

HIGH NORTH ID:  
00050524  
Date: 2021-05-12  
Certificate: 1620847549



241 Hanlan Rd, Unit 7  
Woodbridge, ON, L4L 3R7  
1-416-864-6119

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

Name: [REDACTED]

Strain: Flawless Victory  
Lot: SAM2105-011  
Matrix: Flower  
Sub-matrix: N/A  
Sampled: 2021-05-05  
Received: 2021-05-06

## Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
<b>Total THC [(THCA x 0.877) + D9-THC]</b>			<b>25.533</b>	<b>255.325</b>
Total CBD [(CBDA x 0.877) + CBD]			0.099	0.991
THCA-A	0.0090	0.03	27.978	279.783
CBGA	0.0041	0.03	1.123	11.226
D9-THC	0.0093	0.03	0.995	9.955
CBG	0.0094	0.03	0.149	1.491
CBDA	0.0100	0.03	0.113	1.13
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:** **30.359** **303.585**

Terpene Analysis	LOD (%)	LOQ (%)	wt%
(R)-(+)-Limonene	0.0001	0.01	0.864
Trans-Caryophyllene	0.0001	0.01	0.33
Linalool	0.0001	0.01	0.221
alpha-Pinene	0.0001	0.01	0.147
Terpineol (mix of isomers)	0.0001	0.01	0.142
beta-Pinene	0.0001	0.01	0.136
(R)-Endo-(+)-Fenchyl	0.0001	0.01	0.108
alpha-Humulene	0.0001	0.01	0.095
beta-Myrcene	0.0001	0.01	0.071
Farnesene-2	0.0001	0.01	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

Authorized by:

Ryan Lee  
Quality Assurance

<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
Ocimene (mixture of	0.0001	0.01	0.028
Camphene	0.0001	0.01	0.025
Valencene	0.0001	0.01	0.023
Phytol	0.0001	0.06	BLQ
Geraniol	0.0001	0.01	BLQ
Terpinolene	0.0001	0.01	BLQ
Caryophyllene oxide	0.0001	0.01	BLQ
alpha-Bisabolol	0.0001	0.01	BLQ
trans-beta-Ocimene	0.0001	0.01	BLQ
Citronellol	0.0001	0.01	BLQ
Fenchone (mix of isomers)	0.0001	0.01	BLQ
Sabinene Hydrate	0.0001	0.01	BLQ
(+)-Cedrol	0.0001	0.01	ND
trans-Nerolidol	0.0001	0.01	ND
Guaiol	0.0001	0.01	ND
cis-Nerolidol	0.0001	0.01	ND
Eugenol	0.0001	0.01	ND
alpha-Cedrene	0.0001	0.01	ND
Pulegone	0.0001	0.01	ND
Geraniol acetate	0.0001	0.01	ND
Nerol	0.0001	0.01	ND
gamma-Terpineol	0.0001	0.01	ND
Isoborneol	0.0001	0.01	ND
Camphor (mix of isomers)	0.0001	0.01	ND
Isopulegol	0.0001	0.01	ND
Hexahydrothymol	0.0001	0.01	ND
gamma-Terpinene	0.0001	0.01	ND
p-Isopropyltoluene (p-	0.0001	0.01	ND
Eucalyptol	0.0001	0.01	ND
alpha-Phellandrene	0.0001	0.01	ND
alpha-Terpinene	0.0001	0.01	ND
(1S)-3-Carene	0.0001	0.01	ND
Sabinene	0.0001	0.01	ND
<b>Total of all quantified terpenes:</b>			<b>2.235</b>

**Moisture Analysis** 9.35%

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## Details of Testing

### **Cannabinoid Analysis**

Analysis of 11 Cannabinoids by HPLC & UHPLC

LOQ of 0.3% for Resins/Distillates/Isolates; 0.025% for Tablets; 0.03% for Flower/Oil Samples

HIGH NORTH Laboratories Methods: LAB-MTD-020, LAB-MTD-021, LAB-MTD-023 & LAB-MTD-030

### **Terpene Analysis**

Profile of 42 Terpenes by GC-MS/MS

Cannabis Flower, Oil

HIGH NORTH Laboratories Method: LAB-MTD-018

### **Moisture Analysis**

Water Activity & Moisture Content (Loss on Drying)

HIGH NORTH Laboratories Method: LAB-MTD-031 & LAB-MTD-017

### **Microbial Analysis, Powdery Mildew & Gender Determination**

Molecular detection and quantitation by PCR & qPCR

Cannabis Flower, Cannabis-Infused Products

HIGH NORTH Laboratories Method: MIC-MTD-001 & MIC-MTD-005

### **Mycotoxin Analysis**

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

Cannabis Flower, Oil, Tablets

HIGH NORTH Laboratories Method: LAB-MTD-010, LAB-MTD-029

### **Heavy Metal Analysis**

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

Cannabis Flower, Oil, Topicals, Tablets

HIGH NORTH Laboratories Method: LAB-MTD-027

### **Residual Solvents Analysis**

Determination of 25 Residual Solvents by GC-MS/MS

Cannabis Oil, Tablets

HIGH NORTH Laboratories Method: LAB-MTD-005 & LAB-MTD-028

### **Pesticide Analysis**

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

Cannabis Flower, Oil

HIGH NORTH Laboratories Method: LAB-MTD-010

### **Determination of Butane and Propane Residual Solvents in Cannabis Oil**

HIGH NORTH Laboratories Method: LAB-MTD-034

### **Foreign Matter Analysis**

Visual/Magnified Inspection for Foreign Matter

HIGH NORTH Laboratories Method: LAB-MTD-022

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