

Certificate of Analysis- Pure Analytics InfoTest™

Customer Name: Market and Mission
Sample Name: Natural CBD Batch 5050
Lab Sample I.D.: MKT0014-1
Sample Type: Concentrate - Oil
Date Received: 7/8/2019
Date Tested: 7/8/2019-7/10/2019
Date Reported: 7/10/2019
QC Batch(es): PA15571-572,574-579
Tests Performed: Cannabinoids, Micro (S,E,A), Pesticides, Terpenes, RSA, Filth & Foreign Material, Heavy Metals, Mycotoxins

Results Summary:		Microbiology Analysis:	
Item	Report Status	Analysis	PASS/FAIL
Overall Sample	NA	E. coli	PASS
Cannabinoids	NA	Salmonella	PASS
Pesticides	PASS	Aspergillus	PASS
Residual Solvent	PASS	nigers	PASS
Moisture	NT	terreus	PASS
Microbiological Contamination	PASS	flavus	PASS
Filth & Foreign	PASS	fumigatus	PASS
Mycotoxins	PASS	Water Activity	NT
Heavy Metals	PASS	Moisture %	NT

Methods: Aspergillus, Standard Methods; Total Coliform/E.coli- AOAC 991.14; Aspergillus Salmonella- OMA 2014.01;

Cannabinoid Analysis:

THC	THCA	d-8 THC	CBD	CBDA	CBN	CBC	CBCA	CBG	CBGA	CBL	THCV	THCVA	CBDV	CBDVA	Total THC*	Total
% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.
ND	ND	ND	49.72%	2.06%	5.64%	9.60%	ND	1.75%	ND	ND	ND	ND	0.91%	ND	NA	69.69%
mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g
ND	ND	ND	497.21	20.57	56.41	96.04	ND	17.53	ND	ND	ND	ND	9.11	ND	NA	696.86
mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Flowers Reported on % DRY WT. Basis; *Total THC=(THCA * 0.877) + THC + d-8 THC
 Method: Extraction by Methanol, IPA, Acetonitrile or Ethanol with sonication and HPLC-DAD confirmation analysis as needed by GC-FID analysis

Residual Solvent:

Method: Full Evaporation Technique by GC-MS-FID/ECD.

CA CATEGORY 1

Compound	(ug/g)	Inhal. Action Lim. (ug/g)	Other Action Lim. (ug/g)	PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES:
1,2-Dichloroethane	ND	1.0	1.0	PASS	1.00	0.80	
Benzene	ND	1.0	1.0	PASS	1.00	0.20	
Chloroform	ND	1.0	1.0	PASS	1.00	0.20	
Ethylene Oxide	ND	1.0	1.0	PASS	1.00	0.80	
Methylene chloride	ND	1.0	1.0	PASS	1.00	0.80	
Trichloroethylene	ND	1.0	1.0	PASS	1.00	0.20	

CA CATEGORY 2

Compound	(ug/g)	Inhal. Action Lim. (ug/g)	Other Action Lim. (ug/g)	PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES:
n-Butane	ND	5000	5000	PASS	2.0	0.50	
n-Pentane	35.1	5000	5000	PASS	2.0	0.50	
Acetone	3.2	5000	5000	PASS	2.0	0.50	
Ethanol	ND	5000	5000	PASS	2.0	0.50	
n-Hexane	ND	290	290	PASS	2.0	0.50	
Methanol	ND	3000	3000	PASS	2.0	0.50	
2-Propanol	ND	5000	5000	PASS	2.0	0.50	
Acetonitrile	ND	410	410	PASS	5.0	1.00	
Ethyl acetate	ND	5000	5000	PASS	2.0	0.50	
n-Heptane	ND	5000	5000	PASS	2.0	0.50	
Ether	ND	5000	5000	PASS	2.0	0.50	
Toluene	ND	890	890	PASS	2.0	0.50	
Total xylenes	ND	2170	2170	PASS	2.0	0.50	
Propane	ND	5000	5000	PASS	2.0	0.50	
Total Cat. 1 & 2	38.4						

Heavy Metals:

block. Analysis using graphite furnace, atomic fluorescence spectroscopy, atomic absorption decomposition analysis

Compound	(ug/g)	Inhal. Action Lim. (ug/g)	Other Action Lim. (ug/g)	PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES:
Mercury	ND	0.1	3	PASS	0.03	0.006	
Lead	ND	0.5	0.5	PASS	0.10	0.020	
Cadmium	ND	0.2	0.5	PASS	0.02	0.004	
Arsenic	ND	0.2	1.5	PASS	0.20	0.040	

Homogeneity Testing:

Relative Standard Deviation **NT**
 Homogeneity Result **NT**

Label Claim Verification:

mg THC mg CBD
 Package Claim Verification Results
 % Difference **NA NA**
 PASS/FAIL

Filth and Foreign Material:

Inspection Results **PASS**
 Observations

Testing performed by:

Pure Analytics
 5468 Skylane Blvd Ste 102
 Santa Rosa, CA 95403
 CA License #: C8-0000018-LIC

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Approved by: *Samantha J. Miller*

Certificate of Analysis- Pure Analytics InfoTest™

Customer Name: *Market and Mission*

Sample Name: *Natural CBD Batch 5050*

Lab Sample I.D.: *MKT0014-1*

Pesticides Analysis:

Method: Acetone extraction with sonication, dSPE clean-up, LCMSMS and GC-ECD analysis

Compound	Result (ug/g)	OREGON Action Lim. (ug/g)	PASS/ FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES
CA CATEGORY I						
Aldicarb	ND	0.40	PASS	0.020	0.005	
Carbofuran	ND	0.20	PASS	0.010	0.001	
Chlordane	ND	0.10	PASS	0.010	0.005	
Chlorfenapyr	ND	1.00	PASS	0.100	0.020	
Chlorpyrifos	0.05	0.20	PASS	0.100	0.020	<LOQ
Coumaphos	ND	0.10	PASS	0.100	0.005	
Daminozide	ND	1.00	PASS	0.100	0.010	
Dichlorvos	ND	1.00	PASS	0.010	0.001	
Dimethoate	ND	0.20	PASS	0.100	0.020	
Ethoprop	0.04	0.20	PASS	0.100	0.020	<LOQ
Etofenprox	ND	0.40	PASS	0.010	0.001	
Fenoxycarb	ND	0.20	PASS	0.020	0.005	
Fipronil	ND	0.40	PASS	0.020	0.005	
Imazilil	ND	0.20	PASS	0.100	0.005	
Methiocarb	ND	0.20	PASS	0.100	0.005	
Parathion-methyl	ND	0.20	PASS	0.100	0.010	
Mevinphos	ND	0.10	PASS	0.100	0.050	
Paclbutrazole	ND	0.40	PASS	0.100	0.005	
Propoxur	ND	0.20	PASS	0.010	0.001	
Spiroxamine	ND	0.40	PASS	0.010	0.001	
Thiacloprid	ND	0.20	PASS	0.020	0.005	

Compound	Result (ug/g)	OREGON Action Lim. (ug/g)	PASS/ FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES
CA CATEGORY II						
Abamectin	ND	0.4	PASS	0.10	0.001	
Acephate	ND	0.4	PASS	0.10	0.02	
Acequinocyl	ND	2.0	PASS	0.02	0.02	
Acetamiprid	ND	0.2	PASS	0.02	0.02	
Azoxystrobin	ND	0.2	PASS	0.02	0.01	
Bifenazate	ND	0.2	PASS	0.02	0.001	
Bifenthrin	ND	0.2	PASS	0.10	0.005	
Boscalid	0.01	0.4	PASS	0.02	0.01	<LOQ
Captan	ND	0.7	PASS	0.01	0.005	
Cyfluthrin	ND	1.0	PASS	0.10	0.001	
Cypermethrin	ND	1.0	PASS	0.10	0.05	
Carbaryl	ND	0.2	PASS	0.02	0.001	
Chlorantranilprole	ND	0.2	PASS	0.02	0.01	
Clofentezine	ND	0.2	PASS	0.02	0.001	
Diazinon	ND	0.2	PASS	0.02	0.001	
Dimethomorph	ND	2.0	PASS	0.02	0.001	
Ettoxazole	0.01	0.2	PASS	0.02	0.005	<LOQ
Fenhexamid	ND	0.1	PASS	0.01	0.001	
Fenpyroximate	ND	0.4	PASS	0.02	0.01	
Fonicamid	ND	1.0	PASS	0.02	0.001	
Fludoxonil	ND	0.4	PASS	0.10	0.02	
Hexythiazox	ND	1.0	PASS	0.02	0.01	
Imidacloprid	ND	0.4	PASS	0.10	0.02	
Kresoxim-methyl	ND	0.4	PASS	0.02	0.02	
Malathion	ND	0.2	PASS	0.20	0.001	
Metalaxyl	ND	0.2	PASS	0.02	0.01	
Methomyl	ND	0.4	PASS	0.02	0.001	
Myclobutanil	ND	0.2	PASS	0.005	0.001	
Naled	ND	0.5	PASS	0.10	0.02	
Oxamyl	ND	1.0	PASS	0.05	0.01	
Pentachloronitrobenz.	ND	0.1	PASS	0.10	0.02	
Permethrin	ND	0.2	PASS	0.025	0.005	
Phosmet	ND	0.2	PASS	0.02	0.02	
Piperonyl butoxide	0.04	2.0	PASS	0.005	0.001	
Prallethrin	ND	0.2	PASS	0.02	0.01	
Propiconazole	ND	0.4	PASS	0.02	0.01	
Pyrethrins	ND	1.0	PASS	0.07	0.01	
Pyridaben	ND	0.2	PASS	0.02	0.001	
Spinetoram	ND	0.1	PASS	0.07	0.005	
Spinosad	ND	0.2	PASS	0.10	0.02	
Spiromesifen	ND	0.2	PASS	0.10	0.02	
Spirotetramat	ND	0.2	PASS	0.10	0.02	
Tebuconazole	ND	0.4	PASS	0.10	0.02	
Trifloxystrobin	ND	0.2	PASS	0.01	0.005	
Thiamethoxam	ND	0.2	PASS	0.10	0.01	

Mycotoxin Analysis:

Method: Acetone extraction with sonication, dSPE clean-up, LCMSMS analysis

Compound	Result (ug/kg)	Action lim. (ug/kg)	PASS/ FAIL	LOQ (ug/kg)	LOD (ug/kg)	NOTES
Aflatoxin B1	NA	NA	NA	2.0	0.5	
Aflatoxin B2	NA	NA	NA	2.0	0.5	
Aflatoxin G1	NA	NA	NA	2.0	0.5	
Aflatoxin G2	NA	NA	NA	2.0	0.5	
Total Aflatoxin	ND	<20 ug/kg	PASS	2.0	0.5	
Ochratoxin A	ND	<20 ug/kg	PASS	2.0	0.5	

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Certificate of Analysis- Pure Analytics InfoTest™

Customer Name: *Market and Mission*
Sample Name: *Natural CBD Batch 5050*
Lab Sample I.D.: *MKT0014-1*
Terpene Analysis:
Method: Methanol Extraction with Sonication and GC-FID Analysis

Compound	% wt.	Action lim. (ug/kg)	PASS/ FAIL	LOQ (ug/kg)	LOD (ug/kg)	NOTES
α-Pinene	ND	NA		0.01	0.005	
Camphene	ND	NA		0.01	0.005	
β-Pinene	ND	NA		0.01	0.005	
β-Myrcene	ND	NA		0.01	0.005	
3-Carene	ND	NA		0.01	0.005	
R-Limonene	ND	NA		0.01	0.005	
Eucalyptol	ND	NA		0.01	0.005	
Ocimene	ND	NA		0.01	0.005	
γ-Terpinene	ND	NA		0.01	0.005	
Terpinolene	ND	NA		0.01	0.005	
Linalool	ND	NA		0.01	0.005	
Fenchol	ND	NA		0.01	0.005	
(+)-Pulegone	ND	NA		0.01	0.005	
Menthol	ND	NA		0.01	0.005	
Borneol	ND	NA		0.01	0.005	
α-Terpineol	ND	NA		0.01	0.005	
Geraniol	ND	NA		0.01	0.005	
β-Caryophyllene	ND	NA		0.01	0.005	
α-Humulene	ND	NA		0.01	0.005	
Valencene	ND	NA		0.01	0.005	
Farnesene	ND	NA		0.01	0.005	
trans-Nerolidol	0.12%	NA		0.01	0.005	
cis-Nerolidol	ND	NA		0.01	0.005	
Guaiol	0.22%	NA		0.01	0.005	
α-Bisabolol	1.08%	NA		0.01	0.005	

Compound	% wt.	Action lim. (ug/kg)	PASS/ FAIL	LOQ (ug/kg)	LOD (ug/kg)	NOTES
Eicosane	ND	NA		0.01	0.005	
Camphor	ND	NA		0.01	0.005	
L-Fenchone	ND	NA		0.01	0.005	
Sabinene	ND	NA		0.01	0.005	
β-Caryoph. Ox.	0.13%	NA		0.01	0.005	
Phytol	ND	NA		0.01	0.005	
a-Phellandrene	ND	NA		0.01	0.005	
Total %	1.55%					

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