

Nanticoke Hemp Inc.

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 pete@nanticokegardens.com
 607-754-5008
 License #: OCM-PROC-24-000002

Certificate of Analysis

Final



Date Released: 2/17/2025 8:51:18AM

Report #: 44490

Pluto .5g Preroll

Sample #: 11045, Weight: 10.00g, Unit Count:
 Order #: X250211-0001

Category/Type: Plant, Preroll
 Date Collected: 2/10/2025 9:40:00AM
 Date Received: 2/11/2025 4:10:01AM
 Date Sampled: 2/10/2025 9:03:00AM

Regulator Sample ID: ML120541PR
 Regulator Source Package ID: ML120541PR
 Regulator Batch ID: ML120541PR

Size: 10000Units, Unit Count:



Total Cannabinoids
 31.92 %
 319.2 mg/g



Total THC
 27.19 %
 271.9 mg/g



Total CBD
 0.07575 %
 0.7575 mg/g



Total Terpenes
 2.590 %



Moisture
 8.8 %



Heavy Metals
 PASS



Microbials
 PASS



Pesticides
 PASS



Mycotoxins
 PASS



Foreign Matter
 PASS



Water Activity
 PASS

Cannabinoids Avg					Total Cannabinoids: 31.92 % - 319.2 mg/g		Date Completed: 02/12/2025 12:37PM
					Total THC: 27.19 % - 271.9 mg/g		
					Total CBD: 0.07575 % - 0.7575 mg/g		
Compound	CAS#	LOQ (%)	%	mg/g	Relative Concentration		
THCa	23978-85-0	0.001000	28.66	286.6	<div style="width: 100%; height: 10px; background-color: green;"></div>		
d9-THC	1972-08-3	0.001000	2.047	20.47	<div style="width: 10%; height: 10px; background-color: green;"></div>		
CBGa	25555-57-1	0.001000	0.8984	8.984	<div style="width: 2%; height: 10px; background-color: green;"></div>		
CBG	25654-31-3	0.001000	0.1065	1.065	<div style="width: 0.5%; height: 10px; background-color: green;"></div>		
CBDa	1244-58-2	0.001000	0.08637	0.8637	<div style="width: 0.3%; height: 10px; background-color: green;"></div>		
CBDV	24274-48-4	0.001000	0.05622	0.5622	<div style="width: 0.2%; height: 10px; background-color: green;"></div>		
CBC	20675-51-8	0.001000	0.05032	0.5032	<div style="width: 0.2%; height: 10px; background-color: green;"></div>		

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Kelly Greenland

Dr. Kelly Greenland, Lab Director





Sample #: 11045

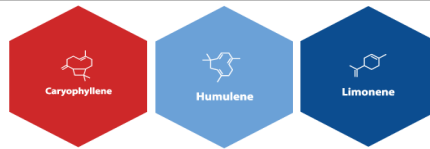
Pluto .5g Preroll

Compound	CAS#	LOQ (%)	%	mg/g	Relative Concentration
CBN	521-35-7	0.001000	0.01300	0.1300	
THCV	31262-37-0	0.001000	ND	ND	
CBD	13956-29-1	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	

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: 02/14/2025 6:18PM



Compound	CAS#	LOQ (%)	%	Relative Concentration
Beta-caryophyllene	87-44-5	0.1000	0.9873	
Alpha-humulene	6753-98-6	0.1000	0.3608	
Limonene	5989-27-5	0.1000	0.3398	
Farnesene	502-61-4	0.1000	0.3227	
Valencene	4630-07-3	0.1000	0.2995	
Linalool	78-70-6	0.1000	0.1702	
Beta-myrcene	123-35-3	0.1000	0.1101	
Alpha-pinene	80-56-8	0.1000	ND	
Beta-pinene	127-91-3	0.1000	ND	

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Sample #: 11045

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Compound	CAS#	LOQ (%)	%	Relative Concentration
Terpinolene	586-62-9	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	

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

Foreign Matter by Microscopy

Pass

Analysis Date: 02/12/2025 11:48 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: 02/12/2025 11:48 am

Compound	LOQ (%)	Limits (%)	Result (%)	Status
Moisture	1.2	5 - 15	8.8	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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Sample #: 11045

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Water Activity

Pass

Analysis Date: 02/12/2025 11:48 am

Compound	LOQ (Aw)	Limits (Aw)	Result (Aw)	Status
Water Activity	0.05	0.65	0.32	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: 02/14/2025 6:11 pm

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: 02/14/2025 6:11 pm

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
Etozazole	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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Sample #: 11045

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Pesticides by LCMSMS

Pass

Analysis Date: 02/14/2025 6:11 pm

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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Mycotoxins by LCMSMS

Pass

Analysis Date: 02/14/2025 6:11 pm

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: 02/12/2025 3:42 pm

Compound	LOQ (µg/g)	Limits (µg/g)	Result (µg/g)	Status
Antimony	0.0100	2.00	ND	Pass
Arsenic	0.00100	0.200	ND	Pass
Cadmium	0.00150	0.200	0.0556	Pass
Chromium	0.280	110	ND	Pass
Copper	0.0750	30.0	5.44	Pass
Lead	0.00250	0.500	0.00835	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.

Micro by Petri & qPCR

Pass

Analysis Date: 02/14/2025 5:56 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

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Sample #: 11045

Pluto .5g Preroll

Micro by Petri & qPCR

Pass

Analysis Date: 02/14/2025 5:56 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		<LOQ	Pass
Total Yeast & Mold	10		<LOQ	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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