HIGH NORTH ID:
00352468
Date: 2023-07-06
Certificate: 1688663656

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	Product:	TRIANGLE KUSH
		Lot:	BK-TK-2207
		Matrix:	Flower
Name:	1199519 BC LTD 778.918.0911 blackkettle000@gmail.com	Sub-matrix:	Dried Flower
		Sampled:	2023-06-27
		Received:	2023-07-01

Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
Total THC [(THCA x 0.877) + D9-THC]			24.382	243.82
Total CBD [(CBDA x 0.877) + CBD]			0.146	1.46
THCA-A	0.0090	0.06	27.391	273.911
CBGA	0.0041	0.06	1.263	12.625
D9-THC	0.0093	0.06	0.36	3.6
CBDA	0.0100	0.06	0.167	1.665
CBG	0.0094	0.06	0.134	1.337
CBC	0.0060	0.06	ND	ND
D8-THC	0.0137	0.06	ND	ND
CBN	0.0067	0.06	ND	ND
THCV	0.0093	0.06	ND	ND
CBD	0.0069	0.06	ND	ND
CBDV	0.0090	0.06	ND	ND
Total of all quantified cannabinoids:			29.314	293.138

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0011	0.005	0.586
Linalool	0.0006	0.005	0.28
(R)-(+)-Limonene	0.0006	0.005	0.269
Beta-Myrcene	0.0004	0.005	0.246
Alpha-Humulene	0.0002	0.005	0.174
Farnesene*	0.0029	0.010	0.149
Alpha-Terpineol	0.0007	0.005	0.046
Beta-Pinene	0.0004	0.005	0.041
Alpha-Pinene	0.0002	0.005	0.037
(R)-Endo-(+)-Fenchyl Alcohol	0.0005	0.005	0.029
Caryophyllene oxide	0.0009	0.005	0.011

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%
Camphene	0.0009	0.005	0.009
Terpinolene	0.0005	0.005	0.006
Borneol	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
Alpha-Bisabolol	0.0011	0.005	ND
Phytane	0.0006	0.005	ND
(+)-Cedrol	0.0004	0.005	ND
Guaiol	0.0013	0.005	ND
trans-Nerolidol	0.0005	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

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Authorized by:

Ryan Lee
Quality Assurance

Terpene Analysis	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
Total of all quantified terpenes:			1.883

Moisture Analysis	9.2%

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Authorized by:

Ryan Lee
Quality Assurance

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 UHPLC
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 Pesticide and Mycotoxins in Cannabis 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 Pesticide Residues and Toxins in Cannabis Oil and Related Products 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 Pesticide and Mycotoxins in Cannabis 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

Heavy Metal Analysis

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

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

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