

Sample information

Sample Name **Lemon Pound Cake**
 Sample ID **ELC-22-001**
 Laboratory ID **PAT28001**
 Method Ref. **5991-9285EN**

Sample Receiving Date **06-Sep-2022**
 Receiving Temperature **21°C**
 Analysis Date **08-Sep-2022**

Cannabinoids Profile

Compounds	Results (%w/w)	Results (mg/g)	LOQ(%)
CBC	0.014	0.140	0.010
CBD	<0.010	<0.100	0.010
CBDA	0.071	0.710	0.010
CBDV	<0.010	<0.100	0.010
CBG	0.017	0.170	0.010
CBGA	0.230	2.300	0.010
CBN	0.009	0.090	0.010
D8-THC	<0.010	<0.100	0.010
D9-THC	1.073	10.730	0.010
THCA-A	26.005	260.050	0.010
THCV	<0.010	<0.100	0.010
Total THC	23.879	238.794	
Total CBD	0.062	0.623	

23.879%
Total THC

0.062%
Total CBD

Total THC = THC + (THCA*0.877), Total CBD = CBD + (CBDA*0.877)
 Total THC/CBD is calculated using the formulas to take into account the loss of carboxyl group during decarboxylation step.

Authorized by: Laboratory Manager

Signature:



Details of testing

1. LOQ- Limit of quantification
2. % w/w: percent (weight of analyte/ weight of product)
3. Results only apply to the items tested and to the sample(s) as received.
4. This report may not be distributed or reproduced except in full



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CERTIFICATE OF ANALYSIS

Client information

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COA information

COA number **220912_29050_PAR7932**
COA Date **12-Sep-2022**
Analysis Request ID **PAR7932**

Sample information

Sample Name **Lemon Pound Cake**
Sample ID **ELC-22-001**
Laboratory ID **PAT27998**
Method Ref. **USP561**

Sample Receiving Date **06-Sep-2022**
Receiving Temperature **21°C**
Analysis Date **06-Sep-2022**

Results Information

Foreign Material	Results	Unit	LOQ
Grey Mold and Bud Rot	0	/g	N/A
Insect and Vermin	0	/g	N/A
Other Extraneous substances	0	/g	N/A
Spider Mite	0	/g	N/A
Stalks	0	/g	N/A

Authorized by: Laboratory Manager

Signature: 

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Sample information

Sample Name **Lemon Pound Cake**
 Sample ID **ELC-22-001**
 Laboratory ID **PAT27998**
 Method Ref. **PAT-SOP106, USP233**

Sample Receiving Date **06-Sep-2022**
 Receiving Temperature **21°C**
 Analysis Date **09-Sep-2022**

Results Information

Heavy Metals	Results	Unit	Specification (USP 232(Inhalation Limits))	Compliance	LOQ
Arsenic	<0.025	ppm	<= 0.2	PASS	0.025
Cadmium	<0.020	ppm	<= 0.3	PASS	0.02
Lead	0.011	ppm	<= 0.5	PASS	0.01
Mercury	<0.005	ppm	<= 0.1	PASS	0.005

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Sample information

Sample Name **Lemon Pound Cake**
Sample ID **ELC-22-001**
Laboratory ID **PAT27998**
Method Ref. **AOAC 2007.01**

Sample Receiving Date **06-Sep-2022**
Receiving Temperature **21°C**
Analysis Date **12-Sep-2022**

Results Information

Aflatoxins	Results	Unit	Specification (EP 2.8.18)	Compliance	LOQ
Aflatoxin B1	<0.002	ppm	<= 0.002	PASS	0.002
Aflatoxin B2	<0.002	ppm	<= 0.002	PASS	0.002
Aflatoxin G1	<0.002	ppm	<= 0.002	PASS	0.002
Aflatoxin G2	<0.002	ppm	<= 0.002	PASS	0.002
Total Aflatoxins (B1,B2,G1,G2)	<0.002	ppm	<= 0.004	PASS	0.002

Authorized by: Laboratory Manager

Signature:



Details of testing

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Sample information

Sample Name **Lemon Pound Cake**
Sample ID **ELC-22-001**
Laboratory ID **PAT27998**
Method Ref. **AOAC 2007.01**

Sample Receiving Date **06-Sep-2022**
Receiving Temperature **21°C**
Analysis Date **12-Sep-2022**

Pesticides Dried Cannabis Results Information

Compound Detected	Results (ppm)	RDL	Specification (HC MRL Limits)	Compliance
No Compounds Detected				

Compounds Not Detected	Results (ppm)	RDL	Specification (HC MRL Limits)
Abamectin	ND	0.02	< 0.1
Acephate	ND	0.02	< 0.02
Acequinocyl	ND	0.02	< 0.03
Acetamiprid	ND	0.02	< 0.1
Aldicarb	ND	0.02	< 1
Allethrin	ND	0.02	< 0.2
Azadirachtin	ND	0.02	< 1
Azoxystrobin	ND	0.01	< 0.02
Benzovindiflupyr	ND	0.01	< 0.02
Bifenazate	ND	0.02	< 1
Bifenthrin	ND	0.02	< 0.02
Boscalid	ND	0.01	< 0.02
Buprofezin	ND	0.01	< 0.05
Carbaryl	ND	0.02	< 0.02
Carbofuran	ND	0.01	< 0.02
Chlorantraniliprole	ND	0.01	< 0.02
Chlorphenapyr	ND	0.05	< 0.05
Chlorpyrifos	ND	0.01	< 0.04
Clofentezine	ND	0.01	< 0.02
Clothianidin	ND	0.02	< 0.05
Coumaphos	ND	0.01	< 0.02
Cyantraniliprole	ND	0.01	< 0.02
Cyfluthrin	ND	0.1	< 0.2
Cypermethrin	ND	0.02	< 0.3
Cyprodinil	ND	0.02	< 0.25
Daminozide	ND	0.05	< 0.1
Deltamethrin	ND	0.02	< 0.5
Diazinon	ND	0.01	< 0.02
Dichlorvos	ND	0.02	< 0.1
Dimethoate	ND	0.01	< 0.02
Dimethomorph	ND	0.02	< 0.05
Dinotefuran	ND	0.02	< 0.1
Dodemorph	ND	0.02	< 0.05
Endosulfan sulfate	ND	0.02	< 0.05
Endosulfan-alpha	ND	0.1	< 0.2
Endosulfan-beta	ND	0.01	< 0.05
Ethoprophos	ND	0.01	< 0.02
Etofenprox	ND	0.01	< 0.05

Compounds Not Detected	Results (ppm)	RDL	Specification (HC MRL Limits)
Etoxazole	ND	0.01	< 0.02
Etridiazole	ND	0.01	< 0.03
Fenoxycarb	ND	0.01	< 0.02
Fenpyroximate	ND	0.02	< 0.02
Fensulfothion	ND	0.01	< 0.02
Fenthion	ND	0.01	< 0.1
Fenvalerate	ND	0.05	< 0.06
Fipronil	ND	0.01	< 0.05
Flonicamid	ND	0.02	< 0.02
Fludioxonil	ND	0.01	< 0.02
Fluopyram	ND	0.01	< 0.01
Hexythiazox	ND	0.01	< 0.05
Imazalil	ND	0.01	< 0.02
Imidacloprid	ND	0.01	< 1
Iprodione	ND	0.5	< 0.5
Kinoprene	ND	0.05	< 0.02
Kresoxim-methyl	ND	0.01	< 0.02
Malathion	ND	0.01	< 0.02
Metalaxyl	ND	0.01	< 0.02
Methiocarb	ND	0.01	< 0.02
Methomyl	ND	0.02	< 0.05
Methoprene	ND	0.5	< 2
Mevinphos	ND	0.02	< 0.05
MGK-264	ND	0.02	< 0.05
Myclobutanil	ND	0.01	< 0.02
Naled	ND	0.02	< 0.1
Novaluron	ND	0.02	< 0.05
Oxamyl	ND	0.02	< 3
Paclobutrazol	ND	0.01	< 0.02
Parathion-methyl	ND	0.02	< 0.05
Permethrin	ND	0.1	< 0.5
Phenothrin	ND	0.02	< 0.05
Phosmet	ND	0.01	< 0.02
Piperonyl butoxide	ND	0.02	< 0.2
Pirimicarb	ND	0.01	< 0.02
Prallethrin	ND	0.02	< 0.05
Propiconazole	ND	0.01	< 0.1
Propoxur	ND	0.01	< 0.02
Pyraclostrobin	ND	0.01	< 0.05
Pyrethrins	ND	0.025	< 0.05
Pyridaben	ND	0.02	< 0.05
Quintozene	ND	0.01	< 0.02
Resmethrin	ND	0.02	< 0.1
Spinetoram	ND	0.01	< 0.02
Spinosad	ND	0.01	< 0.1
Spirodiclofen	ND	0.02	< 0.25
Spiromesifen	ND	0.02	< 3
Spirotetramat	ND	0.02	< 0.02
Spiroxamine	ND	0.01	< 0.1
Tebuconazole	ND	0.01	< 0.05
Tebufenozide	ND	0.01	< 0.02
Teflubenzuron	ND	0.02	< 0.05
Tetrachlorvinphos	ND	0.01	< 0.02

Compounds Not Detected	Results (ppm)	RDL	Specification (HC MRL Limits)
Tetramethrin	ND	0.02	< 0.1
Thiacloprid	ND	0.01	< 0.02
Thiamethoxam	ND	0.01	< 0.02
Thiophanate-methyl	ND	0.02	< 0.05
Trifloxystrobin	ND	0.01	< 0.02

Authorized by: Laboratory Manager

Signature: 

Details of testing

1. ppm (w/w): parts per million by weight, MRL: Maximum residue limits, RDL: Reporting detection limits
2. The compounds are ND (not detected) at or above the RDL
3. Health Canada and/or United States MRL are taken from Health Canada & Global MRL Database (where applicable) on the date of COA preparation
4. Results only apply to the items tested and to the sample(s) as received.
5. This report may not be distributed or reproduced except in full



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HIGH NORTH ID:
00235455
Date: 2022-09-12
Certificate: 1663016815



High North Inc.
241 Hanlan Rd, Unit 7
Woodbridge, ON, L4L 3R7
1-416-864-6119
LIC-P4PNJMAC20-2022

Client: [REDACTED] Lemon Pound Cake
[REDACTED] Lot: ELC-22-001
[REDACTED] Matrix: Flower
Name: [REDACTED] Sub-matrix: Dried Flower
[REDACTED] Sampled: 2022-09-07
[REDACTED] Received: 2022-09-08
[REDACTED]

Certificate of Analysis

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0002	0.005	0.36
Terpinolene	0.0003	0.005	0.339
(R)-(+)-Limonene	0.0001	0.005	0.211
Beta-Myrcene	0.0003	0.005	0.17
Farnesene*	0.0009	0.005	0.168
Alpha-Humulene	0.0010	0.005	0.099
Terpineol*	0.0001	0.005	0.076
Alpha-Pinene	0.0003	0.005	0.074
Beta-Pinene	0.0002	0.005	0.067
(R)-Endo-(+)-Fenchyl	0.0003	0.005	0.045
Guaiol	0.0003	0.005	0.033
Linalool	0.0003	0.005	0.023
alpha-Bisabolol	0.0003	0.005	0.02
Caryophyllene oxide	0.0008	0.005	0.017
Alpha-Phellandrene	0.0002	0.005	0.016
(1S)-3-Carene	0.0007	0.005	0.014
trans-Nerolidol	0.0004	0.005	0.013
Alpha-Terpinene	0.0003	0.005	0.011
Gamma-Terpinene	0.0003	0.005	0.01
Ocimene*	0.0004	0.005	0.01

Abbreviations: wt% = percentage of weight, CFU = colony forming units, ppm = Parts per million, ppb = Parts per billion, ND = None Detected, BLQ = Below Limit of Quantification, LOQ = Limit of Quantification, LOD = Limit of Detection, RL = Reporting Limit, * = Mixture of Isomers

Authorized by:


Ebai Achare
QA Specialist

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Sabinene	0.0013	0.005	0.007
Camphene	0.0002	0.005	0.007
Geraniol	0.0007	0.005	BLQ
Citronellol	0.0003	0.005	BLQ
Fenchone*	0.0003	0.005	BLQ
Phytol*	0.0013	0.010	ND
(+)-Cedrol	0.0010	0.005	ND
Valencene	0.0002	0.005	ND
cis-Nerolidol	0.0003	0.005	ND
Eugenol	0.0004	0.010	ND
Alpha-Cedrene	0.0002	0.005	ND
Pulegone	0.0002	0.005	ND
Geranyl acetate	0.0002	0.005	ND
Nerol	0.0002	0.005	ND
Isoborneol	0.0002	0.005	ND
Camphor + Borneol*	0.0003	0.010	ND
Isopulegol	0.0004	0.005	ND
Hexahydrothymol	0.0005	0.005	ND
Sabinene Hydrate	0.0001	0.005	ND
p-Cymene	0.0003	0.005	ND
Eucalyptol	0.0007	0.005	ND
Total of all quantified terpenes:			1.790

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Authorized by:


Ehai Achare
QA Specialist

Details of Testing

Cannabinoid Analysis

Analysis of 11 Cannabinoids by HPLC & UHPLC

Method LAB-MTD-020: Flower (LOQ 0.06%), Oil (LOQ 0.03%), Concentrates (LOQ 0.6%)

Method LAB-MTD-021: Isolates (LOQ 0.06%)

Method LAB-MTD-023: Tablets & Granules (LOQ 0.025%)

Method LAB-MTD-030: Topicals (LOQ 0.005%)

Method LAB-MTD-039: Determination of 5 Cannabinoids in Cannabis Edibles; Liquid Edibles (LOQ 0.0002%) and Solid Edibles (LOQ 0.005%)

Terpene Analysis

Profile of 42 terpenes by GC/MS

Method LAB-MTD-035: Cannabis Flower, Oil

Pesticide Analysis

Determination of 96 Pesticide Residues by LC/MS/MS and GC/MS/MS

Method LAB-MTD-010: Cannabis Flower, Oil

Method LAB-MTD-040: Determination of EP Pesticide Residue in Cannabis Oil by GCMSMS

Method LAB-MTD-041: Determination of EP Pesticide Residues in Cannabis Flower and Related Products by GCMSMS

Mycotoxin Analysis

Determination of Aflatoxins B1, B2, G1, G2 and Ochratoxin-A by LC/MS/MS

Method LAB-MTD-010: Cannabis Flower, Oil

Method LAB-MTD-029: Tablets

Method LAB-MTD-037: Topicals

Heavy Metal Analysis

Determination of Heavy Metal contamination (Arsenic, Cadmium, Lead & Mercury) by ICP/MS

Method LAB-MTD-027: Cannabis Flower, Oil, Topicals, Tablets

Residual Solvents Analysis

Determination of 24 Residual Solvents by GC/MS

Method LAB-MTD-036: Cannabis Oil

Method LAB-MTD-028: Tablets

Determination of Butane and Propane Residual Solvents in Cannabis Oil

Method LAB-MTD-034 (GC/MS): Cannabis Oil

Information is accurate unless otherwise stated. The results of this report are reflective only to material and product analyzed as received. This report shall not be reproduced, without written approval from High North Laboratories. Test Results are confidential unless explicitly waived otherwise.

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Authorized by:


Ebai Achare
QA Specialist

Details of Testing

Microbial Analysis, Powdery Mildew & Gender Determination

Molecular detection and quantitation by PCR & qPCR

Cannabis Flower, Oil, Cannabis-Infused Products

Method MIC-MTD-001 (TAMC, TYMC, BTGN, E.coli, Salmonella, Staph/Pseudomonas)

Method MIC-MTD-005: (Powdery Mildew & Gender Determination)

Method MIC-MTD-006: Determination of Viruses in Cannabis via qPCR and ELISA

Moisture Analysis

Water Activity & Moisture Content (Loss on Drying)

Method LAB-MTD-017 (Loss on Drying; Dry flower only)

Method LAB-MTD-031 (Water activity, a_w)

Foreign Matter Analysis

Visual/Magnified Inspection for Foreign Matter

Method LAB-MTD-022

Total Ash Analysis

Method LAB-MTD-043: Total Ash by Muffle Furnace in Cannabis Products

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Ebal Achare
QA Specialist