

Certificate ID: **44301**  
 Client Sample ID: **Sapphire**  
 Lot Number: **D12018781**  
 Matrix: **Flowers/Bud - Dry**

 Received: **12/3/18**

 Scan QR Code  
 for authenticity

**DR.GANJA**

Authorization: Jon Podgorni, Lab Manager	Signature: <i>Jon Podgorni</i>	Date: 12/27/2018
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The data contained within this report was collected in accordance with the requirements of ISO/IEC17025:2005. I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the test article listed in this report. Reports may not be reproduced except in their entirety.

**CN: Cannabinoid Profile & Potency [WI-10-17]**

 Analyst: *JSG*

 Test Date: *12/26/2018*

The client sample was analyzed for plant-based cannabinoids by Liquid Chromatography (LC). The collected data was compared to data collected for certified reference standards at known concentrations.

**44301-CN**

ID	Weight %	Conc.	
D9-THC	0.07 wt %	0.67 mg/g	
THCV	ND	ND	
CBD	0.40 wt %	4.01 mg/g	
CBDV	ND	ND	
CBG	ND	ND	
CBC	0.02 wt %	0.25 mg/g	
CBN	ND	ND	
THCA	0.44 wt %	4.37 mg/g	
CBDA	13.49 wt %	134.91 mg/g	
CBGA	0.59 wt %	5.88 mg/g	
<b>Total</b>	<b>15.01 wt%</b>	<b>150.09 mg/g</b>	0% <b>Cannabinoids (wt%)</b> 13.5%
Max THC	0.45 wt%	4.50 mg/g	
Max CBD	12.23 wt%	122.33 mg/g	

**Ratio of Total CBD to THC 27.2:1**

Max THC (and Max CBD) are calculated values for total cannabinoids after heating, assuming complete decarboxylation of the acid to the neutral form. It is calculated based on the weight loss of the acid group during decarboxylation: Max THC = (0.877 x THCA) + THC. ND = None detected above the limits of detection (LLD)

# Sapphire

SAMPLE TYPE

**Flower**

RECEIVED

**01/11/19**

CUSTOMER

Dr.Ganja

REPORTED

**01/22/19**

STEEP HILL ID

**BK63645**

BATCH ID

**J10919D**

TEST NAME

**Extended Terpenes**

METHOD NAME

SOP-069

Terpene	%	mg/g	LOD mg/g	LOQ mg/g
$\alpha$ -Bisabolol	ND	ND	0.038	0.114
endo-Borneol	< LOQ	< LOQ	0.037	0.111
Camphene	<b>0.057</b>	<b>0.57</b>	0.038	0.113
Camphor	ND	ND	0.038	0.114
3-Carene	ND	ND	0.038	0.114
Caryophyllene Oxide	ND	ND	0.038	0.114
$\beta$ -Caryophyllene	<b>0.104</b>	<b>1.04</b>	0.038	0.114
$\alpha$ -Cedrene	ND	ND	0.037	0.110
Cedrol	ND	ND	0.038	0.114
Citronellol	ND	ND	0.037	0.111
Eucalyptol	ND	ND	0.038	0.114
$\alpha$ -Farnesene	ND	ND	0.0125	0.038
$\beta$ -Farnesene	<b>0.077</b>	<b>0.77</b>	0.026	0.077
Fenchol	<b>0.024</b>	<b>0.24</b>	0.037	0.111
Fenchone	<b>0.022</b>	<b>0.22</b>	0.037	0.111

ND - Not Detected  
 < LOQ - Below Limit of Quantitation

LOD - Limit of Detection  
 LOQ - Limit of Quantitation

# Sapphire

TEST NAME

**Extended Terpenes**

METHOD NAME

SOP-069

Terpene	%	mg/g	LOD mg/g	LOQ mg/g
Geraniol	ND	ND	0.037	0.111
Geranyl Acetate	ND	ND	0.038	0.114
Guaiol	<b>0.021</b>	<b>0.21</b>	0.037	0.111
$\alpha$ -Humulene	<b>0.049</b>	<b>0.49</b>	0.037	0.111
Isoborneol	ND	ND	0.038	0.114
Isopulegol	ND	ND	0.038	0.114
Limonene	ND	ND	0.037	0.110
Linalool	< LOQ	< LOQ	0.038	0.114
Menthol	ND	ND	0.038	0.114
$\beta$ -Myrcene	<b>0.36</b>	<b>3.6</b>	0.038	0.114
Nerol	ND	ND	0.038	0.114
cis-Nerolidol	ND	ND	0.038	0.114
trans-Nerolidol	<b>0.0171</b>	<b>0.171</b>	0.037	0.111
cis- $\beta$ -Ocimene	<b>0.067</b>	<b>0.67</b>	0.027	0.080
trans- $\beta$ -Ocimene	ND	ND	0.0115	0.035
$\alpha$ -Phellandrene	ND	ND	0.038	0.114
Phytol 1	<b>0.0088</b>	<b>0.088</b>	0.0093	0.028
Phytol 2	<b>0.021</b>	<b>0.21</b>	0.025	0.074
$\alpha$ -Pinene	<b>0.090</b>	<b>0.90</b>	0.037	0.111
$\beta$ -Pinene	ND	ND	0.037	0.111
Pulegone	ND	ND	0.037	0.112
Sabinene	ND	ND	0.037	0.111
Sabinene Hydrate	ND	ND	0.037	0.111
$\alpha$ -Terpinene	ND	ND	0.037	0.111
$\gamma$ -Terpinene	ND	ND	0.037	0.110

ND - Not Detected  
 < LOQ - Below Limit of Quantitation

LOD - Limit of Detection  
 LOQ - Limit of Quantitation

# Sapphire

TEST NAME

**Extended Terpenes**

METHOD NAME

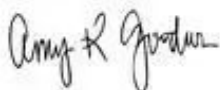
SOP-069

Terpene	%	mg/g	LOD mg/g	LOQ mg/g
$\alpha$ -Terpineol	<b>0.0120</b>	<b>0.120</b>	0.037	0.110
Terpinolene	ND	ND	0.037	0.110
Valencene	ND	ND	0.038	0.114
<b>Total Measured</b>	<b>0.93</b>	<b>9.3</b>		

ND - Not Detected

LOD - Limit of Detection  
LOQ - Limit of Quantitation

CERTIFICATION



AMY GOODWIN PH.D.  
LAB DIRECTOR

CERTIFICATE #: BKS3645-4  
REVISION: TRP-001 Rev. 3

*The above results relate only to the samples tested and for the specific tests conducted. Steep Hill grants permission to reproduce this document in full only.*