

Nanticoke Hemp Inc.

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 607-754-5008
 License #: OCM-PROC-24-000002

Certificate of Analysis

Final



Date Released: 10/9/2024 11:14:40AM

Report #: 25647

Pluto Prerolls

Sample #: 6261, Weight: 10.00g, Unit Count:
 Order #: X241001-0001

Category/Type: Plant, Preroll

Date Collected: 9/30/2024 10:06:00AM

Date Received: 10/1/2024 10:05:41AM

Date Sampled: 9/30/2024 9:41:00AM

Regulator Sample ID: PL051316PR

Regulator Source Package ID: PL051316PR

Regulator Batch ID: PL051316PR

Size: 10000Units, Unit Count:



Total Cannabinoids
 24.40 %
 244.0 mg/g



Total THC
 20.85 %
 208.5 mg/g



Total CBD
 0.06679 %
 0.6679 mg/g



Total Terpenes
 2.737 %



Moisture
 10.4 %



Heavy Metals
 PASS



Microbials
 PASS



Pesticides
 PASS



Mycotoxins
 PASS



Foreign Matter
 PASS



Water Activity
 PASS

| Cannabinoids Avg | | | | | Date Completed: 10/03/2024 10:56AM |
|---|------------|----------|---------|--------|--------------------------------------|
| Total Cannabinoids: 24.40 % - 244.0 mg/g | | | | | |
| Total THC: 20.85 % - 208.5 mg/g | | | | | |
| Total CBD: 0.06679 % - 0.6679 mg/g | | | | | |
| Compound | CAS# | LOQ (%) | % | mg/g | Relative Concentration |
| THCa | 23978-85-0 | 0.001000 | 22.59 | 225.9 | <div style="width: 22.59%;"></div> |
| d9-THC | 1972-08-3 | 0.001000 | 1.036 | 10.36 | <div style="width: 1.036%;"></div> |
| CBGa | 25555-57-1 | 0.001000 | 0.5515 | 5.515 | <div style="width: 0.5515%;"></div> |
| CBG | 25654-31-3 | 0.001000 | 0.1537 | 1.537 | <div style="width: 0.1537%;"></div> |
| CBDa | 1244-58-2 | 0.001000 | 0.07616 | 0.7616 | <div style="width: 0.07616%;"></div> |
| CBDV | 24274-48-4 | 0.001000 | ND | ND | |
| THCV | 31262-37-0 | 0.001000 | ND | ND | |

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Kelly Greenland

Dr. Kelly Greenland, Lab Director





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| Compound | CAS# | LOQ (%) | % | mg/g | Relative Concentration |
|------------|------------|----------|----|------|------------------------|
| CBD | 13956-29-1 | 0.001000 | ND | ND | |
| CBN | 521-35-7 | 0.001000 | ND | ND | |
| d8-THC | 5957-75-5 | 0.001000 | ND | ND | |
| d10/R9-THC | 95543-62-7 | 0.001000 | ND | ND | |
| d10/S9-THC | 95588-87-7 | 0.001000 | ND | ND | |
| CBC | 20675-51-8 | 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.

Terpenes by HS-GC-MS

Date Completed: 10/02/2024 11:15AM



| Compound | CAS# | LOQ (%) | % | Relative Concentration |
|--------------------|-----------|---------|--------|------------------------|
| Beta-caryophyllene | 87-44-5 | 0.1000 | 1.084 | |
| Farnesene | 502-61-4 | 0.1000 | 0.5859 | |
| Valencene | 4630-07-3 | 0.1000 | 0.2597 | |
| Alpha-humulene | 6753-98-6 | 0.1000 | 0.2547 | |
| Beta-myrcene | 123-35-3 | 0.1000 | 0.1792 | |
| Limonene | 5989-27-5 | 0.1000 | 0.1546 | |
| Alpha-bisabolol | 515-69-5 | 0.1000 | 0.1111 | |
| Linalool | 78-70-6 | 0.1000 | 0.1074 | |
| Alpha-pinene | 80-56-8 | 0.1000 | ND | |

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| Compound | CAS# | LOQ (%) | % | Relative Concentration |
|---------------------|------------|---------|----|------------------------|
| Beta-pinene | 127-91-3 | 0.1000 | ND | |
| Terpinolene | 586-62-9 | 0.1000 | ND | |
| Ocimene | 13877-91-3 | 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 | |

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

Foreign Matter by Microscopy

Pass

Analysis Date: 10/03/2024 10:52 am

| 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 LWG

Pass

Analysis Date: 10/03/2024 10:49 am

| Compound | LOQ (%) | Limits (%) | Result (%) | Status |
|----------|---------|------------|------------|--------|
| Moisture | 1.2 | 5 - 15 | 10.4 | Pass |

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

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Water Activity

Pass

Analysis Date: 10/03/2024 10:53 am

| Compound | LOQ (Aw) | Limits (Aw) | Result (Aw) | Status |
|----------------|----------|-------------|-------------|--------|
| Water Activity | 0.05 | 0.65 | 0.61 | 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: 10/04/2024 11:15 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 |

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Pesticides by LCMSMS

Pass

Analysis Date: 10/04/2024 11:15 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 |
| Etoazole | 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 |

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Pesticides by LCMSMS

Pass

Analysis Date: 10/04/2024 11:15 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.

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Pluto Prerolls

Mycotoxins by LCMSMS

Pass

Analysis Date: 10/04/2024 11:15 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.

Heavy Metals by ICPMS

Pass

Analysis Date: 10/07/2024 12:19 pm

| Compound | LOQ (µg/g) | Limits (µg/g) | Result (µg/g) | Status |
|----------|------------|---------------|---------------|--------|
| Antimony | 0.0100 | 2.00 | 0.0153 | Pass |
| Arsenic | 0.00100 | 0.200 | ND | Pass |
| Cadmium | 0.00150 | 0.200 | 0.110 | Pass |
| Chromium | 0.280 | 110 | 1.20 | Pass |
| Copper | 0.0750 | 30.0 | 5.86 | Pass |
| Lead | 0.00250 | 0.500 | 0.112 | Pass |
| Mercury | 0.000500 | 0.100 | 0.00528 | Pass |
| Nickel | 0.0100 | 5.00 | 0.556 | Pass |

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

Micro by Petri & qPCR

Pass

Analysis Date: 10/03/2024 10:02 am

| 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 |

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Micro by Petri & qPCR

Pass

Analysis Date: 10/03/2024 10:02 am

| 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 | | <LOQ | Pass |
| Total Yeast & Mold | 10 | | 1000 | Pass |

Comment: Microbial contamination tested by Petrifilm plates and qPCR using P-NY120. Unless otherwise stated, all QC passed.
Due to COA validation limitations: "Not Detected" = "Absent" and "Detected" = "Presumptive Presence". Acceptance Limits: "0" = "Absence" and "1" = "Presence". "Passed" for an adult-use product implies the results contain less than 1,000,000 cfu/g.

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