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

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

* = if insoluble in water or partially insoluble in water   ** = 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 = Methanol, Ethyl Acetate or appropriate Solvent   4 = methanol/hexane
    1 = 1:1 Petroleum ether/methanol   5 = ethanol
    2 = Methanol, Ethyl Acetate or appropriate Solvent   6 = other appropriate solvent dependent on suspected substance
    3 = borate buffer