

APPENDIX 1

SCOPE OF LABORATORY ACCREDITATION

Certificate Ref No.: **GFSL053/LA/2021/CERT21**

Guyana Forensic Science Laboratory

Area M, University of Guyana Complex,
Turkeyen, Guyana

FIELD: Forensic Science

#	PRODUCT/ MATERIAL	TEST (<i>parameter/ characteristics</i>)	TEST METHOD	EQUIPMENT	UNITS	LIMIT OF CAPABILITY
1	Fresh or dried plant material	Macroscopic and Microscopic Examination of Plant Morphology (<i>Cannabis spp.</i>)	Biological Light Microscopy Stereo Microscopy GFSL-TCH-S02	Motic BA310 Biological Light Microscope Motic DM143 Digital Stereo Zoom Microscope	N/A	N/A
2	Fresh or dried plant material, residues, seized materials, drug paraphernalia	Drug Screen (Presumptive Test for Cannabis)	Colorimetric: Duquenois-Levine Test Fast Blue B Test GFSL-TCH-S03		ug/ml	1ug/ml
3	Fresh or dried plant material, residues, seized materials, drug paraphernalia	Drug Screen (Presumptive Test for Cannabis)	Thin Layer Chromatography GFSL-TCH-S04	TLC System	ug/ml	10ug/ml
4	Fresh or dried plant material, residues, seized	Confirmatory Test for Cannabis: Detection of Delta-9-Tetrahydrocannabinol	Gas Chromatography-Mass Spectrometry	Thermo Scientific Trace 1310 GC with AS1310 or	ug/ml	10ug/ml

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	materials, drug paraphernalia		GFSL-TCH-S05	TriPlus RSH Autosampler and ISQ MS		
5	Powder, granules, liquids, residues, seized materials, drug paraphernalia	Drug Screen (Presumptive Test for Cocaine)	Colorimetric: Modified Scott's Test GFSL-TCH-S06		ug/ml	1ug/ml
#	PRODUCT/ MATERIAL	TEST (parameter/ characteristics)	TEST METHOD	EQUIPMENT	UNITS	LIMIT OF CAPABILITY
6	Powder, granules, liquids, residues, seized materials, drug paraphernalia	Drug Screen (Presumptive Test for Cocaine)	Microcrystalline: Gold Chloride Test Platinum Chloride Test GFSL-TCH-S07	Motic BA310 Biological Light Microscope	ug/ml	1ug/ml
7	Powder, granules, liquids, residues, seized materials, drug paraphernalia	Drug Screen (Presumptive Test for Cocaine)	Thin Layer Chromatography GFSL-TCH-S08	TLC System	ug/ml	1ug/ml
8	Powder, granules, liquids, residues seized material, drug paraphernalia	Confirmatory Test for Cocaine: Detection of Cocaine	Gas Chromatography-Mass Spectrometry GFSL-TCH-S09	Thermo Scientific Trace 1310 GC with AS1310 or TriPlus RSH Autosampler and ISQ MS	ug/ml	10ug/ml
9	Powder, granules, liquids, residues seized material, drug paraphernalia	Confirmatory Test for Opioids: Detection of Heroin, Morphine, Methadone, Codeine, Hydrocodone, Hydromorphone, Oxycodone	Gas Chromatography-Mass Spectrometry GFSL-TCH-S15	Thermo Scientific Trace 1310 GC with AS1310 or TriPlus RSH Autosampler and ISQ MS	ug/ml	Heroin: 2ug/ml Oxycodone: 2ug/ml Morphine: 2ug/ml Methadone: 1ug/ml Codeine: 1ug/ml Hydrocodone: 1ug/ml Hydromorphone: 4ug/ml

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10	Certificates, banknotes and passports	Questioned Documents Examination	Comparative Analysis of Document Security Features: Video Spectral Examination Digital Measuring Microscopy GFSL-TDC-S01	Projectina COMAC Comparison Microscope Projectina DMM 2000 Digital Measuring Microscope Projectina PAGScan Document Reader UVP B Handheld UV Lamp Chauvet Handheld UV Light Carson LumiLoupe™ Stand Magnifier	N/A	N/A
11	Dry stain or wet samples	Presumptive Test for Blood	Colorimetric: Kastle-Meyer Test GFSL-TRC-S02	Buchi R-210 Rotavapor	dilution	1:10 ⁷
#	PRODUCT/ MATERIAL	TEST (parameter/ characteristics)	TEST METHOD	EQUIPMENT	UNITS	LIMIT OF CAPABILITY
12	Dry stain or wet samples	Presumptive Test for Blood	Microcrystalline: Takayama Test GFSL-TRC-S03	Motic BA310 Biological Light Microscope	Blood: ml Haemoglobin: mg	Blood: 0.001ml Haemoglobin: 0.1mg
13	Dry stain or wet samples	Confirmatory Test for Human Blood: Detection of Human Haemoglobin	Immunoassay: Abacus Diagnostics ABACard® HemaTrace® Test Kit GFSL-TRC-S04		ug/ml	0.05ug/ml

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14	<ul style="list-style-type: none"> Buccal swabs and touch DNA swabs Body fluids/body fluid stains body tissues including bone, teeth, finger nails, hair 	Forensic DNA Analysis	Rapid DNA: Automated Analysis of Core Loci STR Profiles GFSL-TRC-S16	Applied Biosystems™ RapidHIT™ 200 Human ID System	pg	<250pg of extracted and quantified DNA
15	Miscellaneous solid material, including cigarette filter, chewing gum	Forensic DNA Analysis	Rapid DNA: Automated Analysis of Core Loci STR Profiles GFSL-TRC-S16	Applied Biosystems™ RapidHIT™ 200 Human ID System	pg	<250pg of extracted and quantified DNA
16	Powder, granules, liquids, residues, pastes, seized material, drug paraphernalia	Confirmatory Test for Amphetamine-Type Stimulants	Gas Chromatography-Mass Spectrometry GFSL-TCH-S12	Thermo Scientific Trace 1310 GC with AS1310 or TriPlus RSH Autosampler and ISQ MS	ug/ml	Amphetamine: 7ug/ml Metamphetamine: 6ug/ml MDA: 18ug/ml MDEA: 3 ug/ml MDMA: 6 ug/ml
#	PRODUCT/ MATERIAL	TEST (parameter/ characteristics)	TEST METHOD	EQUIPMENT	UNITS	LIMIT OF CAPABILITY
17	Dry stains and wet samples	Presumptive Test for Semen	Colorimetric: Acid Phosphatase Test GFSL-TRC-S13		dilution	1:10 ³
18	Dry stain and wet samples	Confirmatory Test for Semen	Microscopy: Christmas Tree Stain	Motic BA310 Biological Light Microscope	each	1

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			GFSL-TCH-S14			
19	Dry stain and wet samples	Confirmatory Test for Semen	Abacus Diagnostics ABAcad® p30 Test Kit GFSL-TRC-S15		ng/ml	4 ng/ml
20	SEM stub, swabs, clothing	Confirmatory Test for Gunshot Residue	Scanning Electron Microscopy-Energy Dispersive Spectroscopy (SEM- EDS) GFSL-TRC-S08	Phenom™ Perception GSR Desktop Scanning Electron Microscope	magnification	80-200,000X