Pass



Certificate of Analysis

For R&D Use Only - Not a California Compliance Certificate.

Microbial Impurities

Pineapple Express





Total CBD	ND
Total THC	29.14 %
Total Cannabinoids	33.20 %
Analysis Summary	
Residual Pesticides	Pass
Mycotoxins	Pass
Heavy Metals	Pass

Sample Name:

Pineapple Express

Matrix:

Plant

Unit Mass:

1 g per unit

Sample ID:

47440801-9

Date Received:

8/1/2024

Approved By: Marie True, M.S. Laboratory Manager

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References: limit of detection (LOD), limit of quantitation (LOQ), not detected (ND), not tested (NT)



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Cannabinoid Analysis	Complete
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Analyte	LOD (%)	LOQ (%)	Mass (%)	Mass (mg/g)
CBDV	0.0035	0.011	ND	ND
CBD	0.0030	0.0090	ND	ND
CBG	0.0038	0.011	ND	ND
CBDA	0.0017	0.0052	ND	ND
CBN	0.00080	0.0024	ND	ND
Delta 9-THC	0.0022	0.0067	0.196	1.96
Delta 8-THC	0.0020	0.0059	ND	ND
CBC	0.00070	0.0021	ND	ND
THCA	0.0024	0.0073	33.006	330.06
Total CBD			ND	ND
Total THC			29.14	291.43
Total Cannabinoids			33.20	332.02

Date Tested: 8/1/2024

Total THC = THCa * 0.877 + d9-THC + d8-THC

Total CBD = CBDa * 0.877 + CBD

Pesticide Analysis Pass

Analyte	LOQ (ppm)	Limit (ppm)	Mass (ppm)	Status	
Abamectin	0.050	0.10	ND	Pass	
Acephate	0.050	0.10	ND	Pass	
Acequinocyl	0.050	0.10	ND	Pass	
Acetamiprid	0.050	0.10	ND	Pass	
Aldicarb	0.050	0.00	ND	Pass	
Azoxystrobin	0.050	0.10	ND	Pass	
Bifenazate	0.050	0.10	ND	Pass	
Bifenthrin	0.050	3.00	ND	Pass	
Boscalid	0.050	0.10	ND	Pass	
Captan	0.050	0.70	ND	Pass	
Carbaryl	0.050	0.50	ND	Pass	
Carbofuran	0.050	0.00	ND	Pass	
Chlorantraniliprole	0.050	10.00	ND	Pass	
Chlordane	0.050	0.00	ND	Pass	
Chlorfenapyr	0.050	0.00	ND	Pass	
Chlorpyrifos	0.050	0.00	ND	Pass	
Clofentezine	0.050	0.10	ND	Pass	
Coumaphos	0.050	0.00	ND	Pass	
Cyfluthrin	0.050	2.00	ND	Pass	
Cypermethrin	0.050	1.00	ND	Pass	
Daminozide	0.050	0.00	ND	Pass	
DDVP	0.050	0.00	ND	Pass	
Diazinon	0.050	0.10	ND	Pass	
Dimethoate	0.050	0.00	ND	Pass	
Dimethomorph	0.050	2.00	ND	Pass	
Ethoprophos	0.050	0.00	ND	Pass	
Etofenprox	0.050	0.00	ND	Pass	
Etoxazole	0.050	0.10	ND	Pass	
Fenhexamid	0.050	0.10	ND	Pass	
Fenoxycarb	0.050	0.00	ND	Pass	
Fenpyroximate	0.050	0.10	ND	Pass	
Fipronil	0.050	0.00	ND	Pass	
Flonicamid	0.050	0.10	ND	Pass	
Fludioxonil	0.050	0.10	ND	Pass	



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Pesticide Analysis Pass

Analyte	LOQ (ppm)	Limit (ppm)	Mass (ppm)	Status	
Hexythiazox	0.050	0.10	ND	Pass	
lmazalil	0.050	0.00	ND	Pass	
Imidacloprid	0.050	5.00	ND	Pass	
Kresoxim Methyl	0.050	0.10	ND	Pass	
Malathion	0.050	0.50	ND	Pass	
Metalaxyl	0.050	2.00	ND	Pass	
Methiocarb	0.050	0.00	ND	Pass	
Methomyl	0.050	1.00	ND	Pass	
Methyl Parathion	0.050	0.00	ND	Pass	
1evinphos	0.050	0.00	ND	Pass	
lyclobutanil	0.050	0.10	ND	Pass	
laled	0.050	0.10	ND	Pass	
xamyl	0.050	0.50	ND	Pass	
aclobutrazol	0.050	0.00	ND	Pass	
entachloronitrobenzene	0.050	0.10	ND	Pass	
ermethrin	0.050	0.50	ND	Pass	
nosmet	0.050	0.10	ND	Pass	
peronyl Butoxide	0.050	3.00	ND	Pass	
allethrin	0.050	0.10	ND	Pass	
ropiconazole	0.050	0.10	ND	Pass	
opoxur	0.050	0.00	ND	Pass	
vrethrins	0.050	0.50	ND	Pass	
yridaben	0.050	0.10	ND	Pass	
pinetoram	0.050	0.10	ND	Pass	
pinosad	0.050	0.10	ND	Pass	
piromesifen	0.050	0.10	ND	Pass	
pirotetramat	0.050	0.10	ND	Pass	
piroxamine	0.050	0.00	ND	Pass	
ebuconazole	0.050	0.10	ND	Pass	
hiacloprid	0.050	0.00	ND	Pass	
⁻ hiamethoxam	0.050	5.00	ND	Pass	
Trifloxystrobin	0.050	0.10	ND	Pass	

Date Tested: 8/1/2024



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Analyte	LOQ (µg/g)	Limit (µg/g)	Mass (µg/g)	Status
Aflatoxin B1	0.02	0.02	ND	Pass
Aflatoxin B2	0.02	0.02	ND	Pass
Aflatoxin G1	0.02	0.02	ND	Pass
Aflatoxin G2	0.02	0.02	ND	Pass
Ochratoxin A	0.02	0.02	ND	Pass

Date Tested: 8/1/2024

Mycotoxins

Heavy Metals Analysis

Pass

Pass

Analyte	LOQ (μg/g)	Limit (µg/g)	Mass (µg/g)	Status
Arsenic	0.050	0.200	ND	Pass
Cadmium	0.050	0.200	ND	Pass
Lead	0.125	0.500	0.194	Pass
Mercury	0.025	0.100	ND	Pass

Date Tested: 8/2/2024

Microbial Analysis Pass

Test	Result (CFU/g)	Status	
Aspergillus flavus	Absent / 1g	Pass	
Aspergillus fumigatus	Absent / 1g	Pass	
Aspergillus niger	Absent / 1g	Pass	
Aspergillus terreus	Absent / 1g	Pass	
Shiga-toxin producing Escherichia coli	Absent / 1g	Pass	
Salmonella	Absent / 1g	Pass	

Date Tested: 8/2/2024

CFU = Colony Forming Units



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Method References: **Testing Location**

Cannabinoid Profile (UNODC)

FESA Labs - Santa Ana, CA

Official Methods of Analysis, Method 2018.11.AOAC INTERNATIONAL (modified), Lukas Vaclavik, Frantisek Benes, Alex Krmela, Veronika Svobodova, Jana Hajsolva, and Katerina Mastovska, "Quantification of Cannabinoids in Cannabis Dried Plant Materials, Concentrates, and Oils Liquid Chromatography-Diode Array Detection Technique with Optional Mass Spectrometric Detection," First Action Method, Journal of AOAC International, Future Issue

United Nations Office on Drugs and Crime - Recommended methods for identification and analysis of cannabis and cannabis products

Multi-Residue Pesticide Analysis - (AOAC_200701)

FESA Labs - Santa Ana, CA

Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified)

CEN Standard Method EN 15662: Food of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS method.

Mycotoxins Analysis - 5 compounds (FDA_MYC)

FESA Labs - Santa Ana, CA

Determination of Mycotoxins in Corn, Peanut Butter and Wheat Flour Using Stable Isotope Dilution Assay (SIDA) and Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) (modified).

Heavy Metals Analysis - 4 elements (EPA_200.8)

FESA Labs - Santa Ana, CA

Methods for the Determination of Metals in Environmental Standards - Supplement 1, EPA-600/R-94-111, May 1994.

"Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma-Mass Spectrometry", USEPA Method 200.8, Revision 5.1, EMMC Version (modified)

Microbial Analysis - (FDABAM_4A_5_18)

FESA Labs - Santa Ana, CA

U.S. Food and Drug Administration, Bacteriological Analytical Manual, Chapter 4A, Diarrheagenic Escherichia coli; Chapter 5, Salmonella; Chapter 18, Yeasts, Molds and Mycotoxins (modified).

Testing Location:

FESA Labs

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