



12025 NE Marx St. Portland, OR 97220  
503-253-3511 / [www.greenleaflab.org](http://www.greenleaflab.org)

Green Leaf Lab proudly follows TNI 2009  
Quality Standards

## Granddaddy Purple

*Western Oregon Botanicals*

Sample ID: G8D0312-02

Date Sampled: 04/27/18 00:00

Date Accepted: 04/27/18

Results Valid Until: 04/27/19

### Results at a Glance

Total THC : 16.14 %

Water Activity : 0.58 PASS

Percent Moisture : 6.16 % PASS

Total Terpenes : 1.350 % PASS

Eric Wendt  
Chief Science Officer - 5/4/2018



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## Granddaddy Purple

Western Oregon Botanicals

Sample ID: G8D0312-02

Matrix: Useable Marijuana

Test RFID: 1A40103000098BF000000986

Source RFID: 1A40103000098BF000000985

Date Sampled: 04/27/18 00:00

Date Accepted: 04/27/18

Results Valid Until: 04/27/19

### Potency Analysis

Date/Time Extracted: 05/01/18 11:12

Analysis Method/SOP: 215

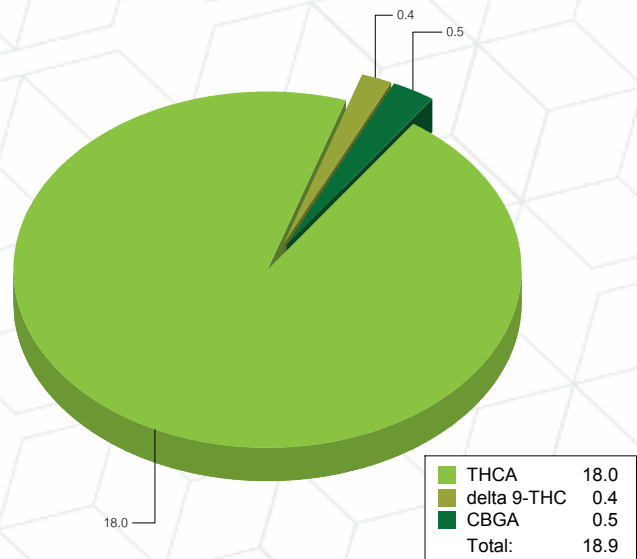
Date/Time Analyzed: 05/01/18 18:58

Batch Identification: 1818012

#### Cannabinoids (% weight)      Moisture Adjusted

Cannabinoids (% weight)	Moisture Adjusted
Total THC ((THCA*0.877)+Δ9)	16.14
Total CBD ((CBDA*0.877)+CBD)	< LOQ
THCA	16.87
delta 9-THC	0.3500
delta 8-THC	< LOQ
THCV	< LOQ
CBGA	0.5106
CBDA	< LOQ
CBD	< LOQ
CBDV	< LOQ
CBN	< LOQ
CBG	< LOQ
CBC	< LOQ
Total Cannabinoids	17.73

#### Cannabinoids Profile



6.16% Moisture

### Water Activity

Date/Time Extracted: 05/01/18 14:23

Analysis Method/SOP: 102

Date/Time Analyzed: 05/01/18 14:23

Water Activity: 0.58 at 24°C

### Moisture

Date/Time Extracted: 05/02/18 14:41

Analysis Method/SOP: 103

Date/Time Analyzed: 05/02/18 14:41

Moisture: 6.16 %

<LOQ - Results below the Limit of Quantitation - Compound not detected. LOQ = 5 PPM (mg/L)

For Potency only delta 9-THC, THCA, CBD, CBDA are ORELAP accredited analytes.

Water Activity Action Level is 0.65. Results above 0.65 fail state testing requirements and will be highlighted Red.

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### Terpene Analysis

Date/Time Extracted: 05/01/18 11:12

Analysis Method/SOP: 204

Date/Time Analyzed: 05/04/18 02:23

Monoterpenes	Results in %	Monoterpenes	Results in %
Camphene	< LOQ	Camphor	< LOQ
3-Carene	< LOQ	alpha-Cedrene	< LOQ
Cedrol	< LOQ	Endo-fenchyl alcohol	< LOQ
Eucalyptol	< LOQ	Fenchone	< LOQ
Geraniol	< LOQ	Geranyl acetate	< LOQ
Hexahydrothymol	< LOQ	Isoborneol	< LOQ
Isopulegol	< LOQ	Limonene	0.03834
Linalool	0.04456	p-Mentha-1,5-diene	< LOQ
beta-Myrcene	0.7718	alpha-Pinene	0.1213
beta-Pinene	0.03584	Pulegone	< LOQ
Sabinene	< LOQ	Sabinene hydrate	< LOQ
gamma-Terpinene	< LOQ	alpha-Terpinene	< LOQ
Terpinolene	< LOQ	B/Y-Terpineol	< LOQ
Nerol	< LOQ	A-Terpineol	< LOQ
Borneol	< LOQ	Ocimene isomer II	0.09654
Ocimene isomer I	0.000		
Sesquiterpenes	Results in %	Sesquiterpenes	Results in %
alpha-Bisabolol	< LOQ	beta-Caryophyllene	0.1857
Caryophyllene Oxide	< LOQ	Guaiol	< LOQ
alpha-Humulene	0.05608	trans-Nerolidol	< LOQ
Valencene	< LOQ	cis-Nerolidol	< LOQ
<b>Total Terpenes</b>	<b>1.350 %</b>		

#### About your terpene profile

Terpenes are aromatic molecules found in plant resins. They are not only responsible for the many unique smells of Cannabis, but they accentuate the holistic effect of cannabinoids as well. Terpene profiles can be utilized to quantify strong flavor, identify different strains and achieve therapeutic benefits.

Green Leaf Lab's terpene analysis quantifies the 36 most common terpenes found in Cannabis sativa.

#### Monoterpenes:

All of the monoterpenes are very similar in chemical structure, containing 10 carbons and 6 hydrogens. Although, they are similar, the varying arrangements produce distinct aromas. Changes such as oxidation and rearrangement produce monoterpenoids which will have a different chemical formula.

Monoterpenes are more volatile than sesquiterpenes; the aromas tend to be stronger and they are more prone to being lost by heating and oxidation. Myrcene and Limonene are examples of an acyclic and cyclic monoterpene, respectively. They both share a basic structure containing a backbone of 10 carbon atoms, however arranged uniquely.

#### Sesquiterpenes:

The sesquiterpenes are a more complex class of terpenes. They are also generally aromatic, but are also heavier and less volatile. Thus, they often remain after some of the more volatile monoterpenes have broken down under heat or oxidation.

Eric Wendt  
 Chief Science Officer - 5/4/2018



**Green Leaf Lab**

# Official Cannalysis Report

License#: 10029074C70

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<LOQ - Results below the Limit of Quantitation - Compound not detected Terpene Analysis is not ORELAP Accredited.



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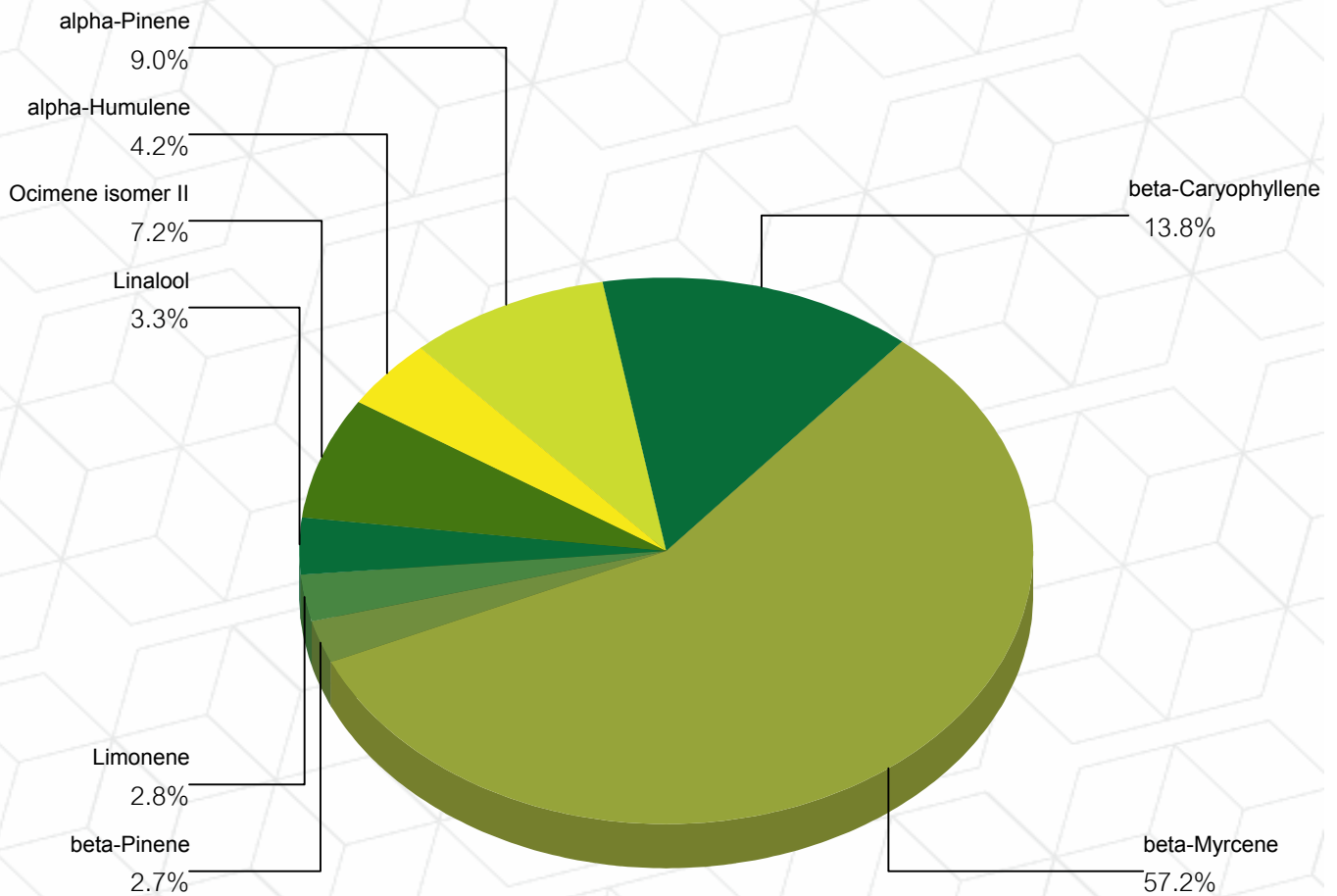
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### Terpene Profile



### Percentage of Total Terpenes Identified

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## Quality Control Potency

**Batch: 1818012 - 215-Useable**

<b>Blank(1818012-BLK1)</b>						
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed
THCA	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
delta 9-THC	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
delta 8-THC	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
CBGA	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
THCV	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
CBDA	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
CBD	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
CBDV	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
CBN	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
CBG	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48
CBC	< LOQ	0.1340	%		05/01/18 11:12	05/01/18 17:48

<b>LCS(1818012-BS1)</b>						
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed
THCA	112	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:00
delta 9-THC	108	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:00
CBDA	112	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:00
CBD	105	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:00

<b>LCS(1818012-BS2)</b>						
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed
THCA	115	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:12
delta 9-THC	109	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:12
CBDA	117	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:12
CBD	108	0.0034	%	80-120	05/01/18 11:12	05/01/18 18:12

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