CERTIFICATE OF ANALYSIS

SAMPLE INFORMATION			
Client:	Retro Cannabis and hemp Extracts	**Vivariant Sample #:**	VV-22-00586
Client Address:	25 fourth street, suite 200, Charlottetown, PE, C1E2B4	**Sample Matrix Type:**	Extract Oil
		Sample Name:	R00062-S2
		Lot/Batch #:	R00062-BB
		Date Sample Collected:	2022-SEP-29
		Strain Name:	Hemp
Contact Name:	Nick DesRoches	**Receipt date:**	2022-OCT-12
Contact Email:	nick@retroextracts.com		

Revision #:	0	**Sample Comments:**
Report Prepared On:	2022-OCT-21	NA

POTENCY	
Date Tested:	2022 Oct 13
Method:	SOP-01-002-08
Units:	mg/g
Results:	Report values

Analyte	Result	Limit of Quantitation	Client Specifications
CBD	106.80	0.10	Report
CBDA	<LOQ	0.075	Report
Total Potential CBD	106.80	N. A	Report
d9THC	1.92	0.075	Report
THCA	<LOQ	0.075	Report
Total Potential THC	1.92	N. A	Report

PESTICIDES	
Date Tested:	2022 OCT 12
Method:	SOP-01-004-02
Equipment:	HPLC-002 (LCMS/MS)
Date of Last Validation:	2022 Oct 11
Units:	ppm
Results:	Met specifications

Analyte	Result	Limit of Quantitation	Client Specifications
Abamectin	<LOQ	0.25	0.25
Acephate	<LOQ	0.05	0.05

Acetamiprid	<LOQ	0.5	0.5
Acequinocyl	<LOQ	0.05	0.05
Aldicarb	<LOQ	0.5	0.5
Allethrin	<LOQ	0.1	0.1
Azadirachtin	<LOQ	0.5	0.5
Azoxystrobin	<LOQ	0.01	0.01
Benzovindiflupyr	<LOQ	0.01	0.01
Bifenazate	<LOQ	0.01	0.01
Bifenthrin	<LOQ	0.25	0.25
Boscalid	<LOQ	0.01	0.01
Buprofezin	<LOQ	0.25	0.25
Carbaryl	<LOQ	0.025	0.025
Carbofuran	<LOQ	0.01	0.01
Chlorantraniliprole	<LOQ	0.25	0.25
Chlorphenapyr	<LOQ	1.5	1.5
Chlorpyrifos	<LOQ	0.5	0.5
Clofentezine	<LOQ	0.01	0.01
Clothianidin	<LOQ	0.025	0.025
Coumaphos	<LOQ	0.01	0.01
Cyantranilipole	<LOQ	0.01	0.01
Cyfluthrin	<LOQ	1.25	1.25
Cypermethrin	<LOQ	0.5	0.5
Cyprodinil	<LOQ	0.01	0.01
Daminozide	<LOQ	0.25	0.25
Deltamethrin	<LOQ	0.25	0.25
Diazinon	<LOQ	0.25	0.25
Dichlorvos	<LOQ	0.05	0.05
Dimethoate	<LOQ	0.01	0.01
Dimethomorph	<LOQ	0.25	0.25
Dinotefuran	<LOQ	0.05	0.05
Dodemorph	<LOQ	0.25	0.25
Endosulfan-alpha	<LOQ	2.5	2.5
Endosulfan-beta	<LOQ	2.5	2.5
Endosulfan sulfate	<LOQ	2.5	2.5
Ethoprophos	<LOQ	0.01	0.01
Etofenprox	<LOQ	0.25	0.25
Etoxazole	<LOQ	0.25	0.25
Etridiazol	<LOQ	0.15	0.15

Fenoxycarb	<LOQ	0.01	0.01
Fenpyroximate	<LOQ	0.25	0.25
Fensulfothion	<LOQ	0.01	0.01
Fenthion	<LOQ	0.01	0.01
Fenvalerate	<LOQ	0.5	0.5
Fipronil	<LOQ	0.01	0.01
Flonicamid	<LOQ	0.025	0.025
Fludioxonil	<LOQ	0.01	0.01
Fluopyram	<LOQ	0.01	0.01
Hexythiazox	<LOQ	0.25	0.25
Imazalil	<LOQ	0.01	0.01
Imidacloprid	<LOQ	0.01	0.01
Iprodione	<LOQ	0.5	0.5
Kinoprene	<LOQ	1.25	1.25
Kresoxim-methyl	<LOQ	0.15	0.15
Malathion	<LOQ	0.01	0.01
Metalaxyl	<LOQ	0.01	0.01
Methiocarb	<LOQ	0.01	0.01
Methomyl	<LOQ	0.025	0.025
Methoprene	<LOQ	0.25	0.25
Methyl parathion	<LOQ	0.25	0.25
Mevinphos	<LOQ	0.025	0.025
MGK-264	<LOQ	0.25	0.25
Myclobutanil	<LOQ	0.01	0.01
Naled	<LOQ	0.25	0.25
Novaluron	<LOQ	0.025	0.025
Oxamyl	<LOQ	1.5	1.5
Paclobutrazol	<LOQ	0.01	0.01
Permethrin	<LOQ	0.5	0.5
Phenothrin	<LOQ	0.25	0.25
Phosmet	<LOQ	0.25	0.25
Piperonyl butoxide	<LOQ	1.25	1.25
Pirimicarb	<LOQ	0.01	0.01
Prallethrin	<LOQ	0.25	0.25
Propiconazole	<LOQ	0.25	0.25
Propoxur	<LOQ	0.01	0.01
Pyraclostrobin	<LOQ	0.01	0.01
Pyrethrins	<LOQ	0.25	0.25

Pyridaben	<LOQ	0.02	0.02
Quintozene	<LOQ	0.5	0.5
Resmethrin	<LOQ	0.05	0.05
Spinetoram	<LOQ	0.01	0.01
Spinosad	<LOQ	0.01	0.01
Spirodiclofen	<LOQ	0.25	0.25
Spiromesifen	<LOQ	0.25	0.25
Spirotetramat	<LOQ	0.01	0.01
Spiroxamine	<LOQ	0.25	0.25
Tebuconazole	<LOQ	0.01	0.01
Tebufenozide	<LOQ	0.01	0.01
Teflubenzuron	<LOQ	0.025	0.025
Tetrachlorvinphos	<LOQ	0.01	0.01
Tetramethrin	<LOQ	0.25	0.25
Thiacloprid	<LOQ	0.01	0.01
Thiamethoxam	<LOQ	0.01	0.01
Thiophanate-methyl	<LOQ	0.25	0.25
Trifloxystrobin	<LOQ	0.01	0.01

METALS	
Date Tested:	2022 Oct 20
Method:	SOP-01-007-02
Units:	PPM
Results:	Met specifications

Analyte	Result	Limit of Quantitation	Client Specifications
Arsenic	LOQ	0.2	<1.5
Cadmium	LOQ	0.2	<0.5
Lead	LOQ	0.5	<0.5
Mercury (total)	LOQ	0.1	<3

MYCOTOXINS	
Date Tested:	2022 OCT 13
Method:	SOP 01-006-00
Units:	ppb
Results:	Met specifications

Analyte	Result	Limit of Quantitation	Client Specifications
Aflatoxin B1	<LOQ	2 ppb	2 ppb
Aflatoxin B2	<LOQ	2 ppb	2 ppb
Aflatoxin G1	<LOQ	2 ppb	2 ppb
Aflatoxin G2	<LOQ	2 ppb	2 ppb
Sum of aflatoxins B1, B2, G1, G2	<LOQ	2 ppb	4 ppb

Foreign Matter	
Date Tested:	2022 OCT 14
Method:	EP 2.8.2
Units:	NA
Results:	Met specifications

Parameter	Result	Client Specifications
Foreign Matter	Absent	Report

RESIDUAL SOLVENTS	
Date Tested:	2022-OCT-14
Method:	LAB-MTD-036
Units:	ppm
Results:	Met specifications

Analyte	Result	Limit of Quantitation	Client Specifications
1-Butanol	<LOQ	1000	NMT 5000
1-Pentanol	<LOQ	1000	NMT 5000
1-Propanol	<LOQ	1000	NMT 5000
2-Butanol	<LOQ	1000	NMT 5000
2-Methyl-1-propanol	<LOQ	1000	NMT 5000
2-Propanol	<LOQ	1000	NMT 5000
3-Methyl-1-butanol	<LOQ	1000	NMT 5000
Acetone	<LOQ	1000	NMT 5000
Anisole	<LOQ	1000	NMT 5000
Butane	<LOQ	1000	NMT 5000
Butyl acetate	<LOQ	1000	NMT 5000
Dimethyl sulfoxide	<LOQ	1000	NMT 5000
Ethanol	<LOQ	1000	NMT 5000
Ethyl acetate	<LOQ	1000	NMT 5000
Ethyl Ether	<LOQ	1000	NMT 5000
Ethyl formate	<LOQ	1000	NMT 5000
Heptane	<LOQ	1000	NMT 5000
Isobutyl acetate	<LOQ	1000	NMT 5000
Isopropyl acetate	<LOQ	1000	NMT 5000
Methyl acetate	<LOQ	1000	NMT 5000
Methyl ethyl ketone	<LOQ	1000	NMT 5000
Pentane	<LOQ	1000	NMT 5000
Propane	<LOQ	1000	NMT 5000
Propyl acetate	<LOQ	1000	NMT 5000
Tert-butylmethyl ether	<LOQ	1000	NMT 5000
Triethylamine	<LOQ	1000	NMT 5000

MICROBIAL ANALYSIS	
Date Tested:	2022-OCT-14
Compendia:	EP (2.6.12) (2.6.31)
Results:	Met specifications

Test	Result	Method	Client Specifications
Total Aerobic Microbial Count	<10 CFU/g	EP 2.6.12	50000 Cfu/g
Total Yeast and Mold Count	<10 CFU/g	EP 2.6.12	500 Cfu/g
Bile Tolerant Gram-Negative Bacteria	<10 CFU/g	EP 2.6.31	100 Cfu/g
Detection of Escherichia Coli	No Growth Detected	EP 2.6.31	Absent in 1g
Detection of Salmonella ssp.	No Growth Detected	EP 2.6.31	Absent in 25g

Approved by: Anand Thota
Date Approved:
10/21/2022

These results relate only to the items tested. This test report shall not be reproduced except in full, without written approval of the laboratory.

* End of report *

Form#: F009 Form Name: Testing Specifications for MBR	Revision No: 1	Effective Date: 05-26-2023
Product Name: CBD Blended Oil Associated Master Batch Record: MBR002	Product Classification: Cannabis Extract	

Testing Specifications for Chemical and Microbial Contaminants
Batch Number: Product Name: Date:

Completed by: Signature:

Contaminant	**Release Criteria**	**Schedule B publication (chapter/monograph)**
Cadmium	0.5 µg/g	USP 232 Table 3 (oral limits)
Mercury	3 µg/g	USP 232 Table 3 (oral limits)
Arsenic	1.5 µg/g	USP 232 Table 3 (oral limits)
Lead	0.5 µg/g	USP 232 Table 3 (oral limits)
Salmonella spp.	Absent in 25g	Ph.Eur. 5.1.8 Category B (extracts using EP 2.6.31)
Bile-tolerant gram negative bacteria	100 CFU/g	Ph.Eur. 5.1.8 Category B (extracts using EP 2.6.31)
Total Combined Yeast and Molds Count	500 CFU/g	Ph.Eur. 5.1.8 Category B (extracts using EP 2.6.12)
E. Coli	Absent in 1g	Ph.Eur. 5.1.8 Category B (extracts using EP 2.6.31)
Total Aerobic Microbial Count	50,000 CFU/g	Ph.Eur. 5.1.8 Category B (extracts using EP 2.6.12)
Aflatoxin B1	2 µg/kg	EP 2.8.18
Aflatoxin B2	2 µg/kg	EP 2.8.18
Aflatoxin G1	2 µg/kg	EP 2.8.18
Aflatoxin G2	2 µg/kg	EP 2.8.18
Total Aflatoxins	4 µg/kg	EP 2.8.18
Anisole (Aniso)	5000 µg/g	Limits for Residual Solvents in Cannabis Products (Limits Previously Set by Health Canada)
2-Butanol (Butan)	5000 µg/g	
Butane (But)	5000 µg/g	
Dimethyl Sulfoxide (DimSu)	5000 µg/g	
Ethyl Acetate (EthAc)	5000 µg/g	
Ethyl Formate (EthFo)	5000 µg/g	
Heptane (Hepta)	5000 µg/g	
Isopropyl Acetate (IsoAc)	5000 µg/g	
3-Methyl-1-Butanol (3-Buta)	5000 µg/g	
2-Methyl-1-Propanol (2-Prop)	5000 µg/g	

Form#: F009 Form Name: Testing Specifications for MBR	Revision No: 1	Effective Date: 05-26-2023
Product Name: CBD Blended Oil Associated Master Batch Record: MBR002	Product Classification: Cannabis Extract	

1-Pentanol (Penta)	5000 µg/g	
2-Propanol (Propa)	5000 µg/g	
Propyl Acetate (ProAc)	5000 µg/g	
1-Butanol (Butan)	5000 µg/g	
Butyl Acetate ()	5000 µg/g	
Tert-Butylmethyl Ether (Ter-Bu)	5000 µg/g	
Ethanol (Ethan)	5000 µg/g	
Ethyl Ether (EthEt)	5000 µg/g	
Formic Acid (ForAc)	5000 µg/g	
Isobutyl Acetate (IsoAc)	5000 µg/g	
Methyl Acetate (MetAc)	5000 µg/g	
Methylethyl ketone (MetKe)	5000 µg/g	
Pentane (Penta)	5000 µg/g	
1-Propanol (Propa)	5000 µg/g	
Propane (Prop)	5000 µg/g	
Triethylamine (Triet)	5000 µg/g	