



12423 NE Whitaker Way  
Portland, OR 97230  
503-254-1794

**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27



**Customer:** Trace Minerals Research  
**Product identity:** CBD Extract 600mg  
**Client/Metric ID:** Lot 0047A  
**Laboratory ID:** 20-004349-0001

**Sample Date:** 04/22/20

### Summary

#### Potency:

| Analyte           | Result  | Limits | Units  |                   |            |
|-------------------|---------|--------|--------|-------------------|------------|
| CBC               | 0.0984  |        | %      | CBD-Total (%)     | 2.46%      |
| CBD               | 2.46    |        | %      |                   |            |
| CBDV <sup>†</sup> | 0.0136  |        | %      | CBD-Total per 1g  | 24.6 mg/1g |
| CBG <sup>†</sup>  | 0.0634  |        | %      |                   |            |
| CBL <sup>†</sup>  | 0.00855 |        | %      | CBD-Total per 30g | 738 mg/30g |
| Δ9-THC            | 0.101   |        | %      |                   |            |
| THCV <sup>†</sup> | 0.00498 |        | %      | THC-Total (%)     | 0.101%     |
| Analyte per 1g    | Result  | Limits | Units  |                   |            |
| CBC per 1g        | 0.984   |        | mg/1g  |                   |            |
| CBD per 1g        | 24.6    |        | mg/1g  |                   |            |
| CBDV per 1g       | 0.136   |        | mg/1g  |                   |            |
| CBG per 1g        | 0.634   |        | mg/1g  |                   |            |
| CBL per 1g        | 0.0855  |        | mg/1g  |                   |            |
| Δ9-THC per 1g     | 1.01    |        | mg/1g  |                   |            |
| THCV per 1g       | 0.0498  |        | mg/1g  |                   |            |
| Analyte per 30g   | Result  | Limits | Units  |                   |            |
| CBC per 30g       | 29.5    |        | mg/30g |                   |            |
| CBD per 30g       | 738     |        | mg/30g |                   |            |
| CBDV per 30g      | 4.08    |        | mg/30g |                   |            |
| CBG per 30g       | 19.0    |        | mg/30g |                   |            |
| CBL per 30g       | 2.57    |        | mg/30g |                   |            |
| Δ9-THC per 30g    | 30.3    |        | mg/30g |                   |            |
| THCV per 30g      | 1.49    |        | mg/30g |                   |            |

#### Residual Solvents:

All analytes passing and less than LOQ.

#### Pesticides:

All analytes passing and less than LOQ.

#### Terpenes:

| Analyte                      | Percent by weight | Percent of Total | Analyte                     | Percent by weight | Percent of Total |
|------------------------------|-------------------|------------------|-----------------------------|-------------------|------------------|
| β-Caryophyllene <sup>†</sup> | 0.0260            | 100.00%          | Total Terpenes <sup>†</sup> | 0.0260            | 100.00%          |

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way  
Portland, OR 97230  
503-254-1794



**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27

**Metals:**

*Less than LOQ for all analytes.*

**Microbiology:**

*Less than LOQ for all analytes.*



12423 NE Whitaker Way  
 Portland, OR 97230  
 503-254-1794

**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27



**Customer:** Trace Minerals Research

**Product identity:** CBD Extract 600mg  
**Client/Metric ID:** Lot 0047A  
**Sample Date:** 04/22/20  
**Laboratory ID:** 20-004349-0001  
**Relinquished by:** FedEx  
**Temp:** 21.4 °C

### Sample Results

| Potency   |             |        |       |        |       |
|---|-------------|--------|-------|--------|-------|
| Method J AOAC 2015 V98-6 (mod) Batch: 2003658 Analyze: 4/28/20 8:00:00 AM |             |        |       |        |       |
| Analyte   | Result      | Limits | Units | LOQ    | Notes |
| CBC   | 0.0984      |        | %     | 0.0032 |       |
| CBC-A†  | < LOQ       |        | %     | 0.0032 |       |
| CBC-Total†  | 0.0984      |        | %     | 0.0061 |       |
| CBD   | 2.46        |        | %     | 0.0325 |       |
| CBD-A   | < LOQ       |        | %     | 0.0032 |       |
| CBD-Total   | 2.46        |        | %     | 0.0353 |       |
| CBDV†   | 0.0136      |        | %     | 0.0032 |       |
| CBDV-A†   | < LOQ       |        | %     | 0.0032 |       |
| CBDV-Total†   | 0.0136      |        | %     | 0.0061 |       |
| CBG†  | 0.0634      |        | %     | 0.0032 |       |
| CBG-A†  | < LOQ       |        | %     | 0.0032 |       |
| CBG-Total   | 0.0634      |        | %     | 0.0061 |       |
| CBL†  | 0.00855     |        | %     | 0.0032 |       |
| CBN   | < LOQ       |        | %     | 0.0032 |       |
| Δ8-THC†   | < LOQ       |        | %     | 0.0032 |       |
| Δ9-THC  | 0.101       |        | %     | 0.0032 |       |
| THC-A   | < LOQ       |        | %     | 0.0032 |       |
| THC-Total   | 0.101       |        | %     | 0.0061 |       |
| THCV†   | 0.00498     |        | %     | 0.0032 |       |
| THCV-A†   | < LOQ       |        | %     | 0.0032 |       |
| THCV-Total†   | < LOQ       |        | %     | 0.0061 |       |
| <b>Total Cannabinoids†</b>  | <b>2.75</b> |        | %     |        |       |

| Potency per 1g  |        |        |       |        |       |
|---|--------|--------|-------|--------|-------|
| Method J AOAC 2015 V98-6 (mod) Batch: 2003658 Analyze: 4/28/20 8:00:00 AM |        |        |       |        |       |
| Analyte   | Result | Limits | Units | LOQ    | Notes |
| CBC per 1g  | 0.984  |        | mg/1g | 0.0325 |       |
| CBC-A per 1g  | < LOQ  |        | mg/1g | 0.0325 |       |
| CBC-Total per 1g  | 0.984  |        | mg/1g | 0.0610 |       |
| CBD per 1g  | 24.6   |        | mg/1g | 0.325  |       |
| CBD-A per 1g  | < LOQ  |        | mg/1g | 0.0325 |       |
| CBD-Total per 1g  | 24.6   |        | mg/1g | 0.353  |       |
| CBDV per 1g   | 0.136  |        | mg/1g | 0.0325 |       |
| CBDV-A per 1g   | < LOQ  |        | mg/1g | 0.0325 |       |
| CBDV-Total per 1g   | 0.136  |        | mg/1g | 0.0607 |       |

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way  
Portland, OR 97230  
503-254-1794

**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27



Potency per 1g Method J AOAC 2015 V98-6 (mod) Batch: 2003658 Analyze: 4/28/20 8:00:00 AM

| Analyte                                  | Result      | Limits | Units | LOQ    | Notes |
|--|-------------|--------|-------|--------|-------|
| CBG per 1g                               | 0.634       |        | mg/1g | 0.0325 |       |
| CBG-A per 1g                             | < LOQ       |        | mg/1g | 0.0325 |       |
| CBG-Total per 1g                         | 0.634       |        | mg/1g | 0.0607 |       |
| CBL per 1g                               | 0.0855      |        | mg/1g | 0.0325 |       |
| CBN per 1g                               | < LOQ       |        | mg/1g | 0.0325 |       |
| Δ8-THC per 1g                            | < LOQ       |        | mg/1g | 0.0325 |       |
| Δ9-THC per 1g                            | 1.01        |        | mg/1g | 0.0325 |       |
| THC-A per 1g                             | < LOQ       |        | mg/1g | 0.0325 |       |
| THC-Total per 1g                         | 1.01        |        | mg/1g | 0.0610 |       |
| THCV per 1g                              | 0.0498      |        | mg/1g | 0.0325 |       |
| THCV-A per 1g                            | < LOQ       |        | mg/1g | 0.0325 |       |
| THCV-Total per 1g                        | < LOQ       |        | mg/1g | 0.0610 |       |
| <b>Total Cannabinoids 1g<sup>†</sup></b> | <b>27.5</b> |        | mg/1g |        |       |

Potency per 30g Method J AOAC 2015 V98-6 (mod) Batch: 2003658 Analyze: 4/28/20 8:00:00 AM

| Analyte                                   | Result     | Limits | Units  | LOQ   | Notes |
|---|------------|--------|--------|-------|-------|
| CBC per 30g                               | 29.5       |        | mg/30g | 0.975 |       |
| CBC-A per 30g                             | < LOQ      |        | mg/30g | 0.975 |       |
| CBC-Total per 30g                         | 29.5       |        | mg/30g | 1.83  |       |
| CBD per 30g                               | 738        |        | mg/30g | 9.75  |       |
| CBD-A per 30g                             | < LOQ      |        | mg/30g | 0.975 |       |
| CBD-Total per 30g                         | 738        |        | mg/30g | 10.6  |       |
| CBDV per 30g                              | 4.08       |        | mg/30g | 0.975 |       |
| CBDV-A per 30g                            | < LOQ      |        | mg/30g | 0.975 |       |
| CBDV-Total per 30g                        | 4.08       |        | mg/30g | 1.82  |       |
| CBG per 30g                               | 19.0       |        | mg/30g | 0.975 |       |
| CBG-A per 30g                             | < LOQ      |        | mg/30g | 0.975 |       |
| CBG-Total per 30g                         | 19.0       |        | mg/30g | 1.82  |       |
| CBL per 30g                               | 2.57       |        | mg/30g | 0.975 |       |
| CBN per 30g                               | < LOQ      |        | mg/30g | 0.975 |       |
| Δ8-THC per 30g                            | < LOQ      |        | mg/30g | 0.975 |       |
| Δ9-THC per 30g                            | 30.3       |        | mg/30g | 0.975 |       |
| THC-A per 30g                             | < LOQ      |        | mg/30g | 0.975 |       |
| THC-Total per 30g                         | 30.3       |        | mg/30g | 1.83  |       |
| THCV per 30g                              | 1.49       |        | mg/30g | 0.975 |       |
| THCV-A per 30g                            | < LOQ      |        | mg/30g | 0.975 |       |
| THCV-Total per 30g                        | < LOQ      |        | mg/30g | 1.83  |       |
| <b>Total Cannabinoids 30g<sup>†</sup></b> | <b>825</b> |        | mg/30g |       |       |

Microbiology

| Analyte                 | Result | Limits | Units | LOQ | Batch   | Analyze  | Method                  | Notes |
|-------------------------|--------|--------|-------|-----|---------|----------|-------------------------|-------|
| E.coli                  | < LOQ  |        | cfu/g | 10  | 2003559 | 04/29/20 | AOAC 991.14 (Petrifilm) | X     |
| Total Coliforms         | < LOQ  |        | cfu/g | 10  | 2003559 | 04/29/20 | AOAC 991.14 (Petrifilm) | X     |
| Mold (RAPID Petrifilm)  | < LOQ  |        | cfu/g | 10  | 2003560 | 04/29/20 | AOAC 2014.05 (RAPID)    | X     |
| Yeast (RAPID Petrifilm) | < LOQ  |        | cfu/g | 10  | 2003560 | 04/29/20 | AOAC 2014.05 (RAPID)    | X     |

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way  
 Portland, OR 97230  
 503-254-1794



**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27

| Solvents           |        | Method EPA5021A |      |        |       | Units µg/g              | Batch 2003566 | Analyze 04/28/20 08:00 AM |      |        |       |
|--------------------|--------|-----------------|------|--------|-------|-------------------------|---------------|---------------------------|------|--------|-------|
| Analyte            | Result | Limits          | LOQ  | Status | Notes | Analyte                 | Result        | Limits                    | LOQ  | Status | Notes |
| 1,4-Dioxane        | < LOQ  | 380             | 100  | pass   |       | 2-Butanol               | < LOQ         | 5000                      | 200  | pass   |       |
| 2-Ethoxyethanol    | < LOQ  | 160             | 30.0 | pass   |       | 2-Methylbutane          | < LOQ         |                           | 200  |        |       |
| 2-Methylpentane    | < LOQ  |                 | 30.0 |        |       | 2-Propanol (IPA)        | < LOQ         | 5000                      | 200  | pass   |       |
| 2,2-Dimethylbutane | < LOQ  |                 | 30.0 |        |       | 2,2-Dimethylpropane     | < LOQ         |                           | 200  |        |       |
| 2,3-Dimethylbutane | < LOQ  |                 | 30.0 |        |       | 3-Methylpentane         | < LOQ         |                           | 30.0 |        |       |
| Acetone            | < LOQ  | 5000            | 200  | pass   |       | Acetonitrile            | < LOQ         | 410                       | 100  | pass   |       |
| Benzene            | < LOQ  | 2.00            | 1.00 | pass   |       | Butanes (sum)           | < LOQ         | 5000                      | 400  | pass   |       |
| Cyclohexane        | < LOQ  | 3880            | 200  | pass   |       | Ethyl acetate           | < LOQ         | 5000                      | 200  | pass   |       |
| Ethyl benzene      | < LOQ  |                 | 200  |        |       | Ethyl ether             | < LOQ         | 5000                      | 200  | pass   |       |
| Ethylene glycol    | < LOQ  | 620             | 200  | pass   |       | Ethylene oxide          | < LOQ         | 50.0                      | 30.0 | pass   |       |
| Hexanes (sum)      | < LOQ  | 290             | 150  | pass   |       | Isopropyl acetate       | < LOQ         | 5000                      | 200  | pass   |       |
| Isopropylbenzene   | < LOQ  | 70.0            | 30.0 | pass   |       | m,p-Xylene              | < LOQ         |                           | 200  |        |       |
| Methanol           | < LOQ  | 3000            | 200  | pass   |       | Methylene chloride      | < LOQ         | 600                       | 200  | pass   |       |
| Methylpropane      | < LOQ  |                 | 200  |        |       | n-Butane                | < LOQ         |                           | 200  |        |       |
| n-Heptane          | < LOQ  | 5000            | 200  | pass   |       | n-Hexane                | < LOQ         |                           | 30.0 |        |       |
| n-Pentane          | < LOQ  |                 | 200  |        |       | o-Xylene                | < LOQ         |                           | 200  |        |       |
| Pentanes (sum)     | < LOQ  | 5000            | 600  | pass   |       | Propane                 | < LOQ         | 5000                      | 200  | pass   |       |
| Tetrahydrofuran    | < LOQ  | 720             | 100  | pass   |       | Toluene                 | < LOQ         | 890                       | 100  | pass   |       |
| Total Xylenes      | < LOQ  |                 | 400  |        |       | Total Xylenes and Ethyl | < LOQ         | 2170                      | 600  | pass   |       |

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way  
 Portland, OR 97230  
 503-254-1794



**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27

| Pesticides   |        |        |       |        |       |                     |        |        |       |        |       |
|--|--------|--------|-------|--------|-------|---------------------|--------|--------|-------|--------|-------|
| Method AOAC 2007.01 & EN 15662 (mod) Units mg/kg Batch 2003695 Analyze 05/01/20 09:43 AM |        |        |       |        |       |                     |        |        |       |        |       |
| Analyte  | Result | Limits | LOQ   | Status | Notes | Analyte             | Result | Limits | LOQ   | Status | Notes |
| Abamectin  | < LOQ  | 0.50   | 0.250 | pass   |       | Acephate            | < LOQ  | 0.40   | 0.250 | pass   |       |
| Acequinocyl  | < LOQ  | 2.0    | 1.00  | pass   |       | Acetamiprid         | < LOQ  | 0.20   | 0.100 | pass   |       |
| Aldicarb   | < LOQ  | 0.40   | 0.200 | pass   |       | Azoxystrobin        | < LOQ  | 0.20   | 0.100 | pass   |       |
| Bifenazate   | < LOQ  | 0.20   | 0.100 | pass   |       | Bifenthrin          | < LOQ  | 0.20   | 0.100 | pass   |       |
| Boscalid   | < LOQ  | 0.40   | 0.200 | pass   |       | Carbaryl            | < LOQ  | 0.20   | 0.100 | pass   |       |
| Carbofuran   | < LOQ  | 0.20   | 0.100 | pass   |       | Chlorantraniliprole | < LOQ  | 0.20   | 0.100 | pass   |       |
| Chlorfenapyr   | < LOQ  | 1.0    | 0.500 | pass   |       | Chlorpyrifos        | < LOQ  | 0.20   | 0.100 | pass   |       |
| Clofentezine   | < LOQ  | 0.20   | 0.100 | pass   |       | Cyfluthrin          | < LOQ  | 1.0    | 0.500 | pass   |       |
| Cypermethrin   | < LOQ  | 1.0    | 0.500 | pass   |       | Daminozide          | < LOQ  | 1.0    | 0.500 | pass   |       |
| Diazinon   | < LOQ  | 0.20   | 0.100 | pass   |       | Dichlorvos          | < LOQ  | 1.0    | 0.500 | pass   |       |
| Dimethoate   | < LOQ  | 0.20   | 0.100 | pass   |       | Ethoprophos         | < LOQ  | 0.20   | 0.100 | pass   |       |
| Etofenprox   | < LOQ  | 0.40   | 0.200 | pass   |       | Etoxazole           | < LOQ  | 0.20   | 0.100 | pass   |       |
| Fenoxycarb   | < LOQ  | 0.20   | 0.100 | pass   |       | Fenpyroximate       | < LOQ  | 0.40   | 0.200 | pass   |       |
| Fipronil   | < LOQ  | 0.40   | 0.200 | pass   |       | Fonicamid           | < LOQ  | 1.0    | 0.400 | pass   |       |
| Fludioxonil  | < LOQ  | 0.40   | 0.200 | pass   |       | Hexythiazox         | < LOQ  | 1.0    | 0.400 | pass   |       |
| Imazalil   | < LOQ  | 0.20   | 0.100 | pass   |       | Imidacloprid        | < LOQ  | 0.40   | 0.200 | pass   |       |
| Kresoxim-methyl  | < LOQ  | 0.40   | 0.200 | pass   |       | Malathion           | < LOQ  | 0.20   | 0.100 | pass   |       |
| Metalaxyl  | < LOQ  | 0.20   | 0.100 | pass   |       | Methiocarb          | < LOQ  | 0.20   | 0.100 | pass   |       |
| Methomyl   | < LOQ  | 0.40   | 0.200 | pass   |       | MGK-264             | < LOQ  | 0.20   | 0.100 | pass   |       |
| Myclobutanil   | < LOQ  | 0.20   | 0.100 | pass   |       | Naled               | < LOQ  | 0.50   | 0.250 | pass   |       |
| Oxamyl   | < LOQ  | 1.0    | 0.500 | pass   |       | Paclobutrazole      | < LOQ  | 0.40   | 0.200 | pass   |       |
| Parathion-Methyl   | < LOQ  | 0.20   | 0.200 | pass   |       | Permethrin          | < LOQ  | 0.20   | 0.100 | pass   |       |
| Phosmet  | < LOQ  | 0.20   | 0.100 | pass   |       | Piperonyl butoxide  | < LOQ  | 2.0    | 1.00  | pass   |       |
| Prallethrin  | < LOQ  | 0.20   | 0.200 | pass   |       | Propiconazole       | < LOQ  | 0.40   | 0.200 | pass   |       |
| Propoxur   | < LOQ  | 0.20   | 0.100 | pass   |       | Pyrethrin I (total) | < LOQ  | 1.0    | 0.500 | pass   |       |
| Pyridaben  | < LOQ  | 0.20   | 0.100 | pass   |       | Spinosad            | < LOQ  | 0.20   | 0.100 | pass   |       |
| Spiromesifen   | < LOQ  | 0.20   | 0.100 | pass   |       | Spirotetramat       | < LOQ  | 0.20   | 0.100 | pass   |       |
| Spiroxamine  | < LOQ  | 0.40   | 0.200 | pass   |       | Tebuconazole        | < LOQ  | 0.40   | 0.200 | pass   |       |
| Thiacloprid  | < LOQ  | 0.20   | 0.100 | pass   |       | Thiamethoxam        | < LOQ  | 0.20   | 0.100 | pass   |       |
| Trifloxystrobin  | < LOQ  | 0.20   | 0.100 | pass   |       |                     |        |        |       |        |       |

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.

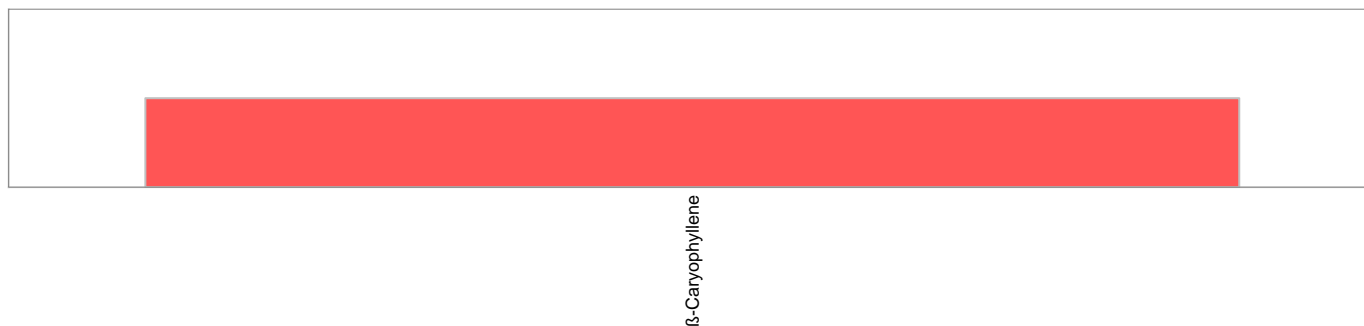


12423 NE Whitaker Way  
Portland, OR 97230  
503-254-1794

**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27



| Terpenes                 |               |       |            | Method J AOAC 2015 V98-6 | Units %              | Batch 2003565 | Analyze 04/28/20 07:40 AM |            |       |
|--------------------------|---------------|-------|------------|--------------------------|----------------------|---------------|---------------------------|------------|-------|
| Analyte                  | Result        | LOQ   | % of Total | Notes                    | Analyte              | Result        | LOQ                       | % of Total | Notes |
| β-Caryophyllene†         | 0.0260        | 0.020 | 100.00%    |                          | (-)-a-Terpineol†     | < LOQ         | 0.020                     | 0.00%      |       |
| (-)-caryophyllene oxide† | < LOQ         | 0.020 | 0.00%      |                          | (-)-Guaial†          | < LOQ         | 0.020                     | 0.00%      |       |
| (-)-Isopulegol†          | < LOQ         | 0.020 | 0.00%      |                          | (-)-β-Pinene†        | < LOQ         | 0.020                     | 0.00%      |       |
| (+)-Borneol†             | < LOQ         | 0.020 | 0.00%      |                          | (+)-Cedrol†          | < LOQ         | 0.020                     | 0.00%      |       |
| (+)-fenchol†             | < LOQ         | 0.020 | 0.00%      |                          | (+)-Pulegone†        | < LOQ         | 0.020                     | 0.00%      |       |
| (±)-Camphor†             | < LOQ         | 0.020 | 0.00%      |                          | (±)-cis-Nerolidol†   | < LOQ         | 0.020                     | 0.00%      |       |
| (±)-fenchone†            | < LOQ         | 0.020 | 0.00%      |                          | (±)-trans-Nerolidol† | < LOQ         | 0.020                     | 0.00%      |       |
| (R)-(+)-Limonene†        | < LOQ         | 0.020 | 0.00%      |                          | a-Bisabolol†         | < LOQ         | 0.020                     | 0.00%      |       |
| a-cedrene†               | < LOQ         | 0.020 | 0.00%      |                          | a-phellandrene†      | < LOQ         | 0.020                     | 0.00%      |       |
| a-pinene†                | < LOQ         | 0.020 | 0.00%      |                          | a-Terpinene†         | < LOQ         | 0.020                     | 0.00%      |       |
| Camphene†                | < LOQ         | 0.020 | 0.00%      |                          | cis-β-Ocimene†       | < LOQ         | 0.006                     | 0.00%      |       |
| d-3-Carene†              | < LOQ         | 0.020 | 0.00%      |                          | Eucalyptol†          | < LOQ         | 0.020                     | 0.00%      |       |
| farnesene†               | < LOQ         | 0.020 | 0.00%      |                          | gamma-Terpinene†     | < LOQ         | 0.020                     | 0.00%      |       |
| Geraniol†                | < LOQ         | 0.020 | 0.00%      |                          | Geranyl acetate†     | < LOQ         | 0.020                     | 0.00%      |       |
| Humulene†                | < LOQ         | 0.020 | 0.00%      |                          | Isoborneol†          | < LOQ         | 0.020                     | 0.00%      |       |
| Linalool†                | < LOQ         | 0.020 | 0.00%      |                          | Menthol†             | < LOQ         | 0.020                     | 0.00%      |       |
| nerol†                   | < LOQ         | 0.020 | 0.00%      |                          | p-Cymene†            | < LOQ         | 0.020                     | 0.00%      |       |
| Sabinene†                | < LOQ         | 0.020 | 0.00%      |                          | Sabinene hydrate†    | < LOQ         | 0.020                     | 0.00%      |       |
| β-Myrcene†               | < LOQ         | 0.020 | 0.00%      |                          | Terpinolene†         | < LOQ         | 0.020                     | 0.00%      |       |
| trans-β-Ocimene†         | < LOQ         | 0.013 | 0.00%      |                          | valencene†           | < LOQ         | 0.020                     | 0.00%      |       |
| <b>Total Terpenes</b>    | <b>0.0260</b> |       |            |                          |                      |               |                           |            |       |



| Metals  |        |        |       |        |         |          |                     |       |  |
|---------|--------|--------|-------|--------|---------|----------|---------------------|-------|--|
| Analyte | Result | Limits | Units | LOQ    | Batch   | Analyze  | Method              | Notes |  |
| Arsenic | < LOQ  |        | mg/kg | 0.0476 | 2003610 | 04/28/20 | AOAC 2013.06 (mod.) | X     |  |
| Cadmium | < LOQ  |        | mg/kg | 0.0476 | 2003610 | 04/28/20 | AOAC 2013.06 (mod.) | X     |  |
| Lead    | < LOQ  |        | mg/kg | 0.0476 | 2003610 | 04/28/20 | AOAC 2013.06 (mod.) | X     |  |
| Mercury | < LOQ  |        | mg/kg | 0.0238 | 2003610 | 04/28/20 | AOAC 2013.06 (mod.) | X     |  |

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.



12423 NE Whitaker Way  
 Portland, OR 97230  
 503-254-1794



**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27

**Mycotoxins**

| Analyte         | Result | Limits | Units | LOQ  | Batch   | Analyze  | Method                  | Notes |
|-----------------|--------|--------|-------|------|---------|----------|-------------------------|-------|
| Aflatoxin B1†   | < LOQ  |        | µg/kg | 5.00 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Aflatoxin B2†   | < LOQ  |        | µg/kg | 5.00 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Aflatoxin G1†   | < LOQ  |        | µg/kg | 5.00 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Aflatoxin G2†   | < LOQ  |        | µg/kg | 5.00 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Deoxynivalenol† | < LOQ  |        | µg/kg | 200  | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Fumonisin B1†   | < LOQ  |        | µg/kg | 200  | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Fumonisin B2†   | < LOQ  |        | µg/kg | 200  | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| HT2-Toxin†      | < LOQ  |        | µg/kg | 40.0 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Nivalenol†      | < LOQ  |        | µg/kg | 400  | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Ochratoxin A†   | < LOQ  |        | µg/kg | 5.00 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Ochratoxin B†   | < LOQ  |        | µg/kg | 2.00 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| T2-Toxin†       | < LOQ  |        | µg/kg | 20.0 | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |
| Zearalenone†    | < LOQ  |        | µg/kg | 200  | 2003587 | 04/28/20 | AOAC 2007.01 & EN 15662 |       |

Test results relate only to the parameters tested and to the samples as received by the laboratory. Test results meet all requirements of NELAP and the Columbia Laboratories quality assurance plan unless otherwise noted. This report shall not be reproduced, except in full, without the written consent of this laboratory. Samples will be retained for a maximum of 30 days from the receipt date unless prior arrangements have been made.





12423 NE Whitaker Way  
Portland, OR 97230  
503-254-1794



**Report Number:** 20-004349/D02.R00  
**Report Date:** 05/01/2020  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 04/27/20 13:27

These test results are representative of the individual sample selected and submitted by the client.

**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

**Limit(s) of Quantitation (LOQ):** The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

† = Analyte not NELAP accredited.

**Units of Measure**

cfu/g = Colony forming units per gram

g = Gram

µg/g = Microgram per gram

µg/kg = Micrograms per kilogram = parts per billion (ppb)

mg/kg = Milligram per kilogram = parts per million (ppm)

mg/1g = Milligram per 1g

mg/30g = Milligram per 30g

% = Percentage of sample

% wt = µg/g divided by 10,000

**Glossary of Qualifiers**

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner  
General Manager