**Revision: 8** 

Effective: 12/21/2023

CS 4.1 Controlled Substances Unit: Evidence Matrices – General Testing Guidelines and Suggestions

Substance Form	Extraction solvent (see below)												
	0	1	2	3	4	5	6	Photos	Weight	MiScope®	GC/MS	FTIR	Other:
Plant Material	X	Х					X	X	X		X		other solvents if suspected laced drugs
Plant Material (cannabis semi-quantitation)	X							X	X	X	X		
Cigars/Cigarettes		X	X					X			X		
Rock (possibly cocaine)	X							X	X		X	X	
Powder (possibly cocaine)	X							X	X		X	X	
Powder (other than cocaine)	x							X	X		X	X	Borate Buffer extraction if initially negative by GC/MS
Tablets - manufactured (all)	x							X			X		Internet/Computer/Book Searches
CS w/ acetaminophen				х				X	х		х		Borate Buffer extraction is not required if the analyte of interest can be identified without an extraction
CS (low dose )				X				X	X		X	X	
CS (other)	x							X	X		X	X	Borate Buffer extraction if initially negative by GC/MS
Tablets- clandestine (all)	x						X	X			X		Borate Buffer extraction if initially negative by GC/MS
Mushrooms	х		X			X		X			X		
Liquid Pharmaceutical Preparations	x		X		X	X	X	X			X		Extraction will vary depending on matrix
Steroids in Oil					X			X			X		
Liquids	X							X			X		
Food Stuff (contain oils)					X			Х			Х		
Food Stuff (no oils)	х		X					X			X		
Blotter paper			X					X			х		
Paraphernalia (residues)	x	X	X			х	х	Х			Х		multiple solvents can be used; at discretion of analyst

# = if manufacturer marking indicates a certain analyte is not readily detected using GC/MS, then a Borate Buffer extraction is optional Blank Space: Optional / Not routinely performed

- 0 = Methanol
- 1 = Petroleum Ether/Methanol (1:1)
- 2 = Ethyl Acetate
- 3 = Extraction (e.g., Borate Buffer)
- 4 = Methanol/Hexane
- 5 = Ethanol
- 6 = other appropriate solvent dependent on suspected substance

Note: The above are suggested guidelines and are not required to be performed/used unless specifically stated.