

# Utah Department of Agriculture and Food **Division of Laboratory Services**4451 South 2700 West

4451 South 2700 West Taylorsville, Utah 84129 (801) 816-3840

### **CERTIFICATE OF ANALYSIS**

#### **Sample Information**

| UDAF Lab #        | HP24253-4                  | Issue Date:    | 09/16/2024                   |  |
|-------------------|----------------------------|----------------|------------------------------|--|
| Client:           | The Wasatch Apothecary LLC | Client Email:  | skyler@wasatchapothecary.com |  |
| Producer:         | The Wasatch Apothecary LLC | Sample Type:   | Gelatinous Cubes             |  |
| Description:      | Watermelon Gummies         |                |                              |  |
| Batch/Lot Number: | WA00043V                   | Date Received: | 09/09/2024                   |  |
| Date Collected:   |                            | Collected By:  | Self-Submitted               |  |



Notes:

### **Testing Summary**

| Analysis:         | Testing Date:                          | Status: | Notes: |
|-------------------|--|---------|--------|
| Cannabinoids      | 09/11/2024                             |         |        |
| Foreign Matter    | 09/10/2024                             | PASS    |        |
| Microbials        | Plating: 09/11/2024<br>PCR: 09/10/2024 | PASS    |        |
| Pesticides        | 09/13/2024                             | PASS    |        |
| Heavy Metals      | 09/13/2024                             | PASS    |        |
| Residual Solvents | 09/13/2024                             | PASS    |        |
| Mycotoxins        | 09/13/2024                             | PASS    |        |
|                   |  |         |        |
|                   |  |         |        |

Approved By:

Date: 09/16/2024

Brandon Forsyth, Ph.D State Chemist



#### **CERTIFICATE OF ANALYSIS**

Cannabinoid Analysis Status: --

| Sample ID:    | HP24253-4  | Description: | Watermelon Gummies |
|---------------|------------|--------------|--------------------|
| Testing Date: | 09/11/2024 | Reviewed By: | Cameron Cheyne     |

Method: ACL.AM.003 Analysis performed using High-Performance Liquid Chromatography (HPLC-DAD)

| Analyte                              | Abbreviation     | CAS Number                  | % (w/w) | mg/g  |
|--------------------------------------|------------------|-----------------------------|---------|-------|
| Δ9-Tetrahydrocannabidiol             | Δ9-ΤΗС           | 1972-08-03                  | 0.10%   | 1     |
| Δ8-Tetrahydrocannabidiol             | Δ8-ΤΗС           | 5957-75-5                   | ND      | ND    |
| Δ9-Tetrahydrocannabinolic acid       | THCA             | 23978-85-0                  | ND      | ND    |
| Δ9-Tetrahydrocannabivarin            | THCV             | 31262-37-0                  | ND      | ND    |
| Cannabidiol                          | CBD              | 13956-29-1                  | 0.98%   | 9.8   |
| Cannabidiolic acid                   | CBDA             | 1244-58-2                   | ND      | ND    |
| Cannabidivarin                       | CBDV             | 24274-48-4                  | ND      | ND    |
| Cannabinol                           | CBN              | 521-35-7                    | ND      | ND    |
| Cannabigerol                         | CBG              | 25654-31-3                  | 0.37%   | 3.7   |
| Cannabichromene                      | CBC              | 20675-51-8                  | 0.09%   | 0.9   |
| Cannabigerolic acid                  | CBGA             | 25555-57-1                  | ND      | ND    |
| Cannabichromenic acid                | CBCA             | 20408-52-0                  | ND      | ND    |
| Cannabicitran                        | CBTC             | 31508-71-1                  | ND      | ND    |
| 9(R+S)-Δ6a,10a-Tetrahydrocannabidiol | Δ3-THC           | 95720-01-07, 95720-<br>02-8 | ND      | ND    |
| (6aR,9R)-Δ10-Tetrahydrocannabidiol   | (6aR,9R)-Δ10-THC | 95543-62-7                  | ND      | ND    |
| (6aR,9S)-Δ10-Tetrahydrocannabidiol   | (6aR,9S)-Δ10-THC | 95588-87-7                  | ND      | ND    |
| Total Cannabinoids                   |                  |                             | 1.54%   | 15.40 |
| Total THC                            |                  |                             | 0.10%   | 1.0   |
| Total CBD                            |                  |                             | 0.98%   | 9.80  |
| Total THC Analogs                    |                  |                             | 0.10%   | 1.0   |

Unknown Cannabinoid Peak Area: 0.0%

Mass Per Piece: 4.72 g Status: --

Notes:

Total Cannabinoids is calculated as the direct sum of each of the cannabinoid values. Total THC is calculated as  $\Delta 9$ -THC + (THCA x 0.877) | Total CBD is calculated as CBD + (CBDA x 0.877). Total THC Analogs is calculated as  $\Delta 9$ -THC + (THCA x 0.877) +  $\Delta 8$ -THC + CBTC. ND = Not Detected, NQ = Not Quantifiable, NT = Not Tested, <LOQ = Below the limit of quantification



## **CERTIFICATE OF ANALYSIS**

| Foreign Matter Analys | is         |              | Status:            | PASS |
|-----------------------|------------|--------------|--------------------|------|
| Sample ID:            | HP24253-4  | Description: | Watermelon Gummies |      |
| Testing Date:         | 09/10/2024 | Reviewed By: | Wyatt Martinez     |      |

Method: Analysis performed by visual inspection aided by magnification

| Analyte        | Foreign Matter Found | Status |
|----------------|----------------------|--------|
| Foreign Matter |                      | PASS   |

Notes:



### **CERTIFICATE OF ANALYSIS**

 Microbial Analysis
 Status:
 PASS

 Sample ID:
 HP24253-4
 Description:
 Watermelon Gummies

 Testing Date:
 Plating: 09/11/2024 PCR: 09/10/2024
 Reviewed By:
 Wyatt Martinez

#### Method: Analysis performed using plating methods

| Analyte | Result (cfu/g) | Allowed Limit | Status |
|---------|----------------|---------------|--------|
| TAC     | <250           | 10,000        | PASS   |
| TYM     | <250           | 1,000         | PASS   |

#### Method: Analysis performed using Polymerase Chain Reaction (PCR)

| Organism    | Result | Required | Status |
|-------------|--------|----------|--------|
| E. Coli     | ND     | ~        | PASS   |
| Salmonella  | ND     | ~        | PASS   |
| STEC        | NT     |          |        |
| Pseudomonas | NT     |          |        |
| Aspergillus | NT     |          |        |
| Staph       | ND     | ~        | PASS   |

Notes:

TNTC = To Numerous To Count, NT = Not Tested, ND = Not Detected, DET = Detected



### **CERTIFICATE OF ANALYSIS**

Pesticide Analysis Status: PASS

| Sample ID:    | HP24253-4  | Description: | Watermelon Gummies |
|---------------|------------|--------------|--------------------|
| Testing Date: | 09/13/2024 | Reviewed By: | Cameron Cheyne     |

Method: ACL.AM.008 Analysis performed using Liquid Chromatography - Mass Spectrometry (LC-MS/MS)

|                     | o i many one perior | moa aomg        | Liquia Oii               | romatograpi | ly made operation  | y (20 mo/mo) |                 |                          |        |
|---------------------|---------------------|-----------------|--------------------------|-------------|--------------------|--------------|-----------------|--------------------------|--------|
| Analyte             | CAS Number          | Result<br>(ppm) | Action<br>Level<br>(ppm) | Status      | Analyte            | CAS Number   | Result<br>(ppm) | Action<br>Level<br>(ppm) | Status |
| Abamectin           | 71751-41-2          | ND              | 0.5                      | PASS        | Imazlil            | 35554-44-0   | ND              | 0.2                      | PASS   |
| Acephate            | 30560-19-1          | ND              | 0.4                      | PASS        | Imidacloprid       | 138261-41-3  | ND              | 0.4                      | PASS   |
| Acequinocyl         | 57960-19-7          | ND              | 2                        | PASS        | Kresoxim-methyl    | 143390-89-0  | ND              | 0.4                      | PASS   |
| Acetamiprid         | 135410-20-7         | ND              | 0.2                      | PASS        | Malathion          | 121-75-5     | ND              | 0.2                      | PASS   |
| Aldicarb            | 0116-06-03          | ND              | 0.4                      | PASS        | Metalaxyl          | 57837-19-1   | ND              | 0.2                      | PASS   |
| Azoxystrobin        | 131860-33-8         | ND              | 0.2                      | PASS        | Methiocarb         | 2032-65-7    | ND              | 0.2                      | PASS   |
| Bifenazate          | 149877-41-8         | ND              | 0.2                      | PASS        | Methomyl           | 16752-77-5   | ND              | 0.4                      | PASS   |
| Bifenthrin          | 82657-04-03         | ND              | 0.2                      | PASS        | Methyl parathion   | 298-00-0     | ND              | 0.2                      | PASS   |
| Boscalid            | 188425-85-6         | ND              | 0.4                      | PASS        | MGK-264            | 113-48-4     | ND              | 0.2                      | PASS   |
| Carbaryl            | 63-25-2             | ND              | 0.2                      | PASS        | Myclobutanil       | 88671-89-0   | ND              | 0.2                      | PASS   |
| Carbofuran          | 1563-66-2           | ND              | 0.2                      | PASS        | Naled              | 300-76-5     | ND              | 0.5                      | PASS   |
| Chlorantraniliprole | 500008-45-7         | ND              | 0.2                      | PASS        | Oxamyl             | 23135-22-0   | ND              | 1                        | PASS   |
| Chlorfenapyr        | 122453-73-0         | ND              | 1                        | PASS        | Paclobutrazol      | 76738-62-0   | ND              | 0.4                      | PASS   |
| Chlorpyrifos        | 2921-88-2           | ND              | 0.2                      | PASS        | Permethrins        | 52645-53-1   | ND              | 0.2                      | PASS   |
| Clofentezine        | 74115-24-5          | ND              | 0.2                      | PASS        | Phosmet            | 0732-11-6    | ND              | 0.2                      | PASS   |
| Cyfluthrin          | 68359-37-5          | ND              | 1                        | PASS        | Piperonyl Butoxide | 51-03-6      | ND              | 2                        | PASS   |
| Cypermethrin        | 52315-07-08         | ND              | 1                        | PASS        | Prallethrin        | 23031-36-9   | ND              | 0.2                      | PASS   |
| Daminozide          | 1596-84-5           | ND              | 1                        | PASS        | Propiconazole      | 60207-90-1   | ND              | 0.4                      | PASS   |
| Dichlorvos          | 62-73-7             | ND              | 0.1                      | PASS        | Propoxur           | 114-26-1     | ND              | 0.2                      | PASS   |
| Diazinon            | 333-41-5            | ND              | 0.2                      | PASS        | Pyrethrins         | 8003-34-7    | ND              | 1                        | PASS   |
| Dimethoate          | 60-51-5             | ND              | 0.2                      | PASS        | Pyridaben          | 96489-71-3   | ND              | 0.2                      | PASS   |
| Ethoprophos         | 13194-48-4          | ND              | 0.2                      | PASS        | Spinosad           | 168316-95-8  | ND              | 0.2                      | PASS   |
| Etofenprox          | 80844-07-01         | ND              | 0.4                      | PASS        | Spiromesifen       | 283594-90-1  | ND              | 0.2                      | PASS   |
| Etoxazole           | 153233-91-1         | ND              | 0.2                      | PASS        | Spirotetramat      | 203313-25-1  | ND              | 0.2                      | PASS   |
| Fenoxycarb          | 72490-01-08         | ND              | 0.2                      | PASS        | Spiroxamine        | 118134-30-8  | ND              | 0.4                      | PASS   |
| Fenpyroximate       | 134098-61-6         | ND              | 0.4                      | PASS        | Tebuconazole       | 80443-41-0   | ND              | 0.4                      | PASS   |
| Fipronil            | 120068-37-3         | ND              | 0.4                      | PASS        | Thiacloprid        | 111988-49-9  | ND              | 0.2                      | PASS   |
| Flonicamid          | 158062-67-0         | ND              | 1                        | PASS        | Thiamethoxam       | 153719-23-4  | ND              | 0.2                      | PASS   |
| Fludioxonil         | 131341-86-1         | ND              | 0.4                      | PASS        | Trifloxystrobin    | 141517-21-7  | ND              | 0.2                      | PASS   |
| Hexythiazox         | 78587-05-0          | ND              | 1                        | PASS        |                    |              |                 |                          |        |
|                     |                     |                 |                          |             |                    |              |                 |                          |        |

Notes:

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### **CERTIFICATE OF ANALYSIS**

Heavy Metal Analysis Status: PASS

| Sample ID:    | HP24253-4  | Description: | Watermelon Gummies |
|---------------|------------|--------------|--------------------|
| Testing Date: | 09/13/2024 | Reviewed By: | Cameron Cheyne     |

#### Method: ACL.AM.004 Analysis performed using Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

| Analyte | CAS Number | Result (ppm) | Action Level (ppm) | Status |
|---------|------------|--------------|--------------------|--------|
| Arsenic | 7440-38-2  | ND           | 2                  | PASS   |
| Cadmium | 7440-43-9  | ND           | 0.82               | PASS   |
| Lead    | 7439-92-1  | ND           | 1.2                | PASS   |
| Mercury | 7439-97-6  | ND           | 0.4                | PASS   |

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### **CERTIFICATE OF ANALYSIS**

Residual Solvent Analysis Status: PASS

| Sample ID:    | HP24253-4  | Description: | Watermelon Gummies |
|---------------|------------|--------------|--------------------|
| Testing Date: | 09/13/2024 | Reviewed By: | Cameron Cheyne     |

Method: ACL.AM.007 Analysis performed using Gas Chromatography - Mass Spectrometry (GC-MS/FID)

| Analyte               | CAS Number | Result<br>(ppm) | Action<br>Level<br>(ppm) | Status | Analyte           | CAS Number | Result<br>(ppm) | Action<br>Level<br>(ppm) | Status |
|-----------------------|------------|-----------------|--------------------------|--------|-------------------|------------|-----------------|--------------------------|--------|
| Acetone               | 67-64-1    | ND              | 5000                     | PASS   | Ethyl Ether       | 60-29-7    | ND              | 5000                     | PASS   |
| Acetonitrile          | 75-05-8    | ND              | 410                      | PASS   | Ethylbenzene      | 100-41-4   | ND              | See<br>Xylenes           |        |
| Benzene               | 71-43-2    | ND              | 2                        | PASS   | Ethylene Glycol   | 107-21-1   | ND              | 620                      | PASS   |
| Butane                | 106-97-8   | ND              | 5000                     | PASS   | Ethylene Oxide    | 75-21-8    | ND              | 50                       | PASS   |
| 1-Butanol             | 71-36-3    | ND              | 5000                     | PASS   | Heptane           | 142-82-5   | ND              | 5000                     | PASS   |
| 2-Butanol             | 78-92-2    | ND              | 5000                     | PASS   | n-Hexane          | 110-54-3   | ND              | 290                      | PASS   |
| 2-Butanone            | 78-93-3    | ND              | 5000                     | PASS   | Isopropyl Acetate | 108-21-4   | ND              | 5000                     | PASS   |
| Cumene                | 98-82-8    | ND              | 70                       | PASS   | Methanol          | 67-56-1    | 10              | 3000                     | PASS   |
| Cyclohexane           | 110-82-7   | ND              | 3880                     | PASS   | 2-Methylbutane    | 78-78-4    | ND              | 5000                     | PASS   |
| Dichloromethane       | 75-09-2    | ND              | 600                      | PASS   | 2-Methylpentane   | 107-83-5   | ND              | 290                      | PASS   |
| 1,2-Dimethoxyethane   | 110-71-4   | ND              | 100                      | PASS   | 3-Methylpentane   | 96-14-0    | ND              | 290                      | PASS   |
| Dimethyl Sulfoxide    | 67-68-5    | ND              | 5000                     | PASS   | Methylpropane     | 75-28-5    | ND              | 5000                     | PASS   |
| N,N-Dimethylacetamide | 127-19-5   | ND              | 1090                     | PASS   | Pentane           | 109-66-0   | ND              | 5000                     | PASS   |
| 1,2-Dimethylbenzene   | 95-47-6    | ND              | See<br>Xylenes           |        | 1-Pentanol        | 71-41-0    | ND              | 5000                     | PASS   |
| 1,3-Dimethylbenzene   | 108-38-3   | ND              | See<br>Xylenes           |        | Propane           | 74-98-6    | ND              | 5000                     | PASS   |
| 1,4-Dimethylbenzene   | 106-42-3   | ND              | See<br>Xylenes           |        | 1-Propanol        | 71-23-8    | ND              | 5000                     | PASS   |
| 2,2-Dimethylbutane    | 75-83-2    | ND              | 290                      | PASS   | 2-Propanol        | 67-63-0    | ND              | 5000                     | PASS   |
| 2,3-Dimethylbutane    | 79-29-8    | ND              | 290                      | PASS   | Pyridine          | 110-86-1   | ND              | 100                      | PASS   |
| N,N-Dimethylformamide | 68-12-2    | ND              | 880                      | PASS   | Sulfolane         | 126-33-0   | ND              | 160                      | PASS   |
| 1,4-Dioxane           | 123-9      | ND              | 380                      | PASS   | Tetrahydrofuran   | 109-99-9   | ND              | 720                      | PASS   |
| Ethanol               | 64-17-5    | ND              | 5000                     | PASS   | Toluene           | 108-88-3   | ND              | 890                      | PASS   |
| 2-Ethoxyethanol       | 110-80-5   | ND              | 160                      | PASS   | Xylenes           | 1330-20-7  | ND              | 2170                     | PASS   |
| Ethyl Acetate         | 141-78-6   | ND              | 5000                     | PASS   |                   |            |                 |                          |        |

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### **CERTIFICATE OF ANALYSIS**

Mycotoxin Analysis Status: PASS

| Sample ID:    | HP24253-4  | Description: | Watermelon Gummies |
|---------------|------------|--------------|--------------------|
| Testing Date: | 09/13/2024 | Reviewed By: | Cameron Cheyne     |

Method: ACL.AM.004 Analysis performed using Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)

| Analyte         | Result (ppb) | Action Level (ppb)  | Status |
|-----------------|--------------|---------------------|--------|
| AflatoxinB1     | ND           | See Total Aflatoxin |        |
| AflatoxinB2     | ND           | See Total Aflatoxin |        |
| AflatoxinG1     | ND           | See Total Aflatoxin |        |
| AflatoxinG2     | ND           | See Total Aflatoxin |        |
| Total Aflatoxin | 0            | 20                  | PASS   |
| Ochratoxin A    | ND           | 20                  | PASS   |

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