



Customer: Trade Roots

Address:

6 Thatcher Lane
Wareham MA 02571

Phone: 774-326-0077

License #: MP281436 & MC281262



Sample ID: 15109
Sample Name: M00002096701: NF1-Bulk Flower
Sample Strain: NF1
Sample Type: Flower
Received Date: 07/12/2024
Report Date: 07/17/2024
METRC ID: 1A40A0300006BD1000005478
METRC Source ID: 1A40A0300006BD1000004807
Client Batch ID: NF1-070124-F3-B1
Client Sample Size: 6 g



Results Summary

Cannabinoids

07/15/2024

TESTED

Terpenes Extended

07/15/2024

TESTED

Heavy Metals

07/15/2024

✓ PASS

Microbial Impurities

07/16/2024

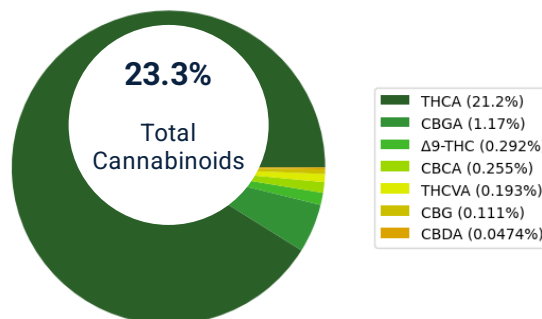
✓ PASS

Pesticides and Mycotoxins

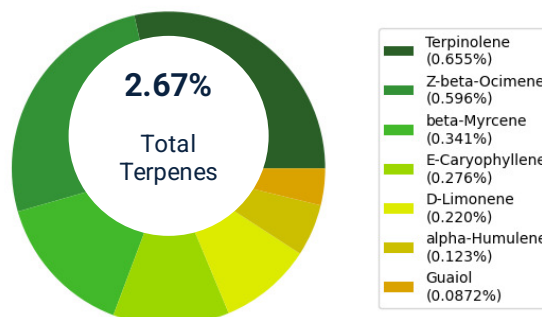
07/17/2024

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Cannabinoid Distribution (%)



Terpene Distribution (%)



Cannabinoids

Date Started: 07/12/2024
Instrument: UPLC-PDA

Date Completed: 07/15/2024
Method: TP-09.001.05 & TP-09.012.05

Analyst: Yuermin Wang Kovaleff
Deviation: N/A

Cannabinoid	Result (%)	Result (mg/g)	LOD (%)	LOQ (%)
THCA	21.2	212	0.102	0.635
CBGA	1.17	11.7	0.00249	0.0317
Δ9-THC	0.292	2.92	0.0117	0.0635
CBCA	0.255	2.55	0.00818	0.0254
THCVA	0.193	1.93	0.00270	0.0254
CBG	0.111	1.11	0.00276	0.0317
CBDA	<LOQ	<LOQ	0.00400	0.0635
CBDVA	ND	ND	0.00427	0.0254
CBDV	ND	ND	0.0121	0.0254
CBD	ND	ND	0.00492	0.0635
Δ9-THCV	ND	ND	0.00342	0.0254
Δ8-THCV	ND	ND	0.00620	0.0254
CBN	ND	ND	0.00435	0.0317
CBNA	ND	ND	0.00335	0.0254
Exo-THC	ND	ND	0.00508	0.0254
Δ8-THC	ND	ND	0.0111	0.0317
CBL	ND	ND	0.00752	0.0254
CBC	ND	ND	0.00301	0.0254
Total THC	18.9	189		
Total CBD	<LOQ	<LOQ		
Total Cannabinoids	23.3	233		

Total THC = Δ9-THC + (THCA x 0.877)

Total CBD = CBD + (CBDA x 0.877)

Total Cannabinoids = Sum of all cannabinoids without THC/CBD corrections.

LOD = Limit of Detection; **LOQ** = Limit of Quantitation; **ND** = Not Detected.

Certificate of Analysis

Terpenes Extended

Date Started: 07/12/2024
Instrument: GC-MS

Date Completed: 07/15/2024
Method: TP-09.004.03

Analyst: Yuemin Wang Kovaleff
Deviation: N/A

Terpene	Result (%)	Result (mg/g)	LOD (%)	LOQ (%)
Terpinolene	0.655	6.55	0.000792	0.00635
Z-beta-Ocimene	0.596	5.96	0.00257	0.00635
beta-Myrcene	0.341	3.41	0.00107	0.00635
E-Caryophyllene	0.276	2.76	0.00279	0.00635
D-Limonene	0.220	2.20	0.00134	0.00635
alpha-Humulene	0.123	1.23	0.00137	0.00635
Guaiol	0.0872	0.872	0.00138	0.00635
beta-Pinene	0.0597	0.597	0.00132	0.00635
alpha-Phellandrene	0.0569	0.569	0.000990	0.00635
alpha-Pinene	0.0524	0.524	0.000533	0.00635
Linalool	0.0407	0.407	0.00193	0.00635
alpha-Terpineol	0.0376	0.376	0.00240	0.00635
delta-3-Carene	0.0227	0.227	0.00207	0.00635
Endo-Fenchyl Alcohol	0.0206	0.206	0.00211	0.00635
alpha-Terpinene	0.0206	0.206	0.00195	0.00635
gamma-Terpinene	0.0117	0.117	0.00144	0.00635
[+/-]-Borneol	<LOQ	<LOQ	0.00245	0.0127
Cedrol	0.00857	0.0857	0.00259	0.00635
Carophyllene Oxide	0.00752	0.0752	0.00144	0.00635
Camphene	<LOQ	<LOQ	0.000701	0.00635
Nerol	<LOQ	<LOQ	0.00200	0.00635
Sabinene Hydrate	<LOQ	<LOQ	0.00212	0.00635
Geraniol	<LOQ	<LOQ	0.00198	0.00635
Eucalyptol	<LOQ	<LOQ	0.00192	0.00635
[+/-]-Fenchone	ND	ND	0.00141	0.0127
E-beta-Ocimene	ND	ND	0.00263	0.00635
gamma-Terpineol	ND	ND	0.00114	0.00635
Isopulegol	ND	ND	0.00308	0.00635
Pulegone	ND	ND	0.00241	0.00635
Valencene	ND	ND	0.00168	0.00635
Z-Nerolidol	ND	ND	0.00172	0.00635
E-Nerolidol	ND	ND	0.00145	0.00635
alpha-Bisabolol	ND	ND	0.00235	0.00635
Sabinene	ND	ND	0.00216	0.00635
Isoborneol	ND	ND	0.00136	0.00635
Menthol	ND	ND	0.00212	0.00635
alpha-Cedrene	ND	ND	0.00192	0.00635
Geranyl Acetate	ND	ND	0.00298	0.00635
[+,N,-]-Camphor	ND	ND	0.00469	0.0190
Total Terpenes	2.67	26.7		

Heavy Metals

 **PASS**

Date Started: 07/14/2024
Instrument: ICP-MS

Date Completed: 07/15/2024
Method: TP-09.007.01

Analyst: Eric Steele
Deviation: N/A

Heavy Metals	Result (ppb)	LOD (ppb)	LOQ (ppb)	Limit (ppb)	Status
Arsenic	<LOQ	7.23	48.9	200	Pass
Cadmium	ND	4.34	48.9	200	Pass
Lead	<LOQ	3.99	48.9	500	Pass
Mercury	ND	3.48	24.4	100	Pass

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Certificate of Analysis

Microbial Impurities

✓ PASS

Date Started: 07/12/2024
Instrument: TEMPO & Gene-Up

Date Completed: 07/16/2024
Method: TP-09.010.01 & TP-09.011.01

Analyst: Garrett Lane
Deviation: N/A

Microbials	Result (CFU/g)	Limit (CFU/g)	Status
Coliforms	ND	1000	Pass
Bile-Tolerant Gram-Negative Bacteria	ND	1000	Pass
Yeast & Mold	830	10000	Pass
Aerobic Bacteria	ND	100000	Pass
E.coli	ND		Pass
Salmonella	ND		Pass

Pesticides and Mycotoxins

✓ PASS

Date Started: 07/15/2024
Instrument: LC-MS/MS & GC-MS/MS

Date Completed: 07/17/2024
Method: TP-09.008.02 & TP-09.009.04

Analyst: Lana Rivera
Deviation: N/A

Analyte	Result (ppb)	LOD (ppb)	LOQ (ppb)	Limit (ppb)	Status
Bifenazate	ND	0.664	4.01	10.0	Pass
Bifenthrin	ND	1.41	4.01	10.0	Pass
Cyfluthrin	ND	0.533	3.35	10.0	Pass
Etoxazole	ND	0.974	4.01	10.0	Pass
Imazalil	ND	1.00	4.01	10.0	Pass
Imidacloprid	ND	0.468	4.01	10.0	Pass
Myclobutanil	ND	1.10	4.01	10.0	Pass
Spiromesifen	ND	1.17	4.01	10.0	Pass
Trifloxystrobin	ND	0.618	4.01	10.0	Pass
Aflatoxin B1	ND	2.18	5.35		
Aflatoxin B2	ND	0.431	4.01		
Aflatoxin G1	ND	0.447	4.01		
Aflatoxin G2	ND	1.13	5.35		
Ochratoxin A	ND	1.24	4.01		
Total Mycotoxins	ND	0.431	4.01	20.0	Pass



Eric Steele, Lab Director
07/17/2024

END OF REPORT