



MD ORGANICS

CERTIFICATE OF QUALITY ASSURANCE

PRODUCT NAME: THC-Free Phytocannabinoid-Rich Hemp Oil

PRODUCT CODE: NO-10kg-bulk

LOT NUMBER: DR013019B2 (Sales Order# NESS-005-ZE, 10,100 g cannabinoids, Total of 11,218.5 g Oil)

OIL BATCH NUMBER: CONO19-11

DATE OF MANUFACTURE: 24Jan2019

Expiration date is 24 months under sealed conditions.

ACTIVE INGREDIENT: THC-Free Phytocannabinoid-Rich Hemp Oil

INACTIVE INGREDIENTS: N/A

Attributes	Acceptance Criteria	Results	Test Method
Appearance	Viscous Amber Oil Possible Crystal Formation	Conforms	QCU002
Odor	Characteristic	Conforms	QCU002
Color	Dark Amber	Conforms	QCU002
Dissolution	Not cloudy or turbid, characteristic color	Conforms	QCU002
Cannabinoid Content	80% total Phytocannabinoids, THC - report results	90.03% total Phytocannabinoids THC Not Detected	QCU001
Microbial Testing	Total Aerobic Count <2000 CFU/g Total Yeast & Mold <200 CFU/g	Conforms	USP<2021>

Package	Acceptance Criteria	Results
Primary Package	Container dedusted and wiped clean. Container caps screwed on tight	Conforms
Secondary Package	Carton Sturdy and clean. Sufficient cushion material exists. Carton taped on all sides	Conforms

Note: When sampling, manufacturing, or formulating with this oil, the oil MUST first be heated and liquefied at 70-75°C and mixed thoroughly. Attempting to sample the oil when it is in a semi-solid state will not result in accurate analytical results.

CERTIFICATE OF INTERNAL ANALYSIS

TYPE: Phytocannabinoid-Rich Hemp Oil/ THC-free **TERPENE RESULTS*:**

BATCH No: CONO19-11

Date of Manufacture: 24Jan2019

Date of Analysis: 30Jan2019

POTENCY RESULTS:

Cannabinoid	Wt. (%)	(mg/g)
CBD	90.03	900.30
CBG	<0.03	<0.30
CBN	<0.03	<0.30
THC	ND**	ND**
CBC	<0.03	<0.30
THC-A	ND**	ND**
CBD-A	<0.03	<0.30
MAX THC	ND**	ND**
MAX CBD	90.03	900.30
TOTAL ACTIVE	90.03	900.30

Residual Solvents*:

Propane	Compliant with USP<467>	Pentane	Compliant with USP<467>
Isobutane	Compliant with USP<467>	Isopropanol	Compliant with USP<467>
Butane	Compliant with USP<467>	Hexane	Compliant with USP<467>
Ethanol	Compliant with USP<467>	Acetone	Compliant with USP<467>

Heavy Metals*:

Cadmium	Compliant with USP<233>
Lead	Compliant with USP<233>
Arsenic	Compliant with USP<233>
Mercury	Compliant with USP<233>

	Wt. (%)		Wt. (%)
β -Bisabolene	1.0-3.0	Camphene	0.1-0.2
β -Farnesene	1.0-2.0	E-Farnesene	0.1-0.2
Guaiol	0.5-2.0	Farnesol	0.1-0.2
β -Maaliene	0.5-2.0	α -Bisabolol	< 0.1
Calarene	0.5-1.5	P-Cymene	< 0.1
β -Caryophyllene	0.1-1.0	Linalool	< 0.1
α -Humulene	0.1-1.0	Myrcene	< 0.1
Cadinene	0.1-1.0	Phytol	< 0.1
α -Gurjunene	0.1-0.5	Isopulegol	< 0.1
d-Limonene	0.1-0.5	Terpinene	< 0.1
Nerolidol	0.1-0.5	Geraniol	< 0.1
α -Pinene	0.1-0.5	Myrcene	< 0.1
Aristolene	0.1-0.3	γ -Terpinene	< 0.1
Eucalyptol	0.1-0.2	δ -3-Carene	< 0.1

Pesticides*:

Acequinocyl	ND***	Spinosad	ND***
Pyrethrium	ND***	Spirotetramat	ND***
Spiromesifen	ND***	Bifenazate	ND***
Abamectin	ND***	Fenoxycarb	ND***
Imidacloprid	ND***	Paclobutrazol	ND***

Test ID: 7491102.001 tested by Botanacor

*Batches are sent out regularly for testing, not all batches tested

** ND = Not Detected using a validated high-performance liquid chromatography test method

*** Pesticides are tested by a third party lab, ND = Not Detected at the Reporting Limit (RL)

SPECIAL NOTE: Process enhancement has recently been implemented to remove excess pigmentation from the oil due to customer requests. While the color of the future oil batches will be golden to light amber, its composition and the full spectrum characteristics remain unchanged.



This report cannot be used for ODA, OHA or OLCC compliance requirements.

Product identity: TNAT1000 T012
Laboratory ID: 19-004456-0001

Client/Metric ID: .
Sample Date:

Summary

Potency:

Analyte per 30ml	Result	Limits	Units	LOQ	
CBD per 30ml	1110		mg/30ml	0.917	CBD-Total per 30ml 1110 mg/30ml
CBDV per 30ml†	6.02		mg/30ml	0.917	THC-Total per 30ml < 1.722 mg/30ml

Pesticides:

All analytes passing and less than LOQ.

Metals:

Less than LOQ for all analytes.

Microbiology:

Less than LOQ for all analytes.



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Customer: My CBD Test
Product identity: TNAT1000 T012
Client/Metric ID: .
Sample Date:
Laboratory ID: 19-004456-0001
Relinquished by: Received By Mail
Temp: 22 °C
Serving Size #1: 30ml (27.5 g)
Net volume: 30.00 ml

Sample Results

Potency per 30ml		Batch: 1903588					
Analyte	Result	Limits	Units	LOQ	Analyze	Method	Notes
CBC per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBC-A per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBC-Total per 30ml [†]	< LOQ		mg/30ml	1.72	04/25/19	J AOAC 2015 V98-6	
CBD per 30ml	1110		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBD-A per 30ml	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBD-Total per 30ml	1110		mg/30ml	1.72	04/25/19	J AOAC 2015 V98-6	
CBDV per 30ml [†]	6.02		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBDV-A per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBDV-Total per 30ml [†]	6.02		mg/30ml	1.71	04/25/19	J AOAC 2015 V98-6	
CBG per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBG-A per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBG-Total per 30ml [†]	< LOQ		mg/30ml	1.72	04/25/19	J AOAC 2015 V98-6	
CBL per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
CBN per 30ml	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
Δ8-THC per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
Δ9-THC per 30ml	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
THC-A per 30ml	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
THC-Total per 30ml	< LOQ		mg/30ml	1.72	04/25/19	J AOAC 2015 V98-6	
THCV per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
THCV-A per 30ml [†]	< LOQ		mg/30ml	0.917	04/25/19	J AOAC 2015 V98-6	
THCV-Total per 30ml [†]	< LOQ		mg/30ml	1.71	04/25/19	J AOAC 2015 V98-6	



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Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
E.coli	< LOQ		cfu/g	10	1903459	04/23/19	AOAC 991.14 (Petrifilm)	X
Total Coliforms	< LOQ		cfu/g	10	1903459	04/23/19	AOAC 991.14 (Petrifilm)	X
Mold	< LOQ		cfu/g	10	1903457	04/26/19	AOAC 2014.05 (RAPID)	X
Yeast	< LOQ		cfu/g	10	1903457	04/26/19	AOAC 2014.05 (RAPID)	X

Pesticides Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 1903541 Analyze 04/25/19 09:09 AM

Analyte	Result	Limits	LOQ	Status	Notes	Analyte	Result	Limits	LOQ	Status	Notes
Abamectin	< LOQ	0.50	0.250	pass		Acephate	< LOQ	0.40	0.250	pass	
Acequinocyl	< LOQ	2.0	1.00	pass		Acetamiprid	< LOQ	0.20	0.100	pass	
Aldicarb	< LOQ	0.40	0.200	pass		Azoxystrobin	< LOQ	0.20	0.100	pass	
Bifentazate	< LOQ	0.20	0.100	pass		Bifenthrin	< LOQ	0.20	0.100	pass	
Boscalid	< LOQ	0.40	0.100	pass		Carbaryl	< LOQ	0.20	0.100	pass	
Carbofuran	< LOQ	0.20	0.100	pass		Chlorantraniliprole	< LOQ	0.20	0.100	pass	
Chlorfenapyr	< LOQ	1.0	0.500	pass		Chlorpyrifos	< LOQ	0.20	0.100	pass	
Clofentezine	< LOQ	0.20	0.100	pass		Cyfluthrin (incl.	< LOQ	1.0	0.500	pass	
Cypermethrin	< LOQ	1.0	0.500	pass		Daminozide	< LOQ	1.0	0.500	pass	
Diazinon	< LOQ	0.20	0.100	pass		Dichlorvos	< LOQ	1.0	0.500	pass	
Dimethoate	< LOQ	0.20	0.100	pass		Ethoprophos	< LOQ	0.20	0.100	pass	
Etofenprox	< LOQ	0.40	0.200	pass		Etoazole	< LOQ	0.20	0.100	pass	
Fenoxycarb	< LOQ	0.20	0.100	pass		Fenpyroximate	< LOQ	0.40	0.200	pass	
Fipronil	< LOQ	0.40	0.200	pass		Flonicamid	< LOQ	1.0	0.400	pass	
Fludioxonil	< LOQ	0.40	0.200	pass		Hexythiazox	< LOQ	1.0	0.400	pass	
Imazalil	< LOQ	0.20	0.100	pass		Imidacloprid	< LOQ	0.40	0.200	pass	
Kresoxim-methyl	< LOQ	0.40	0.200	pass		Malathion	< LOQ	0.20	0.100	pass	
Metalaxyl	< LOQ	0.20	0.100	pass		Methiocarb	< LOQ	0.20	0.100	pass	
Methomyl	< LOQ	0.40	0.200	pass		MGK-264	< LOQ	0.20	0.100	pass	
Myclobutanil	< LOQ	0.20	0.100	pass		Naled	< LOQ	0.50	0.250	pass	
Oxamyl	< LOQ	1.0	0.500	pass		Paclbutrazole	< LOQ	0.40	0.200	pass	
Parathion-Methyl	< LOQ	0.20	0.200	pass		Permethrin	< LOQ	0.20	0.100	pass	
Phosmet	< LOQ	0.20	0.100	pass		Piperonyl butoxide	< LOQ	2.0	1.00	pass	
Prallethrin	< LOQ	0.20	0.100	pass		Propiconazole	< LOQ	0.40	0.200	pass	
Propoxur	< LOQ	0.20	0.100	pass		Pyrethrin I (total)	< LOQ	1.0	0.500	pass	
Pyridaben	< LOQ	0.20	0.100	pass		Spinosad	< LOQ	0.20	0.100	pass	
Spiromesifen	< LOQ	0.20	0.100	pass		Spirotetramat	< LOQ	0.20	0.100	pass	
Spiroxamine	< LOQ	0.40	0.200	pass		Tebuconazole	< LOQ	0.40	0.200	pass	
Thiacloprid	< LOQ	0.20	0.100	pass		Thiamethoxam	< LOQ	0.20	0.100	pass	
Trifloxystrobin	< LOQ	0.20	0.100	pass							



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Metals								
Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Notes
Arsenic	< LOQ		mg/kg	0.0494	1903545	04/24/19	AOAC 2013.06	X
Cadmium	< LOQ		mg/kg	0.0494	1903545	04/24/19	AOAC 2013.06	X
Lead	< LOQ		mg/kg	0.0494	1903545	04/24/19	AOAC 2013.06	X
Mercury	< LOQ		mg/kg	0.0247	1903545	04/24/19	AOAC 2013.06	X



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Abbreviations

Limits: Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

Limit(s) of Quantitation (LOQ): The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

† = Analyte not NELAP accredited.

Units of Measure

cfu/g = Colony forming units per gram

g = Gram

mg/kg = Milligram per kilogram

mg/27.5g = Milligram per 27.5g

ml = Milliliter

% = Percentage of sample

% wt = $\mu\text{g/g}$ divided by 10,000

Glossary of Qualifiers

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner
General Manager