

Regulatory Compliance Testing Certificate of Analysis

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Client Name: Rolling Pines

Client Address: 2672 A Lower Centreville Rd, Liberty, MS

39645

License Number: MCUL002757 / MPRC001303

Sample Name: Northern Lights 1g FSO Syringe

Sample ID: MS10572

METRC ID (LOT#): 1A4230100007851000000272

Batch Number: 1A4230100007851000000241

Sample Matrix: Concentrate

Total Batch Size (#), Units in Batch (count):

Total Sample Weight (g), Units Sampled (count): 10

Sample Density(g/ml):

Servings Per Container (#):

Serving Mass (g):

Grams per Package:

Date Sampled: 3/5/2025

Date Received: 3/5/2025

Date Reported: 3/10/2025

Sample Result: PASS



Cannabinoids PASS

Standard potency analysis utilizing High Performance Liquid Chromatography (HPLC) | Test ID: #85939

Analyte	%	mg/g	LOD (mg/g)	LOQ (mg/g)
CBC	0.6136	6.136	0.0383	0.1155
CBD	14.2075	142.075	0.0562	0.1702
CBDA	ND	ND	0.0624	0.1881
CBDV	ND	ND	0.0695	0.2115
CBG	5.3946	53.946	0.0570	0.1733
CBGA	0.1975	1.975	0.0601	0.1819
CBN	0.9761	9.761	0.0546	0.1647
d8-THC	ND	ND	0.0445	0.1350
d9-THC	53.6638	536.638	0.0453	0.1366
THCA	0.7706	7.706	0.0468	0.1405
THCV	ND	ND	0.0554	0.1671

Total Cannabinoids					
	%	mg/g			
Total THC:	54.34	543.396			
Total CBD:	14.21	142.075			
Total Cannabinoids:	75.70	757.046			

Total theoretical THC % = (delta-9-THC%) + (THCA% * 0.877)







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Terpenes

Standard terpene analysis utilizing Gas Chromatography – Mass Spectrometry (GC-MS) | Test ID: #85942

Analyte	%	mg/g	LOD (mg/g)	LOQ (mg/g)	
trans-Caryophyllene	1.3836	13.836	0.014	0.043	
a-Terpinolene	1.2919	12.919	0.003	0.011	
Limonene	1.2549	12.549	0.006	0.018	
Myrcene	0.8335	8.335	0.006	0.018	
trans-Ocimene	0.4712	4.712	0.010	0.032	
Linalool	0.4459	4.459	0.007	0.022	
a-Pinene	0.436	4.36	0.003	0.009	
a-Humulene	0.3229	3.229	0.007	0.022	
beta-Pinene	0.3034	3.034	0.006	0.019	
a-Bisabolol	0.2243	2.243	0.017	0.051	
Guaiol	0.1484	1.484	0.013	0.039	
trans-Nerolidol	0.1389	1.389	0.007	0.021	
3-Carene	0.1174	1.174	0.005	0.016	
Carophyllene Oxide	0.1064	1.064	0.022	0.066	
alpha-Terpinene	0.0918	0.918	0.002	0.007	
Camphene	0.072	0.72	0.009	0.027	
Cineole	0.0553	0.553	0.008	0.024	
gamma-terpinene	0.0539	0.539	0.005	0.015	
Isopulegol	0.0526	0.526	0.016	0.048	
Geraniol	0.0201	0.201	0.021	0.064	
cis-Ocimene	0.0169	0.169	0.005	0.015	
cis-Nerolidol	ND	ND	0.007	0.021	
Total Terpenes	7.8413	78.413			

Heavy Metals

PASS

Heavy metals analysis utilizing Inductively Coupled Plasma Mass Spectrometry (ICP-MS) - Limit units: μg/kg | Test ID: #85940

Analyte	Pass/Fail	Result (ug/g)	Limit	LOD (ug/g)	LOQ (ug/g)
Arsenic	Pass	0.087	0.200	0.016	0.050
Cadmium	Pass	ND	0.200	0.022	0.067
Chromium	Pass	< LOQ	0.600	0.065	0.198
Copper	NT	NT	NT	0.083	0.251
Lead	Pass	ND	0.500	0.021	0.062
Mercury	Pass	ND	0.100	0.028	0.084
Nickel	Pass	< LOQ	0.500	0.055	0.166







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Pesticides PASS

Residual pesticide analysis utilizing Liquid and Gas Chromatography – Mass Spectrometry (LC-MSMS) - Limit units: ug/g = ppm | Test | D: #85943

Analyte	Pass/Fail	Result (µg/g)	Limit	LOD (µg/g)	LOQ (µg/g)
Abamectin	PASS	ND	0.500	0.001	0.002
Acephate	PASS	ND	0.400	0.015	0.047
Acequinocyl	PASS	ND	2.000	0.024	0.072
Acetamiprid	PASS	ND	0.200	0.002	0.006
Aldicarb	PASS	ND	0.400	0.005	0.015
Azoxystrobin	PASS	ND	0.200	0.002	0.006
Bifenazate	PASS	ND	0.200	0.002	0.007
Bifenthrin	PASS	ND	0.200	0.002	0.012
Boscalid	PASS	ND	0.400	0.004	0.012
Carbaryl	PASS	ND	0.200	0.008	0.023
Carbofuran	PASS	ND	0.200	0.001	0.005
Chlorantraniliprole	PASS	ND	0.200	0.004	0.011
Chlorfenapyr	PASS	ND	1.000	0.056	0.170
Chlormequat chloride	PASS	ND	0.200	0.004	0.013
Chlorpyrifos	PASS	ND	0.200	0.004	0.011
Clofentezine	PASS	ND	0.200	0.002	0.006
Cyfluthrin	PASS	ND	1.000	0.025	0.076
Cypermethrin	PASS	ND	1.000	0.010	0.029
Daminozide	PASS	ND	1.000	0.014	0.044
Diazinon	PASS	ND	0.200	0.001	0.004
Dichlorvos	PASS	ND	0.100	0.001	0.002
Dimethoate	PASS	ND	0.200	0.002	0.005
Ethoprophos	PASS	ND	0.200	0.002	0.006
Etofenprox	PASS	ND	0.400	0.009	0.029
Etoxazole	PASS	ND	0.200	0.001	0.004
Fenoxycarb	PASS	ND	0.200	0.002	0.005
Fenpyroximate	PASS	ND	0.400	0.002	0.007
Fipronil	PASS	ND	0.400	0.008	0.023
Flonicamid	PASS	ND	1.000	0.043	0.130
Fludioxonil	PASS	ND	0.400	0.010	0.030
Hexythiazox	PASS	ND	1.000	0.007	0.021
Imazalil	PASS	ND	0.200	0.007	0.008
Imidacloprid	PASS	ND	0.400	0.003	0.000
Kresoxim-methyl	PASS	ND	0.400	0.004	0.009
Malathion	PASS	ND	0.200	0.003	0.009
Metalaxyl	PASS	ND	0.200	0.003	0.008
Methiocarb	PASS	ND	0.200	0.002	0.005
Methomyl	PASS	ND	0.400	0.005	0.014
Methyl parathion	PASS	ND	0.200	0.005	0.016
Myclobutanil	PASS	ND	0.200	0.002	0.005
Naled	PASS	ND	0.500	0.004	0.012
Oxamyl	PASS	ND	1.000	0.013	0.040
Paclobutrazol	PASS	ND	0.400	0.009	0.028
Permethrins	PASS	ND	0.200	0.001	0.002
Phosmet	PASS	ND	0.200	0.001	0.004
Piperonyl Butoxide	PASS	ND	2.000	0.048	0.145
Prallethrin	PASS	ND	0.200	0.001	0.004
Propiconazole	PASS	ND	0.400	0.004	0.011
Propoxur Propoxur	PASS	ND	0.200	0.002	0.005
Pyrethrins	PASS	ND	1.000	0.000	0.001
Pyridaben	PASS	ND	0.200	0.001	0.004
Spinosad	PASS	ND	0.200	0.000	0.001
Spiromesifen	PASS	ND	0.200	0.001	0.003
Spirotetramat	PASS	ND	0.200	0.005	0.015
Spiroxamine	PASS	ND	0.400	0.002	0.006
Tebuconazole	PASS	ND	0.400	0.006	0.017
Thiacloprid	PASS	ND	0.200	0.000	0.017
Thiamethoxam	PASS	ND	0.200	0.002	0.007
Trifloxystrobin	PASS	ND	0.200	0.002	0.007
THIONYSUODIII	1 700	ND	0.200	0.013	0.040







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Mycotoxins PASS

Mycotoxins (LC-MS) - Limit units: ug/kg = ppb | Test ID: #85941

Analyte	Pass/Fail	Result (µg/kg)	Limit	LOD (µg/kg)
Aflatoxin B1	PASS	ND	20.0	0.679
Aflatoxin B2	PASS	ND	20.0	0.433
Aflatoxin G1	PASS	ND	20.0	0.373
Aflatoxin G2	PASS	ND	20.0	0.632
Ochratoxin A	PASS	ND	20.0	0.446

Residual Solvents

Pass

Residual solvents and processing chemicals analysis utilizing Headspace Gas Chromatography – Mass Spectrometry (HS-GC-MS) - Limit units: $\mu g/g$ | Test |D: #85944

Analyte	Pass/Fail	Result (µg/g)	Limit	LOD (µg/g)	LOQ (µg/g)
Propane	Pass	ND	5000	187.88	626.28
2-Methylpropane	Pass	ND	5000	93.50	311.66
n-Butane	Pass	ND	5000	99.75	332.51
Neopentane	Pass	ND	5000	248.23	827.43
Methanol	Pass	ND	3000	208.89	696.29
Isopentane	Pass	ND	5000	506.34	1687.79
n-Pentane	Pass	ND	5000	393.23	1310.76
Ethanol	Pass	ND	5000	346.28	1154.27
Ethyl Ether	Pass	ND	5000	400.67	1335.56
2,2-Dimethylbutane	Pass	ND	290	56.50	188.34
Acetone	Pass	ND	1000	42.17	140.57
Isopropanol	Pass	ND	5000	260.56	868.52
Acetonitrile	Pass	ND	410	54.54	181.79
2,3-Dimethylbutane	Pass	14.124	290	2.54	8.48
Dichloromethane	Pass	ND	600	14.22	47.41
2-Methylpentane	Pass	ND	290	47.80	159.35
3-Methylpentane	Pass	ND	290	53.27	177.57
n-Hexane	Pass	ND	290	49.79	165.98
Ethyl Acetate	Pass	ND	5000	334.29	1114.30
Chloroform	Pass	ND	60	1.04	3.46
Benzene	Pass	ND	2	0.18	0.61
Isopropyl Acetate	Pass	ND	5000	377.60	1258.67
n-Heptane	Pass	ND	5000	667.21	2224.02
Toluene	Pass	ND	890	68.95	229.84
Ethyl Benzene	Pass	ND	2170	181.59	605.30
m,p-Xylene	Pass	ND	2170	421.85	1406.18
o-Xylene	Pass	ND	2710	206.87	689.57
Total Xylene	Pass	ND	2170	6.90	22.99

Microbials PASS

Microbial analysis utilizing quantitative Polymerase Chain Reaction and microbial enumeration - Limit units: CFU/g

Analyte	e	Results (CFU/g)	Limit (CFU/g)	Pass/Fail	
Asperg	gillus Fumigatus	ND	Detectable in 1 gram	Pass	
Asperg	gillus Niger	ND	Detectable in 1 gram	Pass	
Asper	gillus Flavus1	ND	Detectable in 1 gram	Pass	
Asperg	gillus Terrus	ND	Detectable in 1 gram	Pass	
Shiga 1	Toxin E.Coli	ND	Detectable in 1 gram	Pass	
Salmor	nella	ND	Detectable in 1 gram	Pass	
Total Y	east and Mold	0	10,000 CFU/g	Pass	
Total C	Coliforms	0	100 CFU/g	Pass	







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Foreign Material Pass

Foreign Matter Inspection

Analyte Pass/Fail

Foreign Matter Pass

I hereby attest that all information contained within this report is complete and accurate, and further that all LQC samples have met required regulatory standards as enacted by the Mississippi Medical Cannabis Program as administered by the Mississippi Department of Health.

Whitney Maris

Whitney Morris Laboratory Director Date: 3/10/2025





