1543 Union Center Maine Hwy ellen@nanticokegardens.com 607-754-5008

License #: OCM-AUCC-22-000079

Certificate of Analysis



Date Released: 12/20/2023 10:50:18AM

Report #: 6983

Northern Lights

Sample #: 3329, Weight: 28.00g, Unit Count:

Order #: X231212-0001

Category/Type: Plant, Flower - Cured Date Collected: 12/12/2023 6:17:16PM Date Received: 12/12/2023 6:20:18PM Regulator Sample ID: Lot # 150615

Regulator Source Package ID: Lot # 150615

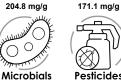
Regulator Batch ID: Lot # 150615

Size: 1200Units, Unit Count:



Total Cannabinoids 20.48 % 204.8 mg/g

PASS





Total THC

17.11 %



Total CBD 0.05812 % 0.5812 mg/g



Total Terpenes 1.5 %



Moisture 10.6 %



Heavy Metals **PASS**







Foreign Matter Water Activity

PASS

Date Completed: 12/14/2023 10:40AM

Potency Analysis by HPLC

Total Cannabinoids: 20.48 % - 204.8 mg/g

Total THC: 17.11 % - 171.1 mg/g Total CBD: 0.05812 % - 0.5812 mg/g

Compound	CAS#	LOQ (%)	%	mg/g
THCa	23978-85-0	0.001000	17.45	174.5
d9-THC	1972-08-3	0.001000	1.810	18.10
CBGa	25555-57-1	0.001000	0.9421	9.421
CBG	25654-31-3	0.001000	0.08220	0.8220
CBDa	1244-58-2	0.001000	0.06627	0.6627
CBDV	24274-48-4	0.001000	0.04906	0.4906
CBC	20675-51-8	0.001000	0.03830	0.3830
THCV	31262-37-0	0.001000	0.02711	0.2711
CBN	521-35-7	0.001000	0.01851	0.1851
d8-THC	5957-75-5	0.001000	ND	ND
d10-THC	95543-62-7	0.001000	ND	ND
CBD	13956-29-1	0.001000	ND	ND

Relative Concentration

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

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d8-THC is an abbreviation for delta-8 tetrahydrocannabinol. d9-THC is an abbreviation for delta-9 tetrahydrocannabinol.



stated all QC passed



Keystone State Testing of New York 1809 Vestal Pkwy E

Vestal, NY 13850 (607)301-0884 InfoNY@KeystoneStateTesting.com www.KevstoneStateTesting.com Permit #: OCM-CPL-2022-00007

Kelly N. Greela



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Final



Sample #: 3329 Northern Lights

Terpenes by HS-GC-MS	Ca	rryophyllene	Limonene	Humulene	Date Completed: 12/14/2023 9:58Al
Compound	CAS#	LOQ (%)	%	Relative Concentration	
Beta-caryophyllene	87-44-5	0.1000	0.5991		
Limonene	5989-27-5	0.1000	0.3652		
Farnesene	502-61-4	0.1000	0.3407		
Alpha-humulene	6753-98-6	0.1000	0.1924		
Beta-myrcene	123-35-3	0.1000	ND		
Alpha-pinene	80-56-8	0.1000	ND		
Linalool	78-70-6	0.1000	ND		
Beta-pinene	127-91-3	0.1000	ND		
Terpinolene	586-62-9	0.1000	ND		
Borneol	464-45-9	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		
Valencene	4630-07-3	0.1000	ND		
Alpha-phellandrene	99-83-2	0.1000	ND		
Camphor	464-49-3	0.1000	ND		

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Sample #: 3329 Northern Lights

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			0.000	
Pulegone	89-82-7	0.1000	ND	
Sabinene	3387-41-5	0.1000	ND	
Sabinene Hydrate	546-79-2	0.1000	ND	

F	oreign Matter by Microscopy	Pass	i	Analysis Date: 12/14/2023 11:33 am		
	Compound	LOQ (%)	Limits (%)	Result (%)	Status	
	% Foreign Matter	0.00100	2.0	false	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	3	Analysis Date: 12/14/2023 11:32 am			
	Compound	LOQ (%)	Limits (%)	Result (%)	Status		
	Moisture	1.2	5 - 15	10.6	Pass		
Co	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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Keystone State Testing of New York 1809 Vestal Pkwy E

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License #: OCM-AUCC-22-000079

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Final



Sample #: 3329 Northern Lights

Water Activity		Pass		Analysis Date: 12/14/2023 11:32 am		
	Compound	LOQ (Aw)	Limits (Aw)	Result (Aw)	Status	
	Water Activity	0.05	0.65	0.46	Pass	
Со	Comment: Physical chemistry was tested using moisture analyzer, water activity meter using P-NY 160. Unless otherwise stated, all QC passed.					

sticides by LCMSMS	Pass	•	Analysis Date: 12/14/2023 11:00 a		
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	
Chlormequat 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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Keystone State Testing of New York 1809 Vestal Pkwy E

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Sample #: 3329 Northern Lights

sticides by LCMSMS	Pass	;	Analysis Date: 12/14/2023 11:00 a		
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	
Flonicamid	0.0100	1.00	ND	Pass	
Fludioxonil	0.0100	0.400	ND	Pass	
Hexythiazox	0.0100	1.00	ND	Pass	
lmazalil	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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Keystone State Testing of New York 1809 Vestal Pkwy E

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Final



Sample #: 3329 Northern Lights

sticides by LCMSMS	Pass	;	Analysis Date: 12/14/2023 11:00		
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	0.0802	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	

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Final



Sample #: 3329 Northern Lights

Mycotoxins by LCMSMS	Pass	5	Analysis Date: 12/14/2023 11:00 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.							

avy Metals by ICPMS	Pass	•	Analysis Date: 12/14/2023 10:05 ar		
Compound	LOQ (µg/g)	Limits (µg/g)	Result (μg/g)	Status	
Antimony	0.0100	2.00	ND	Pass	
Arsenic	0.00100	0.200	0.0287	Pass	
Cadmium	0.00150	0.300	0.0186	Pass	
Chromium	0.280	110	ND	Pass	
Copper	0.0750	30.0	11.2	Pass	
Lead	0.00250	0.500	0.0476	Pass	
Mercury	0.000500	0.100	ND	Pass	
Nickel	0.0100	5.00	0.0269	Pass	

Micro by Petri & qPCR	Pass	•	Analysis Date: 12/15/2023 2:40 pm		
Compound	LOQ (CFU/g)	Limits (CFU/g)	Result (CFU/g)	Status	
Aspergillus flavus Qualitative	0	0	Not Detected	Pass	
Aspergillus fumigatus Qualitative	0	0	Not Detected	Pass	
Aspergillus niger Qualitative	0	0	Not Detected	Pass	
Aspergillus terreus Qualitative	0	0	Not Detected	Pass	

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Keystone State Testing of New York 1809 Vestal Pkwy E

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Dr. Kelly Greenland, Lab Director



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Report Date: 12/20/2023 10:53:21AN

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Sample #: 3329 Northern Lights

Micro by Petri & qPCR		Pass		Analysis Date: 12/15/2023 2:40 pm	
	Compound	LOQ (CFU/g)	Limits (CFU/g)	Result (CFU/g)	Status
	Salmonella Qualitative	0	0	Not Detected	Pass
	Shiga Toxin-Producing E. coli Qualitative	0	0	Not Detected	Pass
	Total Aerobic Bacteria	10		ND	Pass
	Total Yeast & Mold	10		3000	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 "Presumptive Presence". Acceptance Limits: "0" = "Absence" and "1" = "Presence".					nd "Detected" =

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Dr. Kelly Greenland, Lab Director



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Report Date: 12/20/2023 10:53:21AN