

Endoca

Certificate of Analysis

Hemp Oil 2000mg CBD(cannabidiol)(20%)

Endoca BV
 Siriusdreef 17 2132 WT Hoofddorp EU
 Phone: +31-238-080-104
 info@endoca.com
 www.endoca.com
 ISO 22000 certified
 HACCP certified; GMP certified

Responsible Supervisor: _____
 Sample _____
 Date samples received: _____
 Date analysis began: _____
 Date sample report produced: _____
 Expiry date: _____
 Sample Mass _____

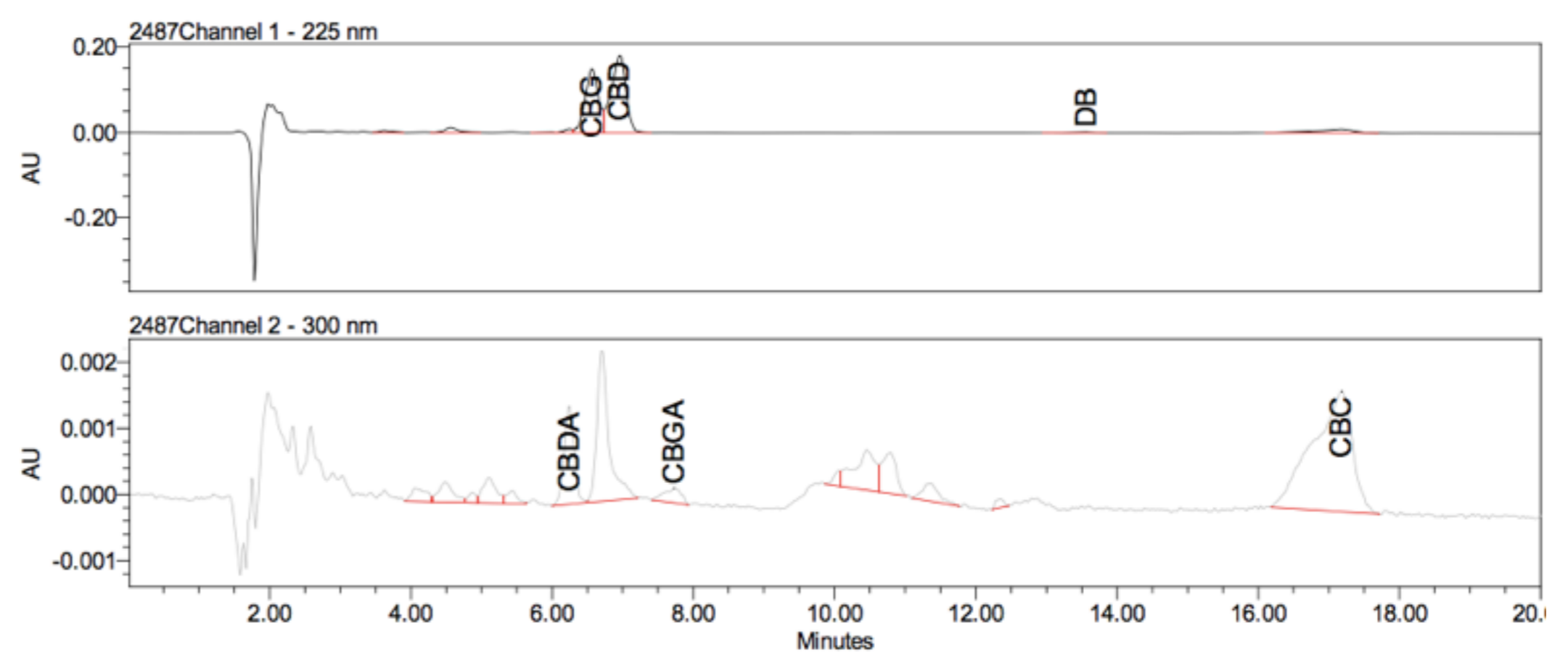
Martin V.
 Batch 2305
 08-November 2021
 08-November 2021
 17-November 2021
 11-2023
 1 g

CBD 20.39%

Cannabinoid Profile:

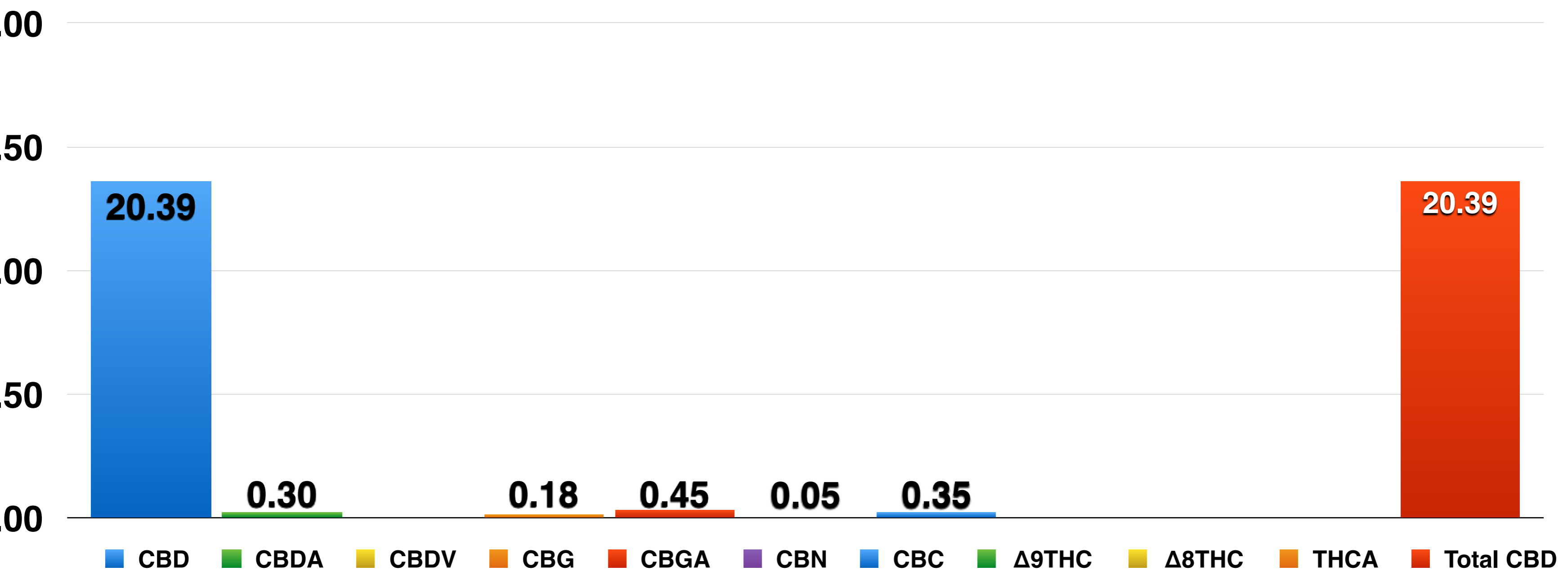
Method: HPLC-UV

Component	Mass (%)	Amount (mg/g)
CBD	20.39	203.90
CBDA	0.30	3.00
CBDV	ND	ND
CBG	0.18	1.80
CBGA	0.45	4.50
CBN	0.05	0.50
CBC	0.35	3.50
Δ9THC	ND	ND
Δ8THC	ND	ND
THCA	ND	ND
Total CBD	20.39	203.90



ND - Not detected, LOD - Limit of Detection (LOD=0.001%)

Cannabinoids as Percent of Total Mass



Endoca

Certificate of Analysis

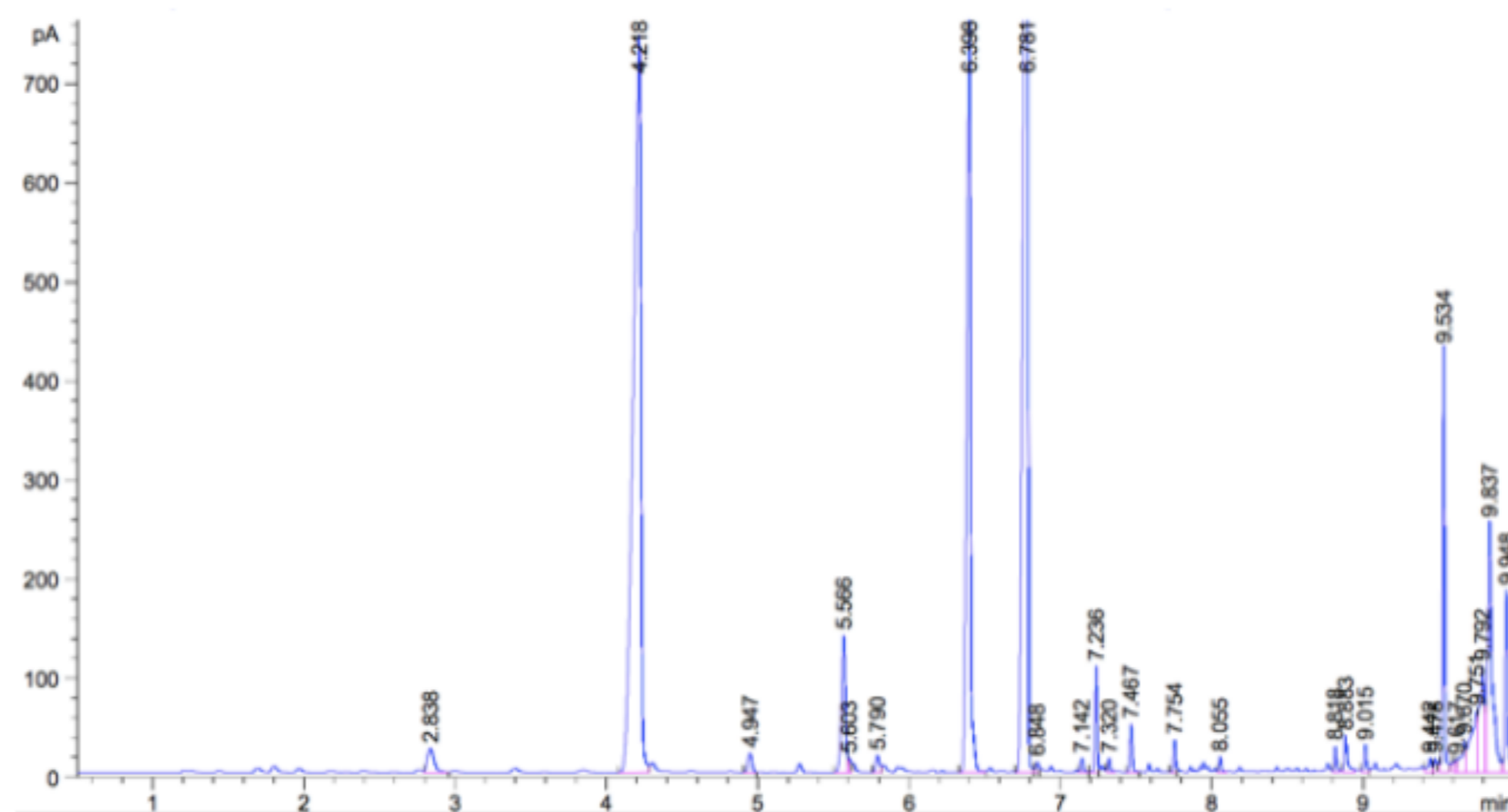
Hemp Oil 2000mg CBD(cannabidiol)(20%)

Endoca BV
 Siriusdreef 17 2132 WT Hoofddorp EU
 Phone: +31-238-080-104
 info@endoca.com
 www.endoca.com
 ISO 22000 certified
 HACCP certified; GMP certified

Responsible Supervisor: Martin V.
 Sample: Batch 2305
 Date samples received: 08-November 2021
 Date analysis began: 08-November 2021
 Date sample report produced: 17-November 2021
 Expiry date: 11-2023
 Sample Mass: 1 g

Terpenoid Profile:

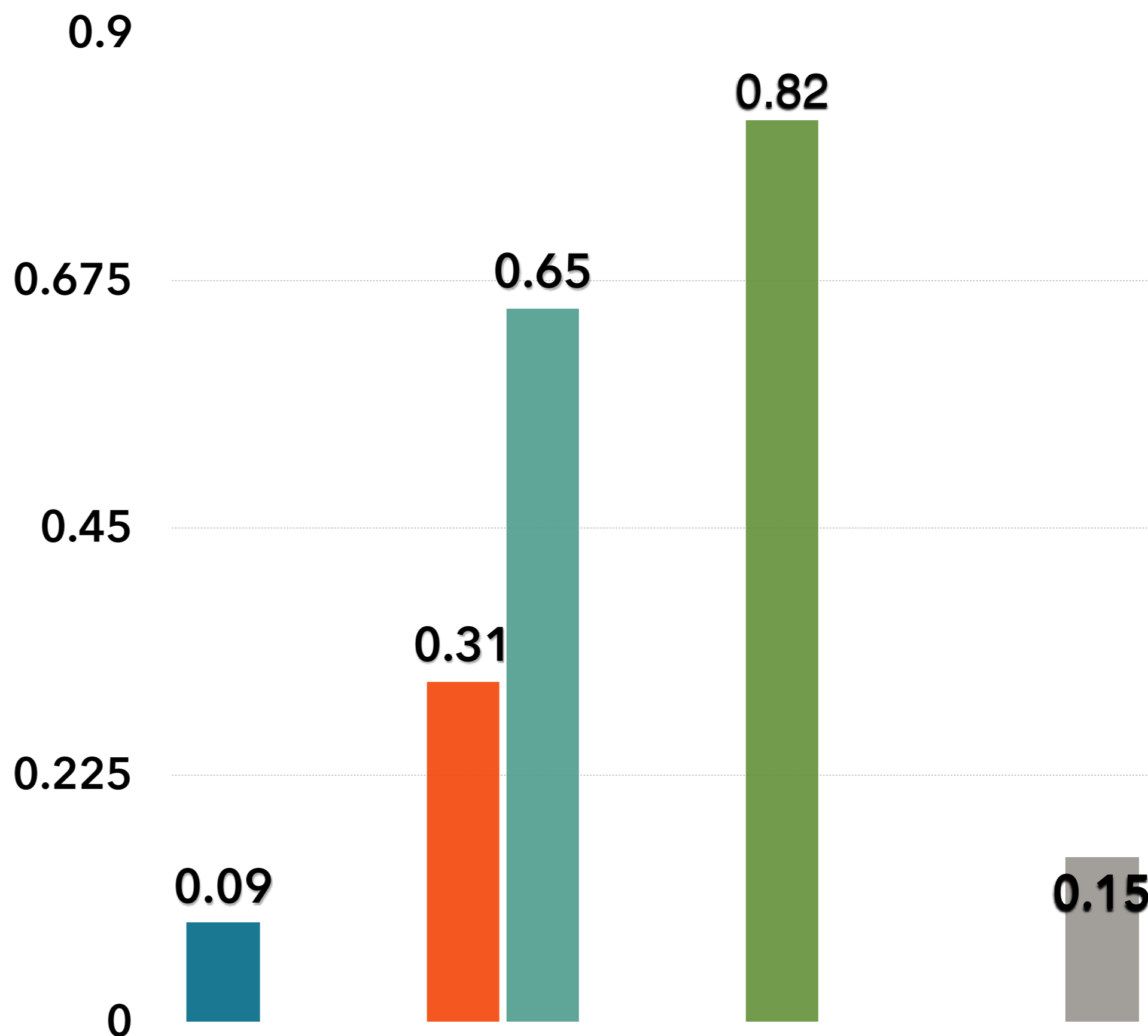
Component	Amount %
β-Caryophyllene	0.09
α-Humulene	ND
Caryophyllene oxide	ND
Myrcene	0.31
α-Pinene	0.65
Terpinolene	ND
Humulene epoxide II	ND
Limonene	0.82
β-Pinene	ND
E-β-Ocimene	ND
Sabinene	ND
Linalool	0.15



Method: HS-GC-FID

ND - Not Detected

Terpenoid Distribution



- β-Caryophyllene
- α-Humulene
- Caryophyllene oxide
- Myrcene
- α-Pinene
- Terpinolene
- Humulene epoxide II
- Limonene
- β-Pinene
- E-β-Ocimene
- Sabinene
- Linalool

Endoca

Certificate of Analysis

Hemp Oil 2000mg CBD(cannabidiol)(20%)

Endoca BV
 Siriusdreef 17 2132 WT Hoofddorp EU
 Phone: +31-238-080-104
 info@endoca.com
 www.endoca.com
 ISO 22000 certified
 HACCP certified; GMP certified

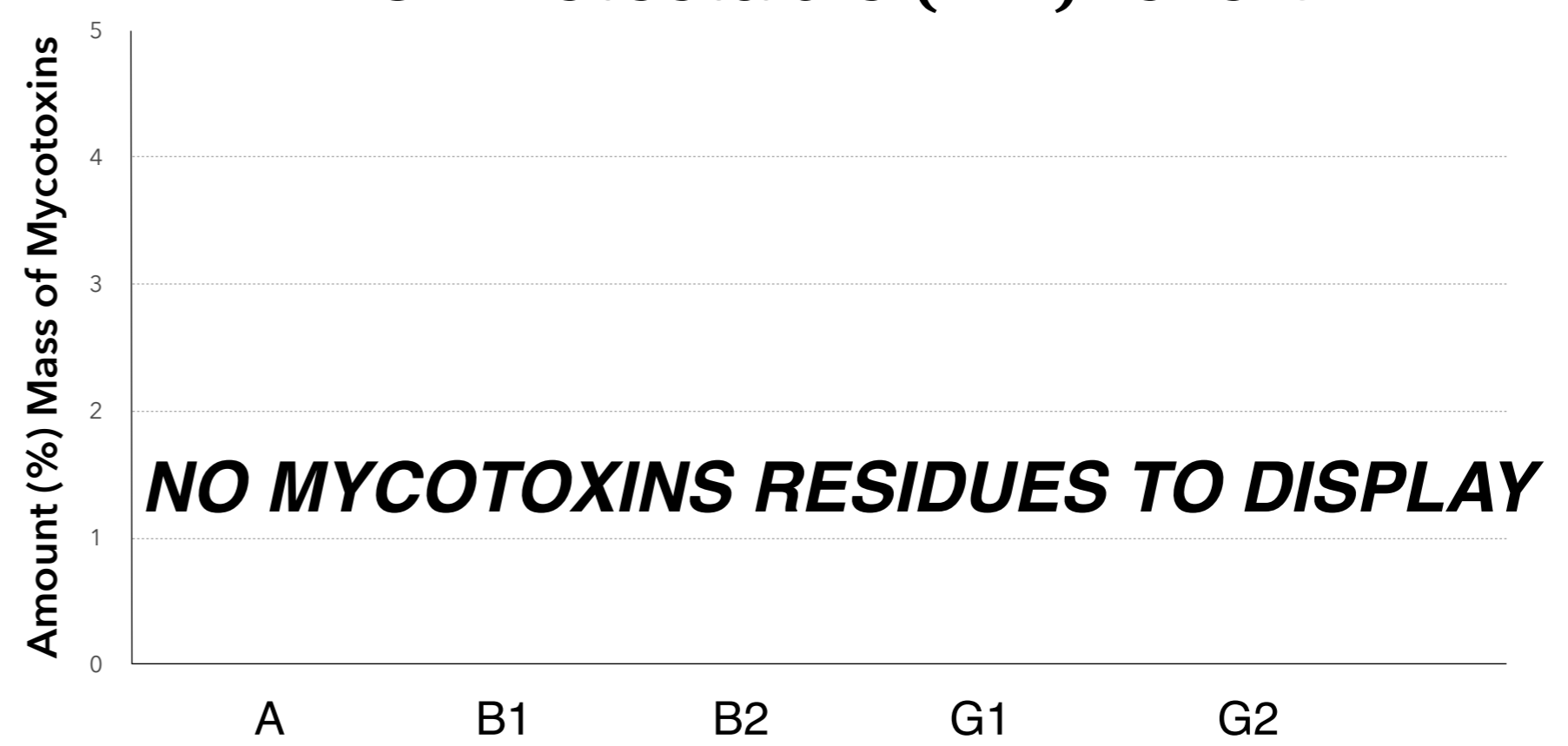
Responsible Supervisor:	<u>Martin V.</u>
Sample	<u>Batch 2305</u>
Date samples received:	<u>08-November 2021</u>
Date analysis began:	<u>08-November 2021</u>
Date sample report produced:	<u>17-November 2021</u>
Expiry date:	<u>11-2023</u>
Sample Mass	<u>1 g</u>

Microbial Profile:

Component	CFU	Results
<i>Listeria m.</i>	1 g	ND*
<i>Escherichia c.</i>	1 g	ND*
<i>Salmonella</i>	25 g	ND*
Yeast	1 g	ND*
Mould	1 g	ND*

*ND - Not detected

All Mycotoxins at Non Detectable (ND) levels



Nutrition Facts

Component	%
Moisture and volatile matter content	1.55
Protein content	0.15
Total fat content	98.21
Carbohydrates content	ND*
Total Fiber content	ND*
Total sugars content	ND*
Total ash content	ND*

*ND - Not detected

Endoca

Certificate of Analysis

Hemp Oil 2000mg CBD(cannabidiol)(20%)

Endoca BV
 Siriusdreef 17 2132 WT Hoofddorp EU
 Phone: +31-238-080-104
 info@endoca.com
 www.endoca.com
 ISO 22000 certified
 HACCP certified; GMP certified

Responsible Supervisor:	<u>Martin V.</u>
Sample	<u>Batch 2305</u>
Date samples received:	<u>08-November 2021</u>
Date analysis began:	<u>08-November 2021</u>
Date sample report produced:	<u>17-November 2021</u>
Expiry date:	<u>11-2023</u>
Sample Mass	<u>1 g</u>

Heavy Metals Profile:

Component	Mass (%)	Amount (ppm)	Limit** (ppm)
Arsenic (As ₂ O ₃)	ND*	< 0.1	< 0.1
Cadmium (Cd)	ND*	< 0.1	< 0.1
Lead (Pb)	ND*	< 0.1	< 0.1
Mercury (Hg)	ND*	< 0.1	< 0.1
Chromium (Cr)	ND*	< 1	< 1
Tin (Sn)	ND*	< 10	< 10

*ND - Not detected, **Codex STAN 193-1995, GB 2762, EC No. 1881/2006, FDA

All Heavy Metals at Non Detectable (ND) levels



Conclusions:

No heavy metal residues detected.

No flammable residues detected.

No chemical residues detected.

Endoca

Certificate of Analysis

Hemp Oil 2000mg CBD(cannabidiol)(20%)

Endoca BV
Siriusdreef 17 2132 WT Hoofddorp EU
Phone: +31-238-080-104
info@endoca.com
www.endoca.com
ISO 22000 certified
HACCP certified; GMP certified

Responsible Supervisor:	Martin V.
Sample	Batch 2305
Date samples received:	08-November 2021
Date analysis began:	08-November 2021
Date sample report produced:	17-November 2021
Expiry date:	11-2023
Sample Mass	1 g

Pesticide Analysis: Our tests looked for residue of nearly 300 known pesticides finding no evidence of any over detectable limits.

Endoca Labs tests our products thoroughly. Nearly 300 of the below pesticides concentrations were measured and we are proud to say that all tests measured below our detectable limits. Most tests have a threshold of 0.01 mg/k, while only a handful of tests have a threshold value of <0.05 mg/kg. Not a single test of Endoca products went over detectable threshold limits.

PESTICIDES MEASURED

Acrinathrin Azoxystrobin Biphenhin Bitertanol Biphenyl Bromopropylate Bromuconazole Bupirimate Cadusafos Captafol Captan Chlorphenson Chlorfenapyr Chlorfenvinphos Chlorothalonil Chlorprophame 3,5-Dichloraniline Chlorpyrifos Chlorpyrifos-methyl Chlorthal-dimethyl Cyfluthrin Cypermethrin Cyproconazole Cyprodinil Clomazone o,p-DDE P,P-DDE o,p-DDD P,P-DDD o,p-DDT p,p-DDT Deltamethri Diazinon Diclofop-methyl Dieldrin Dichlobenil Dichlofluanid Dichlorvos Dicloran Dicofol Dicrotophos Diethofencarb Diflubenzuron Dimetachlor Diniconazole Dodemorph Diphenylamine Alpha-Endosulfan Beta-Endosulfan Endosulfan-sulphate Ethion Etofumesate Ethoprophos Ehtoxyquin Etoxazole Etridiazole Etrimphos Famoxadone Fenarimol Fenazaquin Fenchlorphos Fenhexamid Fenithothion Fenpropidin Fenpropimorph Fenvalerate Formothion Fipronil Fipronil-sulfone Fludioxonil Flusilazole Flutriafol Folpet Fuberidazole Furathiocarb Hexaconazole HCB Alpha-HCH Beta-HCH Delta-HCH Heptachlor Heptachlor-epoxidceis Heptachlor-epoxidtreans Iprodione Iprovalicarb Lambda- cyhalothrin Lindane Mecarbam Metalaxv Metazachlor Methidathion Metribuzin Mevinphos Myclobutanil Nuarimol Orthophenylphenol Oxadixyl Paclbutrazol Parathion Parathion-methyl Paraoxon-methyl Paraoxon-ethyl Penconazole Pendimethaline Permethrin Phenthoate Phorate Procymidone Profenofos Propiconazole Propyzamide Pyrazophos Pyrethrins Pyridaben Pyrimethanil Pyriproxyfen Quinoxifen Quitozone Pentachloraniline Phosphamidon Pyrifenox Prometryn Propanil Propoxur Proquinazid Prothiofos Simazine Spiroxamine T au-fluvalinate T ebuconazole T ebufenpyrad T ecnazene T efluthrin T erbuthylazine T etraconazole T etradifon T etramethrine T olclofos-methyl T olyfluanid Transfluthrin Triadimephon Triadimenol Trialate Trifloxystrobin Triflumizole Vinclozolin DDT isomersum Heptachlor (heptachloarnd heptachloer poxidsum) Trifluraline Chlorobenzilate 3-Chloraniline Abamectin (AvermectinBla and AvermectinBlb sum) Acetamidiprid Aldicarb Aldikarbsulphone Aldikarbsulphoxide Azinphos-ethyl Azinphos-methyl Benalaxyl Benfuracarb Boscalid Buprofezin Carbaryl Carbendazim Carbofuran 3-hydroksicarbofuran Carbosulfan Chloridazon Cymoxanil Clofentezin Clothianidin Demeton-S-methyl Demeton-S-methylsulfoxid Diafenthiuron Difenconazole Dimethoate Dimethomorph Diuron EPN Epoxiconazole Ethirimol Etofenprox Fenamidone Fenbuconazole Fenbutatinoxid Fenoxycarb Fenpyroximate Fenpropathrin Fensulfotion Fenthion Fenthionsulphone Fenthionsulphoxide Fluazinam Flufenoxuron Fluquinconazole Fonofos Formetanate Fosthiazate Hexythiazox Imazalil Imidacloprid Indoxacarb Isofenphos Methacrifos Isofenphos-methyl Krezoxim-methyl Linuron Lufenuron Malaaxon Malathion Mepanipirim Mepronil Metamitron Metconazole Methamidophos Methiocarb Methiocarbsulphone Methiocarbsulfoxide Methomyl Methoxyfenozide Metobromuron Monocrotophos Monolinuron Omethoate Oxamyl Pencycuron Phenmedipham Phosalone Phosmet Phosmeot xon Phoxim Pymetrozine Piperonylbutoxide Pyraclostrobin Pyridaphenthion Pyridate Pyrifenox Pirimicarb Pirimicarbdesmethyl Pirimiphos-methyl Primisulfuron-methyl Prochloraz Propamocarb Propargite Prothioconazole Prothioconazole-desthio Quinalphos SpinosynA SpinosynD Sulfotep T ebufenozide T eflubenzuron Thiabendazole Thiacloprid Thiamethoxam Thiodicar Thiophanate-methyl Tralkoxydim Triazophos Trichlorfon Triflumuron Triforine Triticonazole Zoxamide Acephate Amitraz Fenamiphos Fenamiphosulphone Fenamiphosulfoxid Nitempiram Fenthionoxonsulphone Fenthionoxonsulfoxid Kumapho Piriphenox Mehibuzine DEET

Our microbiology analysis is standardized after the following protocols:

ISO 6579:2003

ISO 11290-1:2003

ISO 16649-2:2002

ISO 21527-2:2008

Note on Cannabinoid Testing:

All cannabinoids in their acid forms (ending in "-A") are convertible to their non-acid forms via a decarboxylation process (heating). The components lose mass through this process. To find the total theoretical active cannabinoids, one multiplies the acid forms by 87.7%. For example, CBD-A can be converted to active CBD using the formula: $CBD-A \times 0.877 = CBD$. In this case, the Max CBD for the sample is: $Max\ CBD\ (\%) = (\%CBD-A \times 0.877) + \%CBD$. The same calculation assay is valid for THC-A. This method has been validated according to the principles of the International Conference on Harmonisation.

Chromatographic Analysis:

Analysis of cannabinoids content was performed using Waters 2695 (Milford, MA, USA) separation module equipped with auto injector, sample cooler, vacuum degasser and column heater units. Separation of all cannabinoids was accomplished on YMC PRO C18 (150 x 4 mm I.D., S-3 μ m) RP column coupled with C18 precolumn maintained at 30 °C by a CTO-20AC column oven.

Isocratic elution consisted of acetonitrile:water (4:1) was done in 20 min. The flow rate was maintained at 0.8 ml/min. The cannabinoids were monitored using dual absorbance detector Waters 2487 (Milford, MA, USA). The injection volume of 1 mg/ml sample was 10 μ l. Data evaluation was performed using Clarity software.

Quantification of cannabinoids was obtained from linear regression equation of calibration curve of individual reference standard by plotting concentration versus the area ratio.

Analysis of terpenes was performed using GC-HS system equipped with auto injector. Separation was accomplished on Rx624Sil, 30m, 0.25 μ m ID column.