

HIGH NORTH ID:  
00365766  
Date: 2023-08-10  
Certificate: 1691696419



High North Inc.  
241 Hanlan Rd, Unit 7  
Woodbridge, ON, L4L 3R7  
1-416-864-6119  
LIC-P4PNJMAC20-2022

Client: BLACK KETTLE FARMS  
22051 56 AVE ,  
LANGLEY, BC, V2Y 2M8  
Name: 1199519 BC LTD  
778.918.0911  
blackkettle000@gmail.com

Product: Donkey Butter  
Lot: DB-23-01  
Matrix: Flower  
Sub-matrix: Dried Flower  
Sampled: 2023-08-01  
Received: 2023-08-04

## Certificate of Analysis

<b>Cannabinoid Analysis</b>	LOD (%)	LOQ (%)	wt%	mg/g
Total THC [(THCA x 0.877) + D9-THC]			22.3630	223.6293
Total CBD [(CBDA x 0.877) + CBD]			0.0729	0.7288
THCA-A	0.015	0.06	24.8824	248.8242
CBGA	0.015	0.06	0.7246	7.2459
D9-THC	0.015	0.06	0.5411	5.4105
CBDA	0.015	0.06	0.0831	0.8310
CBG	0.015	0.06	0.0783	0.7832
CBC	0.015	0.06	ND	ND
D8-THC	0.015	0.06	ND	ND
CBN	0.015	0.06	ND	ND
THCV	0.015	0.06	ND	ND
CBD	0.015	0.06	ND	ND
CBDV	0.015	0.06	ND	ND
<b>Total of all quantified cannabinoids:</b>			26.3095	263.0948

<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0011	0.005	0.5109
(R)-(+)-Limonene	0.0006	0.005	0.3318
Farnesene*	0.0029	0.010	0.2553
Beta-Myrcene	0.0004	0.005	0.1961
Alpha-Humulene	0.0002	0.005	0.1404
Alpha-Terpeneol	0.0007	0.005	0.0852
Linalool	0.0006	0.005	0.0767
(R)-Endo-(+)-Fenchyl Alcohol	0.0005	0.005	0.0680
Beta-Pinene	0.0004	0.005	0.0606
Alpha-Pinene	0.0002	0.005	0.0539
Alpha-Bisabolol	0.0011	0.005	0.0313

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:

  
Gui Scharlack  
QA Specialist

<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
trans-Nerolidol	0.0005	0.005	0.0228
Camphene	0.0009	0.005	0.0134
Caryophyllene oxide	0.0009	0.005	0.0130
Borneol	0.0005	0.005	0.0089
Terpinolene	0.0005	0.005	BLQ
Fenchone	0.0003	0.005	BLQ
Squalene	0.0015	0.005	ND
Phytol*	0.0030	0.010	ND
Nootkatone	0.0009	0.005	ND
Farnesol*	0.0032	0.010	ND
Phytane	0.0006	0.005	ND
(+)-Cedrol	0.0004	0.005	ND
Guaiol	0.0013	0.005	ND
cis-Nerolidol	0.0012	0.005	ND
Valencene	0.0006	0.005	ND
Eugenol	0.0010	0.005	ND
Alpha-Cedrene	0.0004	0.005	ND
Geranyl acetate	0.0007	0.005	ND
Carvacrol	0.0005	0.005	ND
Thymol	0.0006	0.005	ND
d-Valerolactam (2-piperidone)	0.0015	0.005	ND
(-)-Piperitone	0.0012	0.005	ND
Isobornyl Acetate	0.0005	0.005	ND
Carvone	0.0006	0.005	ND
Pulegone	0.0006	0.005	ND
Verbenone	0.0006	0.005	ND
Citral*	0.0015	0.005	ND
Geraniol	0.0005	0.005	ND
Safranal	0.0004	0.005	ND
Nerol	0.0007	0.005	ND
Citronellol	0.0008	0.005	ND
Octyl Acetate	0.0005	0.005	ND
Terpinen-4-ol	0.0017	0.005	ND
Camphor	0.0005	0.005	ND
Isoborneol	0.0005	0.005	ND
Menthol (Hexahydrothymol)	0.0013	0.005	ND
Menthone*	0.0015	0.005	ND
Isopulegol	0.0010	0.005	ND
Alpha-Thujone	0.0010	0.005	ND
Sabinene Hydrate	0.0006	0.005	ND
Gamma-Terpinene	0.0002	0.005	ND
Eucalyptol	0.0011	0.005	ND
Cymene*	0.0004	0.005	ND

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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<b>Terpene Analysis</b>	LOD (%)	LOQ (%)	wt%
Ocimene	0.0017	0.005	ND
Alpha-Terpinene	0.0004	0.005	ND
Alpha-Phellandrene	0.0010	0.005	ND
(1S)-3-Carene	0.0009	0.005	ND
Sabinene	0.0003	0.005	ND
<b>Total of all quantified terpenes:</b>			1.868
<b>Moisture Analysis</b>	9.61%		

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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## Details of Testing

### **Cannabinoid Analysis**

LAB-MTD-020: Determination of 11 Cannabinoids in Cannabis Flower (LOQ 0.06%), Fresh Flower (LOQ 0.015%), Oil (LOQ 0.03%) and Concentrates (LOQ 0.6%) by HPLC and UHPLC

LAB-MTD-021: Determination of Cannabinoids of Individually Isolated Sample by HPLC/UHPLC

LAB-MTD-023: Determination of 11 Cannabinoids in Cannabis Tablets and Granules (LOQ 0.025%) by HPLC/UHPLC

LAB-MTD-030: Determination of 11 Cannabinoids in Cannabis Topicals (LOQ 0.005%) by HPLC/UHPLC

LAB-MTD-039: Determination of 11 Cannabinoids in Cannabis Edibles; Liquid Edibles (LOQ 0.0005%) and Solid Edibles (LOQ 0.005%) 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 Pesticide Residues in Cannabis Oil and Related Products by GC-MS/MS

LAB-MTD-041: Determination of EP Pesticide Residues in Cannabis Flower and Related Products by GC-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

### **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

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QA Specialist

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# 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 qPCR  
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

## **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

## **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

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

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

## **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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Authorized by:

  
Gui Scharlack  
QA Specialist

## CERTIFICATE OF ANALYSIS

### Client information

Seastone Farm Ltd.  
2831 East Road  
Denman Island , Canada, V0R 1T0

### COA information

COA number **231020\_79136\_PAR22183**  
COA Date **20-Oct-2023**  
Analysis Request ID **PAR22183**

### Sample information

Sample Name **Lot 7**  
Sample ID **Lot 7**  
Laboratory ID **PAT66293**  
Method Ref. **PAT-AM-019**

Sample Receiving Date **17-Oct-2023**  
Receiving Temperature **21°C**  
Analysis Date **19-Oct-2023**

### Cannabinoids Profile

Compounds	Results (%w/w)	Results (mg/g)	LOQ(%)
CBC	<0.050	<0.500	0.050
CBD	<0.050	<0.500	0.050
CBDA	0.062	0.620	0.050
CBDV	<0.050	<0.500	0.050
CBG	0.117	1.170	0.050
CBGA	1.158	11.580	0.050
CBN	<0.050	<0.500	0.050
D8-THC	0.834	8.340	0.050
D9-THC	<0.050	<0.500	0.050
THCA-A	31.052	310.520	0.050
THCV	<0.050	<0.500	0.050
<b>Total THC</b>	<b>28.067</b>	<b>280.666</b>	
<b>Total CBD</b>	<b>0.054</b>	<b>0.544</b>	

**28.067%**  
Total THC

**0.054%**  
Total CBD

Total THC = THC + (THCA\*0.877), Total CBD = CBD + (CBDA\*0.877)

Total THC/CBD is calculated using the formulas to take into account the loss of carboxyl group during decarboxylation step.

Authorized by: Laboratory Manager

Signature:



## Details of testing

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1. *LOQ- Limit of quantification*
2. *% w/w: percent (weight of analyte/ weight of product)*
3. *Results only apply to the items tested and to the sample(s) as received.*
4. *This report may not be distributed or reproduced except in full*



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scanning the QR code

## Sample information

Sample Name	Lot 7	Sample Receiving Date	17-Oct-2023
Sample ID	Lot 7	Receiving Temperature	21°C
Laboratory ID	PAT66293	Analysis Date	20-Oct-2023
Method Ref.	PAT-AM-022		

## Terpenes Profile

Compounds	Results (%w/w)	Results (mg/g)	LOQ(%)
D-Limonene	0.911	9.110	0.001
Linalool	0.348	3.480	0.001
beta-Caryophyllene	0.324	3.240	0.001
Selina-3,7(11)-diene	0.230	2.300	0.001
beta-Myrcene	0.212	2.120	0.001
Farnesene 5	0.138	1.380	0.005
Farnesene 3	0.127	1.270	0.005
beta-Pinene	0.125	1.250	0.001
alpha-Humulene	0.119	1.190	0.001
(-)-Guaiol	0.112	1.120	0.001
1R-endo-Fenchyl-Alcohol	0.065	0.650	0.001
alpha-Pinene	0.064	0.640	0.001
Farnesene 1	0.061	0.610	0.005
(-)-alpha-Bisabolol	0.059	0.590	0.001
alpha-Terpineol	0.059	0.590	0.001
beta-Selinene	0.054	0.540	0.001
Farnesol 2	0.051	0.510	0.001
alpha-Selinene	0.050	0.500	0.001
trans-Nerolidol	0.044	0.440	0.001
Camphene	0.019	0.190	0.001
Farnesene 4	0.019	0.190	0.005
Geranyl Acetate	0.019	0.190	0.001
Fenchone	0.014	0.140	0.001
Valencene	0.013	0.130	0.001
cis-beta-Ocimene	0.010	0.100	0.005
Squalene	0.010	0.100	0.001
Nootkatone	0.009	0.090	0.001
Terpinen-4-ol/D-Isomenthone	0.008	0.080	0.001
trans-beta-Farnesene	0.008	0.080	0.001
Caryophyllene Oxide	0.006	0.060	0.001
Farnesene 2	<0.005	<0.050	0.005
(-)-Isopulegol	0.003	0.030	0.001
Citronellol	0.003	0.030	0.001
Piperitone	0.003	0.030	0.001
gamma-Terpinene	0.002	0.020	0.001
Isobornyl Acetate	0.002	0.020	0.001
Menthol	0.002	0.020	0.001
Octyl Acetate	0.002	0.020	0.001
Phytane	0.002	0.020	0.001
1,8-Cineole (Eucalyptol)	<0.001	<0.010	0.001



Compounds	Results (%w/w)	Results (mg/g)	LOQ(%)
alpha-Cedrene	<0.001	<0.010	0.001
alpha-Phellandrene	<0.001	<0.010	0.001
alpha-Terpinene	<0.001	<0.010	0.001
alpha-Thujone	<0.001	<0.010	0.001
Borneol	<0.001	<0.010	0.001
Camphor	<0.001	<0.010	0.001
Carvacrol	<0.001	<0.010	0.001
Carvone	<0.001	<0.010	0.001
Cedrol	<0.001	<0.010	0.001
cis-Citral	<0.001	<0.010	0.001
cis-Nerolidol	<0.001	<0.010	0.001
delta-3-Carene	<0.001	<0.010	0.001
Farnesol 1	<0.001	<0.010	0.001
Geraniol	0.001	0.010	0.001
Isoborneol	<0.001	<0.010	0.001
L-Menthone	<0.001	<0.010	0.001
m-Isopropyltoluene	<0.001	<0.010	0.001
Nerol	<0.001	<0.010	0.001
o-Isopropyltoluene	<0.001	<0.010	0.001
p-Isopropyltoluene	<0.001	<0.010	0.001
Pulegone	<0.001	<0.010	0.001
Sabinene	<0.001	<0.010	0.001
Sabinene Hydrate	0.001	0.010	0.001
Safranal	<0.001	<0.010	0.001
Terpinolene	<0.001	<0.010	0.001
Thymol	<0.001	<0.010	0.001
trans-beta-Ocimene	0.001	0.010	0.001
trans-Citral	0.001	0.010	0.001
Verbenone	<0.001	<0.010	0.001
<b>Total Terpenes</b>	<b>3.311</b>	<b>33.110</b>	

Authorized by: Laboratory Manager

Signature:



## Details of testing

1. LOQ- Limit of quantification
2. % w/w: percent (weight of analyte/ weight of product)
3. Results only apply to the items tested and to the sample(s) as received.
4. This report may not be distributed or reproduced except in full



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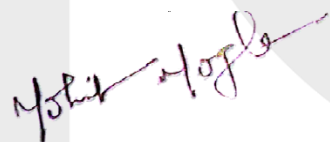
Sample Type: **Pre-Roll**  
Client Batch: **240001.BB**  
Product Name: **King Sherb**  
Job No': **Job\_00000527**  
Sample No': **5042**  
Received Date: **01/11/2024**  
Report Date: **01/17/2024**  
Login Date: **01/11/2024**

Reported to: Rosebud Productions Inc  
**Attn:** Madeleine Gwynne  
madeline@herbaldispatch.com

115-23000 Fraserwood way  
Richmond, BC. V6V3C7  
SOW#: NS\_SOW-000397

### Safety Analysis - Summary

Heavy Metals:  **PASS**    Microbiology:  **FAIL**



**Head of Laboratory, Mohit Mogla**

**01/17/2024**

**Date Approved**



**Northern Scientific Inc**

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## CANNABINOID

Analyte	LOQ (%)	Result (%wt/wt)	Result (mg/g)	Analyte	LOQ (%)	Result (%wt/wt)	Result (mg/g)
Cannabidiolic acid (CBDA)	0.10	< 0.10	<1.0	Tetrahydrocannabinolic acid (THCA)	0.10	25.01	250.1
Cannabidiol (CBD)	0.10	< 0.10	<1.0	Delta-9-tetrahydrocannabinol (D9-THC)	0.10	0.91	9.1
Total CBD	0.10	< 0.10	<1.0	Total THC	0.10	22.85	228.5
CBN	0.10	< 0.10	<1.0				

Cannabinoids are analyzed using a method (SOP#CA005) with HPLC-UV instrument

Total THC = THC + (THCA \*0.877)

Total CBD = CBD + (CBDA\* 0.877)

Abbreviations: LOQ = Limit of Quantification

## HEAVY METALS

Analyte	RL (ug/g)	Spec*. (ug/g)	Result(ug/g)
Arsenic (As)	0.200	<0.200	<0.200
Cadmium (Cd)	0.200	<0.300	<0.200
Mercury (Hg)	0.100	<0.100	<0.100
Lead (Pb)	0.500	<0.500	<0.500

Heavy metals are analyzed using a method (SOP#CA001) with ICP-MS Instrument.

Abbreviations: RL = Reporting Limit, Spec\* = Specification (USP<232>)

## MICROBIAL ANALYSIS

Microbial Analysis	Method	Specification <sup>a</sup>	Result	Pass/Fail
Total Yeasts and Molds Count <sup>b</sup>	USP <2023	<1,000 CFU/g or CFU/mL	6850 CFU/g	Fail
Total Aerobic Microbial Count <sup>b</sup>	USP <2023	<100,000 CFU/g or CFU/mL	<10 CFU/g	Pass
Bile-Tolerant Gram-Negative Bacteria <sup>b</sup>	USP <2023	<1,000 CFU/g or CFU/mL	<10 CFU/g	Pass
<i>Escherichia coli</i>	USP <2023	Absence in 10g or 10mL	Absent in 10g	Pass
<i>Salmonella</i> spp.	USP <2023	Absence in 10g or 10mL	Absent in 10g	Pass

<sup>a</sup> USP <2023> Specifications for Dried or Powdered Botanicals.

<sup>b</sup> LOD = 10 CFU/g; LOQ = 50 CFU/g

Abbreviations: CFU = Colony Forming Units; LOD = Limit of Detection; LOQ = Limit of Quantification; USP = United States Pharmacopeia.

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