HIGH NORTH ID: 00406845

Date: 2023-11-30

Certificate: 1701372870



High North Inc. 241 Hanlan Rd, Unit 7 Woodbridge, ON, L4L 3R7 1-416-864-6119 LIC-P4PNIMAC20-2022

Client: Rosebud Productions Inc.

#115 - 23000 FRASERWOOD

WAY.

RICHMOND, BC, V6V 3C7

Madeleine Gwynne Name:

17782291621

madeleine@herbaldispatch.com

Squirt Product:

2023092002 Lot:

Matrix: Oil

Sub-matrix: Live Resin Sampled: 2023-11-15 Received:

2023-11-16

Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
Total THC [(THCA x 0.877) + D9-THC] Total CBD [(CBDA x 0.877) + CBD]			60.8378 0.1801	608.3771 1.8012
THCA-A	0.1	0.2	67.9083	679.0828
CBGA	0.1	0.2	2.9252	29.2522
D9-THC	0.1	0.2	1.2822	12.8215
CBCA	0.1	0.2	0.8355	8.3549
CBG	0.1	0.2	0.3131	3.1306
CBDA	0.1	0.2	0.2054	2.0538
CBC	0.1	0.2	ND	ND
D8-THC	0.1	0.2	ND	ND
CBCVA	0.1	0.2	ND	ND
CBN	0.1	0.2	ND	ND
THCVA	0.1	0.2	ND	ND
CBCV	0.1	0.2	ND	ND
THCV	0.1	0.2	ND	ND
CBD	0.1	0.2	ND	ND
CBDV	0.1	0.2	ND	ND
CBDVA	0.1	0.2	ND	ND
Total of all quantified cannabinoids:			73.4697	734.6958

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0008	0.025	2.7765
Farnesene*	0.0055	0.050	2.3571
(R)-(+)-Limonene	0.0007	0.025	1.7996
Beta-Myrcene	0.0005	0.025	1.4902
Alpha-Humulene	0.0005	0.025	1.2049

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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Terpene Analysis	LOD (%)	LOQ (%)	wt%
Linalool	0.0007	0.025	0.5074
Guaiol	0.0005	0.025	0.4761
Terpinolene	0.0008	0.025	0.4194
Alpha-Bisabolol	0.0008	0.025	0.3156
Beta-Pinene	0.0008	0.025	0.2240
Alpha-Terpineol	0.0008	0.025	0.1780
Alpha-Pinene	0.0007	0.025	0.1772
(R)-Endo-(+)-Fenchyl Alcohol	0.0010	0.025	0.1391
Caryophyllene oxide	0.0007	0.025	0.1372
Ocimene	0.0005	0.025	0.0592
trans-Nerolidol	0.0006	0.025	0.0444
Camphene	0.0017	0.025	0.0339
Alpha-Phellandrene	0.0010	0.025	BLQ
Borneol	0.0007	0.025	BLQ
Alpha-Terpinene	0.0004	0.025	BLQ
(1S)-3-Carene	0.0009	0.025	BLQ
Fenchone	0.0008	0.025	BLQ
Gamma-Terpinene	0.0007	0.025	BLQ
Sabinene	0.0009	0.025	BLQ
Cymene*	0.0006	0.025	BLQ
Squalene	0.0029	0.050	ND
Phytol*	0.0018	0.050	ND
Nootkatone	0.0018	0.025	ND
Farnesol*	0.0016	0.050	ND
Phytane	0.0009	0.025	ND
(+)-Cedrol	0.0006	0.025	ND
cis-Nerolidol	0.0015	0.025	ND
Valencene	0.0005	0.025	ND
Eugenol	0.0023	0.025	ND
Alpha-Cedrene	0.0006	0.025	ND
Geranyl acetate	0.0009	0.025	ND
Carvacrol	0.0009	0.025	ND
Thymol	0.0012	0.025	ND
d-Valerolactam (2-piperidone)	0.0012	0.025	ND
(-)-Piperitone	0.0017	0.025	ND
Isobornyl Acetate	0.0018	0.025	ND
Carvone	0.0007	0.025	ND
Pulegone	0.0007	0.025	ND
Verbenone	0.0007	0.025	ND
Citral*	0.0021	0.025	ND
Geraniol	0.0007	0.025	ND
Safranal	0.0004	0.025	ND
Nerol	0.0010	0.025	ND

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Terpene Analysis	LOD (%)	LOQ (%)	wt%		
Citronellol	0.0008	0.025	ND		
Octyl Acetate	0.0009	0.025	ND		
Terpinen-4-ol	0.0010	0.025	ND		
Camphor	0.0008	0.025	ND		
Isoborneol	0.0006	0.025	ND		
Menthol (Hexahydrothymol)	0.0010	0.025	ND		
Menthone*	0.0007	0.025	ND		
Isopulegol	0.0007	0.025	ND		
Alpha-Thujone	0.0005	0.025	ND		
Sabinene Hydrate	0.0010	0.025	ND		
Eucalyptol	0.0006	0.025	ND		
Total of all quantified terpenes:			12.340		
Microbial Analysis		LOD (CFU/g)	RL (CFU/g)	Result (CFU/g)	Status
Total Aerobic Count		10	200	< 10	PASS
Total Yeast and Mold Count		10	20	< 10	PASS

Microbial Analysis		LOD (CFU/g)	RL (CFU/g)	Result (CFU/g)	Status
Total Aerobic Count Total Yeast and Mold Count S.aureus/P.aeruginosa		10 10	200 20	< 10 < 10 Absent in 1g	PASS PASS PASS
Bile-Tolerant Gram-Negative Heavy Metals Analysis	LOD (ppm)	LOQ (ppm)	RL (ppm)	Absent in 1g Result (ppm)	PASS Status
Arsenic	0.067	0.2	0.2	ND	PASS
Cadmium	0.008	0.05	0.3	ND	PASS
Lead	0.010	0.50	0.5	ND	PASS
Mercury	0.003	0.05	0.1	ND	PASS

Comments

This COA cancels and supersedes certificate ID 1700838388 dated 2023-11-24.

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Authorized by:

KOSUJawa Kintesh Sutaria QA Specialist

Details of Testing

Cannabinoid Analysis

LAB-MTD-020: Determination of 16 Cannabinoids in Cannabis Flowers, Extracts, Topicals, Tablets and Isolates by HPLC

LAB-MTD-039: Determination of 11 Cannabinoids in Cannabis Edibles by HPLC LAB-MTD-051: Assay of Cannabinoids in Cannabis Flower as per DAB by HPLC

LAB-MTD-052: Identification of CBD and THCA as per DAB by Thin-Layer Chromatography

Terpene Analysis

LAB-MTD-044: Determination of Terpene Content in Cannabis Dried Flower, Fresh Flower and Extracts by GC-MS

Pesticide Analysis

LAB-MTD-010: Determination of Health Canada Pesticide Residues and Toxins in Dried Cannabis Flower by LC-MS/MS and GC-MS/MS

LAB-MTD-040: Determination of EP 2.8.13 Pesticide Residues in Cannabis Extracts by GC-MS/MS LAB-MTD-041: Determination of EP 2.8.13/USP 561 Pesticide Residues in Cannabis Flower by GC-MS/MS and LC-MS/MS

LAB-MTD-046: Determination of Health Canada Pesticides and Toxins in Cannabis Extracts by LC-MS/MS

LAB-MTD-048: Determination of Health Canada Pesticide Residues and Toxins in Fresh Cannabis Flower by LC-MS/MS and GC-MS/MS

LAB-MTD-055: Determination of Israel Pesticide Residues in Dried/Fresh Cannabis by LC-MS/MS and GC-MS/MS

Mycotoxin Analysis

LAB-MTD-010: Determination of Health Canada Pesticide Residues and Toxins in Dried Cannabis Flower by LC-MS/MS and GC-MS/MS

LAB-MTD-029: Determination of Toxins in Tablet Samples by LC-MS/MS

LAB-MTD-037: Determination of Mycotoxins in Topical/Cream Samples by LC-MS/MS

LAB-MTD-046: Determination of Health Canada Pesticides and Toxins in Cannabis Extracts by LC-MS/MS

LAB-MTD-048: Determination of Health Canada Pesticide Residues and Toxins in Fresh Cannabis Flower by LC-MS/MS and GC-MS/MS

Flavonoid Analysis

LAB-MTD-045: Determination of Flavonoids in Cannabis Dried Flower, Fresh Flower, and Extracts by LC-MS/MS

Peroxide Value, p-Anisidine and Acidity (FFA) Analysis

LAB-MTD-049: Determination of Peroxide Value, p-Anisidine, and Acidity (FFA)

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Authorized by:

KUSULaxa Kintesh Sutaria QA Specialist

Details of Testing

Microbial Analysis

MIC-MTD-001: Microbial Analysis of Cannabis Flower and Oil by qPCR MIC-MTD-006: Determination of Viruses in Cannabis via qPCR and ELISA MIC-MTD-007: Microbial Analysis of Cannabis by Culture Techniques

MIC-MTD-009: Cannabis Gender Determination by gPCR

MIC-MTD-010: Identification A and Identification B of Cannabis by DAB Monograph MIC-MTD-011: Analysis of Shigella Species in Cannabis and Cannabis Infused Products

MIC-MTD-008: Analysis of Listeria Monocytogenes in Cannabis and Cannabis Infused Products

MIC-MTD-012: Microbial Analysis of Cannabis and Cannabis Infused Products by TEMPO

Moisture Analysis

LAB-MTD-017: Determination of Moisture Content in Cannabis Flower

LAB-MTD-031: Water Activity Meter Setup and Operation

LAB-MTD-053: Determination of Moisture Content by Loss on Drying Technique using Vacuum

Oven

LAB-MTD-056: Determination of Moisture Content by Karl Fischer Titration

Sample Appearance and Foreign Matter

LAB-MTD-022: Sample Appearance and Detection of Foreign Matter Content in Cannabis Samples

Total Ash Analysis

LAB-MTD-043: Total Ash by Muffle Furnace in Cannabis Products

Residual Solvents Analysis

LAB-MTD-036: Determination of Residual Solvents in Cannabis Oil by GC-MS

LAB-MTD-028: Determination of Residual Solvents in Tablet Samples by GC-MS

LAB-MTD-034: Determination of Propane and Butane in Cannabis Oil by GC-MS

LAB-MTD-038: Determination of Toluene in Cannabis Isolate by GC-MS

LAB-MTD-054: Determination of Acetic Acid in Flavour, Cannabis Vape Mix Oil and Cannabis

Infused Flower by GC-MS

Heavy Metal Analysis

LAB-MTD-027: Determination of Heavy Metals in Cannabis Samples (Cream/Topicals, Tablets and Edibles) by ICP-MS

LAB-MTD-050: Multi-Element Analysis of Cannabis Dried Flower, Fresh Flower, Extracts, and Rolling Papers by ICP-MS

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KOSukasa Kintesh Sutaria QA Specialist