### Standard Pathogen Panel



# Agriculture and Food Testing Solutions

CERTIFICATE OF ANALYSIS # CS0268-192204-001-SP

Sponsor Sample ID: Sample 1

Sample Description: Batch 1

Date/Time Received: 01 March 2019 / 1235

Analyses Initiated: 04 March 2019

Attn: Devon Vince

Address: 4022 Hwy 495 Harrisburg, NC 28075

Email: Devonvince@gmail.com

Phone: 704-453-6241

Analyst Name: Sean Prestley	Signature:	Date: 07 March 2019
Reviewer Name: Jen Heath	Signature: Jen Heut	Date: 07 March 2019

#### **Initial Tests:**

Test Name	Test Results (CFU/g)	Comments
E. coli	<10	Test is confirmatory.
Coliform Count	<10	Test is confirmatory.
Enterobacter	<10	Test is confirmatory.
Staphylococcus aureus (Staph) Count	<10	Test is confirmatory.
Yeast Count	<10	Test is confirmatory.
Mold Count	<10	Test is confirmatory.
Test Name	Test Results	Comments
Listeria	Negative	No secondary testing required.

### **Secondary Tests:**

Test Name	Test Status	Test Results
E. Coli Confirmation	Not Required	N/A
Salmonella Confirmation	Not Required	N/A
Listeria Confirmation	Not Required	N/A

<sup>\*</sup>Avazyme cannot warrant the absolute negative presence of any pathogen, only attest that the test was carried out via appropriate methods and shows a negative result.

Testing was performed according to established AOAC, BAM, and API methods. Using these methods, this sample tested negative for:

Listeria monocytogenes

Salmonella enterica

E. coli O157:H7

Staphylococcus aureus

Certificate Approved by:

signature/date



# **CERTIFICATE OF ANALYSIS** CS0268\_192204\_001\_P

Pesticides

**Client Sample ID:** 

Sample 1

Sample Description:

Batch 1

**Hemp Quest** 4022 Hwy 495 Harrisburg, NC 28075

Attn: Devon Vince

120

120

40

ND

ND

Tebufenpyrad

Teflubenzuron

Tebuthiuron

Propargite

Propham

Propiconazole

Pesticide	Conc. Detected	LOQ	Pesticide	Conc. Detected	LOQ	Pesticide	Conc. Detected	LOQ
Naled	ND	400	Propoxur	ND	40	Temephos	ND	40
Neburon	ND	40	Prothioconazole	ND	400	Terbutryn	ND	40
Nitenpyram	ND	40	Pymetrozine	ND	40	Tetraconazole	ND	40
Novaluron	ND	40	Pyracarbolid	ND	40	Thiabendazole	ND -	40
Nuarimol	ND	400	Pyraclostrobin	ND	40	Thiacloprid	ND	40
Omethoate	ND	40	Pyrethrin I	ND	40	Thiamethoxam	ND	40
Oxadixyl	ND	40	Pyrethrin II	ND	40	Thidiazuron	ND	40
Oxamyl	ND	120	Pyridaben	ND	40	Thiobencarb	ND	40
Paclobutrazol	ND	40	Pyrimethanil	ND	40	Thiophanate-methyl	ND	120
Penconazole	ND	40	Pyriproxyfen	ND	40	Triadimefon	ND	40
Pencycuron	ND	40	Quinoxyfen	ND	40	Triadimenol	ND	40
Pentachloronitrobenzene	ND	40	Rotenone	ND	40	Trichlorfon	ND	40
Permethrin	ND	400	Secbumeton	ND	40	Tricyclazole	ND	40
Phenmedipham	ND	40	Siduron	ND	40	Trifloxystrobin	ND	40
Phosmet	ND	400	Simetryn	ND	40	Triflumizole	ND	40
Picoxystrobin	ND	40	Spinetoram	ND	40	Triflumuron	ND	40
Piperonyl Butoxide	ND	40	Spinosyn A	ND	40	Triticonazole	ND	40
Pirimicarb	ND	40	Spinosyn D	ND	40	Vamidothion	ND	40
Prallethrin	ND	40	Spiromesifen	ND	400	Zoxamide	ND	40
Prochloraz	ND	40	Spirotetramat	ND	40	Vamidothion	ND	40
Promecarb	ND	40	Spiroxamine	ND	40	Zoxamide	ND	40
Prometon	ND	40	Sulfentrazone	ND	40		***************************************	h
Prometryne	NĎ	40	Tebuconazole	ND	40			
Propamocarb	ND	40	Tebufenozide	ND	40			
	<del> </del>	-			-	CONTROL OF THE PARTY OF THE PAR		

ND = not detected above the LOQ (limit of quantitation)

ND

ND

40

40

40

Avazyme warrants that this study was performed in accordance with appropriate laboratory research practices and protocols. Avazyme is not responsible for Sponsor's use of the information or concepts generated as part of the study, and will not be liable for any loss or damage resulting from such use.





Agriculture and Food Testing Solutions
CERTIFICATE OF ANALYSIS

CS0268\_192204\_001\_M

Mycotoxins

Certificate ID: CS0268\_192204\_001\_M

Client Sample ID: Sample 1
Sample Description: Batch 1
Receive sample: 1-Mar-19
Initiate analyses: 6-Mar-19

Hemp Quest 4022 Hwy 495 Harrisburg, NC 28075

**Attn: Devon Vince** 

Analyst:

Jacob Edwards

Signature:

Mov 19

Reviewed by:

Stove Morrocc

Signature:

Marken & Wenner

Date: 8 Mq o ( 9)

Analysis requested: Analysis of concentration of mycotoxins in customer supplied material

## Results:

	Year,
Mycotoxin	Concentration  Detected
BMAA	<10.0 ppb
B1 Fumonisin	<10.0 ppb
B2 Fumonisin	<10.0 ppb
15-Acetyl-DON	<10.0 ppb
3-Acetyl-DON	<10.0 ppb
DON (Deoxynivalenol)	<10.0 ppb
NIV (Nivalenol)	<10.0 ppb
Cytochalasin B	<10.0 ppb
Cytochalasin D	<10.0 ppb
Cytochalasin A	<10.0 ppb
Cytochalasin E	<10.0 ppb
Aflatoxin G2	<10.0 ppb
Aflatoxin G1	<10.0 ppb
Aflatoxin B1	<10.0 ppb
Aflatoxin B2	<10.0 ppb
Zearalenone	<10.0 ppb
Tenuazonic Acid	<10.0 ppb
DAS (Diacetoxyscirpenol)	<10.0 ppb
MON (Moniliformin)	<10.0 ppb
T2	<10.0 ppb
Ochratoxin A	<10.0 ppb

ppb = ng/g

Avazyme warrants that this study was performed in accordance with appropriate laboratory research practices and protocols. Avazyme warrants that this study was performed in accordance with appropriate laboratory research practices and protocols. Avazyme is not responsible for Sponsor's use of the information or concepts generated as part of the study, and will not be liable for any loss or damage resulting from such use.



# **CERTIFICATE OF ANALYSIS**

CS0268\_192204-001\_HM

# **Heavy Metals**

**Client Sample ID: Sample Description:**  Sample 1 Batch 1

Receive sample: Initiate analyses: 01-Mar-19 11-Mar-19 **Hemp Quest** 4022 Hwy 495

Harrisburg, NC 28075

Attn: Devon Vince

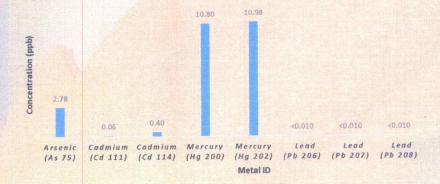
Analyst:

Ian Kirven Reviewed by:

Signature:

Test Type: **Heavy Metal Content Technical Procedure: TP A0036-01** 

**Results:** 



Chemical Analyzed	Concentration (ppb)		
Arsenic (As 75)	2.78		
Cadmium (Cd 111)	0.06		
Cadmium (Cd 114)	0.40		
Mercury (Hg 200)	10.80		
Mercury (Hg 202)	10.98		
Lead (Pb 206)	<0.010		
Lead (Pb 207)	<0.010		
Lead (Pb 208)	<0.010		

Concentration of metals was determined by ICP-MS with an Avazyme intra lab validated method utilizing certified reference standards for each chemical analyzed.

Avazyme warrants that this study was performed in accordance with appropriate laboratory research practices and protocols. Avazyme is not responsible for Sponsor's use of the information or concepts generated as part of the study, and will not be liable for any loss or damage resulting from such use.

# CERTIFICATE OF ANALYSIS CS0268\_192204\_001\_P

**Pesticides** 

Client Sample ID: Sample 1
Sample Description: Batch 1

Hemp Quest 4022 Hwy 495

Harrisburg, NC 28075

Attn: Devon Vince

Received sample: 1-Mar-19

Initiated analyses: 2-Mar-19

Analyst:
Steve Werness

Reviewed by:
Jacob Edwards

Signature:

Marie

Date:

O4Marie

O4Marie

Date:

O4Marie

Analysis of concentration (conc.) of Pesticides in customer supplied material with UHPLC-MS/MS.

#### Results:

Pesticide	Conc.	LOQ	Pesticide	Conc.	LOQ	Pesticide	Conc.	LOQ	Pesticide	Conc.	LOO
	Detected	ppb	Example 1	Detected	ppb		Detected	ppb		Detected	ppb
2,4-D	ND*	40	Chloroxuron	ND	40	Ethoprophos	ND	40	Indoxacarb	ND	40
3-hydroxycarbofuran	ND	40	Chlorpyrifos	ND	40	Etofenprox	ND	40	Ipconazole	ND	40
Acephate	ND	400	Cinerin I	ND	40	Etoxazole	ND	40	Iprovalicarb	ND	40
Acequinocyl	ND	400	Cinerin II	ND	40	Fenamidone	ND	40	Isoprocarb	ND	40
Acetamiprid	ND	40	Clethodim I	ND	400	Fenarimol /	ND	40	Isoproturon	ND	40
Acibenzolar-S-methyl	ND	120	Clethodim II	ND	40	Fenazaquin	ND	40	Jasmolin 1	ND	40
Alanycarb	ND	120	Clofentazine	ND	40	Fenbuconazole	ND	40	Jasmolin II	ND	40
Aldicarb Sulfone	ND	400	Clothianidin	ND	40	Fenhexamid	ND	40	Kresoxym-methyl	ND	40
Aldicarb Sulfoxide	ND	40	Coumaphos	ND	40	Fenobucarb	ND	40	Linuron	ND	40
Ametryn	ND	40	Cyazofamid	ND	40	Fenoxycarb	ND	40	Lufenuron	ND	40
Aminocarb	ND	40	Cycluron	ND	40	Fenpropimorph	ND	40	Malathion	ND	40
Amitraz	ND	120	Cymoxanil	ND	40	Fenpyroximate	ND	40	Mandipropamid	ND	40
Azoxystrobin	ND	40	Cyproconazole	ND	40	Fenuron	ND	40	Mefenacet	ND	40
Benalaxyl	ND	40	Cyprodinil	ND	40	Fipronil	ND	40	Mepanipyrim	ND	40
Bendiocarb	ND	40	Cyromazine	ND	40	Flonicamid	ND	120	Mepronil	ND	40
Benfuracarb	ND	40	Daminozide	ND	40	Fluazinam	ND	40	Mesotrione	ND	120
Benzoximate	ND	40	Desmedipham	ND	40	Fludioxonil	ND	40	Metaflumizone	ND	40
Bifenazate	ND	40	Diazinon	ND	40	Flufenacet	ND	40	Metalaxyl	ND	40
Bitertanol	ND	40	Dichlorvos	ND	400	Flufenoxuron	ND	40	Metconazole	ND	40
Boscalid	ND	40	Dicrotophos	ND	40	Fluometuron	ND	40	Methabenzthiazuron	ND	40
Bromuconazole I	ND	40	Diethofencarb	ND	40	Fluoxastrobin	ND	40	Methamidophos	ND	40
Bromuconazole II	ND	40	Difenoconazole	ND	40	Fluquinconazole	ND	40	Methiocarb	ND	40
Bupirimate	ND	40	Diflubenzuron	ND	40	Flusilazole	ND	40	Methomyl	ND	40
Buprofezin	ND	40	Dimethoate	ND	40	Flutolanil	ND	40	Methoprotryne	ND	40
Butafenacil	ND	40	Dimethomorph	ND	40	Flutraifol	ND	40	Methoxyfenozide	ND	40
Butocarboxim	ND	40	Dimoxystrobin	ND	40	Forchlorfenuron	ND	40	Methyl parathion	ND	40
Butoxycarboxim	ND	40	Diniconazole	ND	40	Formetanate	ND	40	Metobromuron	ND	40
Captan	ND	400	Dinotefuran	ND	40	Fuberdiazole	CIN	40	Metribuzin	ND	40
Carbaryl	ND	40	Dioxacarb	ND	40	Furalaxyl	ND	40	Mevinphos	ND	40
Carbendazim	ND	40	Diuron	ND	40	Furathiocarb	ND	40	Mexacarbate	ND	40
Carbetamide	ND	40	Emamectin B1a	ND	40	Halofenozide	ND	120	MGK-264 I	ND	40
Carbofuran	ND	40	Epoxiconazole	ND	40	Hexaconazole	ND	40	MGK-264 II	ND	40
Carboxin	ND	40	Eprinomectin	ND	400	Hexaflumuron	ND	40	Monocrotophos	ND	40
Carfentrazone-ethyl	ND	40	Ethiofencarb	ND	40	Hexythiazox	ND	40	Monolinuron	ND	40
Chlorantraniliprole	ND	40	Ethiprole	ND	40	Imazalil	ND	40	Moxidectin	ND	120
Chlorotoluron	ND	40	Ethirimol	ND	40	Imidacloprid	ND	40	Myclobutanil	ND a	40

ND = not detected above the LOQ (limit of quantitation)

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# CERTIFICATE OF ANALYSIS CS0268\_192204\_001\_T

Terpenes

Client Sample ID: Sample Description:

Sample 1
Batch 1
01-Mar-1

Hemp Quest 4022 Hwy 495

Receive sample: Initiate analyses:

01-Mar-19 01-Mar-19 Harrisburg, NC 28075 Attn: Devon Vince

Analyst: Signature: WW

Reviewed by: Signature:

Date: 0/ MARIO

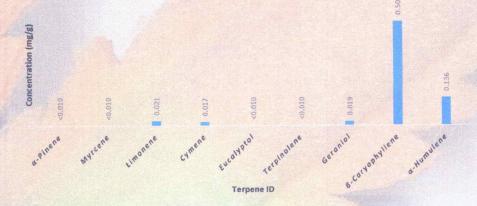
Date:

06 MAR 19

Test Type: Terpene Profile

Technical Procedure: TP A0037-001

Results:





Chemical Analyzed	Concentration (mg/g)		
α-Pinene	<0.010		
Myrcene	<0.010		
Limonene	0.021		
Cymene	0.017		
Eucalyptol	<0.010		
Terpinolene	<0.010		
Geraniol	0.019		
β-Caryophyllene	0.504		
α-Humulene	0.136		

Concentration of terpenes were determined by GC-MS with an Avazyme intra lab validated method utilizing certified reference standards for each chemical analyzed.

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# Fractionated Coconut Oil / Coconut MCT Oil

# Certificate of Analysis

Material Info	Made 100% from Coconut O	Made 100% from Coconut Oil					
Verdana Lot No	1075041	1075041					
Manufacturing Date	11/2018						
Expiry Date	Re-test 11/2021	Re-test 11/2021					
Physio-Che	emical Analysis						
TEST	PROTOCOL	Specification	Result				
Color Lovibond (Alpha)	AOAC	50% Max	19%				
Moisture	AOAC	0.1% Max	0.04%				
Viscosity (mPa-s)	Inhouse Method	24.0-32.0	29.6 mPa-s				
Peroxide Value meq/kg	AOAC	1.0 Max	0.0				
Hydroxyl Value mg KOH/g	AOAC	10.0 Max	1.4				
Acid value mg KOH/g	ISO 660	0.1 Max	0.040				
lodine Value gl <sub>2</sub> /100g	Inhouse Method	1.0 Max	0.2				
Saponification Value mg KOH/g	Inhouse Method	324-346	339.7				
Sulphated Ash %	AOAC	0.1 Max	0.05				
Density (20 Deg C) g/ccm	Anton Paar DMA 38	0.930-0.965	0.9448				
Refractive Index (20 Deg C)	ATAGO ABBE Refractometer	1.447-1.453	1.4485				
Fatty Acid	Distribution						
C-6 Caproic Acid		0.8% Max	0.00%				
C-8 Caprylic Acid	CUINAND\U 2040 - L - CC	55% Min	58.1 %				
C-10 Capric Acid	SHIMAD)U 2010 plus GC	35-45%	41.9%				
C-12 Lauric Acid	with RTX Wax column &	1.6% Max	0.0%				
	QP 2010 Plus GCMS with						
	SGE BP-5 column						
Heavy Met							
Mercury (LOQ10μg/kg)	AOAC	0.1ppm max	0.1ppm max				
Cadmium (LOQ0.01mg/kg)	AOAC	0.1ppm max	0.1ppm max				
Arsenic (As ash) PPM	AOAC	0.5ppm max	0.5ppm max				
Copper (LOQ0.01g/kg)	AOAC	Absent	Absent				
Lead PPM	AOAC	0.1max (ppm)	0.1max (ppm)				

PESTICIDES: This product does not contain residue of pesticides at levels higher than the permitted limits as stated in USP Monograph General Chapter <561> Articles of Botanical Origin.

PROP 65: To the best of our knowledge, this product does not contain any contaminants or bi-products known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act.