flubromazolam	0.5	1	Cocaine and Metabolites		
Fluclotizolam [∞]	0.25	0.5	Cocaine	1	2.5
Meclonazepam [∞]	1	1	Norcocaine	2.5	5
Metizolam [∞]	0.5	0.5	meta-Hydroxy Cocaine / para-Hydroxy Cocaine	1	1
Zolazepam	0.5	1	Cocaethylene	1	2.5
Alprazolam	1	1	Benzoyllecgonine	10	10
alpha-Hydroxy Alprazolam	1	2.5			
Clonazepam	2.5	5			
7-Amino Clonazepam	1	2.5			



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Component	Blood	Urine	Component	Blood	Urine
Anhydroecgonine Methyl Ester	5	25	Morphine	1	5
Dissociatives			Codeine	1	5
Phencyclidine (PCP)	1	10	Dihydrocodeine	1	5
3-Chloro PCP [∞]	0.1	0.25	Norcodeine	5	5
3-Hydroxy PCP [∞]	0.25	0.5	Hydrocodone	1	5
3-Methoxy PCP / 4-Methoxy PCP [∞]	0.1	1	Norhydrocodone	1	10
Ketamine	5	10	Hydromorphone	1	5
Norketamine	1	10	Buprenorphine	0.5	1
Deschloroketamine	2.5	2.5	Norbuprenorphine	1	5
2-Fluoro Deschloro Ketamine [∞]	2.5	2.5	Dextromethorphan / Levomethorphan	0.5	5
gamma-Hydroxybutyric Acid (GHB) [*]	5,000	10,000	Dextrorphan / Levorphanol	0.5	1
Hallucinogens			Methadone	1	1
Psilocin	1	5	EDDP (Methadone Metabolite)	5	10
Psilocybin	2.5	50	Nalbuphine	1	5
Lysergic Acid Diethylamide (LSD)	0.1	0.1	Naloxone	1	5
5-Methoxy DMT	0.5	0.5	Naltrexone	1	5
N,N-Dimethyltryptamine (DMT)	0.5	0.5	Oxycodone	2.5	5
Miscellaneous			Noroxycodone	1	10
Mitragynine	2.5	5	Oxymorphone	1	10
Suvorexant	0.5	1	Noroxymorphone	5	50
Xylazine [∞]	0.25	0.75	Tapentadol	5	10
Muscle Relaxants			Tramadol	1	10
Carisoprodol	25	25	O-Desmethyl-Tramadol	1	5
Meprobamate	50	100	Z Drugs		
Opioids			Zaleplon	0.5	1
Fentanyl	0.1	1	Zolpidem	0.75	1
Acetyl Fentanyl	0.1	1	Zolpidem Phenyl-4-Carboxylic Acid	0.5	1
Norfentanyl	0.25	1	Zopiclone / Eszopiclone	1	10
6-Monoacetylmorphine (6-MAM)	0.25	2.5	Zopiclone-N-oxide	N/A	10

^{*}In postmortem casework, GHB is reported when results are greater than 50,000 ng/mL.

[∞]Component validation not completed.

LCQC by LC-MS/MS [ng/mL]

Component	Blood	Urine	Component	Blood	Urine
Amphetamines			1-(3-Chlorophenyl)-Piperazine (McPP)	1	N/A
Ritalinic Acid	2.5	5	Venlafaxine	2.5	2.5
Analgesics			O-Desmethyl Venlafaxine / N-Desmethyl Venlafaxine	2.5	2.5
Acetaminophen	500	500	Antihistamine		
Salicylic Acid	100	250	Brompheniramine	0.5	0.5
Anesthetic			Carbinoxamine	0.5	0.5
Norlidocaine	5	5	Cetirizine / Levocetirizine	1	1
Anticonvulsant			Norchlorcyclizine	1	1
Carbamazepine	25	25	Meclizine	0.5	0.5
10,11-Dihydro-10-Hydroxy Carbamazepine	25	25	Antipsychotic		
Levetiracetam	10	10	Chlorpromazine	1	1
Phenytoin	25	25	Clozapine	1	1
Topiramate	25	25	N-Desmethyl Clozapine	1	1
Valproic Acid	2,500	5,000	Olanzapine	5	5
Primidone	5	5	Quetiapine	2.5	2.5
Antidepressant			Norquetiapine	2.5	2.5
Amitriptyline	1	1	7-Hydroxy Quetiapine	1	1
Nortriptyline	1	1	Risperidone	0.5	0.5
Bupropion	1	5	9-Hydroxy Risperidone	0.5	0.5
Citalopram / Escitalopram	1	5	Thioridazine	1	1
Clomipramine	1	1	Ziprasidone	2.5	5
Desipramine	1	1	Cardiac		
Doxepin	1	1	Clonidine	0.25	1
Nordoxepin	1	1	Diltiazem	1	1
Duloxetine	2.5	2.5	Decongestant		
Fluoxetine	2.5	2.5	Tetrahydrozoline	0.1	0.5
Norfluoxetine	5	5	Miscellaneous		
Imipramine	1	1	gamma-Butyrolactone (GBL)	5,000	200,000
Mirtazapine	2.5	2.5	Muscle Relaxant		
Paroxetine	5	10	Cyclobenzaprine	0.5	0.5
Sertraline	2.5	2.5	N-Desmethyl Cyclobenzaprine	0.5	0.5
Norsertaline	5	5	Scopolamine	0.5	0.5
Trazodone	5	5			