12025 NE Marx St. Portland, OR 97220
503-253-3511 / www.greenleaflab.org

Green Leaf Lab proudly follows
ISO/IEC 17025:2005(E) Quality Standards

Enigma

Little Farma LLC

Sample ID S134806 Matrix: Flower
Date Accepted: 8/29/16 Date Analyzed: 9/2/16
Sampling Method Laboratory Sampled Batch

Testing in compliance with Oregon State Law and OAR 333-0081190

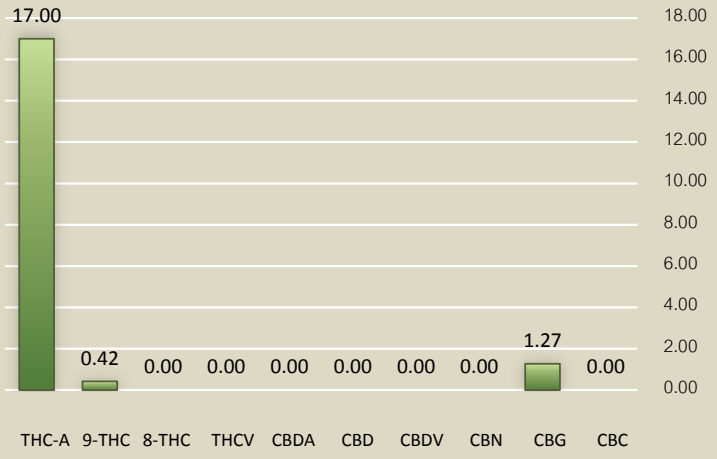
Analysis Methods
Potency via HPLC
Pesticide via GC-MS / ELISA
Mold & Mildew via Plate Culture
Water Activity: 0.467 at 24°C

Instruments
HP Agilent 1100 Series
Analysts
PMH/EEW

Potency Analysis

Cannabinoids (% weight)		Moisture Adjusted
Total THC (THCA*0.877+Δ9)		15.33
Total CBD ((CBDA*0.877)+CBD)		ND @ 0.01
THCA	16.29	17.00
Δ9-THC	0.40	0.42
Δ8-THC	ND @ 0.01	ND @ 0.01
THCV	ND @ 0.01	ND @ 0.01
CBDA	ND @ 0.01	ND @ 0.01
CBD	ND @ 0.01	ND @ 0.01
CBDV	ND @ 0.01	ND @ 0.01
CBN	ND @ 0.01	ND @ 0.01
CBG	1.22	1.27
CBC	ND @ 0.01	ND @ 0.01
Total Cannabinoids	17.91	18.70
		4.20% Moisture

Minor Cannabinoid Profile

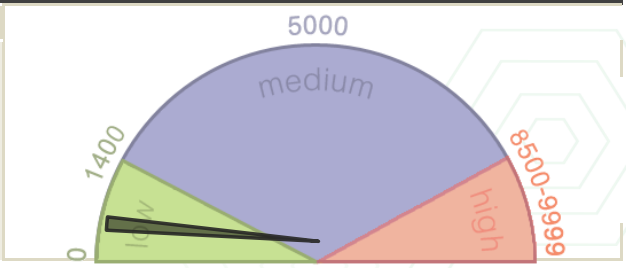


*The HPLC measures cannabinoids in both their acidic and activated form; total THC represent the **potential** total activated THC.

Mold and Mildew Screen

Total Colonies	320	CFU/g

This color coded gauge represents the sample's colony forming units per gram (CFU/g) and how it compares to flowers tested at Green Leaf Lab. This is not a doctor's recommendation and is only a tool for helping compare your sample to CFU/g values observed in the lab. The larger size of the medium range indicates that the majority of samples fall within the 1400-8500 range.



Quality Control Results

Method Blank:	Passed	No Analytes Detected
Quality Control Sample:	Passed	90-110% of expected
Sample Duplicate Requirement:	Passed	<10% difference

Definitions
ND: not detected
ppm: parts per million,
CFU/g: colony forming units per gram

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Sampling Method: Laboratory Sampled Batch
Testing in compliance with Oregon State Law and OAR 333-0081190

Matrix: Flower
Date Analyzed: 9/2/16

Analysis Methods
Pesticide via LC-MS/MS

Analytes	TYPE	AL	RESULTS
Acephate	Organophosphate Insecticide	0.5	nd
Acetamiprid	Neonicotinoid instecticide	0.2	nd
Aldicarb	Carbamate insecticide	0.4	nd
Azoxystrobin	Strobin fungicide	0.2	nd
Bifenazate	Unclassified insecticide	0.2	nd
Boscalid	Anilide fungicide	0.4	nd
Carbaryl	Carbamate insecticide	0.2	nd
Carbofuran	Carbamate insecticide	0.2	nd
Chlorantraniliprole	Anthranilic diamide insecticide	0.2	nd
Chlorfenapyr	Pyrazole insecticide	1	nd
Diazinon	Organophosphate Insecticide	0.2	nd
Dimethoate	Organophosphate Insecticide	0.2	nd
Ethoprophos	Organophosphate Insecticide	0.2	nd
Etofenprox	Pyrethroid insecticide	0.4	nd
Etoxazole	Unclassified miticide	0.2	nd
Fenoxycarb	Carbamate insecticide	0.2	nd
Fenpyroximate	Pyrazole insecticide	0.4	nd
Fipronil	Pyrazole insecticide	0.4	nd
Flonicamid	Pyridinecarboxamide insecticide	1	nd
Fludioxonil	non-systemic fungicide	0.4	nd
Imazalil	Azole fungicide	0.2	nd
	Units:	ppm	ppm

Analytes	TYPE	AL	RESULTS
Imidacloprid	Neonicotinoid insectide	0.4	nd
Malathion	Organophosphate insecticide	0.2	nd
Metalaxyl	Xylylalanine fungicide	0.2	nd
Methomyl	Carbamate insecticide	0.4	nd
Myclobutanil	Azole fungicide	0.2	nd
Oxamyl	Carbamate insecticide	1	nd
Paclobutrazol	Azole plant growth regulator	0.4	nd
Phosmet	Organophosphate insecticide	0.2	nd
Propiconazole	Azole fungicide	0.4	nd
Propoxur	Carbamate insecticide	0.2	nd
Pyridaben	Unclassified insecticide	0.2	nd
Spinosad	Spinosyn insecticide	0.2	nd
Spiromesifen	Keto-enol insecticide	0.2	nd
Spirotetramat	Keto-enol insecticide	0.1	nd
Spiroxamine	Unclassified fungicide	0.4	nd
Thiacloprid	Neonicotinoid insectide	0.2	nd
Thiamethoxam	Neonicotinoid insectide	0.2	nd
Trifloxystrobin	Strobin fungicide	0.2	nd
	Units:	ppm	ppm

Definitions

ND: not detected
ppm: parts per million
AL: Action Limit
AC: Above Calibration Curve

Green Leaf Lab

Official Cannalysis Report

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Sample ID S134806 Matrix: Flower
Date Accepted: 8/29/2016 Date Analyzed: 9/7/2016
Sampling Method: Laboratory Batch Sample

Analysis Methods
Terpenes via GC-MS

Instruments
HP 5890 / HP 5972

Analysts
PMH/AKH/EEW

Terpene Analysis

Monoterpenes	Results in Percent	Results in mg/g	
Camphene	0.000%	ND @ 0.01	mg/g
δ 3-Carene	0.000%	ND @ 0.01	mg/g
p-Cymene	0.000%	ND @ 0.01	mg/g
Eucalyptol	0.000%	ND @ 0.01	mg/g
Fenchone	0.000%	ND @ 0.01	mg/g
Geraniol	0.000%	ND @ 0.01	mg/g
Isopulegol	0.000%	ND @ 0.01	mg/g
Limonene	0.076%	0.76	mg/g
Linalool	0.079%	0.79	mg/g
β-Myrcene	0.335%	3.35	mg/g
Nerol	0.000%	ND @ 0.01	mg/g
β-Ocimene	0.000%	ND @ 0.01	mg/g
α-Pinene	0.122%	1.22	mg/g
β-Pinene	0.084%	0.84	mg/g
Pulegone	0.000%	ND @ 0.01	mg/g
α-Terpinene	0.000%	ND @ 0.01	mg/g
γ-Terpinene	0.000%	ND @ 0.01	mg/g

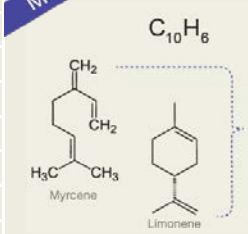
Sesquiterpenes			
α-Bisabolol	0.130%	1.30	mg/g
β-Caryophyllene	0.222%	2.22	mg/g
Caryophyllene Oxide	0.057%	0.57	mg/g
Guaiol	0.128%	1.28	mg/g
α-Humulene	0.090%	0.90	mg/g
Nerolidol	0.028%	0.28	mg/g
Valencene	0.000%	ND @ 0.01	mg/g
Total Terpenes:	1.351%	13.51	mg/g

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 cannabanoids 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 25 most common terpenes found in Cannabis sativa. Terpenes are generally divided into two chemical classifications: Monoterprens and sesquiterpenes.

Monoterpenes:



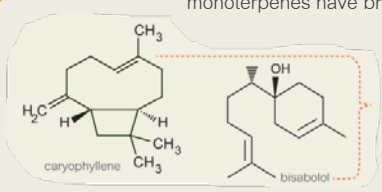
All of the monoterpenes are very similar in chemical structure, containing 10 carbons and 6 hydrogens. Although, they are similar, the varying arrangements produce distinct aromas. Changes such as oxidation and rerrangement produce monoterpenoids which will have a different chemical formula.

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.



These two common terpenes have quite varied structure and different therapeutic properties.

Terpene Profile