

HIGH NORTH ID:
00106396
Date: 2021-11-18
Certificate: 1637267630



High North Inc.
241 Hanlan Rd, Unit 7
Woodbridge, ON, L4L 3R7
1-416-864-6119
LIC-P4PNJMAC20-2019


Client: Grow Cup
241 Hanlan Rd, Unit 7&8,
Woodbridge, ON, L4L 3R7
Name: Grow Cup
416-864-6119
rick+growcup@highnorth.com
Strain: Pink Lemonade
Lot: James Hill
Matrix: Flower
Sub-matrix: Dried Flower
Sampled: 2021-11-12
Received: 2021-11-12

Certificate of Analysis

| Cannabinoid Analysis | LOD (%) | LOQ (%) | wt% | mg/g |
|--|---------|---------|--------|---------|
| Total THC [(THCA x 0.877) + D9-THC] | | | 20.091 | 200.914 |
| Total CBD [(CBDA x 0.877) + CBD] | | | 0.062 | 0.616 |
| THCA-A | 0.0090 | 0.03 | 21.682 | 216.816 |
| D9-THC | 0.0093 | 0.03 | 1.077 | 10.766 |
| CBGA | 0.0041 | 0.03 | 0.2 | 1.995 |
| CBG | 0.0094 | 0.03 | 0.088 | 0.882 |
| CBDA | 0.0100 | 0.03 | 0.07 | 0.702 |
| CBC | 0.0060 | 0.03 | ND | ND |
| D8-THC | 0.0137 | 0.03 | ND | ND |
| CBN | 0.0067 | 0.03 | ND | ND |
| CBD | 0.0069 | 0.03 | ND | ND |
| THCV | 0.0093 | 0.03 | ND | ND |
| CBDV | 0.0090 | 0.03 | ND | ND |
| Total of all quantified cannabinoids: | | | 23.116 | 231.161 |

| Terpene Analysis | LOD (%) | LOQ (%) | wt% |
|----------------------|---------|---------|-------|
| Trans-Caryophyllene | 0.0002 | 0.005 | 1.224 |
| (R)-(+)-Limonene | 0.0001 | 0.005 | 0.418 |
| Linalool | 0.0003 | 0.005 | 0.367 |
| Farnesene* | 0.0009 | 0.005 | 0.32 |
| Alpha-Humulene | 0.0010 | 0.005 | 0.235 |
| Beta-Myrcene | 0.0003 | 0.005 | 0.183 |
| trans-Nerolidol | 0.0004 | 0.005 | 0.086 |
| Terpineol* | 0.0001 | 0.005 | 0.066 |
| alpha-Bisabolol | 0.0003 | 0.005 | 0.054 |
| (R)-Endo-(+)-Fenchyl | 0.0003 | 0.005 | 0.049 |
| Beta-Pinene | 0.0002 | 0.005 | 0.045 |

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: 

Amrita Naidu
QA Specialist

| Terpene Analysis | LOD (%) | LOQ (%) | wt% |
|--|----------------|----------------|--------------|
| Alpha-Pinene | 0.0003 | 0.005 | 0.034 |
| Caryophyllene oxide | 0.0008 | 0.005 | 0.009 |
| Camphene | 0.0002 | 0.005 | 0.009 |
| Citronellol | 0.0003 | 0.005 | 0.008 |
| Nerol | 0.0002 | 0.005 | BLQ |
| Terpinolene | 0.0003 | 0.005 | 0.005 |
| Geraniol | 0.0007 | 0.005 | BLQ |
| Fenchone* | 0.0003 | 0.005 | BLQ |
| Sabinene Hydrate | 0.0001 | 0.005 | BLQ |
| Ocimene* | 0.0004 | 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 |
| Alpha-Cedrene | 0.0002 | 0.005 | ND |
| Pulegone | 0.0002 | 0.005 | ND |
| Geranyl acetate | 0.0002 | 0.005 | ND |
| Isoborneol | 0.0002 | 0.005 | ND |
| Camphor + Borneol* | 0.0003 | 0.010 | ND |
| Hexahydrothymol | 0.0005 | 0.005 | ND |
| Isopulegol | 0.0004 | 0.005 | ND |
| Gamma-Terpinene | 0.0003 | 0.005 | ND |
| Eucalyptol | 0.0007 | 0.005 | ND |
| p-Cymene | 0.0003 | 0.005 | ND |
| Alpha-Terpinene | 0.0003 | 0.005 | ND |
| (1S)-3-Carene | 0.0007 | 0.005 | ND |
| Alpha-Phellandrene | 0.0002 | 0.005 | ND |
| Sabinene | 0.0013 | 0.005 | ND |
| Total of all quantified terpenes: | | | 3.112 |

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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%), Extracts (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%)

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

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

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)

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

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