

REGULATORY COMPLIANCE TESTING

COMPLIANCE CERTIFICATE OF ANALYSIS

Sample ID: CW32230S04

CW ANALYTICAL LABORATORIES | 510.545.6984 | 851 81st Avenue, Suite D, Oakland, CA 94621 | License No. C8-18-000021-TEMP
 Distributor Name: Cann Distributors, Inc. | Distributor Address: 810 81st St Oakland, CA 94621 | Distributor License No. M11-18-000070-TEMP
 Manufacturer Name: CCSAC, Inc. | Manufacturer Address: 580 Julie Ann Way, Oakland, CA 94621 | Manufacturer License No. CDPH-T00000325

Batch ID: 580-120418-GG4-ND/NUG
GG4 Needle

Client Username: candistributors

CW Collection ID: NUGG181204-A4S

Primary Sample Size: 10 units

Date Sampled: 2018-12-04

Date Received: 2018-12-04

Date Expires: 2019-12-02

Total Batch Weight/Count: 511 units

Date Reviewed: December 18, 2018

Sample Type: Oil (Inhalable Prod.)

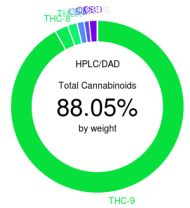
Overall Batch Status - Pass



Profiling by Liquid Chromatography - Pass

(SOP-014) | Date Performed: 2018-12-12

Cannabinoid	Percent	mg/g	LOQ (mg/g)	LOD (mg/g)	L.C. ^{A1}	L.C.Diff ^{A1}	Status
d9-THC	80.97	809.73	5.00	1.67	75.00	7.96%	Pass
d8-THC	2.17	21.73	5.00	1.67	-	-	Pass
THCA	1.58	15.84	5.00	1.67	-	-	Pass
THCV	<LOQ	<LOQ	5.00	1.67	-	-	Pass
CBG	1.16	11.58	5.00	1.67	-	-	Pass
CBGA	<LOQ	<LOQ	5.00	1.67	-	-	Pass
CBN	0.85	8.45	5.00	1.67	-	-	Pass
CBD	1.32	13.19	5.00	1.67	-	-	Pass
CBDV	ND ¹	ND ¹	5.00	1.67	-	-	Pass
CBDA	ND ¹	ND ¹	5.00	1.67	-	-	Pass
Total	88.05	880.52	NA	NA	-	-	-
Total THC	82.36	823.62	-	-	-	-	Pass
Total CBD	1.32	13.19	-	-	-	-	Pass



¹ND = Not Detected
^{A1}L.C. = Label Claim in Percentage
 Total THC = ((THCA*0.877)+ d9-THC) / Total CBD = ((CBDA*0.877)+ CBD)

Microbiological Screening - Pass

Petrifilm screening for microbiological contamination. [SOP-009] | Date Performed: 2018-12-05

	Analysis	Limit of Detection	Action Limits	Status
Shiga-Toxin E. Coli	ND	< 1 cfu/g	1 cfu/g	Pass
Salmonella	ND	< 1 cfu/g	1 cfu/g	Pass
Aspergillus niger	ND	< 1 cfu/g	1 cfu/g	Pass
Aspergillus flavus	ND	< 1 cfu/g	1 cfu/g	Pass
Aspergillus fumigatus	ND	< 1 cfu/g	1 cfu/g	Pass
Aspergillus terreus	ND	< 1 cfu/g	1 cfu/g	Pass
Pseudomonas	ND	< 1 cfu/g	1 cfu/g	Pass
APC	ND	< 1 cfu/g	100000 cfu/g	Pass
E. Coli	ND	< 1 cfu/g	10 cfu/g	Pass
Coliform	ND	< 1 cfu/g	500 cfu/g	Pass
Yeast & Mold	ND	< 1 cfu/g	10000 cfu/g	Pass

ND = Not Detected

Residual Solvent Analysis - Pass

Analysis of residual solvents. [SOP-011] | Date Performed: 2018-12-06

Solvent	ug/g	Action Limit	LOQ (ug/g)	LOD (ug/g)	Status
Benzene	ND ¹	0.00	1.00	0.33	Pass
Chloroform	ND ¹	0.00	1.00	0.33	Pass
1-2-Dichloroethane	ND ¹	0.00	1.00	0.33	Pass
Ethylene Oxide	ND ¹	0.00	1.00	0.33	Pass
Methylene Chloride	ND ¹	0.00	1.00	0.33	Pass
Trichloroethylene	ND ¹	0.00	1.00	0.33	Pass
Acetone	<LOQ	3100.00	150.00	10.00	Pass
Acetonitrile	ND ¹	6.00	6.00	2.30	Pass
Ethanol	ND ¹	5000.00	250.00	2.00	Pass
Ethyl Acetate	ND ¹	5000.00	250.00	2.00	Pass
Diethyl ether	ND ¹	5000.00	250.00	2.00	Pass
Heptane	ND ¹	5000.00	250.00	2.00	Pass
Hexane	ND ¹	70.00	6.00	2.00	Pass
Isopropanol	175.3	320.00	50.00	10.00	Pass
Methanol	ND ¹	400.00	50.00	10.00	Pass
N-Butane	ND ¹	5000.00	50.00	6.50	Pass
Pentane	ND ¹	5000.00	50.00	1.00	Pass
Propane	ND ¹	5000.00	200.00	10.00	Pass
Toluene	<LOQ	30.00	3.00	1.00	Pass
Total Xylenes	ND ¹	10.00	3.00	1.00	Pass

¹ND = Not Detected

CW uses its best efforts to deliver high-quality results and to verify that the data contained therein are based on sound scientific judgment. However, CW makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of these data in any way. Further, CW makes no claims regarding the representativeness of the analyzed sample to the larger batch from which it was taken. The limit of liability accepted by CW Analytical is limited to the total amount invoiced for services provided. As part of our strict confidentiality policy, CW can only discuss results with the original client of record. Comments? lab@cwanalytical.com



This sample was tested by CW Analytical Laboratories. Results are valid through the expiration date indicated.

Robert W Martin, PhD
 Robert W Martin, PhD

REGULATORY COMPLIANCE TESTING

COMPLIANCE CERTIFICATE OF ANALYSIS

Sample ID: CW32230S04

CW ANALYTICAL LABORATORIES | 510.545.6984 | 851 81st Avenue, Suite D, Oakland, CA 94621 | License No. C8-18-000021-TEMP
 Distributor Name: Cann Distributors, Inc. | Distributor Address: 810 81st St Oakland, CA 94621 | Distributor License No. M11-18-000070-TEMP
 Manufacturer Name: CCSAC, Inc. | Manufacturer Address: 580 Julie Ann Way, Oakland, CA 94621 | Manufacturer License No. CDPH-T00000325

Batch ID: 580-120418-GG4-ND/NUG
 GG4 Needle

Client Username: candistributors

CW Collection ID: NUGG181204-A4S

Primary Sample Size: 10 units

Date Sampled: 2018-12-04

Date Received: 2018-12-04

Date Expires: 2019-12-02

Total Batch Weight/Count: 511 units

Date Reviewed: December 18, 2018

Sample Type: Oil (Inhalable Prod.)

Overall Batch Status - Pass



Chemical Residue Screening - Pass

Targeted analysis of chemical residues. [SOP-017] | Date Performed: 2018-12-07

	ug/g	LOQ (ug/g)	LOD (ug/g)	Action Limit	Status		ug/g	LOQ (ug/g)	LOD (ug/g)	Action Limit	Status
Abamectin	ND ¹	0.04	0.01	0.10	Pass	Fludioxonil	ND ¹	0.03	0.01	0.10	Pass
Acephate	ND ¹	0.31	0.10	0.10	Pass	Hexythiazox	ND ¹	0.04	0.01	0.10	Pass
Acequinocyl	ND ¹	0.03	0.01	0.10	Pass	Imazalil	ND ¹	0.01	0.01	0.00	Pass
Acetamiprid	ND ¹	0.03	0.01	0.10	Pass	Imidacloprid	ND ¹	0.04	0.01	5.00	Pass
Aldicarb	ND ¹	0.04	0.01	0.00	Pass	Kresoxim-methyl	ND ¹	0.02	0.01	0.10	Pass
Azoxystrobin	ND ¹	0.02	0.01	0.10	Pass	Malathion	ND ¹	0.07	0.02	0.50	Pass
Bifenazate	ND ¹	0.03	0.01	0.10	Pass	Metalaxyl	ND ¹	0.01	0.01	2.00	Pass
Bifenthrin	ND ¹	0.17	0.06	3.00	Pass	Methiocarb	ND ¹	0.03	0.01	0.00	Pass
Boscalid	ND ¹	0.03	0.01	0.10	Pass	Methomyl	ND ¹	0.03	0.01	1.00	Pass
Captan	ND ¹	0.07	0.02	0.70	Pass	Mevinphos	ND ¹	0.03	0.01	0.00	Pass
Carbaryl	ND ¹	0.03	0.01	0.50	Pass	Myclobutanil	ND ¹	0.03	0.01	0.10	Pass
Carbofuran	ND ¹	0.02	0.01	0.00	Pass	Naled	ND ¹	0.06	0.02	0.10	Pass
Chlorantraniliprole	ND ¹	0.06	0.02	10.00	Pass	Oxamyl	ND ¹	0.04	0.01	0.50	Pass
Chlordane	ND ¹	0.12	0.04	0.00	Pass	Pacllobutrazol	ND ¹	0.03	0.01	0.00	Pass
Chlorfenapyr	ND ¹	0.06	0.02	0.00	Pass	Parathion methyl	ND ¹	0.14	0.05	0.00	Pass
Chlorpyrifos	ND ¹	0.13	0.04	0.00	Pass	PCNB	ND ¹	0.05	0.02	0.10	Pass
Clofentezine	ND ¹	0.04	0.01	0.10	Pass	Permethrin	ND ¹	0.05	0.02	0.50	Pass
Coumaphos	ND ¹	0.05	0.02	0.00	Pass	Phosmet	ND ¹	0.02	0.01	0.10	Pass
Cyfluthrin	ND ¹	0.13	0.04	2.00	Pass	Piperonyl butoxide	ND ¹	0.02	0.01	3.00	Pass
Cypermethrin	ND ¹	0.10	0.03	1.00	Pass	Prallethrin	ND ¹	0.07	0.02	0.10	Pass
Daminozide	ND ¹	0.05	0.02	0.00	Pass	Propiconazole	ND ¹	0.02	0.01	0.10	Pass
Diazinon	ND ¹	0.02	0.01	0.10	Pass	Propoxure	ND ¹	0.02	0.01	0.00	Pass
Dichlorvos	ND ¹	0.03	0.01	0.00	Pass	Pyrethrin	ND ¹	0.09	0.03	0.50	Pass
Dimethoate	ND ¹	0.05	0.02	0.00	Pass	Pyridaben	ND ¹	0.01	0.01	0.10	Pass
Dimethomorph	ND ¹	0.01	0.01	2.00	Pass	Spinetoram	ND ¹	0.03	0.01	0.10	Pass
Ethoprophos	ND ¹	0.05	0.02	0.00	Pass	Spinosad	ND ¹	0.02	0.01	0.10	Pass
Etofenprox	ND ¹	0.03	0.01	0.00	Pass	Spiromesifen	ND ¹	0.07	0.02	0.10	Pass
Etoxazole	ND ¹	0.02	0.01	0.10	Pass	Spirotetramat	ND ¹	0.03	0.01	0.10	Pass
Fenhexamid	ND ¹	0.03	0.01	0.10	Pass	Spiroxamine	ND ¹	0.03	0.01	0.00	Pass
Fenoxycarb	ND ¹	0.03	0.01	0.00	Pass	Tebuconazole	ND ¹	0.06	0.02	0.10	Pass
Fenpyroximate	ND ¹	0.03	0.01	0.10	Pass	Thiacloprid	ND ¹	0.02	0.01	0.00	Pass
Fipronil	ND ¹	0.04	0.01	0.00	Pass	Thiamethoxam	ND ¹	0.02	0.01	5.00	Pass
Fonicamid	ND ¹	0.04	0.01	0.10	Pass	Trifloxystrobin	ND ¹	0.04	0.01	0.10	Pass

¹ND = Not Detected
 NT = Not Tested

Heavy Metals Profiling - Pass

Analysis of Heavy Metals. [SOP-012] | Date Performed: 2018-12-07

	ug/g	LOQ(ug/g)	LOD(ug/g)	Action Limit	Status
Cadmium	ND ¹	0.03	0.01	0.2	Pass
Lead	0.35	0.06	0.02	0.5	Pass
Arsenic	ND ¹	0.06	0.02	0.2	Pass
Mercury	ND ¹	0.03	0.01	0.1	Pass

¹ND = Not Detected

Water Activity -

Analysis to determine water activity | Date Performed:

Aw	Action Limit (Aw)	Status

Foreign Material Analysis - Pass

Analysis to determine whether foreign material is present | Date Performed: 2018-12-05

Analysis	Status
Product within acceptable limits for all foreign material criteria.	Pass

CW uses its best efforts to deliver high-quality results and to verify that the data contained therein are based on sound scientific judgment. However, CW makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of these data in any way. Further, CW makes no claims regarding the representativeness of the analyzed sample to the larger batch from which it was taken. The limit of liability accepted by CW Analytical is limited to the total amount invoiced for services provided. As part of our strict confidentiality policy, CW can only discuss results with the original client of record. Comments? lab@cwanalytical.com



This sample was tested by CW Analytical Laboratories. Results are valid through the expiration date indicated.

Robert W Martin, PhD
 Robert W Martin, PhD

REGULATORY COMPLIANCE TESTING

COMPLIANCE CERTIFICATE OF ANALYSIS

Sample ID: CW32230S04

CW ANALYTICAL LABORATORIES | 510.545.6984 | 851 81st Avenue, Suite D, Oakland, CA 94621 | License No. C8-18-000021-TEMP
 Distributor Name: Cann Distributors, Inc. | Distributor Address: 810 81st St Oakland, CA 94621 | Distributor License No. M11-18-000070-TEMP
 Manufacturer Name: CCSAC, Inc. | Manufacturer Address: 580 Julie Ann Way, Oakland, CA 94621 | Manufacturer License No. CDPH-T00000325

Batch ID: 580-120418-GG4-ND/NUG
GG4 Needle

Client Username: candistributors

CW Collection ID: NUGG181204-A4S

Primary Sample Size: 10 units

Date Sampled: 2018-12-04

Date Received: 2018-12-04

Date Expires: 2019-12-02

Total Batch Weight/Count: 511 units

Date Reviewed: December 18, 2018

Sample Type: Oil (Inhalable Prod.)

Overall Batch Status - Pass



Mycotoxin Screening - Pass

Analysis of Mycotoxins. | Date Performed: 2018-12-07

	ug/kg	LOQ (ug/kg)	LOD (ug/kg)	Status
Aflatoxin B1	ND ¹	4.2	1.4	Pass
aflatoxin B2	ND ¹	4.2	1.4	Pass
Aflatoxin G1	ND ¹	4.2	1.4	Pass
Aflatoxin G2	ND ¹	4.2	1.4	Pass
Ochratoxin A	ND ¹	6.0	2.0	Pass

¹ND = Not Detected

Terpene Profiling -

Analysis of terpenes. [SOP-012] | Date Performed:

	PPM	mg/g	LOQ(mg/g)	LOD(mg/g)	L.C. ²	Status		PPM	mg/g	LOQ(mg/g)	LOD(mg/g)	L.C. ²	Status
b-Myrcene	NT						Camphor	NT					
Nerol	NT						Borneol	NT					
Nerolidol	NT						Pulegone	NT					
Ocimene	NT						Cedrol	NT					
a-Bisbolol	NT						b-Caryophyllene	NT					
Farnasene	NT						Elemene	NT					
Valencene	NT						Phellandrene	NT					
d3-Carene	NT						Isopulegol	NT					
d-Limonene	NT						Linalool	NT					
g-Terpinene	NT						(+)-Fenchone	NT					
a-Pinene	NT						a-Caryophyllene	NT					
Sabinene	NT						Guaiol	NT					
b-Pinene	NT						Bergamotene	NT					
Camphene	NT						Terpineol	NT					
Eucalyptol	NT						Terpinolene	NT					
(-)-Fenchone	NT						a-Terpinene	NT					
Fenchol	NT												

Total Terpenes 0.0 PPM

¹ND = Not Detected

²L.C. = Label Claim

Moisture: 0.0% - Pass

(LPG-001) | Date Performed: -

CW uses its best efforts to deliver high-quality results and to verify that the data contained therein are based on sound scientific judgment. However, CW makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of these data in any way. Further, CW makes no claims regarding the representativeness of the analyzed sample to the larger batch from which it was taken. The limit of liability accepted by CW Analytical is limited to the total amount invoiced for services provided. As part of our strict confidentiality policy, CW can only discuss results with the original client of record. Comments? lab@cwanalytical.com



This sample was tested by CW Analytical Laboratories. Results are valid through the expiration date indicated.

Robert W Martin
Robert W Martin, PhD