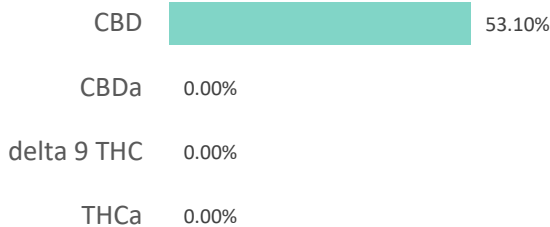
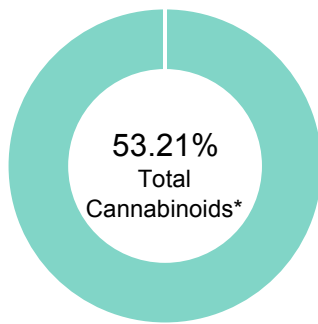


**Ignite Spear Vape**

<b>Batch ID:</b>	072019-Spearmint250-0001	<b>Test ID:</b>	5993391.0014
<b>Reported:</b>	26-Jul-2019	<b>Method:</b>	TM14
<b>Type:</b>	Concentrate		
<b>Test:</b>	Potency		

**CANNABINOID PROFILE**


Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.22	0.00	0.0
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.11	0.00	0.0
Cannabidiolic acid (CBDA)	0.17	0.00	0.0
Cannabidiol (CBD)	0.09	53.10	531.0
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.12	0.00	0.0
Cannabinolic Acid (CBNA)	0.30	0.00	0.0
Cannabinol (CBN)	0.13	0.00	0.0
Cannabigerolic acid (CBGA)	0.19	0.00	0.0
Cannabigerol (CBG)	0.11	0.00	0.0
Tetrahydrocannabivarinic Acid (THCVA)	0.19	0.00	0.0
Tetrahydrocannabivarin (THCV)	0.10	0.00	0.0
Cannabidivarinic Acid (CBDVA)	0.16	0.00	0.0
Cannabidivarin (CBDV)	0.09	0.11	1.1
Cannabichromenic Acid (CBCA)	0.17	0.00	0.0
Cannabichromene (CBC)	0.20	0.00	0.0
<b>Total Cannabinoids</b>		<b>53.21</b>	<b>532.10</b>
Total Potential THC**		0.00	0.00
Total Potential CBD**		53.10	531.00

**NOTES:**

N/A

% = % (w/w) = Percent (Weight of Analyte / Weight of Product)

\* Total Cannabinoids result reflects the absolute sum of all cannabinoids detected.

\*\* Total Potential THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step.

$$\text{Total THC} = \text{THC} + (\text{THCa} * (0.877)) \text{ and Total CBD} = \text{CBD} + (\text{CBDa} * (0.877))$$
**FINAL APPROVAL**


Alex Smith  
26-Jul-2019  
10:51 AM

PREPARED BY / DATE



Greg Zimpfer  
26-Jul-2019  
12:05 PM

APPROVED BY / DATE

Testing results are based solely upon the sample submitted to Botanacor Laboratories, LLC, in the condition it was received. Botanacor Laboratories, LLC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of Botanacor Laboratories, LLC. ISO/IEC 17025:2005 Accredited A2LA Certificate Number 4329.02





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 CoA Date 08/19/2019  
 CoA Status Final

## CERTIFICATE OF ANALYSIS

<b>Customer</b>	MYKU Biosciences LLC	<b>Date Received</b>	8/12/2019
<b>Address</b>	3715 E 40th Ave. Denver CO 80205	<b>Condition</b>	Good
<b>Sample Name</b>	Spearmint 250_0001	<b>Temp</b>	Ambient
<b>Sample Lot #</b>	NA	<b>PO #</b>	
		<b>Remarks</b>	RUSH

Analysis	Specification	Test Result	Test Method	Test Date
Pesticides				
DDT	N/A	Pass <0.500 ppm	GC-MS	08/14/2019
Alachlor	N/A	Pass <0.500 ppm	GC-MS	as above
Aldin	N/A	Pass <0.025 ppm	GC-MS	as above
Azinphos-ethyl	N/A	Pass <3.000 ppm	GC-MS	as above
Azinphos-methyl	N/A	Pass <0.500 ppm	GC-MS	as above
Bromophos-ethyl	N/A	Pass <0.050 ppm	GC-MS	as above
Bromophos-methyl	N/A	Pass <0.500 ppm	GC-MS	as above
Brompropylate	N/A	Pass <2.000 ppm	GC-MS	as above
Chlordane	N/A	Pass <0.025 ppm	GC-MS	as above
Chlorfenvinphos	N/A	Pass <0.500 ppm	GC-MS	as above
Chlorpyrifos	N/A	Pass <0.150 ppm	GC-MS	as above
Chlorpyrifos-methyl	N/A	Pass <2.000 ppm	GC-MS	as above
Chlorthal-dimethyl	N/A	Pass <1.000 ppm	GC-MS	as above
Cyfluthrin	N/A	Pass <0.100 ppm	GC-MS	as above
Cyhalothrin-Lambda	N/A	Pass <0.150 ppm	GC-MS	as above
Cypermethrin	N/A	Pass <0.150 ppm	GC-MS	as above
Deltamethrin	N/A	Pass <0.500 ppm	GC-MS	as above
Diazinon	N/A	Pass <2.000 ppm	GC-MS	as above
Dichlofluanid	N/A	Pass <1.000 ppm	GC-MS	as above
Dichlorvos	N/A	Pass <0.050 ppm	GC-MS	as above
Dicofol	N/A	Pass <0.500 ppm	GC-MS	as above
Dieldrin	N/A	Pass <0.025 ppm	GC-MS	as above
Dimethoate	N/A	Pass <1.000 ppm	GC-MS	as above
Endosulfan	N/A	Pass <0.250 ppm	GC-MS	as above
Endrin	N/A	Pass <0.025 ppm	GC-MS	as above
Ethion	N/A	Pass <0.500 ppm	GC-MS	as above
Etrimphos	N/A	Pass <0.250 ppm	GC-MS	as above
Fenchlorophos	N/A	Pass <0.500 ppm	GC-MS	as above
Fenitrothion	N/A	Pass <1.000 ppm	GC-MS	as above
Fenpropathrin	N/A	Pass <0.050 ppm	GC-MS	as above
Fensulfothion	N/A	Pass <0.500 ppm	GC-MS	as above
Fenthion	N/A	Pass <0.250 ppm	GC-MS	as above
Fenvalerate	N/A	Pass <0.010 ppm	GC-MS	as above
Flucytrinate	N/A	Pass <0.100 ppm	GC-MS	as above
Fluvalinate-Tau	N/A	Pass <0.250 ppm	GC-MS	as above
Fonofos	N/A	Pass <0.150 ppm	GC-MS	as above
Heptachlor	N/A	Pass <0.075 ppm	GC-MS	as above
Hexachlorbenzene	N/A	Pass <0.100 ppm	GC-MS	as above

Authorized by Hadi Habib 8/19/19  
 Hadi Habib, M.Sc / Technical Deputy

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		<b>Temp</b>	Ambient
<b>Sample Name</b>	Spearmint 250_0001	<b>PO #</b>	
<b>Sample Lot #</b>	NA	<b>Remarks</b>	RUSH

Analysis	Specification	Test Result	Test Method	Test Date
Hexachlorocyclohexane	N/A	Pass <0.025 ppm	GC-MS	as above
Lindane	N/A	Pass <0.250 ppm	GC-MS	as above
Malaaxon	N/A	Pass <0.100 ppm	GC-MS	as above
Malathion	N/A	Pass <0.250 ppm	GC-MS	as above
Mecarbam	N/A	Pass <0.500 ppm	GC-MS	as above
Methacrifos	N/A	Pass <0.025 ppm	GC-MS	as above
Methamidophos	N/A	Pass <0.005 ppm	GC-MS	as above
Methidathion	N/A	Pass <0.100 ppm	GC-MS	as above
Methoxychlor	N/A	Pass <2.000 ppm	GC-MS	as above
Parathion-ethyl	N/A	Pass <1.000 ppm	GC-MS	as above
Mirex	N/A	Pass <1.000 ppm	GC-MS	as above
Monocrotophos	N/A	Pass <0.050 ppm	GC-MS	as above
Omethoate	N/A	Pass <0.500 ppm	GC-MS	as above
Paraaxon-ethyl	N/A	Pass <0.025 ppm	GC-MS	as above
Paraaxon	N/A	Pass <2.000 ppm	GC-MS	as above
Parathion-methyl	N/A	Pass <1.000 ppm	GC-MS	as above
Pendimethalin	N/A	Pass <1.000 ppm	GC-MS	as above
Pentachloroanisole	N/A	Pass <0.025 ppm	GC-MS	as above
Permethrin	N/A	Pass <0.025 ppm	GC-MS	as above
Phosalone	N/A	Pass <2.000 ppm	GC-MS	as above
Phosmet	N/A	Pass <0.500 ppm	GC-MS	as above
Piperonylbutoxide	N/A	Pass <1.000 ppm	GC-MS	as above
Pirimiphos-ethyl	N/A	Pass <0.050 ppm	GC-MS	as above
Pirimiphos-methyl	N/A	Pass <0.250 ppm	GC-MS	as above
Procyimdone	N/A	Pass <1.000 ppm	GC-MS	as above
Profenofos	N/A	Pass <2.000 ppm	GC-MS	as above
Prothiofos	N/A	Pass <0.500 ppm	GC-MS	as above
Pyrethrum	N/A	Pass <0.250 ppm	GC-MS	as above
Quinalphos	N/A	Pass <0.500 ppm	GC-MS	as above
Quintozene	N/A	Pass <1.000 ppm	GC-MS	as above
S-421	N/A	Pass <0.500 ppm	GC-MS	as above
Tecnazene	N/A	Pass <0.100 ppm	GC-MS	as above
Tetradifon	N/A	Pass <0.250 ppm	GC-MS	as above
Vinclozolin	N/A	Pass <1.000 ppm	GC-MS	as above
<b>Residual Solvents</b>				
Methanol	N/A	Pass <3000 ppm	USP <467>	08/19/2019
Acetonitrile	N/A	Pass <410 ppm	USP <467>	as above
Dichloromethane	N/A	Pass <600 ppm	USP <467>	as above

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		<b>Temp</b>	Ambient
<b>Sample Name</b>	Spearmint 250_0001	<b>PO #</b>	
<b>Sample Lot #</b>	NA	<b>Remarks</b>	RUSH

Analysis	Specification	Test Result	Test Method	Test Date
trans-1, 2-Dichloroethene	N/A	Pass <1870 ppm	USP <467>	as above
cis-1, 2-Dichloroethene	N/A	Pass <1870 ppm	USP <467>	as above
Tetrahydrofuran	N/A	Pass <720 ppm	USP <467>	as above
Cyclohexane	N/A	Pass <3880 ppm	USP <467>	as above
Methylcyclohexane	N/A	Pass <1180 ppm	USP <467>	as above
1,4-Dioxane	N/A	Pass <380 ppm	USP <467>	as above
Toluene	N/A	Pass <890 ppm	USP <467>	as above
Chlorobenzene	N/A	Pass <360 ppm	USP <467>	as above
Ethylbenzene	N/A	Pass <368.9 ppm	USP <467>	as above
m-Xylene	N/A	Pass <1302 ppm	USP <467>	as above
p-Xylene	N/A	Pass <368.9 ppm	USP <467>	as above
o-Xylene	N/A	Pass <195.3 ppm	USP <467>	as above
n-Hexane	N/A	Pass <290 ppm	USP <467>	as above
Nitromethane	N/A	Pass <50 ppm	USP <467>	as above
Chloroform	N/A	Pass <60 ppm	USP <467>	as above
1,2-Dimethoxyethane	N/A	Pass <100 ppm	USP <467>	as above
Trichloroethylene	N/A	Pass <80 ppm	USP <467>	as above
Pyridine	N/A	Pass <200 ppm	USP <467>	as above
2-Hexanone	N/A	Pass <50 ppm	USP <467>	as above
Tetralin	N/A	Pass <100 ppm	USP <467>	as above
Ethanol	N/A	Pass <5000 ppm	USP <467>	as above
Terpenes				
alpha-Pinene	N/A	0.16mg / g	GC	08/12/2019
Camphene	N/A	Not Detected	GC	as above
Beta-Myrcene	N/A	0.39mg / g	GC	as above
Beta-Pinene	N/A	0.19mg / g	GC	as above
3-Carene	N/A	0.06mg / g	GC	as above
alpha-Terpinene	N/A	Not Detected	GC	as above
Ocimene	N/A	6.57mg / g	GC	as above
Limonene	N/A	7.46mg / g	GC	as above
P-Cymene	N/A	Not Detected	GC	as above
Beta-Ocimene	N/A	Not Detected	GC	as above
Eucalyptol	N/A	0.47mg / g	GC	as above
gamma-Terpinene	N/A	0.04mg / g	GC	as above
Terpinolene	N/A	0.04mg / g	GC	as above
Linalool	N/A	0.06mg / g	GC	as above
Isopulegol	N/A	Not Detected	GC	as above
Geraniol	N/A	Not Detected	GC	as above

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		<b>Temp</b>	Ambient
<b>Sample Name</b>	Spearmint 250_0001	<b>PO #</b>	
<b>Sample Lot #</b>	NA	<b>Remarks</b>	RUSH

Analysis	Specification	Test Result	Test Method	Test Date
Beta-Caryophyllene	N/A	0.18mg / g	GC	as above
alpha-Humulene	N/A	Not Detected	GC	as above
Nerolidol 1	N/A	Not Detected	GC	as above
Nerolidol 2	N/A	Not Detected	GC	as above
Guaiol	N/A	Not Detected	GC	as above
Caryophyllene oxide	N/A	Not Detected	GC	as above
alpha-Bisabolol	N/A	Not Detected	GC	as above
<b>Heavy Metals</b>				
Arsenic (As)	N/A	<0.004 ppm	ICP-MS (STP-021)	08/13/2019
Cadmium (Cd)	N/A	<0.004 ppm	ICP-MS (STP-021)	as above
Mercury (Hg)	N/A	<0.001 ppm	ICP-MS (STP-021)	as above
Lead (Pb)	N/A	0.007 ppm	ICP-MS (STP-021)	as above
<b>Microbiology</b>				
TPC	N/A	<10 cfu/g	AOAC 966.23	08/12/2019
Yeast	N/A	<10 cfu/g	AOAC 2014.05	as above
Mold	N/A	<10 cfu/g	AOAC 2014.05	as above
Coliforms	N/A	<10 cfu/g	AOAC 991.14	as above
E. coli	N/A	Negative / 10g	AOAC 991.14	as above
Salmonella	N/A	Negative / 10g	AOAC 989.13	as above
Staphylococcus aureus	N/A	Negative / 10g	AOAC 2003.07	as above

Authorized by

*Hadi Habib* 8/19/19

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