

HIGH NORTH ID:  
00242528  
Date: 2022-09-29  
Certificate: 1664460043



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

Client: Lotus Ventures Inc.  
4861 South Grandview Flats Rd.,  
Armstrong, BC, V0E 2S1

Strain: Lemon Tini  
Lot: 092LF  
Matrix: Flower  
Sub-matrix: Dried Flower  
Sampled: 2022-09-22  
Received: 2022-09-23

## Certificate of Analysis

<b>Cannabinoid Analysis</b>	LOD (%)	LOQ (%)	wt%	mg/g
Total THC [(THCA x 0.877) + D9-THC]			28.059	280.592
Total CBD [(CBDA x 0.877) + CBD]			0.075	0.746
THCA-A	0.0090	0.03	31.409	314.089
CBGA	0.0041	0.03	0.868	8.678
D9-THC	0.0093	0.03	0.514	5.136
CBG	0.0094	0.03	0.135	1.354
CBDA	0.0100	0.03	0.085	0.851
CBC	0.0060	0.03	ND	ND
D8-THC	0.0137	0.03	ND	ND
THCV	0.0093	0.03	ND	ND
CBN	0.0067	0.03	ND	ND
CBD	0.0069	0.03	ND	ND
CBDV	0.0090	0.03	ND	ND
<b>Total of all quantified cannabinoids:</b>			33.011	330.108

<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
(R)-(+)-Limonene	0.0001	0.005	0.7
Farnesene*	0.0009	0.005	0.497
Trans-Caryophyllene	0.0002	0.005	0.418
Linalool	0.0003	0.005	0.341
Alpha-Humulene	0.0010	0.005	0.134
Beta-Myrcene	0.0003	0.005	0.125
Terpineol*	0.0001	0.005	0.099
Beta-Pinene	0.0002	0.005	0.085
(R)-Endo-(+)-Fenchyl	0.0003	0.005	0.083
trans-Nerolidol	0.0004	0.005	0.063
Alpha-Pinene	0.0003	0.005	0.06

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

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Gui Scharfack  
QA Specialist

<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
alpha-Bisabolol	0.0003	0.005	0.042
Camphene	0.0002	0.005	0.018
Caryophyllene oxide	0.0008	0.005	0.011
Terpinolene	0.0003	0.005	0.007
Geraniol	0.0007	0.005	BLQ
Citronellol	0.0003	0.005	BLQ
Phytol*	0.0013	0.010	ND
(+)-Cedrol	0.0010	0.005	ND
Guaiol	0.0003	0.005	ND
cis-Nerolidol	0.0003	0.005	ND
Valencene	0.0002	0.005	ND
Eugenol	0.0004	0.010	ND
Geranyl acetate	0.0002	0.005	ND
Alpha-Cedrene	0.0002	0.005	ND
Pulegone	0.0002	0.005	ND
Nerol	0.0002	0.005	ND
Camphor + Borneol*	0.0003	0.010	ND
Hexahydrothymol	0.0005	0.005	ND
Isoborneol	0.0002	0.005	ND
Isopulegol	0.0004	0.005	ND
Fenchone*	0.0003	0.005	ND
Gamma-Terpinene	0.0003	0.005	ND
Sabinene Hydrate	0.0001	0.005	ND
Ocimene*	0.0004	0.005	ND
p-Cymene	0.0003	0.005	ND
Eucalyptol	0.0007	0.005	ND
Alpha-Phellandrene	0.0002	0.005	ND
Alpha-Terpinene	0.0003	0.005	ND
(1S)-3-Carene	0.0007	0.005	ND
Sabinene	0.0013	0.005	ND
<b>Total of all quantified terpenes:</b>			<b>2.683</b>

**Moisture Analysis** 10.95%

**Foreign Matter Analysis** None Detected

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<b>Mycotoxin Analysis</b>	LOD (ppb)	LOQ (ppb)	RL (ppb)	Result (ppb)	
Aflatoxin-B1	1.0	2	2	ND	PASS
Aflatoxin-B2	0.9	2		ND	PASS
Aflatoxin-G1	0.7	2		ND	PASS
Aflatoxin-G2	1.0	2		ND	PASS
<b>Sum of Aflatoxins:</b>			4	0	PASS
Ochratoxin-A	8.7	20	20	ND	PASS

<b>Microbial Analysis</b>	LOD (CFU/g)	RL (CFU/g)	Result (CFU/g)	Status
Total Aerobic Count	12	100,000	ND	PASS
Bile-Tolerant Gram-Negative	5	1,000	ND	PASS
Total Yeast and Mold Count	1.8	1,000	ND	PASS
Salmonella			Absent in 10g	PASS
E.coli			Absent in 10g	PASS

<b>Heavy Metals Analysis</b>	LOD (ppm)	LOQ (ppm)	RL (ppm)	Result (ppm)	Status
Arsenic	0.05	0.2	0.2	ND	PASS
Cadmium	0.01	0.05	0.3	ND	PASS
Lead	0.02	0.5	0.5	ND	PASS
Mercury	0.01	0.05	0.1	ND	PASS

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<b>Pesticides Analysis</b>	LOD (ppm)	LOQ (ppm)	RL (ppm)	Result (ppm)	Status
Abamectin	0.0057	0.1	0.1	ND	PASS
Acephate	0.0100	0.02	0.02	ND	PASS
Acequinocyl	0.0115	0.03	0.03	ND	PASS
Acetamiprid	0.0017	0.1	0.1	ND	PASS
Aldicarb	0.0442	1	1	ND	PASS
Allethrin	0.0314	0.2	0.2	ND	PASS
Azadirachtin	0.0729	1	1	ND	PASS
Azoxystrobin	0.0029	0.02	0.02	ND	PASS
Benzovindiflupyr	0.0038	0.02	0.02	ND	PASS
Bifenazate	0.0022	0.02	0.02	ND	PASS
Bifenthrin	0.0660	1	1	ND	PASS
Boscalid	0.0035	0.02	0.02	ND	PASS
Buprofezin	0.0014	0.02	0.02	ND	PASS
Carbaryl	0.0134	0.05	0.05	ND	PASS
Carbofuran	0.0018	0.02	0.02	ND	PASS
Chlorantraniliprole	0.0039	0.02	0.02	ND	PASS
Chlorfenapyr	0.0263	0.05	0.05	ND	PASS
Chlorpyrifos	0.0033	0.04	0.04	ND	PASS
Clofentezine	0.0022	0.02	0.02	ND	PASS
Clothianidin	0.0220	0.05	0.05	ND	PASS
Coumaphos	0.0038	0.02	0.02	ND	PASS
Cyantraniliprole	0.0032	0.02	0.02	ND	PASS
Cyfluthrin	0.0653	0.2	0.2	ND	PASS
Cypermethrin	0.1550	0.3	0.3	ND	PASS
Cyprodinil	0.0139	0.25	0.25	ND	PASS
Daminozide	0.0138	0.1	0.1	ND	PASS
Deltamethrin	0.0060	0.5	0.5	ND	PASS
Diazinon	0.0016	0.02	0.02	ND	PASS
Dichlorvos	0.0072	0.1	0.1	ND	PASS
Dimethoate	0.0053	0.02	0.02	ND	PASS
Dimethomorph	0.0023	0.05	0.05	ND	PASS
Dinotefuran	0.0076	0.1	0.1	ND	PASS
Dodemorph	0.0026	0.05	0.05	ND	PASS
Endosulfan-alpha	0.0357	0.2	0.2	ND	PASS
Endosulfan-beta	0.0173	0.05	0.05	ND	PASS
Endosulfan sulfate	0.0029	0.05	0.05	ND	PASS
Ethoprophos	0.0060	0.02	0.02	ND	PASS
Etofenprox	0.0059	0.05	0.05	ND	PASS
Etoxazole	0.0007	0.02	0.02	ND	PASS
Etridiazol	0.0036	0.03	0.03	ND	PASS
Fenoxycarb	0.0031	0.02	0.02	ND	PASS
Fenpyroximate	0.0008	0.02	0.02	ND	PASS
Fensulfothion	0.0046	0.02	0.02	ND	PASS

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<b>Pesticides Analysis</b>	LOD (ppm)	LOQ (ppm)	RL (ppm)	Result (ppm)	Status
Fenthion	0.0085	0.02	0.02	ND	PASS
Fenvalerate	0.0767	0.1	0.1	ND	PASS
Fipronil	0.0013	0.06	0.06	ND	PASS
Flonicamid	0.0041	0.05	0.05	ND	PASS
Fludioxonil	0.0043	0.02	0.02	ND	PASS
Fluopyram	0.0014	0.02	0.02	ND	PASS
Hexythiazox	0.0016	0.01	0.01	ND	PASS
Imazalil	0.0060	0.05	0.05	ND	PASS
Imidacloprid	0.0018	0.02	0.02	ND	PASS
Iprodione	0.1217	1	1	ND	PASS
Kinoprene	0.1142	0.5	0.5	ND	PASS
Kresoxim-methyl	0.0069	0.02	0.02	ND	PASS
Malathion	0.0041	0.02	0.02	ND	PASS
Metalaxyl	0.0016	0.02	0.02	ND	PASS
Methiocarb	0.0027	0.02	0.02	ND	PASS
Methomyl	0.0093	0.05	0.05	ND	PASS
Methoprene	0.4544	2	2	ND	PASS
Mevinphos	0.0044	0.05	0.05	ND	PASS
MGK-264	0.0035	0.05	0.05	ND	PASS
Myclobutanil	0.0062	0.02	0.02	ND	PASS
Naled	0.0218	0.1	0.1	ND	PASS
Novaluron	0.0019	0.05	0.05	ND	PASS
Oxamyl	0.0123	3	3	ND	PASS
Paclobutrazol	0.0187	0.02	0.02	ND	PASS
Parathion-methyl	0.0312	0.05	0.05	ND	PASS
Permethrin	0.0609	0.5	0.5	ND	PASS
Phenothrin	0.0294	0.05	0.05	ND	PASS
Phosmet	0.0046	0.02	0.02	ND	PASS
Piperonyl butoxide	0.0010	0.2	0.2	ND	PASS
Pirimicarb	0.0020	0.02	0.02	ND	PASS
Prallethrin	0.0097	0.05	0.05	ND	PASS
Propiconazole	0.0687	0.1	0.1	ND	PASS
Propoxur	0.0035	0.02	0.02	ND	PASS
Pyraclostrobin	0.0020	0.02	0.02	ND	PASS
Pyrethrins	0.0135	0.05	0.05	ND	PASS
Pyridaben	0.0010	0.05	0.05	ND	PASS
Quintozene	0.0074	0.02	0.02	ND	PASS
Resmethrin	0.0090	0.1	0.1	ND	PASS
Spinetoram	0.0012	0.02	0.02	ND	PASS
Spinosad	0.0020	0.1	0.1	ND	PASS
Spirodiclofen	0.0140	0.25	0.25	ND	PASS
Spiromesifen	0.0025	3	3	ND	PASS
Spirotetramat	0.0027	0.02	0.02	ND	PASS

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<b>Pesticides Analysis</b>	LOD (ppm)	LOQ (ppm)	RL (ppm)	Result (ppm)	Status
Spiroxamine	0.0013	0.1	0.1	ND	PASS
Tebuconazole	0.0020	0.05	0.05	ND	PASS
Tebufenozide	0.0021	0.02	0.02	ND	PASS
Teflubenzuron	0.0015	0.05	0.05	ND	PASS
Tetrachlorvinphos	0.0026	0.02	0.02	ND	PASS
Tetramethrin	0.0239	0.1	0.1	ND	PASS
Thiacloprid	0.0014	0.02	0.02	ND	PASS
Thiamethoxam	0.0076	0.02	0.02	ND	PASS
Thiophanate-methyl	0.0174	0.05	0.05	ND	PASS
Trifloxystrobin	0.0018	0.02	0.02	ND	PASS

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## 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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## 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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