

CERTIFICATE OF ANALYSIS



SAMPLE INFORMATION

Sample Name: VVSE: GREEN APPLE TINCTURE
Sample Matrix: Tincture
Batch Id: VVS.SY.GA-001
Received: 03/12/2019 17:53
Serv. Per Sample: 400
Sample Size: 2 units

Sample Id: 69161
Collected: 03/12/2019 15:01
Serving Size: 5 DROPS
Batch Size: 50 units
Overall Result: **Pass**

DISTRIBUTOR INFO

Business Name: Green Rose Green Leaf Care, Inc.
Street Address: 1325 Saint Andrew Pl. E
State: CA
License: C11-18-0000671-TEMP

City: Santa Ana
Zip Code: 92705

MANUFACTURER INFO

Business Name: Stone Service Inc. DBA VVSE
Street Address: 300 E San Antonio Dr
State: CA
License: CDPH-T00002117

City: King City
Zip Code: 93930

CANNABINOID ANALYSIS

i Total THC,CBD value(s) have been decarboxylated.

TOTAL THC: 2.606 mg per serving (8.817 mg/mL) (0.7348 %)
TOTAL CBD: 0.0091 mg per serving (0.0307 mg/mL) (0.0026 %)
TOTAL CANNABINOIDS: 2.797 mg per serving (9.466 mg/mL) (0.7888 %)

TEST TYPE RESULT: N/A
UNIT OF MEASUREMENT: Milligrams per Milliliter(mg/mL)

ANALYTE	RESULT	LOD	LLOQ	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
D9THC	8.817 mg/mL (0.7348 %)	0.0020	0.0050	D8THC	ND	0.0020	0.0050	
THCa	ND	0.0020	0.0050	CBG	0.3217 mg/mL (0.0268 %)	0.0020	0.0050	
CBN	0.0681 mg/mL (0.0057 %)	0.0020	0.0050	CBD	0.0307 mg/mL (0.0026 %)	0.0020	0.0050	
CBDa	ND	0.0020	0.0050	CBGa	ND	0.0020	0.0050	
THCv	0.0835 mg/mL (0.0070 %)	0.0020	0.0050	CBC	0.1440 mg/mL (0.0120 %)	0.0020	0.0050	
CBDv	ND	0.0020	0.0050					

ADDITIONAL INFORMATION

Method: SOP-TECH-001
Instrument: HPLC-DAD

Sample Prepped 03/15/2019 14:09
Sample Analyzed 03/15/2019 16:38

Sample Approved 03/16/2019 16:38



CERTIFICATE OF ANALYSIS



CHEMICAL RESIDUE ANALYSIS

TEST TYPE RESULT: **Pass**
 UNIT OF MEASUREMENT: **Micrograms per Gram(ug/g)**

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Acephate	ND	0.0200	0.0400	5.000 Pass	Acequinocyl	ND	0.0200	0.0400	4.000 Pass
Acetamiprid	ND	0.0200	0.0400	5.000 Pass	Aldicarb	ND	0.0200	0.0400	0.0 Pass
Azoxystrobin	ND	0.0200	0.0400	40.00 Pass	Bifenazate	ND	0.0200	0.0400	5.000 Pass
Bifenthrin	ND	0.0200	0.0400	0.5000 Pass	Boscalid	ND	0.0200	0.0400	10.00 Pass
Carbaryl	ND	0.0200	0.0400	0.5000 Pass	Carbofuran	ND	0.0200	0.0400	0.0 Pass
Chlorantraniliprole	ND	0.0200	0.0400	40.00 Pass	Chlorfenapyr	ND	0.0200	0.0400	0.0 Pass
Chlorpyrifos	ND	0.0200	0.0400	0.0 Pass	Clofentezine	ND	0.0200	0.0400	0.5000 Pass
Cypermethrin	ND	0.0400	0.1000	1.000 Pass	Daminozide	ND	0.0200	0.0400	0.0 Pass
Dichlorvos	ND	0.0200	0.0400	0.0 Pass	Diazinon	ND	0.0200	0.0400	0.2000 Pass
Dimethoate	ND	0.0200	0.0400	0.0 Pass	Ethoprophos	ND	0.0200	0.0400	0.0 Pass
Etofenprox	ND	0.0200	0.0400	0.0 Pass	Etoxazole	ND	0.0200	0.0400	1.500 Pass
Fenoxycarb	ND	0.0200	0.0400	0.0 Pass	Fenpyroximate	ND	0.0200	0.0400	2.000 Pass
Fipronil	ND	0.0200	0.0400	0.0 Pass	Fonicamid	ND	0.0200	0.0400	2.000 Pass
Fludioxonil	ND	0.0200	0.0400	30.00 Pass	Hexythiazox	ND	0.0200	0.0400	2.000 Pass
Imazalil	ND	0.0200	0.0400	0.0 Pass	Imidacloprid	ND	0.0200	0.0400	3.000 Pass
KresoximMethyl	ND	0.0200	0.0400	1.000 Pass	Malathion	ND	0.0200	0.0400	5.000 Pass
Metalaxyl	ND	0.0200	0.0400	15.00 Pass	Methiocarb	ND	0.0200	0.0400	0.0 Pass
Methomyl	ND	0.0200	0.0400	0.1000 Pass	Myclobutanil	ND	0.0200	0.0400	9.000 Pass
Naled	ND	0.0200	0.0400	0.5000 Pass	Oxamyl	ND	0.0200	0.0400	0.2000 Pass
Paclobutrazol	ND	0.0200	0.0400	0.0 Pass	Phosmet	ND	0.0200	0.0400	0.2000 Pass
PiperonylButoxide	ND	0.0200	0.0400	8.000 Pass	Prallethrin	ND	0.0200	0.0400	0.4000 Pass
Propoxur	ND	0.0200	0.0400	0.0 Pass	Pyridaben	ND	0.0200	0.0400	3.000 Pass
Spiromesifen	ND	0.0200	0.0400	12.00 Pass	Spirotetramat	ND	0.0200	0.0400	13.00 Pass
Spiroxamine	ND	0.0200	0.0400	0.4000 Pass	Tebuconazole	ND	0.0200	0.0400	2.000 Pass
Thiacloprid	ND	0.0200	0.0400	0.0 Pass	Thiamethoxam	ND	0.0200	0.0400	4.500 Pass
Trifloxystrobin	ND	0.0200	0.0400	30.00 Pass	Abamectin	ND	0.0200	0.0400	0.3000 Pass
Cyfluthrin	ND	0.1000	0.2000	1.000 Pass	Permethrins	ND	0.0200	0.0400	20.00 Pass
Propiconazole	ND	0.0200	0.0400	20.00 Pass	Pyrethrins	ND	0.0374	0.1236	1.000 Pass
Spinosad	ND	0.0200	0.0400	3.000 Pass	Coumaphos	ND	0.0200	0.0400	0.0 Pass
Fenhexamid	ND	0.0200	0.0400	10.00 Pass	Spinetoram	ND	0.0200	0.0400	3.000 Pass
Dimethomorph	ND	0.0200	0.0400	20.00 Pass	Mevinphos	ND	0.0100	0.0200	0.0 Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-002
 Instrument: UPLC-MSMS

Sample Prepped 03/14/2019 16:23
 Sample Analyzed 03/14/2019 17:46

Sample Approved 03/15/2019 16:24



CERTIFICATE OF ANALYSIS

CHEMICAL RESIDUE GC ANALYSIS

TEST TYPE RESULT: **Pass**
 UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
Chlordane	ND	0.0400	0.1000	0.0	Pass	Captan	ND	0.0400	0.1000	5.000	Pass
PCNB	ND	0.0200	0.0400	0.2000	Pass	MethylParathion	ND	0.0400	0.1000	0.0	Pass

ADDITIONAL INFORMATION

Method: SOP-LAB-007 Sample Prepped 03/14/2019 14:51 Sample Approved 03/15/2019 10:07
 Instrument: GC-MS/MS Sample Analyzed 03/14/2019 18:58

RESIDUAL SOLVENT ANALYSIS

TEST TYPE RESULT: **Pass**
 UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL		ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	
Chloroform	ND	0.5000	1.000	1.000	Pass	Acetone	ND	5.000	10.00	5000	Pass
Methanol	ND	50.00	100.0	3000	Pass	Ethanol	ND	10.00	50.00	5000	Pass
Benzene	ND	0.5000	1.000	1.000	Pass	Toluene	ND	1.000	2.500	890.0	Pass
Pentane	ND	50.00	100.0	5000	Pass	Hexane	ND	0.5000	1.000	290.0	Pass
Heptane	ND	5.000	10.00	5000	Pass	Ethyl Acetate	ND	10.00	50.00	5000	Pass
Propane	ND	100.0	200.0	5000	Pass	Acetonitrile	ND	1.000	2.500	410.0	Pass
Ethyl Ether	ND	10.00	50.00	5000	Pass	1,2-Dichloroethane	ND	0.5000	1.000	1.000	Pass
Butane	ND	96.00	192.0	5000	Pass	Methylene chloride	ND	0.5000	1.000	1.000	Pass
Ethylene oxide	ND	0.5000	1.000	1.000	Pass	Isopropyl Alcohol	ND	5.000	10.00	5000	Pass
Trichloroethylene	ND	0.5000	1.000	1.000	Pass	Xylenes	ND	1.000	2.000	2170	Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-003 Sample Prepped 03/14/2019 12:11 Sample Approved 03/15/2019 12:45
 Instrument: HS-GC-MS-FID Sample Analyzed 03/14/2019 12:53



CERTIFICATE OF ANALYSIS

MICROBIAL ANALYSIS

TEST TYPE RESULT: **Pass**
UNIT OF MEASUREMENT: Cycle Threshold (Ct)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
A.fumigatus	ND	0.0	0.0	33.00 Pass	A. flavus	ND	0.0	0.0	33.00 Pass
A. niger	ND	0.0	0.0	33.00 Pass	A. terreus	ND	0.0	0.0	33.00 Pass
STEC	ND	0.0	0.0	33.00 Pass	Salmonella spp	ND	0.0	0.0	33.00 Pass

ADDITIONAL INFORMATION

Method: SOP-LAB--00? Sample Prepped 03/13/2019 16:49 Sample Approved 03/18/2019 16:08
Instrument: qPCR Sample Analyzed 03/15/2019 11:14

FILTH & FOREIGN MATERIAL

TEST TYPE RESULT: **Pass**
UNIT OF MEASUREMENT: Filth and Foreign Matter (%)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
SSCD	ND	0.0	0.0	25.00 Pass	Mold	ND	0.0	0.0	25.00 Pass
IF RH ME	ND	0.0	0.0	3.000 Pass	IFM	ND	0.0	0.0	25.00 Pass

ADDITIONAL INFORMATION

Method: SOP-LAB-007 Sample Prepped 03/13/2019 11:26 Sample Approved 03/14/2019 12:37
Instrument: Magnifying Glass Sample Analyzed 03/14/2019 12:01

HEAVY METALS

TEST TYPE RESULT: **Pass**
UNIT OF MEASUREMENT: Micrograms per Gram(ug/g)

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Lead	0.0251 ug/g	0.0	0.0050	0.5000 Pass	Mercury	<LLOQ	0.0	0.0050	3.000 Pass
Arsenic	ND	0.0	0.0050	1.500 Pass	Cadmium	<LLOQ	0.0	0.0050	0.5000 Pass

ADDITIONAL INFORMATION

Method: SOP-TECH-008 Sample Prepped 03/14/2019 11:29 Sample Approved 03/15/2019 17:23
Instrument: ICP-MS Sample Analyzed 03/15/2019 10:47



CERTIFICATE OF ANALYSIS

 **MYCOTOXINS**

TEST TYPE RESULT: **Pass**
UNIT OF MEASUREMENT: **Micrograms per Kilogram(ug/kg)**

ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL	ANALYTE	RESULT	LOD	LLOQ	ACTION LEVEL
Aflatoxins-B1-2-G1-2	ND	10.00	14.00	20.00 Pass	Ochratoxin A	ND	1.000	2.000	20.00 Pass

ADDITIONAL INFORMATION

Method: *SOP-TECH-009*
Instrument: *UPLC-MSMS*

Sample Prepped *03/14/2019 15:45*
Sample Analyzed *03/14/2019 17:47*

Sample Approved *03/15/2019 13:14*

This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented, or abstracted in any manner. Any violation of these conditions renders the report and its results void.

All LQC samples required by state regulations were performed and met the acceptance criteria.

DATA REVIEWED AND APPROVED BY

03/19/2019

Swetha Kaul, PhD
Chief Scientific Officer

Date

