CS 4.1 Controlled Substances: Evidence Matrices General Testing Guidelines

Substance Form	Extraction solvent													
	0	1	2	3	4	5	6	Photos	Weight	Solubility	MiScope	GC/MS	FTIR	Other:
Plant Material (likely marihuana)		Х						Х	Х	n/a	Х	Х	n/a	
Plant Material (not marihuana)		Х	Х			Х		Х	Х	n/a	n/a	Х	n/a	
Cigars/Cigarettes		Х	Х					Х	n/a	n/a	X+	Х	n/a	
Rock (likely cocaine)	Х							Х	Х	Х	n/a	X	X *	
Powder (likely cocaine)	Х							Х	Х	Х	n/a	X	n/a**	
Powder (other than cocaine)	Х							х	х	n/a	n/a	х	n/a	borate buffer extraction if initially negative by GC/MS
Tablets - manufactured (all)	Х							Х	n/a	n/a	n/a	х	n/a	
														Note BB extraction is not required if the drug of interest is found running without
CS w/ acetaminophen				Х								Х		extraction
CS (low dose)				Χ								Х		
CS (other)	х											х		borate buffer extraction if initially negative by GC/MS #
Tablets- clandestine (all)	х						х	х	n/a	n/a	n/a	х	n/a	borate buffer extraction if initially negative by GC/MS
Mushrooms						Х		X	X	n/a	n/a	Х	n/a	
Liquid Pharmaceutical Preparations	х		х		х	х	x	x	n/a	n/a	n/a	х	n/a	Extraction will vary depending on matrix
Steroids in Oil					Х			х	n/a	n/a	n/a	Х	n/a	Volume taken
Liquids	Х							х	n/a	n/a	n/a	Х	n/a	Volume taken
Food Stuff (contain oils)					x			х	n/a	n/a	n/a	х	n/a	LC may be needed depending on the expected substance
Food Stuff (no oils)			Х					х	n/a	n/a	n/a	Х	n/a	
Blotter paper			Х					Х	n/a	n/a	n/a	Х	n/a	
Paraphernalia (residues) * - if insoluble in water or partially insolu		x	x			x	Х	х	n/a	n/a	n/a	х	n/a	multiple solvents can be used; at discretion of analyst

^{* =} if insoluble in water or partially insoluble in water

4 = methanol/hexane

5 = ethanol

6 = other appropriate solvent dependent on suspected substance

^{** =} if soluble in water, if partially soluble need FTIR

^{# =} if manufactures marking indicates a substance that does not GC/MS Borate Buffer extraction is not required + = to report marihuana MiScope is required to report Δ-9-THC MiScope is not required

^{0 =} no extraction required

^{1 = 1:1} Petroleum ether/methanol

^{2 =} methanol

^{3 =} borate buffer