



Date Released: 7/22/2024 12:19:03PM

Report #: 20350

**Hard Cider**

Sample #: 5348, Weight: 45.50g, Unit Count:

Order #: K240716-0001

Category/Type: Plant, Flower - Cured

Date Collected: 7/15/2024 3:06:00PM

Date Received: 7/16/2024 3:49:37AM

Regulator Sample ID: 0524-020

Regulator Source Package ID: 0524-020

Regulator Batch ID: 0524-020

Size: 2531Unit, Unit Count:



**Total Cannabinoids**  
23.79 %  
237.9 mg/g



**Total THC**  
20.71 %  
207.1 mg/g



**Total CBD**  
0.04692 %  
0.4692 mg/g



**Total Terpenes**  
2.1 %



**Moisture**  
14.0 %



**Heavy Metals**  
PASS



**Microbials**  
PASS



**Pesticides**  
PASS



**Mycotoxins**  
PASS



**Foreign Matter**  
PASS



**Water Activity**  
PASS

**Potency Analysis by HPLC**

Total Cannabinoids: **23.79 % - 237.9 mg/g**

Total THC: **20.71 % - 207.1 mg/g**

Total CBD: **0.04692 % - 0.4692 mg/g**

Date Completed: 07/18/2024 10:33AM

| Compound   | CAS#       | LOQ (%)  | %       | mg/g   | Relative Concentration              |
|------------|------------|----------|---------|--------|-------------------------------------|
| THCa       | 23978-85-0 | 0.001000 | 19.61   | 196.1  | <div style="width: 196.1%;"></div>  |
| d9-THC     | 1972-08-3  | 0.001000 | 3.511   | 35.11  | <div style="width: 35.11%;"></div>  |
| CBGa       | 25555-57-1 | 0.001000 | 0.3836  | 3.836  | <div style="width: 3.836%;"></div>  |
| d10/S9-THC | 95588-87-7 | 0.001000 | 0.09578 | 0.9578 | <div style="width: 0.9578%;"></div> |
| CBG        | 25654-31-3 | 0.001000 | 0.08888 | 0.8888 | <div style="width: 0.8888%;"></div> |
| CBDa       | 1244-58-2  | 0.001000 | 0.05350 | 0.5350 | <div style="width: 0.5350%;"></div> |
| CBC        | 20675-51-8 | 0.001000 | 0.04315 | 0.4315 | <div style="width: 0.4315%;"></div> |
| d8-THC     | 5957-75-5  | 0.001000 | ND      | ND     |                                     |
| d10/R9-THC | 95543-62-7 | 0.001000 | ND      | ND     |                                     |
| THCV       | 31262-37-0 | 0.001000 | ND      | ND     |                                     |
| CBD        | 13956-29-1 | 0.001000 | ND      | ND     |                                     |
| CBDV       | 24274-48-4 | 0.001000 | ND      | ND     |                                     |
| CBN        | 521-35-7   | 0.001000 | ND      | ND     |                                     |

**Test Comment:** Cannabinoids analyzed by HPLC using P-NY100. The reported result is based on a sample weight using moisture content for flower samples unless moisture is listed as zero or ND. Unless otherwise stated all QC passed.

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty. If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



**Keystone State Testing of New York**  
1809 Vestal Pkwy E  
Vestal, NY 13850  
(607)301-0884  
InfoNY@KeystoneStateTesting.com  
www.KeystoneStateTesting.com  
Permit #: OCM-CPL-2022-00007

*Kelly N Greenland*

Dr. Kelly Greenland, Lab Director





**Sample #: 5348**

**Hard Cider**

**Terpenes by HS-GC-MS**

Date Completed: 07/17/2024 12:05PM



| Compound            | CAS#       | LOQ (%) | %      | Relative Concentration             |
|---------------------|------------|---------|--------|------------------------------------|
| Beta-caryophyllene  | 87-44-5    | 0.1000  | 0.7955 | <div style="width: 79.55%;"></div> |
| Farnesene           | 502-61-4   | 0.1000  | 0.4989 | <div style="width: 49.89%;"></div> |
| Limonene            | 5989-27-5  | 0.1000  | 0.3140 | <div style="width: 31.40%;"></div> |
| Linalool            | 78-70-6    | 0.1000  | 0.1929 | <div style="width: 19.29%;"></div> |
| Alpha-humulene      | 6753-98-6  | 0.1000  | 0.1786 | <div style="width: 17.86%;"></div> |
| Valencene           | 4630-07-3  | 0.1000  | 0.1041 | <div style="width: 10.41%;"></div> |
| Beta-myrcene        | 123-35-3   | 0.1000  | ND     |                                    |
| Alpha-pinene        | 80-56-8    | 0.1000  | ND     |                                    |
| Beta-pinene         | 127-91-3   | 0.1000  | ND     |                                    |
| Terpinolene         | 586-62-9   | 0.1000  | ND     |                                    |
| Borneol             | 464-43-7   | 0.1000  | ND     |                                    |
| Ocimene             | 13877-91-3 | 0.1000  | ND     |                                    |
| Alpha-bisabolol     | 515-69-5   | 0.1000  | ND     |                                    |
| Caryophyllene-oxide | 1139-30-6  | 0.1000  | ND     |                                    |
| Geraniol            | 106-24-1   | 0.1000  | ND     |                                    |
| Camphene            | 79-92-5    | 0.1000  | ND     |                                    |
| Guaiol              | 489-86-1   | 0.1000  | ND     |                                    |
| Alpha-terpinene     | 99-86-5    | 0.1000  | ND     |                                    |
| Terpineol           | 8006-39-1  | 0.1000  | ND     |                                    |
| Fenchol             | 14575-74-7 | 0.1000  | ND     |                                    |
| Alpha-phellandrene  | 99-83-2    | 0.1000  | ND     |                                    |
| Camphor             | 464-49-3   | 0.1000  | ND     |                                    |

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty.  
If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



**Keystone State Testing of New York**  
1809 Vestal Pkwy E  
Vestal, NY 13850  
(607)301-0884  
InfoNY@KeystoneStateTesting.com  
www.KeystoneStateTesting.com  
Permit #: OCM-CPL-2022-00007

*Kelly Greenland*

Dr. Kelly Greenland, Lab Director





Sample #: 5348

Hard Cider

| Compound         | CAS#       | LOQ (%) | %  | Relative Concentration |
|------------------|------------|---------|----|------------------------|
| 3-Carene         | 13466-78-9 | 0.1000  | ND |                        |
| Alpha-cedrene    | 469-61-4   | 0.1000  | ND |                        |
| Cedrol           | 77-53-2    | 0.1000  | ND |                        |
| Eucalyptol       | 470-82-6   | 0.1000  | ND |                        |
| Fenchone         | 1195-79-5  | 0.1000  | ND |                        |
| Gamma-terpinene  | 99-85-4    | 0.1000  | ND |                        |
| Geranyl Acetate  | 105-87-3   | 0.1000  | ND |                        |
| Isopulegol       | 89-79-2    | 0.1000  | ND |                        |
| Menthol          | 15356-70-4 | 0.1000  | ND |                        |
| Nerol            | 106-25-2   | 0.1000  | ND |                        |
| Nerolidol        |            | 0.1000  | ND |                        |
| Pulegone         | 89-82-7    | 0.1000  | ND |                        |
| Sabinene         | 3387-41-5  | 0.1000  | ND |                        |
| Sabinene Hydrate | 546-79-2   | 0.1000  | ND |                        |

**Test Comment:** Terpenes tested by GCMS using P-NY210. Unless otherwise stated, all QC passed.

Foreign Matter by microscopy

Pass

Analysis Date: 07/16/2024 2:04 pm

| Compound         | LOQ (%) | Limits (%) | Result (%) | Status |
|------------------|---------|------------|------------|--------|
| % Foreign Matter | 0.00100 | 2.0        | ND         | Pass   |
| Mammalian Exreta | 0.00100 | 0.03       | ND         | Pass   |
| Stems            | 0.00100 | 5.0        | ND         | Pass   |

Comment: Physical chemistry was tested using moisture analyzer, water activity meter using P-NY 160. Unless otherwise stated, all QC passed.

Moisture Content

Pass

Analysis Date: 07/16/2024 2:21 pm

| Compound | LOQ (%) | Limits (%) | Result (%) | Status |
|----------|---------|------------|------------|--------|
| Moisture | 1.2     | 5 - 15     | 14.0       | Pass   |

Comment: Physical chemistry was tested using moisture analyzer, water activity meter using P-NY 160. Unless otherwise stated, all QC passed.

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty. If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



Keystone State Testing of New York  
 1809 Vestal Pkwy E  
 Vestal, NY 13850  
 (607)301-0884  
 InfoNY@KeystoneStateTesting.com  
 www.KeystoneStateTesting.com  
 Permit #: OCM-CPL-2022-00007

*Kelly Greenland*

Dr. Kelly Greenland, Lab Director





**Sample #: 5348**

**Hard Cider**

**Water Activity**

**Pass**

Analysis Date: 07/16/2024 2:04 pm

| Compound       | LOQ (Aw) | Limits (Aw) | Result (Aw) | Status |
|----------------|----------|-------------|-------------|--------|
| Water Activity | 0.05     | 0.65        | 0.58        | Pass   |

Comment: Physical chemistry was tested using moisture analyzer, water activity meter using P-NY 160. Unless otherwise stated, all QC passed.

**Pesticides by LCMSMS**

**Pass**

Analysis Date: 07/19/2024 11:25 am

| Compound              | LOQ (µg/g) | Limits (µg/g) | Result (µg/g) | Status |
|-----------------------|------------|---------------|---------------|--------|
| Abamectin             | 0.0100     | 0.500         | ND            | Pass   |
| Acephate              | 0.0100     | 0.400         | ND            | Pass   |
| Acequinocyl           | 0.0100     | 2.00          | ND            | Pass   |
| Acetamiprid           | 0.0100     | 0.200         | ND            | Pass   |
| Aldicarb              | 0.0100     | 0.400         | ND            | Pass   |
| Azadirachtin          | 0.0100     | 1.00          | ND            | Pass   |
| Azoxystrobin          | 0.0100     | 0.200         | ND            | Pass   |
| Bifenazate            | 0.0100     | 0.200         | ND            | Pass   |
| Bifenthrin            | 0.0100     | 0.200         | ND            | Pass   |
| Boscalid              | 0.0100     | 0.400         | ND            | Pass   |
| Captan                | 0.0100     | 1.00          | ND            | Pass   |
| Carbaryl              | 0.0100     | 0.200         | ND            | Pass   |
| Carbofuran            | 0.0100     | 0.200         | ND            | Pass   |
| Chlorantraniliprole   | 0.0100     | 0.200         | ND            | Pass   |
| Chlordane-alpha       | 0.0100     | 1.00          | ND            | Pass   |
| Chlorfenapyr          | 0.0100     | 1.00          | ND            | Pass   |
| Chloromequat Chloride | 0.0100     | 1.00          | ND            | Pass   |
| Chlorpyrifos          | 0.0100     | 0.200         | ND            | Pass   |
| Clofentezine          | 0.0100     | 0.200         | ND            | Pass   |
| Coumaphos             | 0.0100     | 1.00          | ND            | Pass   |
| Cyfluthrin            | 0.0100     | 1.00          | ND            | Pass   |

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty.  
If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



**Keystone State Testing of New York**  
1809 Vestal Pkwy E  
Vestal, NY 13850  
(607)301-0884  
InfoNY@KeystoneStateTesting.com  
www.KeystoneStateTesting.com  
Permit #: OCM-CPL-2022-00007

*Kelly Greenland*

Dr. Kelly Greenland, Lab Director





Sample #: 5348

Hard Cider

Pesticides by LCMSMS

Pass

Analysis Date: 07/19/2024 11:25 am

| Compound           | LOQ (µg/g) | Limits (µg/g) | Result (µg/g) | Status |
|--------------------|------------|---------------|---------------|--------|
| Cypermethrin       | 0.0100     | 1.00          | ND            | Pass   |
| Daminozide         | 0.0100     | 1.00          | ND            | Pass   |
| Diazinon           | 0.0100     | 0.200         | ND            | Pass   |
| Dichlorvos         | 0.0100     | 1.00          | ND            | Pass   |
| Dimethoate         | 0.0100     | 0.200         | ND            | Pass   |
| Dimethomorph       | 0.0100     | 1.00          | ND            | Pass   |
| Ethoprophos        | 0.0100     | 0.200         | ND            | Pass   |
| Etofenprox         | 0.0100     | 0.400         | ND            | Pass   |
| Etoxazole          | 0.0100     | 0.200         | ND            | Pass   |
| Fenhexamid         | 0.0100     | 1.00          | ND            | Pass   |
| Fenoxycarb         | 0.0100     | 0.200         | ND            | Pass   |
| Fenpyroximate      | 0.0100     | 0.400         | ND            | Pass   |
| Fipronil           | 0.0100     | 0.400         | ND            | Pass   |
| Fonicamid          | 0.0100     | 1.00          | ND            | Pass   |
| Fludioxonil        | 0.0100     | 0.400         | ND            | Pass   |
| Hexythiazox        | 0.0100     | 1.00          | ND            | Pass   |
| Imazalil           | 0.0100     | 0.200         | ND            | Pass   |
| Imidacloprid       | 0.0100     | 0.400         | ND            | Pass   |
| Indolebutyric Acid | 0.0100     | 1.00          | ND            | Pass   |
| Kresoxim-methyl    | 0.0100     | 0.400         | ND            | Pass   |
| Malathion          | 0.0100     | 0.200         | ND            | Pass   |
| Metalaxyl          | 0.0100     | 0.200         | ND            | Pass   |
| Methiocarb         | 0.0100     | 0.200         | ND            | Pass   |
| Methomyl           | 0.0100     | 0.400         | ND            | Pass   |
| Methyl Parathion   | 0.0100     | 0.200         | ND            | Pass   |
| Mevinphos          | 0.0100     | 1.00          | ND            | Pass   |

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty.  
 If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



Keystone State Testing of New York  
 1809 Vestal Pkwy E  
 Vestal, NY 13850  
 (607)301-0884  
 InfoNY@KeystoneStateTesting.com  
 www.KeystoneStateTesting.com  
 Permit #: OCM-CPL-2022-00007

*Kelly Greenland*

Dr. Kelly Greenland, Lab Director





**Sample #: 5348**

**Hard Cider**

**Pesticides by LCMSMS**

**Pass**

Analysis Date: 07/19/2024 11:25 am

| Compound                | LOQ (µg/g) | Limits (µg/g) | Result (µg/g) | Status |
|-------------------------|------------|---------------|---------------|--------|
| MGK-264                 | 0.0100     | 0.200         | ND            | Pass   |
| Myclobutanil            | 0.0100     | 0.200         | ND            | Pass   |
| Naled                   | 0.0100     | 0.500         | ND            | Pass   |
| Oxamyl                  | 0.0100     | 1.00          | ND            | Pass   |
| Paclobutrazol           | 0.0100     | 0.400         | ND            | Pass   |
| Pentachloronitrobenzene | 0.0100     | 1.00          | ND            | Pass   |
| Permethrins, Total      | 0.0100     | 0.200         | ND            | Pass   |
| Phosmet                 | 0.0100     | 0.200         | ND            | Pass   |
| Piperonyl Butoxide      | 0.0100     | 2.00          | ND            | Pass   |
| Prallethrin             | 0.0100     | 0.200         | ND            | Pass   |
| Propiconazole           | 0.0100     | 0.400         | ND            | Pass   |
| Propoxur                | 0.0100     | 0.200         | ND            | Pass   |
| Pyrethrins Total        | 0.0100     | 1.00          | ND            | Pass   |
| Pyridaben               | 0.0100     | 0.200         | ND            | Pass   |
| Spinetoram Total        | 0.0100     | 1.00          | ND            | Pass   |
| Spinosad Total          | 0.0100     | 0.200         | ND            | Pass   |
| Spiromesifen            | 0.0100     | 0.200         | ND            | Pass   |
| Spirotetramat           | 0.0100     | 0.200         | ND            | Pass   |
| Spiroxamine             | 0.0100     | 0.200         | ND            | Pass   |
| Tebuconazole            | 0.0100     | 0.400         | ND            | Pass   |
| Thiacloprid             | 0.0100     | 0.200         | ND            | Pass   |
| Thiamethoxam            | 0.0100     | 0.200         | ND            | Pass   |
| Trifloxystrobin         | 0.0100     | 0.200         | ND            | Pass   |

Comment: Pesticides tested by LCMSMS by using P-NY150. Unless otherwise stated, all QC passed.

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty.  
If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



**Keystone State Testing of New York**  
1809 Vestal Pkwy E  
Vestal, NY 13850  
(607)301-0884  
InfoNY@KeystoneStateTesting.com  
www.KeystoneStateTesting.com  
Permit #: OCM-CPL-2022-00007

*Kelly Greenland*

Dr. Kelly Greenland, Lab Director





**Sample #: 5348**

**Hard Cider**

**Mycotoxins**

**Pass**

Analysis Date: 07/19/2024 11:25 am

| Compound        | LOQ (µg/g) | Limits (µg/g) | Result (µg/g) | Status |
|-----------------|------------|---------------|---------------|--------|
| Aflatoxin B1    | 0.0050     | 0.020         | ND            | Pass   |
| Aflatoxin B2    | 0.0050     | 0.020         | ND            | Pass   |
| Aflatoxin G1    | 0.0050     | 0.020         | ND            | Pass   |
| Aflatoxin G2    | 0.0050     | 0.020         | ND            | Pass   |
| Ochratoxin A    | 0.0050     | 0.020         | ND            | Pass   |
| Total Aflatoxin | 0.0050     | 0.020         | ND            | Pass   |

Comment: Mycotoxin contamination tested by LCMSMS using P-NY125. Unless otherwise stated, all QC passed.

**Metals**

**Pass**

Analysis Date: 07/17/2024 1:50 pm

| Compound | LOQ (µg/g) | Limits (µg/g) | Result (µg/g) | Status |
|----------|------------|---------------|---------------|--------|
| Antimony | 0.0100     | 2.00          | ND            | Pass   |
| Arsenic  | 0.00100    | 0.200         | 0.157         | Pass   |
| Cadmium  | 0.00150    | 0.300         | 0.00503       | Pass   |
| Chromium | 0.280      | 110           | ND            | Pass   |
| Copper   | 0.0750     | 30.0          | 8.30          | Pass   |
| Lead     | 0.00250    | 0.500         | 0.0380        | Pass   |
| Mercury  | 0.000500   | 0.100         | ND            | Pass   |
| Nickel   | 0.0100     | 5.00          | ND            | Pass   |

Comment: Heavy Metal contamination tested by ICPMS using P-NY140. Unless otherwise stated, all QC passed.

**Microbials Count/Qualitative**

**Pass**

Analysis Date: 07/18/2024 4:35 pm

| Compound                          | LOQ (CFU/g) | Limits (CFU/g) | Result (CFU/g) | Status |
|-----------------------------------|-------------|----------------|----------------|--------|
| Aspergillus flavus Qualitative    | 1           | 0              | Not Detected   | Pass   |
| Aspergillus fumigatus Qualitative | 1           | 0              | Not Detected   | Pass   |
| Aspergillus niger Qualitative     | 1           | 0              | Not Detected   | Pass   |
| Aspergillus terreus Qualitative   | 1           | 0              | Not Detected   | Pass   |

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty.  
If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



**Keystone State Testing of New York**  
1809 Vestal Pkwy E  
Vestal, NY 13850  
(607)301-0884  
InfoNY@KeystoneStateTesting.com  
www.KeystoneStateTesting.com  
Permit #: OCM-CPL-2022-00007

*Kelly Greenland*

Dr. Kelly Greenland, Lab Director





**Sample #: 5348**

**Hard Cider**

**Microbials Count/Qualitative**

**Pass**

Analysis Date: 07/18/2024 4:35 pm

| Compound                                  | LOQ (CFU/g) | Limits (CFU/g) | Result (CFU/g) | Status |
|---|-------------|----------------|----------------|--------|
| Salmonella Qualitative                    | 1           | 0              | Not Detected   | Pass   |
| Shiga Toxin-Producing E. coli Qualitative | 1           | 0              | Not Detected   | Pass   |
| Total Aerobic Bacteria                    | 10          |                | 111000         | Pass   |
| Total Yeast & Mold                        | 10          |                | 1000           | Pass   |

Comment: Note that "Pass" is listed for total yeast and mold and total aerobic bacteria results for all adult use products, as there are currently no limits for conformity.

LOQ= Level of Quantitation. ND= Not Detected. Results based on simple acceptance, not taking into consideration measuremental uncertainty.  
If sampled by Keystone State Testing, sampling followed SOP-P-NY500 at the client facility listed above.



**Keystone State Testing of New York**  
1809 Vestal Pkwy E  
Vestal, NY 13850  
(607)301-0884  
InfoNY@KeystoneStateTesting.com  
www.KeystoneStateTesting.com  
Permit #: OCM-CPL-2022-00007

*Kelly Greenland*

Dr. Kelly Greenland, Lab Director

