



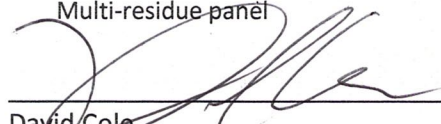
STRAIGHT HEMP

CERTIFICATE OF ANALYSIS

PRODUCT: Straight Hemp Vape Oil PRODUCTION DATE: 09/2020
BATCH/LOT: VA014 BEST BY/EXP DATE: 09/2022

INGREDIENTS: Full Spectrum Hemp Extract, Terpene Blend (Hemp-derived)
ADDITIVES: none
EXCIPIENTS: none

TEST	METHOD	SPECIFICATION	RESULTS
Strength & Composition			
Total Cannabidiol (CBD) ⁱ	UPLC/UV	48 – 58%	49.64%
Total minor cannabinoids	UPLC/UV	n/e	9.04%
Total Tetrahydrocannabinol (THC) ⁱⁱ	UPLC/UV	NMT 0.3%	0.11%
Total Cannabinoids	UPLC/UV	n/e	58.79%
Terpene assay ⁱⁱⁱ	HS-GC/MS	n/e	18.93%
Microbiological^{iv}			
Total Plate Count	USP 42	NMT 1,000 cfu/g	PASS
Total Coliforms	USP 42	NMT 100 cfu/g	PASS
Total Yeast & Mold	USP 42	NMT 100 cfu/g	PASS
<i>E. coli</i>	USP 42	Absent	PASS
<i>Salmonella</i>	USP 42	Absent	PASS
Heavy Metals^v			
Arsenic (As)	ICP/MS	NMT 0.2 ppm	PASS
Cadmium (Cd)	ICP/MS	NMT 0.2 ppm	PASS
Lead (Pb)	ICP/MS	NMT 0.5 ppm	PASS
Mercury (Hg)	ICP/MS	NMT 0.1 ppm	PASS
Residual Solvents			
Multi-residue panel	GC-HS-MSD	Below CCR Limits ^{vi}	PASS
Pesticides			
Multi-residue panel	UPLC-MS/MS	Below MRL ^{vii}	PASS


David Cole
Director of Quality

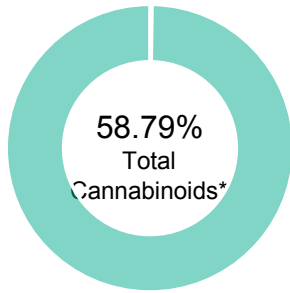
9/25/20
Date

ⁱ Total CBD = CBD + (0.877*CBDA) to account for loss of acid group during decarboxylation
ⁱⁱ Total THC = THC + (0.877*THCA) to account for loss of acid group during decarboxylation
ⁱⁱⁱ Sum of terpene assay (n=22)
^{iv} Microbiological limits based on USP, WHO, and/or NSF/ANSI.
^v Limits for As and Pb set below CA Prop 65 *no significant risk level*; Cd and Hg set below USP permitted daily exposure for 110lb body weight. Complies with 1 CCR 212-3
^{vi} 11 solvent panel: Propane, Butanes, Methanol, Pentane, Ethanol, Acetone, Isopropyl Alcohol, Hexane, Benzene, Heptanes, Toluene, Xylenes. Individual limits: 1 CCR 212-3
^{vii} 50 residue panel

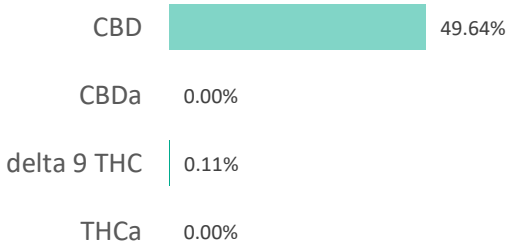
NMT = Not More Than
MRL = Method Reporting Limit
n/e = not established

Vape Oil

Batch ID:	VA014	Test ID:	T000095643
Reported:	14-Sep-2020	Method:	TM14
Type:	Concentrate		
Test:	Potency		

CANNABINOID PROFILE



Compound	LOQ (%)	Result (%)	Result (mg/g)
Delta 9-Tetrahydrocannabinolic acid (THCA-A)	0.13	ND	ND
Delta 9-Tetrahydrocannabinol (Delta 9THC)	0.06	0.11	1.1
Cannabidiolic acid (CBDA)	0.06	ND	ND
Cannabidiol (CBD)	0.13	49.64	496.4
Delta 8-Tetrahydrocannabinol (Delta 8THC)	0.07	ND	ND
Cannabinolic Acid (CBNA)	0.18	ND	ND
Cannabinol (CBN)	0.08	0.30	3.0
Cannabigerolic acid (CBGA)	0.11	ND	ND
Cannabigerol (CBG)	0.06	6.51	65.1
Tetrahydrocannabivarinic Acid (THCVA)	0.11	ND	ND
Tetrahydrocannabivarin (THCV)	0.06	ND	ND
Cannabidivarinic Acid (CBDVA)	0.06	ND	ND
Cannabidivarin (CBDV)	0.03	2.23	22.3
Cannabichromenic Acid (CBCA)	0.10	ND	ND
Cannabichromene (CBC)	0.11	ND	ND
Total Cannabinoids		58.79	587.9
Total Potential THC**		0.11	1.1
Total Potential CBD**		49.64	496.4


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.
 Total THC = THC + (THCa * (0.877)) and
 Total CBD = CBD + (CBDa * (0.877))
 ND = None Detected (Defined by Dynamic Range of the method)

FINAL APPROVAL


Michelle Gagnon
 14-Sep-2020
 3:00 PM



Ben Minton
 14-Sep-2020
 3:28 PM

PREPARED BY / DATE

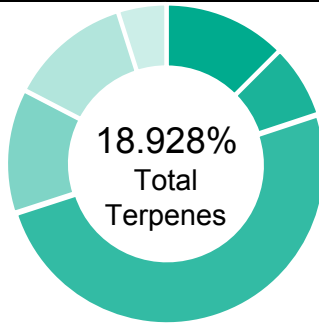
APPROVED BY / DATE

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Vape Oil

Batch ID:	VA014	Test ID:	7406095.0022
Reported:	17-Sep-2020	Method:	TM10
Type:	Concentrate		
Test:	Terpenes		

TERPENE PROFILE


Compound	%(w/w)	mg/g
(-)-alpha-Bisabolol	0.000	0
Camphene	0.000	0
delta-3-Carene	0.000	0
beta-Caryophyllene	2.280	22.8
(-)-Caryophyllene Oxide	0.000	0
p-Cymene	0.000	0
Eucalyptol	0.334	3.34
Geraniol	0.000	0
alpha-Humulene	0.895	8.95
(-)-Isopulegol	0.000	0
d-Limonene	2.302	23.02
Linalool	0.000	0
beta-Myrcene	9.148	91.48
cis-Nerolidol	0.000	0
trans-Nerolidol	0.000	0
Ocimene	0.000	0
beta-Ocimene	0.000	0
alpha-Pinene	2.285	22.85
(-)-beta-Pinene	1.354	13.54
alpha-Terpinene	0.000	0
gamma-Terpinene	0.000	0
Terpinolene	0.330	3.3
	18.928%	189.28



PREDOMINANT TERPENES

alpha-Pinene	2.285%
(-)-beta-Pinene	1.354%
beta-Myrcene	9.148%
delta-3-Carene	0.000%
alpha-Terpinene	0.000%
d-Limonene	2.302%
Linalool	0.000%
beta-Caryophyllene	2.280%
alpha-Humulene	0.895%
(-)-alpha-Bisabolol	0.000%

NOTES:

0

FINAL APPROVAL

 Daniel Weidensaul 17-Sep-2020 12:36 PM	 Ben Minton 17-Sep-2020 2:20 PM
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Certificate #4329.02



prepared for: Straight Hemp
5135 W 58th Ave, Unit 5
Arvada, CO 80002

Vape Oil


Batch ID:	VA014	Test ID:	T000095648
Reported:	15-Sep-2020	Method:	TM19
Type:	Other		
Test:	Metals		

HEAVY METALS


Analyte	Dynamic Range (ppm)	Result (ppm)
Arsenic	0.072 - 7.15	ND
Cadmium	0.071 - 7.11	ND
Mercury	0.069 - 6.88	ND
Lead	0.069 - 6.94	ND

* ND = None Detected (Defined by Dynamic Range of the method)

FINAL APPROVAL

 Ryan Weems
15-Sep-2020
12:19 PM

PREPARED BY / DATE

 Ben Minton
15-Sep-2020
1:54 PM

APPROVED BY / DATE

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Vape Oil

Batch ID:	VA014	Test ID:	T000095645
Reported:	15-Sep-2020	Method:	TM04
Type:	Concentrate		
Test:	Residual Solvents		

RESIDUAL SOLVENTS

Solvent	Dynamic Range (ppm)	Result (ppm)
Propane	66 - 1311	*ND
Butanes (Isobutane, n-Butane)	140 - 2796	*ND
Methanol	58 - 1162	*ND
Pentane	80 - 1603	*ND
Ethanol	79 - 1588	*ND
Acetone	92 - 1838	*ND
Isopropyl Alcohol	95 - 1907	*ND
Hexane	6 - 112	*ND
Ethyl Acetate	92 - 1842	*ND
Benzene	0.2 - 3.7	*ND
Heptanes	88 - 1751	*ND
Toluene	17 - 331	*ND
Xylenes (m,p,o-Xylenes)	123 - 2458	*ND

* ND = None Detected (Defined by Dynamic Range of the method)

NOTES:
N/A

FINAL APPROVAL



Ryan Weems
15-Sep-2020
3:00 PM

PREPARED BY / DATE



Ben Minton
15-Sep-2020
6:47 PM

APPROVED BY / DATE

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Certificate #4329.02

Vape Oil

Batch ID:	VA014	Test ID:	T000095647
Reported:	16-Sep-2020	Method:	TM17
Type:	Concentrate		
Test:	Pesticides		


PESTICIDE RESIDUE


Compound	Dynamic Range (ppb)	Result (ppb)	Compound	Dynamic Range (ppb)	Result (ppb)
Acephate	37 - 2318	ND*	Malathion	283 - 2318	ND*
Acetamiprid	40 - 2318	ND*	Metalaxyl	44 - 2318	ND*
Abamectin	>255	ND*	Methiocarb	38 - 2318	ND*
Azoxystrobin	44 - 2318	ND*	Methomyl	38 - 2318	ND*
Bifenazate	43 - 2318	ND*	MGK 264 1	157 - 2318	ND*
Boscalid	34 - 2318	ND*	MGK 264 2	109 - 2318	ND*
Carbaryl	37 - 2318	ND*	Myclobutanil	43 - 2318	ND*
Carbofuran	40 - 2318	ND*	Naled	41 - 2318	ND*
Chlorantraniliprole	48 - 2318	ND*	Oxamyl	40 - 2318	ND*
Chlorpyrifos	43 - 2318	ND*	Paclobutrazol	43 - 2318	ND*
Clofentezine	262 - 2318	ND*	Permethrin	276 - 2318	ND*
Diazinon	291 - 2318	ND*	Phosmet	43 - 2318	ND*
Dichlorvos	>261	ND*	Prophos	266 - 2318	ND*
Dimethoate	40 - 2318	ND*	Propoxur	41 - 2318	ND*
E-Fenpyroximate	180 - 2318	ND*	Pyridaben	276 - 2318	ND*
Etofenprox	43 - 2318	ND*	Spinosad A	30 - 2318	ND*
Etoxazole	282 - 2318	ND*	Spinosad D	74 - 2318	ND*
Fenoxycarb	>44	ND*	Spiromesifen	>267	ND*
Fipronil	44 - 2318	ND*	Spirotetramat	>260	ND*
Flonicamid	49 - 2318	ND*	Spiroxamine 1	18 - 2318	ND*
Fludioxonil	>265	ND*	Spiroxamine 2	22 - 2318	ND*
Hexythiazox	38 - 2318	ND*	Tebuconazole	288 - 2318	ND*
Imazalil	280 - 2318	ND*	Thiacloprid	40 - 2318	ND*
Imidacloprid	43 - 2318	ND*	Thiamethoxam	40 - 2318	ND*
Kresoxim-methyl	47 - 2318	ND*	Trifloxystrobin	43 - 2318	ND*

* ND = None Detected (Defined by Dynamic Range of the method)

N/A

FINAL APPROVAL


 Sam Smith
 16-Sep-2020
 9:54 AM


 Ben Minton
 16-Sep-2020
 2:15 PM

PREPARED BY / DATE

APPROVED BY / DATE

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Certificate of Analysis

Straight Hemp
 5135 W. 58th Ave, Ste 5
 Arvada, CO 80002
 Phone: 970-214-7814

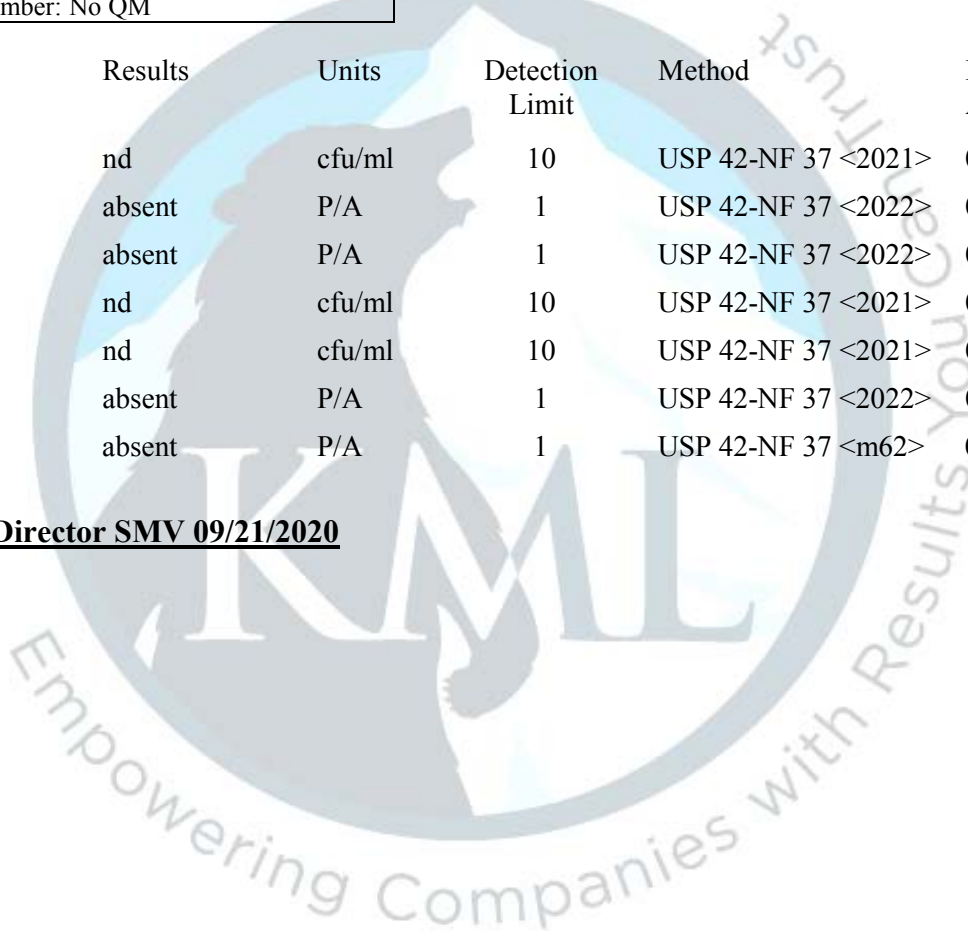
Invoice Number: 20.1356
 PO Number:
 Received Date: 09/14/2020
 Number of Samples: 01
 Project Name: Routine Testing

Microbiology Report:

Lab #: 20-8459	Sample Lot: VA014	Sample Date: 09/10/2020
Sample Name: Vape Oil	Additional ID:	Plated Date: 09/14/2020
Qualifying Material Number: No QM		

Test Performed	Results	Units	Detection Limit	Method	Date Analyzed
Aerobic Plate Count	nd	cfu/ml	10	USP 42-NF 37 <2021>	09/17/2020
<i>E. coli</i>	absent	P/A	1	USP 42-NF 37 <2022>	09/17/2020
<i>Staph aureus</i>	absent	P/A	1	USP 42-NF 37 <2022>	09/17/2020
Yeast	nd	cfu/ml	10	USP 42-NF 37 <2021>	09/19/2020
Mold	nd	cfu/ml	10	USP 42-NF 37 <2021>	09/19/2020
Salmonella	absent	P/A	1	USP 42-NF 37 <2022>	09/18/2020
<i>Pseudo. aeruginosa</i>	absent	P/A	1	USP 42-NF 37 <m62>	09/17/2020

Approved By: QA Director SMV 09/21/2020



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Certificate of Analysis

Straight Hemp
 5135 W. 58th Ave, Ste 5
 Arvada, CO 80002
 Phone: 970-214-7814

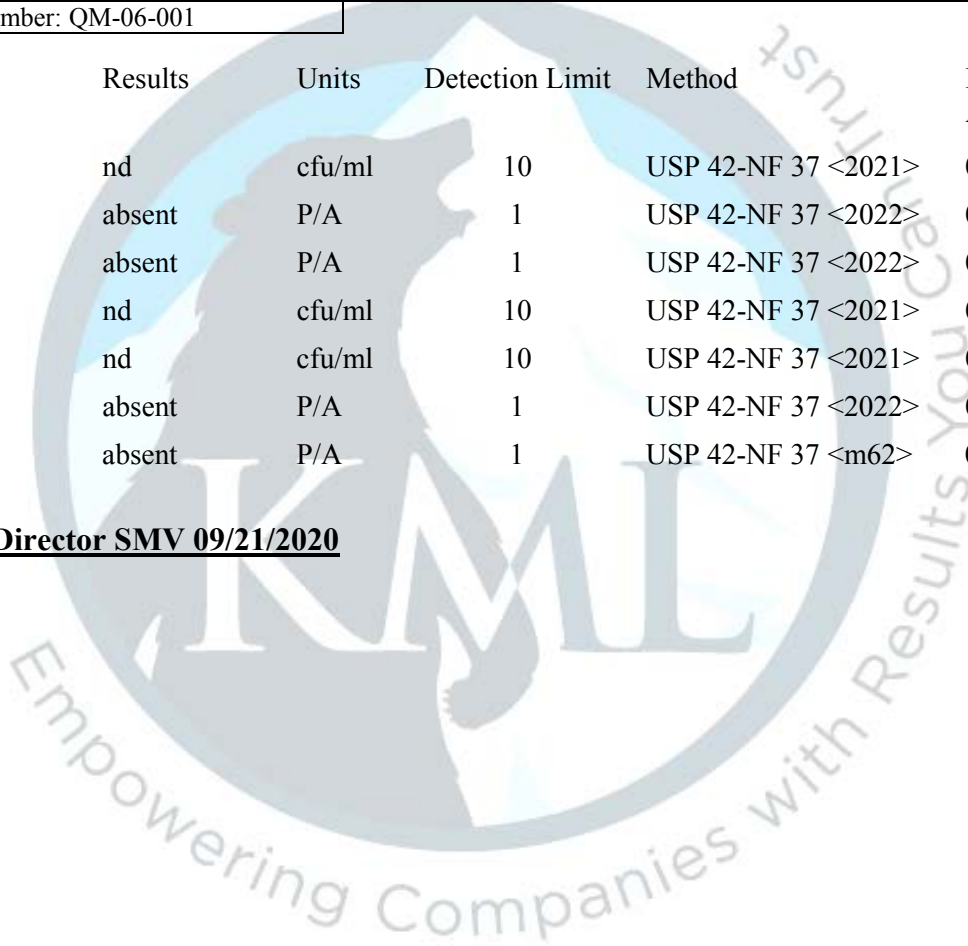
Invoice Number: 20.1356
 PO Number:
 Received Date: 09/14/2020
 Number of Samples: 01
 Project Name: Routine Testing

Microbiology Report:

Lab #: Control 09142020	Additional ID: Negative Control Purposes	Plated Date: 09/14/2020
Sample Name: Control 09142020		
Qualifying Material Number: QM-06-001		

Test Performed	Results	Units	Detection Limit	Method	Date Analyzed
Aerobic Plate Count	nd	cfu/ml	10	USP 42-NF 37 <2021>	09/17/2020
<i>E. coli</i>	absent	P/A	1	USP 42-NF 37 <2022>	09/17/2020
<i>Staph aureus</i>	absent	P/A	1	USP 42-NF 37 <2022>	09/17/2020
Yeast	nd	cfu/ml	10	USP 42-NF 37 <2021>	09/19/2020
Mold	nd	cfu/ml	10	USP 42-NF 37 <2021>	09/19/2020
Salmonella	absent	P/A	1	USP 42-NF 37 <2022>	09/18/2020
<i>Pseudo. aeruginosa</i>	absent	P/A	1	USP 42-NF 37 <m62>	09/17/2020

Approved By: QA Director SMV 09/21/2020



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