



DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

HAPPY FRUIT
6500 S. QUEBEC ST.
CENTENNIAL, CO 80111

Batch # N01632
Batch Date: 2022-03-01
Extracted From: Hemp

Sampling Method: MSP 7.3.1
Test Reg State: Florida

Order # HAP220414-090001
Order Date: 2022-04-14
Sample # AAC167

Sampling Date: 2022-04-18
Lab Batch Date: 2022-04-18
Completion Date: 2022-04-25

Initial Gross Weight: 93.500 g

Number of Units: 3
Net Weight per Unit: 26466.667 mg



Potency
Tested

Terpenes
Tested

Heavy Metals
Passed

Mycotoxins
Passed

Pesticides
Passed

Residual Solvents
Passed

Listeria
Monocytogenes
Passed

Pathogenic
Passed

Product Image

Delta 8/Delta 10 Potency 12

Specimen Weight: 1534.400 mg

Analyte	LOD (%)	LOQ (%)	Result (mg/g)	(%)
Delta-8 THC	0.000026	0.001	8.970	0.897
THCV	0.000007	0.001	1.310	0.131
CBGA	0.000008	0.001	0.020	0.002
CBN	0.000014	0.001	0.020	0.002
CBDA	0.00001	0.001	<LOQ	<LOQ
CBDV	0.000065	0.001	<LOQ	<LOQ
CBD	0.000054	0.001	<LOQ	<LOQ
THCA	0.000032	0.001	<LOQ	<LOQ
Delta-9 THC	0.000013	0.001	<LOQ	<LOQ
CBG	0.000248	0.001	<LOQ	<LOQ
Delta-10 THC	0.000003	0.001	<LOQ	<LOQ
CBC	0.000018	0.001	<LOQ	<LOQ

Tested
(LCUV)

Potency Summary

Total Delta 8 0.897% 237.410mg	Total Delta 10 None Detected
Total THC None Detected	Total CBD None Detected
Total CBG 0.001% 0.260mg	Total CBN 0.002% 0.530mg
Other Cannabinoids 0.131% 34.670mg	Total Cannabinoids 1.031% 272.870mg

Terpenes Summary

Analyte	Result (mg/g)	(%)
(R)-(+)-Limonene	0.084	0.008%
cis-Nerolidol	0.057	0.006%

Total Terpenes: 0.014%

Detailed Terpenes Analysis is on the following page

Xueli Gao
Ph.D., DABT
Lab Toxicologist

Aixia Sun
D.H.Sc., M.Sc., B.Sc., MT (AAB)
Lab Director/Principal Scientist



Definitions and Abbreviations used in this report: *Total CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), *Total THC = THCA-A * 0.877 + Delta 9 THC, *Total THCV = THC + (THCVA * 0.87), *CBG Total = (CBGA * 0.877) + CBG, *CBN Total = (CBNA * 0.877) + CBN, *Total CBC = CBC + (CBCA * 0.877), *Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, *Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, *Total Detected Cannabinoids = Delta6a10a-THC + Delta8-THC + Total CBN + CBT + Delta8-THCV + Total CBG + Total CBD + Total THC + CBL + Total THC + Total CBC + Total CBDV + Delta10-THC + Total THC-O-Acetate, *Analyte Details above show the Dry Weight Concentrations unless specified as 12% moisture concentration, (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram (cfu/g) = Colony Forming Unit per Gram, LOD = Limit of Detection, (µg/g) = Microgram per Gram (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = aw (area ratio) = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.



DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

HAPPY FRUIT
6500 S. QUEBEC ST.
CENTENNIAL, CO 80111

Batch # N01632
Batch Date: 2022-03-01
Extracted From: Hemp

Sampling Method: MSP 7.3.1
Test Reg State: Florida

Order # HAP220414-090001
Order Date: 2022-04-14
Sample # AAC5167

Sampling Date: 2022-04-18
Lab Batch Date: 2022-04-18
Completion Date: 2022-04-25

Initial Gross Weight: 93.500 g

Number of Units: 3
Net Weight per Unit: 26466.667 mg

Terpenes Tested (GC/GCMS)

Specimen Weight: 1825.100 mg

Dilution Factor: 20.000

Analyte	LOQ (%)	Result (mg/g)	(%)	Analyte	LOQ (%)	Result (mg/g)	(%)
(R)-(+)-Limonene	0.002	0.084	0.008	Fenchyl Alcohol	0.002		<LOQ
cis-Nerolidol	0.002	0.057	0.006	Gamma-Terpinene	0.002		<LOQ
(+)-Cedrol	0.002		<LOQ	alpha-Terpinene	0.002		<LOQ
Geranyl acetate	0.002		<LOQ	3-Carene	0.002		<LOQ
Guaiol	0.002		<LOQ	alpha-Bisabolol	0.002		<LOQ
Hexahydrothymol	0.002		<LOQ	alpha-Cedrene	0.002		<LOQ
Isoborneol	0.002		<LOQ	alpha-Humulene	0.002		<LOQ
Isopulegol	0.002		<LOQ	alpha-Phellandrene	0.002		<LOQ
Linalool	0.002		<LOQ	alpha-Pinene	0.002		<LOQ
Ocimene	0.000		<LOQ	beta-Myrcene	0.002		<LOQ
Nerol	0.002		<LOQ	Fenchone	0.002		<LOQ
Pulegone	0.002		<LOQ	beta-Pinene	0.002		<LOQ
Sabinene	0.002		<LOQ	Borneol	0.004		<LOQ
Sabinene Hydrate	0.002		<LOQ	Camphene	0.002		<LOQ
Terpinolene	0.002		<LOQ	Camphors	0.006		<LOQ
Total Terpeneol	0.001		<LOQ	Caryophyllene oxide	0.002		<LOQ
trans-Caryophyllene	0.002		<LOQ	Eucalyptol	0.002		<LOQ
trans-Nerolidol	0.002		<LOQ	Farnesene	0.002		<LOQ
Geraniol	0.002		<LOQ	Valencene	0.002		<LOQ

Total Terpenes: 0.014%

Mycotoxins

Specimen Weight: 267.810 mg

Dilution Factor: 5.601

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Aflatoxin B1	6	20	<LOQ	Aflatoxin G2	6	20	<LOQ
Aflatoxin B2	6	20	<LOQ	Ochratoxin A	12	20	<LOQ
Aflatoxin G1	6	20	<LOQ				

Passed (LCMS)

Heavy Metals

Specimen Weight: 251.470 mg

Dilution Factor: 198

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	100	1500	<LOQ	Lead (Pb)	100	500	<LOQ
Cadmium (Cd)	100	500	<LOQ	Mercury (Hg)	100	3000	<LOQ

Passed (ICP-MS)

Xueli Gao
Xueli Gao Lab Toxicologist
Ph.D., DABT

Aixia Sun
Aixia Sun Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



Definitions and Abbreviations used in this report: *Total CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), *Total THC = THCA-A * 0.877 + Delta 9 THC, *Total THCV = THCV + (THCVA * 0.87), *CBG Total = (CBGA * 0.877) + CBG, *CBN Total = (CBNA * 0.877) + CBN, *Total CBC = CBC + (CBCA * 0.877), *Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, *Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, *Total Detected Cannabinoids = Delta9a10a-THC + Delta8-THC + Total CBN + CBT + Delta8-THCV + Total CBG + Total CBD + Total THCV + CBL + Total THC + Total CBC + Total CBDV + Delta10-THC + Total THC-O-Acetate, *Analyte Details above show the Dry Weight Concentrations unless specified as 12% moisture concentration. (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram (cfu/g) = Colony Forming Unit per Gram, LOD = Limit of Detection, (µg/g) = Microgram per Gram (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = aw (area ratio) = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.





DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

HAPPY FRUIT
6500 S. QUEBEC ST.
CENTENNIAL, CO 80111

Batch # N01632
Batch Date: 2022-03-01
Extracted From: Hemp

Sampling Method: MSP 7.3.1
Test Reg State: Florida

Order # HAP220414-090001
Order Date: 2022-04-14
Sample # AAC167

Sampling Date: 2022-04-18
Lab Batch Date: 2022-04-18
Completion Date: 2022-04-25

Initial Gross Weight: 93.500 g

Number of Units: 3
Net Weight per Unit: 26466.667 mg

Pesticides FL V4

Specimen Weight: 267.810 mg

Passed
(LCMS/GCMS)



Residual Solvents - FL (CBD)

Specimen Weight: 10.500 mg

Passed
(GCMS)

Dilution Factor: 5.601

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	28.23	300	<LOQ	Fludioxonil	48	3000	<LOQ
Acephate	30	3000	<LOQ	Hexythiazox	30	2000	<LOQ
Acequinocyl	48	2000	<LOQ	Imazail	30	100	<LOQ
Acetamiprid	30	3000	<LOQ	Imidacloprid	30	3000	<LOQ
Aldicarb	30	100	<LOQ	Kresoxim Methyl	30	1000	<LOQ
Azoxystrobin	10	3000	<LOQ	Malathion	30	2000	<LOQ
Bifenazate	30	3000	<LOQ	Metaxalyl	10	3000	<LOQ
Bifenthrin	30	500	<LOQ	Methiocarb	30	100	<LOQ
Boscalid	10	3000	<LOQ	Methomyl	30	100	<LOQ
Captan	30	3000	<LOQ	methyl-Parathion	10	100	<LOQ
Carbaryl	10	500	<LOQ	Mevinphos	10	100	<LOQ
Carbofuran	10	100	<LOQ	Myclobutanil	30	3000	<LOQ
Chlorantraniliprole	10	3000	<LOQ	Naled	30	500	<LOQ
Chlordane	10	100	<LOQ	Oxamyl	30	500	<LOQ
Chlorfenapyr	30	100	<LOQ	Paclotrazol	30	100	<LOQ
Chloromequat Chloride	10	3000	<LOQ	Pentachloronitrobenzene	10	200	<LOQ
Chlorpyrifos	30	100	<LOQ	Permethrin	30	1000	<LOQ
Clofentezine	30	500	<LOQ	Phosmet	30	200	<LOQ
Coumaphos	48	100	<LOQ	Piperonylbutoxide	30	3000	<LOQ
Cyfluthrin	30	1000	<LOQ	Prallethrin	30	400	<LOQ
Cypermethrin	30	1000	<LOQ	Propiconazole	30	1000	<LOQ
Daminozide	30	100	<LOQ	Propoxur	30	100	<LOQ
Diazinon	30	200	<LOQ	Pyrethrins	30	1000	<LOQ
Dichlorvos	30	100	<LOQ	Pyridaben	30	3000	<LOQ
Dimethoate	30	100	<LOQ	Spinetoram	30	3000	<LOQ
Dimethomorph	48	3000	<LOQ	Spinosad	30	3000	<LOQ
Ethoprophos	30	100	<LOQ	Spiromesifen	30	3000	<LOQ
Etofenprox	30	100	<LOQ	Spirotetramat	30	3000	<LOQ
Etoxazole	30	1500	<LOQ	Spiroxamine	30	100	<LOQ
Fenhexamid	10	3000	<LOQ	Tebuconazole	30	1000	<LOQ
Fenoxycarb	30	100	<LOQ	Thiacloprid	30	100	<LOQ
Fenpyroximate	30	2000	<LOQ	Thiamethoxam	30	1000	<LOQ
Fipronil	30	100	<LOQ	Trifloxystrobin	30	3000	<LOQ
Fonicamid	30	2000	<LOQ				

Dilution Factor: 1.000

Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)	Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)
1,1-Dichloroethene	0.16	8	<LOQ	Heptane	1.39	5000	<LOQ
1,2-Dichloroethane	0.04	5	<LOQ	Hexane	1.17	290	<LOQ
Acetone	2.08	5000	<LOQ	Isopropyl alcohol	1.39	500	<LOQ
Acetonitrile	1.17	410	<LOQ	Methanol	0.69	3000	<LOQ
Benzene	0.02	2	<LOQ	Methylene chloride	2.43	600	<LOQ
Butanes	2.5	2000	<LOQ	Pentane	2.08	5000	<LOQ
Chloroform	0.04	60	<LOQ	Propane	5.83	2100	<LOQ
Ethanol	2.78	5000	Passed	Toluene	2.92	890	<LOQ
Ethyl Acetate	1.11	5000	<LOQ	Total Xylenes	2.92	2170	<LOQ
Ethyl Ether	1.39	5000	<LOQ	Trichloroethylene	0.49	80	<LOQ
Ethylene Oxide	0.1	5	<LOQ				

Pathogenic SAE (qPCR)

Specimen Weight: 239.930 mg

Passed
(qPCR)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result (cfu/g)	Analyte	Action Level (cfu/g)	Result (cfu/g)
Aspergillus (Flavus, Fumigatus, Niger, Terreus)	1	Absence in 1g	Salmonella	1	Absence in 1g
E.Coli	1	Absence in 1g			

Listeria Monocytogenes

Specimen Weight: 977.910 mg

Passed
(qPCR)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result (cfu/g)
Listeria Monocytogenes	1	Absence in 1g

Xueli Gao
Ph.D., DABT
Lab Toxicologist

Aixia Sun
D.H.Sc., M.Sc., B.Sc., MT (AAB)
Lab Director/Principal Scientist

Definitions and Abbreviations used in this report: *Total CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), *Total THC = THCA-A * 0.877 + Delta 9 THC, *Total THCV = THCV + (THCVA * 0.87), *CBG Total = (CBGA * 0.877) + CBG, *CBN Total = (CBNA * 0.877) + CBN, *Total CBC = CBC + (CBCA * 0.877), *Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, *Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, *Total Detected Cannabinoids = Delta6a10a-THC + Delta8-THC + Total CBN + CBT + Delta8-THCV + Total CBG + Total CBD + Total THCV + CBL + Total THC + Total CBC + Total CBDV + Delta10-THC + Total THC-O-Acetate, *Analyte Details above show the Dry Weight Concentrations unless specified as 12% moisture concentration, (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram (cfu/g) = Colony Forming Unit per Gram, LOD = Limit of Detection, (µg/g) = Microgram per Gram (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = aw (area ratio) = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%

This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. Accredited by a third-party accrediting body as a competent testing laboratory pursuant to ISO/IEC 17025 of the International Organization for Standardization.

