

**Report To:**

Connecticut Pharmaceutical Solutions

Attn: Rino Ferrarese

47 Lower Main St

Portland CT 06480

Date Received: 8/13/2015

Date Tested: 8/13/2015

Laboratory Report#: N1563269

Report Date: 8/21/2015

E-Mail: rino.ferrarese@ctpharma.com

Sample Site:	CONNECTICUT PHARMACEUTICAL SOLUTIONS • 47 LOWER MAIN STREET, PORTLAND CT
Date Collected:	8/13/2015 10:30
Collected by:	CA of NELabs
Laboratory ID #:	1563269 – 01
Product Description:	CRITICAL MASS - FLOWER

<u>Parameter</u>	<u>Result</u>	<u>Units</u>		<u>Recommended Limits *</u>
Total Aerobic Microbial Count	400	per gram	PASS	100,000
Total Yeast & Mold Count	38,000	per gram	FAIL	10,000
Bile Tolerant Gram Negative Bacteria	<100	per gram	PASS	1,000
Coliform	<100	per gram	PASS	1,000
Enteropathogenic E.coli	Not Detected	per gram	PASS	Not Detected
Salmonella species	Not Detected	per gram	PASS	Not Detected

*** RECOMMENDED LIMITS:** per American Herbal Pharmacopoeia (2013)**PASS =** Product meets Microbial and Fungal Recommended Limits
per American Herbal Pharmacopoeia (2013)**METHODS:** USP 2021, USP 2022, FDA-BAM, AOAC 996.09**Comments:**

- Results are based on sample/s submitted to Northeast Laboratories, Inc. on: 8/13/2015

Approved By:

Alan C. Johnson, Laboratory Director

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<u>Product Description:</u>	CRITICAL MASS - FLOWER

HEAVY METALS:

<u>Parameter</u>	<u>Result</u>	<u>Units</u>		<u>Limits</u>
Arsenic, Total	<0.0005	µg/kg BW/day	PASS	<0.14
Cadmium, Total	<0.002	µg/kg BW/day	PASS	<0.09
Lead, Total	<0.002	µg/kg BW/day	PASS	<0.29
Mercury, Total	<0.0005	µg/kg BW/day	PASS	<0.29

Daily Dose: 1 gram**Body Weight:** 50 kilograms

METHODS: USP <232> and <233> (Modified)
AOAC 986.15, 935.50, 971.21
FCC 7, Appendix 3

LIMITS: per American Herbal Pharmacopoeia (2013)

PASS = Product meets Heavy Metals Recommended Limits
per American Herbal Pharmacopoeia (2013)

Comments:

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Approved By:

Alan C. Johnson, Laboratory Director

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Date Received: 8/13/2015

Date Tested: 8/14/2015

Laboratory Report#: N1563269

Emailed 1st by R. Picard on 8/18/2015

Report Date: 8/21/2015

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TERPENE PROFILE (% Dry Weight)	Result	Units
<u>Monoterpenoids</u>		
a-pinene	---	%
b-pinene	0.16	%
b-myrcene	2.45	%
limonene	0.56	%
ocimene	---	%
terpinolene	---	%
linalool	0.51	%
<u>Sesquiterpenoids</u>		
b-caryophyllene	1.16	%
humulene	0.25	%
trans-nerolidol	---	%
caryophyllene oxide	---	%
b-eudesmol	0.05	%

METHODS: GC, GC/MS**Comments:**

- Results are based on sample/s submitted to Northeast Laboratories, Inc. on: 8/13/2015

Approved By:

Alan C. Johnson, Laboratory Director

Northeast Laboratories, Inc. 129 Mill Street Berlin, CT 06037 www.nelabsct.com

Telephone: 860-828-9787 Toll Free (In State) 800-826-0105 (Out of State) 800-654-1230 Fax: 860-829-1050

CT Cert. #PH-0404 EPA Cert. #CT-024 USDA Cert. #0976 FDA Reg. #086650488 DEA Reg.: Federal #RN0281852 + CT #624

**Report To:**

Connecticut Pharmaceutical Solutions
Attn: Rino Ferrarese
47 Lower Main St
Portland, CT 06480

Date Received: 8/13/2015

Date Tested: 8/17/2015

Laboratory Report#: N1563269
Emailed 1st by R. Picard on 8/18/2015

Report Date: 8/21/2015

E-Mail: rino.ferrarese@ctpharma.com

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Product Description:	CRITICAL MASS - FLOWER

PESTICIDES LC (MS/MS)				
Parameter	Result	Units		Limits
Abamectin	<0.01	mg/kg	PASS	15
Acequinocyl	<0.01	mg/kg	PASS	14
Azadiractin	<0.01	mg/kg	PASS	60
Bifenazate	<0.01	mg/kg	PASS	6
Bifenthrin	<0.01	mg/kg	PASS	12
Chloromequat Chloride	<0.01	mg/kg	PASS	30
Cyfluthrin	<0.01	mg/kg	PASS	12
Daminozide	<0.01	mg/kg	PASS	270
Etoxazole	<0.01	mg/kg	PASS	24
Fenoxycarb	<0.01	mg/kg	PASS	32
Imazalil	<0.01	mg/kg	PASS	6
Imidacloprid	<0.01	mg/kg	PASS	36
Myclobutanil	<0.01	mg/kg	PASS	18
Paclobutrazol	<0.01	mg/kg	PASS	13
Pyrethrum	<0.01	mg/kg	PASS	3
Spinosad	<0.01	mg/kg	PASS	12
Spiromesifen	<0.01	mg/kg	PASS	15
Spirotetramat	<0.01	mg/kg	PASS	30
Trifloxystrobin	<0.01	mg/kg	PASS	60

LOQ = 1.0 µg/kg LOD = 0.1 µg/kg

METHODS: LC – MS/MS (Restek Method)**LIMITS:** per FAO - WHO**Comments:**

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MYCOTOXINS			
Parameter	Result	Units	Limits
<u>Method: USP 561-II</u>			
Aflatoxin B1	<5	µg/kg	PASS 5
Aflatoxin B2	<5	µg/kg	PASS 5
Aflatoxin G1	<5	µg/kg	PASS 5
Aflatoxin G2	<5	µg/kg	PASS 5
<u>Method: USP 561-II (Mod)</u>			
Ochratoxin-A	<5	µg/kg	PASS 5

METHODS: USP <561>

Articles of Botanical Origin: Aflatoxins Method 2 (modified for Ochratoxin)

LIMITS: per American Herbal Pharmacopoeia (2013)

Comments:

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CANNABINOIDS (% weight)		
	Result	Units
CBDA	0.05	% weight
CBG	----	% weight
CBD	----	% weight
CBN	----	% weight
THC	0.19	% weight
CBC	----	% weight
THCA	26.70	% weight

METHODS: HPLCComments:

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Approved By: Alan C. Johnson, Laboratory Director

**Report To:**

Connecticut Pharmaceutical Solutions

Attn: Rino Ferrarese

47 Lower Main St

Portland CT 06480

Date Received: 8/19/2015

Date Tested: 8/19/2015

Laboratory Report#: N1563356

Report Date: 8/24/2015

E-Mail: rino.ferrarese@ctpharma.com

<u>Sample Site:</u>	CONNECTICUT PHARMACEUTICAL SOLUTIONS • 47 LOWER MAIN STREET, PORTLAND CT
<u>Date Collected:</u>	8/19/2015 11:15
<u>Collected by:</u>	CA of NELabs
<u>Laboratory ID #:</u>	<u>1563356 – 09</u>
<u>Product Description:</u>	<u>CRITICAL MASS #BT9</u> <u>== RE-TEST of Total Yeast & Mold Count</u>

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Recommended Limits *</u>
Total Yeast & Mold Count	2,000	per gram	PASS 10,000

* **RECOMMENDED LIMITS:** per American Herbal Pharmacopoeia (2013)

PASS = Product meets Microbial and Fungal Recommended Limits
per American Herbal Pharmacopoeia (2013)

METHODS: USP 2021, USP 2022, FDA-BAM, AOAC 996.09

Comments:

- Results are based on sample/s submitted to Northeast Laboratories, Inc. on: 8/19/2015

Approved By: 
Alan C. Johnson, Laboratory Director

**Report To:**

Connecticut Pharmaceutical Solutions

Attn: Rino Ferrarese

47 Lower Main St

Portland CT 06480

Date Received: 8/19/2015

Date Tested: 8/19/2015

Laboratory Report#: N1563356

Report Date: 8/24/2015

E-Mail: rino.ferrarese@ctpharma.com

<u>Sample Site:</u>	CONNECTICUT PHARMACEUTICAL SOLUTIONS • 47 LOWER MAIN STREET, PORTLAND CT
<u>Date Collected:</u>	8/19/2015 11:15
<u>Collected by:</u>	CA of NELabs
<u>Laboratory ID #:</u>	<u>1563356 – 10</u>
<u>Product Description:</u>	<u>CRITICAL MASS #BT35</u> <u>== RE-TEST of Total Yeast & Mold Count</u>

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Recommended Limits *</u>
Total Yeast & Mold Count	1,400	per gram	PASS 10,000

*** RECOMMENDED LIMITS:** per American Herbal Pharmacopoeia (2013)**PASS** = Product meets Microbial and Fungal Recommended Limits
per American Herbal Pharmacopoeia (2013)**METHODS:** USP 2021, USP 2022, FDA-BAM, AOAC 996.09**Comments:**

- Results are based on sample/s submitted to Northeast Laboratories, Inc. on: 8/19/2015

Approved By: 
Alan C. Johnson, Laboratory Director

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<u>Collected by:</u>	CA of NELabs
<u>Laboratory ID #:</u>	<u>1563356 – 11</u>
<u>Product Description:</u>	<u>CRITICAL MASS #BT36</u> <u>== RE-TEST of Total Yeast & Mold Count</u>

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Recommended Limits *</u>
<u>Total Yeast & Mold Count</u>	<u>20,000</u>	<u>per gram</u>	<u>FAIL</u> <u>10,000</u>

* RECOMMENDED LIMITS: per American Herbal Pharmacopoeia (2013)

PASS = Product meets Microbial and Fungal Recommended Limits
per American Herbal Pharmacopoeia (2013)

METHODS: USP 2021, USP 2022, FDA-BAM, AOAC 996.09

Comments:

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Date Collected:	8/19/2015 11:15
Collected by:	CA of NELabs
Laboratory ID #:	<u>1563356 – 12</u>
Product Description:	<u>CRITICAL MASS #BT37</u> <u>== RE-TEST of Total Yeast & Mold Count</u>

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Recommended Limits *</u>
Total Yeast & Mold Count	1,600	per gram	PASS 10,000

*** RECOMMENDED LIMITS:** per American Herbal Pharmacopoeia (2013)**PASS =** Product meets Microbial and Fungal Recommended Limits
per American Herbal Pharmacopoeia (2013)**METHODS:** USP 2021, USP 2022, FDA-BAM, AOAC 996.09**Comments:**

- Results are based on sample/s submitted to Northeast Laboratories, Inc. on: 8/19/2015

Approved By: 
Alan C. Johnson, Laboratory Director



August 27, 2015

Connecticut Pharmaceutical Solutions
Attn: Rino Ferrarese
47 Lower Main St
Portland CT 06480

E-Mail: rino.ferrarese@ctpharma.com

Dear Mr. Ferrarese:

Ref: Report #1563269 – 01 = Critical Mass Flower (rc'd 8/13/2015) = Full Range Reported on 8/21/2015
&
Report #1563356 – 09,10,11,12
= Critical Mass Flower rc'd 8/19/2015) = Retested Yeast/Mold Reported on 8/24/2015

Enclosed is a Report (#N1563269 – 01) of the results for testing conducted on Critical Mass Flower from August 13, 2015. The report contains the original testing in which the Mold Count results exceeded the specification (38,000 per gram; with an acceptable level being $\leq 10,000$ per gram).

Product was contained in four (4) bins and results of Mold (Report #N1563356 – 09,10,11,12) showed three (3) bins with low numbers (2,000, 1,400 and 1,600 respectively), and the fourth bin (our sample #11) with an elevated count (20,000) still out of specification. It appears that the fourth bin (sample #11) contained product with elevated levels of mold, and confirmatory testing might be advisable for this bin.

The mold noted was of the genus *Penicillium*, which is the most common atmospheric mold in this area, and is non-toxicogenic.

The source of the out-of-specification count may be linked to an isolated and localized contamination of a small number of plants.

If you have any questions regarding this report, please contact us.

NORTHEAST LABORATORIES, INC.

By: 
Alan C. Johnson, Laboratory Director