

HIGH NORTH ID:  
00083440  
Date: 2021-09-15  
Certificate: 1631737594



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: Regulate v6  
Lot: SAM2109-060  
Matrix: Flower  
Sub-matrix: Dried Flower  
Sampled: 2021-09-08  
Received: 2021-09-09

## Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
<b>Total THC [(THCA x 0.877) + D9-THC]</b>			<b>25.747</b>	<b>257.468</b>
Total CBD [(CBDA x 0.877) + CBD]			0.086	0.856
THCA-A	0.0090	0.03	28.094	280.941
D9-THC	0.0093	0.03	1.108	11.083
CBGA	0.0041	0.03	0.991	9.905
CBDA	0.0100	0.03	0.098	0.976
CBG	0.0094	0.03	0.067	0.669
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:** **30.357** **303.574**

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0002	0.005	1.043
Beta-Myrcene	0.0003	0.005	0.676
(R)-(+)-Limonene	0.0001	0.005	0.509
Farnesene*	0.0009	0.005	0.428
Alpha-Humulene	0.0010	0.005	0.247
alpha-Bisabolol	0.0003	0.005	0.111
Linalool	0.0003	0.005	0.11
Beta-Pinene	0.0002	0.005	0.087
Terpineol*	0.0001	0.005	0.081
(R)-Endo-(+)-Fenchyl	0.0003	0.005	0.066

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:

Ryan Lee  
Quality Assurance

<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
Alpha-Pinene	0.0003	0.005	0.056
Caryophyllene oxide	0.0008	0.005	0.039
Camphene	0.0002	0.005	0.016
Phytol*	0.0013	0.010	BLQ
Terpinolene	0.0003	0.005	0.006
Citronellol	0.0003	0.005	BLQ
Fenchone*	0.0003	0.005	BLQ
Geraniol	0.0007	0.005	BLQ
Sabinene Hydrate	0.0001	0.005	BLQ
Gamma-Terpinene	0.0003	0.005	BLQ
(+)-Cedrol	0.0010	0.005	ND
Guaiol	0.0003	0.005	ND
trans-Nerolidol	0.0004	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
Eucalyptol	0.0007	0.005	ND
Ocimene*	0.0004	0.005	ND
p-Cymene	0.0003	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>3.475</b>

**Moisture Analysis** 11.26%

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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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