

HIGH NORTH ID:
00071200
Date: 2021-08-06
Certificate: 1628278257



High North Inc.
241 Hanlan Rd, Unit 7
Woodbridge, ON, L4L 3R7
1-416-864-6119
LIC-P4PNJMAC20-2019

Client:	North 40 Cannabis PO Box 2684, Nipawin, SK, S0E 1E0	Strain:	Colada
Name:	Gord Nichol 780-907-9220 gord@north40cannabis.com	Lot:	COFR5B6B
		Matrix:	Oil
		Sub-matrix:	Flower Rosin
		Sampled:	2021-07-28
		Received:	2021-07-30

Certificate of Analysis

Cannabinoid Analysis	LOD (%)	LOQ (%)	wt%	mg/g
Total THC [(THCA x 0.877) + D9-THC]			66.579	665.787
Total CBD [(CBDA x 0.877) + CBD]			0	0
THCA-A	0.004	0.03	54.922	549.219
D9-THC	0.0086	0.03	18.412	184.122
CBGA	0.007	0.03	3.251	32.506
CBG	0.0028	0.03	1.299	12.99
CBC	0.0092	0.03	BLQ	BLQ
CBDA	0.008	0.03	BLQ	BLQ
CBN	0.0069	0.03	BLQ	BLQ
D8-THC	0.0074	0.03	ND	ND
THCV	0.0068	0.03	ND	ND
CBD	0.0081	0.03	ND	ND
CBDV	0.0073	0.03	ND	ND
Total of all quantified cannabinoids:			77.884	778.837

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Trans-Caryophyllene	0.0016	0.025	0.692
Beta-Myrcene	0.0012	0.025	0.557
Farnesene*	0.0021	0.025	0.478
(R)-(+)-Limonene	0.0023	0.025	0.327
Guaiol	0.0016	0.025	0.247
Linalool	0.0014	0.025	0.205
Alpha-Humulene	0.0017	0.025	0.19
Terpineol*	0.0013	0.025	0.163
(R)-Endo-(+)-Fenchyl	0.0013	0.025	0.118
alpha-Bisabolol	0.0022	0.025	0.093
Beta-Pinene	0.0016	0.025	0.076

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

Terpene Analysis	LOD (%)	LOQ (%)	wt%
Alpha-Pinene	0.0013	0.025	0.062
trans-Nerolidol	0.0025	0.025	0.044
Caryophyllene oxide	0.0023	0.025	0.042
Phytol*	0.0028	0.050	BLQ
Terpinolene	0.0018	0.025	BLQ
Camphene	0.0019	0.025	BLQ
Fenchone*	0.0014	0.025	BLQ
(+)-Cedrol	0.0023	0.025	ND
Valencene	0.0015	0.025	ND
cis-Nerolidol	0.0028	0.025	ND
Eugenol	0.0019	0.025	ND
Alpha-Cedrene	0.0016	0.025	ND
Pulegone	0.0011	0.025	ND
Geranyl acetate	0.0015	0.025	ND
Citronellol	0.0014	0.025	ND
Nerol	0.0023	0.025	ND
Geraniol	0.0020	0.025	ND
Camphor + Borneol*	0.0013	0.050	ND
Isopulegol	0.0011	0.025	ND
Hexahydrothymol	0.0020	0.025	ND
Isoborneol	0.0013	0.025	ND
Sabinene Hydrate	0.0011	0.025	ND
Ocimene*	0.0030	0.025	ND
Gamma-Terpinene	0.0014	0.025	ND
p-Cymene	0.0010	0.025	ND
Eucalyptol	0.0028	0.025	ND
Alpha-Terpinene	0.0021	0.025	ND
(1S)-3-Carene	0.0020	0.025	ND
Alpha-Phellandrene	0.0018	0.025	ND
Sabinene	0.0017	0.025	ND
Total of all quantified terpenes:			3.294

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Mycotoxin Analysis	LOD (ppb)	LOQ (ppb)	RL (ppb)	Result (ppb)	
Aflatoxin-B1	0.9	2	2	ND	PASS
Aflatoxin-B2	0.8	2		ND	PASS
Aflatoxin-G1	0.9	2		ND	PASS
Aflatoxin-G2	0.8	2		ND	PASS
Sum of Aflatoxins:			4	0	PASS
Ochratoxin-A	9.4	20	20	ND	PASS

Microbial Analysis	RL (CFU/g)	Result (CFU/g)	Status
Total Aerobic Count	500,000	ND	PASS
Bile-Tolerant Gram-Negative	10,000	ND	PASS
Total Yeast and Mold Count	50,000	ND	PASS
E.coli/Salmonella		Absent in 10g	PASS
S.aureus/P.aeruginosa		Absent in 1g	PASS

Heavy Metals Analysis	LOD (ppm)	LOQ (ppm)	RL (ppm)	Result (ppm)	Status
Arsenic	0.05	0.2	1.0	ND	PASS
Cadmium	0.01	0.05	1.5	ND	PASS
Lead	0.02	0.5	2.5	ND	PASS
Mercury	0.01	0.05	0.5	ND	PASS

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Residual Solvents Analysis	LOD (ppm)	LOQ (ppm)	RL (ppm)	Result (ppm)	Status
1-Butanol	22.7	1000	5,000	ND	PASS
1-Pentanol	28.9	1000	5,000	ND	PASS
1-Propanol	44.6	1000	5,000	ND	PASS
2-Butanol	20.1	1000	5,000	ND	PASS
2-Methyl-1-propanol	11.6	1000	5,000	ND	PASS
2-Propanol	13.3	1000	5,000	ND	PASS
3-Methyl-1-butanol	16.8	1000	5,000	ND	PASS
Acetone	19.4	1000	5,000	ND	PASS
Anisole	104	1000	5,000	ND	PASS
Butyl acetate	67.3	1000	5,000	ND	PASS
Dimethyl sulfoxide	55.8	1000	5,000	ND	PASS
Ethanol	34.5	1000	5,000	ND	PASS
Ethyl acetate	17.3	1000	5,000	ND	PASS
Ethyl ether	27	1000	5,000	ND	PASS
Ethyl formate	92.5	1000	5,000	ND	PASS
Heptane	19.2	1000	5,000	ND	PASS
Isobutyl acetate	28.4	1000	5,000	ND	PASS
Isopropyl acetate	13.5	1000	5,000	ND	PASS
Methyl acetate	26.9	1000	5,000	ND	PASS
Methylethyl ketone	13.1	1000	5,000	ND	PASS
Pentane	35.7	1000	5,000	ND	PASS
Propyl acetate	13.5	1000	5,000	ND	PASS
Tert-Butylmethyl ether	134.2	1000	5,000	ND	PASS
Triethylamine	22.4	1000	5,000	ND	PASS

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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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