



Certificate ID: **97344**

Received: **9/13/21**

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**Nordic Oil**

Client Sample ID: **1200mg CBG Oil + 400mg CBD**



**433 Broadway, Suite 209**

Lot Number: **26062201**

**New York, NY 10013**

Matrix: **Tincture/Infused Oil - MCT Oil**

**Attn: Khulan Gantumur**

Authorization: Chris Hudalla, Chief Science Officer	Signature: 	Date: 9/21/2021
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The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2017. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**CN: Cannabinoid Profile & Potency [WI-10-17 & WI-10-17-01]**

Analyst: AC

Test Date: 9/16/2021

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

**97344-CN**

ID	Weight %	Concentration (mg/mL)			
D9-THC	ND	ND			
THCV	ND	ND			
CBD	1.57	14.6			
CBDV	0.0118	0.110			
CBG	4.53	42.0			
CBC	0.0168	0.156			
CBN	0.0139	0.129			
THCA	ND	ND			
CBDA	ND	ND			
CBGA	ND	ND			
D8-THC	ND	ND			
exo-THC	ND	ND			
Total	6.15	57.0	0%	Cannabinoids (wt%)	4.53%
Max THC	ND	ND		Limit of Quantitation (LOQ) =	0.0113 wt%
Max CBD	1.58	14.6		Limit of Detection (LOD) =	0.0038 wt%

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation:  $MAX\ THC = (0.877 \times THCA) + THC$ . This calculation does not include other cannabinoid isomers (eg. D8-THC and exo-THC). ND=None detected above the limits of detection (LOD), which is one third of Limit of Quantification (LOQ). For values reported as "<LOQ", the estimated value is included in the calculated Total.

**HM: Heavy Metal Analysis [WI-10-13]**

Analyst: CJS

Test Date: 9/13/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**97344-HM**

Symbol	Metal	Conc. <sup>1</sup> (µg/kg)	RL	Use Limits <sup>2</sup> (µg/kg)		Status
				All	Ingestion	
As	Arsenic	ND	50.0	200	1,500	PASS
Cd	Cadmium	ND	50.0	200	500	PASS
Hg	Mercury	ND	50.0	100	1,500	PASS
Pb	Lead	ND	50.0	500	1,000	PASS

1) ND = None detected above the indicated Reporting Limit (RL)

2) MA Dept. of Public Health: Protocol for MMJ and MIPS, Exhibit 4(a) for all products.

3) USP exposure limits based on daily oral dosing of 1g of concentrate for a 110 lb person.

**MY: Mycotoxin Testing [WI-10-05]**

Analyst: BMJ

Test Date: 9/15/2021

This test method was performed in accordance with the requirements of ISO/IEC 17025. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**97344-MY**

Test ID	Date	Results	MDL	Limits	Status*
Total Aflatoxin	9/15/2021	< MDL	2 ppb	< 20 ppb	PASS
Total Ochratoxin	9/15/2021	< MDL	3 ppb	< 20 ppb	PASS

**TP: Terpenes Profile [WI-10-27]**

Analyst: CJS

Test Date: 9/16/2021

Client sample analysis was performed using full evaporative technique (FET) headspace sample delivery and gas chromatographic (GC) compound separation. A combination of flame ionization detection (FID) and/or mass spectrometric (MS) detection with mass spectral confirmation against the National Institute of Standards and Technology (NIST) Mass Spectral Database, Revision 2017 were used. Chromatographic and/or mass spectral data were processed by quantitatively comparing the analytical peak areas against calibration curves prepared from certified reference standards.

**97344-TP**

Compound	CAS	Conc. (wt%)	Conc. (ppm)	Qualitative Profile	
alpha-pinene	80-56-8	0.0344	344		
camphene	79-92-5	0.0006	5.52		
sabinene*	3387-41-5	ND	ND		
beta-myrcene	123-35-3	0.144	1,440		
beta-pinene	127-91-3	0.0074	73.7		
alpha-phellandrene	99-83-2	ND	ND		
delta-3-carene	13466-78-9	ND	ND		
alpha-terpinene	99-86-5	ND	ND		
alpha-ocimene	502-99-8	<RL	<RL		
D-limonene	138-86-3	0.0475	475		
p-cymene	99-87-6	ND	ND		
cis-beta-ocimene	3338-55-4	0.0080	80.3		
eucalyptol	470-82-6	ND	ND		
gamma-terpinene	99-85-4	ND	ND		
terpinolene	586-62-9	<RL	<RL		
linalool	78-70-6	0.0038	37.6		
L-fenchone*	7787-20-4	ND	ND		
isopulegol	89-79-2	ND	ND		
menthol*	89-78-1	ND	ND		
geraniol	106-24-1	ND	ND		
beta-caryophyllene	87-44-5	0.0141	141		
alpha-humulene	6753-98-6	0.0022	21.5		
cis-nerolidol	3790-78-1	ND	ND		
trans-nerolidol	40716-66-3	ND	ND		
guaial	489-86-1	ND	ND		
caryophyllene oxide	1139-30-6	ND	ND		
alpha-bisabolol	23089-26-1	ND	ND		

Total Terpene: 0.3 wt%

\* Certified reference standard not available for this compound. Concentration is estimated using the response factor from alpha-pinene. ND = None Detected. RL = Reporting Limit of 5 ppm.

**VC: Analysis of Volatile Organic Compounds [WI-10-28]**

Analyst: CJS

Test Date: 9/15/2021

The client sample was analyzed by Head-Space Gas Chromatography (HS-GC). The collected data was compared to data collected for certified reference standards at known concentrations.

**97344-VC**

Compound	CAS	Amount <sup>1</sup>	Limit <sup>2</sup>	RL	Status
Propane	74-98-6	ND	1,000 ppm	100	PASS
Isobutane	75-28-5	ND	1,000 ppm	100	PASS
Butane	106-97-8	ND	1,000 ppm	100	PASS
Methanol	67-56-1	ND	3,000 ppm	100	PASS
Pentane	109-66-0	ND	5,000 ppm	100	PASS
Ethanol	64-17-5	ND	5,000 ppm	100	PASS
Acetone	67-64-1	ND	5,000 ppm	100	PASS
Isopropanol	67-63-0	ND	5,000 ppm	100	PASS
Acetonitrile	75-05-8	ND	410 ppm	100	PASS
Hexane	110-54-3	ND	290 ppm	100	PASS
Heptane	142-82-5	ND	5,000 ppm	100	PASS

1) ND = Not detected at a level greater than the Reporting Limit (RL).

2) In ppm, based on USP recommended limits for residual solvents, adopted by the Massachusetts Department of Public Health for cannabis concentrates and extracts on 3/31/16. Butane/Propane limits are based on limits established for state of Colorado.

(\*) For ethanol, as many formulations contain flavorings based on ethanol extracts of natural products, no status has been assigned.

**END OF REPORT**