

HIGH NORTH ID:
00074615
Date: 2021-08-13
Certificate: 1628863073



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

Client: Mother Labs
#115 343 70th STREET,
SASKATOON, SK, CANADA,
Saskatoon, SK, S7P0E3

Name: [REDACTED]

Strain: Sinmintz v7
Lot: SAM2108-015
Matrix: Flower
Sub-matrix: Dried Flower
Sampled: 2021-08-09
Received: 2021-08-10

Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
Total THC [(THCA x 0.877) + D9-THC]			24.226	242.263
Total CBD [(CBDA x 0.877) + CBD]			0.064	0.635
THCA-A	0.0090	0.03	27.258	272.577
CBGA	0.0041	0.03	1.343	13.432
D9-THC	0.0093	0.03	0.321	3.213
CBG	0.0094	0.03	0.124	1.235
CBDA	0.0100	0.03	0.072	0.724
D8-THC	0.0137	0.03	ND	ND
CBC	0.0060	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:			29.118	291.181

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0002	0.005	0.868
Farnesene*	0.0009	0.005	0.631
(R)-(+)-Limonene	0.0001	0.005	0.606
Alpha-Humulene	0.0010	0.005	0.29
Linalool	0.0003	0.005	0.228
alpha-Bisabolol	0.0003	0.005	0.099
Terpineol*	0.0001	0.005	0.074
Beta-Pinene	0.0002	0.005	0.072
(R)-Endo-(+)-Fenchyl	0.0003	0.005	0.064
Alpha-Pinene	0.0003	0.005	0.051

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:

Will Zhang, Quality Assurance Specialist

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Beta-Myrcene	0.0003	0.005	0.028
Caryophyllene oxide	0.0008	0.005	0.02
trans-Nerolidol	0.0004	0.005	0.017
Camphene	0.0002	0.005	0.015
Terpinolene	0.0003	0.005	0.008
Citronellol	0.0003	0.005	BLQ
Nerol	0.0002	0.005	BLQ
Geraniol	0.0007	0.005	BLQ
Sabinene Hydrate	0.0001	0.005	BLQ
Gamma-Terpinene	0.0003	0.005	BLQ
Alpha-Terpinene	0.0003	0.005	BLQ
Fenchone*	0.0003	0.005	BLQ
Phytol*	0.0013	0.010	ND
(+)-Cedrol	0.0010	0.005	ND
Guaiol	0.0003	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
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
Eucalyptol	0.0007	0.005	ND
Ocimene*	0.0004	0.005	ND
p-Cymene	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:			3.071

Moisture Analysis 12.08%

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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%), 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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