



# Certificate of Analysis

Jan 18, 2021 | Grove, Inc.

1710 Whitney Mesa Drive  
Henderson, NV, 89014, US



Sample: MO10114017-001  
Harvest/Lot ID: 201022WM

Seed to Sale #N/A

Batch Date : 01/11/21

Batch#: 201022WM

Sample Size Received: 13.5 gram

Retail Product Size: 125

Ordered : 01/13/21

Sampled : 01/13/21

Completed: 01/18/21 Expires: 01/18/22

Sampling Method: SOP Client Method

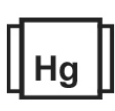
## PASSED

Page 1 of 5

### PRODUCT IMAGE SAFETY RESULTS



Pesticides  
**PASSED**



Heavy Metals  
**PASSED**



Microbials  
**PASSED**



Mycotoxins  
**PASSED**



Residuals  
Solvents  
**PASSED**



Filtration  
**PASSED**



Water Activity  
**NOT TESTED**



Moisture  
**NOT TESTED**



Terpenes  
**TESTED**

### CANNABINOID RESULTS



Total THC  
**0.000%**



Total CBD  
**0.000%**



Total Cannabinoids  
**0.616%**

D9-THC	THCA	CBD	CBDA	D8-THC	THCV	CBN	CBDV	CBC	CBG	CBGA
<0.010	ND	ND	ND	0.616%	ND	ND	ND	ND	ND	ND
<0.010	ND	ND	ND	6.160 mg/g	ND	ND	ND	ND	ND	ND
LOD 0.0001	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
%	%	%	%	%	%	%	%	%	%	%

	<b>Filtration</b>	<b>PASSED</b>
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Analyzed By	Weight	Extraction date	Extracted By
564	NA	NA	NA
Analyte			LOD
Filtration and Foreign Material			0.3
Analysis Method -SOP.T.40.013		Batch Date :	
Analytical Batch -NA		Reviewed On -	01/18/21 11:13:51
Instrument Used :			

This includes but is not limited to hair, insects, feces, packaging contaminants, and manufacturing waste and by-products. An SH-2B/T Stereo Microscope is used for inspection.

### Cannabinoid Profile Test

Analyzed by	Weight	Extraction date :	Extracted By :
19	2.9914g	NA	NA
Analysis Method -SOP.T.40.020, SOP.T.30.050		Reviewed On - 01/18/21 17:26:06	Batch Date : 01/18/21 11:34:27
Analytical Batch -MO001658POT		Instrument Used : HPLC Potency Analyzer	

Reagent	Dilution	Consumers. ID
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Full spectrum cannabinoid analysis utilizing High Performance Liquid Chromatography with UV detection (HPLC-UV). (Method: SOP.T.30.050 for sample prep and Shimadzu High Sensitivity Method SOP.T.40.020 for analysis. LOQ for all cannabinoids is 1 mg/L). Measurement of Uncertainty: 2.7%

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David Greene  
Lab Director

State License # 19-05-02P  
ISO Accreditation # .

Signature

01/19/2021

Signed On



## Certificate of Analysis

**PASSED**

Grove, Inc.

1710 Whitney Mesa Drive  
Henderson, NV, 89014, US  
Telephone: 2098181464  
Email: molly@cbd.io

Sample : MO10114017-001  
Harvest/LOT ID: 201022WM

Batch# : 201022WM  
Sampled : 01/13/21  
Ordered : 01/13/21

Sample Size Received : 13.5 gram  
Completed : 01/18/21 Expires: 01/18/22  
Sample Method : SOP Client Method

Page 2 of 5



### Terpenes

**TESTED**

Terpenes	LOD	Units	Result (%)	Terpenes	LOD	Units	Result (%)
ALPHA-PHELLANDRENE	0.005	%	ND	CIS-NEROLIDOL	0.005	%	ND
FENCHONE	0.01	%	ND	3-CARENE	0.005	%	ND
GAMMA-TERPINENE	0.005	%	ND	FENCHYL ALCOHOL	0.005	%	ND
GERANIOL	0.005	%	ND	HEXAHYDROT HYMOL	0.005	%	ND
GERANYL ACETATE	0.01	%	ND	EUCALYPTOL	0.005	%	ND
GUAJOL	0.005	%	ND	ISOBORNEOL	0.005	%	ND
LIMONENE	0.005	%	ND				
LINALOOL	0.01	%	ND				
NEROL	0.005	%	ND				
OCIMENE	0.005	%	ND				
PULEGONE	0.005	%	ND				
SABINENE	0.005	%	ND				
SABINENE HYDRATE	0.01	%	ND				
TERPINEOL	0.005	%	ND				
TERPINOLENE	0.005	%	ND				
TRANS-CARYOPHYLLENE	0.005	%	ND				
TRANS-NEROLIDOL	0.005	%	ND				
VALENCENE	0.005	%	ND				
CEDROL	0.005	%	ND				
ALPHA-HUMULENE	0.005	%	ND				
ALPHA-PINENE	0.005	%	ND				
ALPHA-TERPINENE	0.005	%	ND				
BETA-MYRCENE	0.005	%	ND				
BETA-PINENE	0.005	%	ND				
BORNEOL	0.01	%	ND				
CAMPHENE	0.005	%	ND				
CAMPHOR	0.01	%	ND				
CARYOPHYLLENE OXIDE	0.005	%	ND				
ALPHA-CEDRENE	0.005	%	ND				
ALPHA-BISABOLOL	0.005	%	ND				
ISOPULEGOL	0.01	%	ND				
<b>Total</b>	0.000						



### Terpenes

**TESTED**

**Analyzed by** 18 **Weight** 1.014g **Extraction date** 01/15/21 09:01:19 **Extracted By** 18  
**Analysis Method** -SOP.T.40.090  
**Analytical Batch** -MO001652TER **Reviewed On** - 01/15/21 10:50:56  
**Instrument Used** : GCMS8050 with Liquid Handler  
**Running On** :  
**Batch Date** : 01/15/21 09:32:42

**Reagent** **Dilution** **Consums. ID**  
 Terpenoid profile screening is performed using GC-MS/MS TQ-8040 with Liquid Injection (Gas Chromatography - Mass Spectrometer Triple Quad) which can screen 37 terpenes using Method SOP.T.40.091 Terpenoid Analysis Via GC-MS/MS.



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Telephone: 2098181464  
Email: molly@cbd.io

Sample : MO10114017-001  
Harvest/LOT ID: 201022WM

Batch# : 201022WM  
Sampled : 01/13/21  
Ordered : 01/13/21

Sample Size Received : 13.5 gram  
Completed : 01/18/21 Expires: 01/18/22  
Sample Method : SOP Client Method

Page 3 of 5

## Pesticides

# PASSED

Pesticides	LOD	Units	Action Level	Result	Pesticides	LOD	Units	Action Level	Result
ABAMECTIN B1A	0.020	ppm	0.5	ND	PRALLETHRIN	0.050	ppm	0.2	ND
ACEPHATE	0.010	ppm	0.5	ND	PROPICONAZOLE	0.010	ppm	0.4	ND
ACEQUINOCYL	0.02	ppm	2	ND	PROPOXUR	0.010	ppm	0.2	ND
ACETAMIPRID	0.010	ppm	0.2	ND	PYRETHRIN I	0.010	ppm	1	ND
ALDICARB	0.020	ppm	0.4	ND	PYRIDABEN	0.005	ppm	0.2	ND
AZOXYSTROBIN	0.010	ppm	0.2	ND	SPINETORAM	0.005	ppm	0.5	ND
BIFENAZATE	0.010	ppm	0.2	ND	SPINOSAD (SPINOSYN A)	0.010	ppm	0.2	ND
BIFENTHRIN	0.010	ppm	0.2	ND	SPINOSAD (SPINOSYN D)	0.010	ppm	0.2	ND
BOSCALID	0.005	ppm	0.4	ND	SPIROMESIFEN	0.010	ppm	0.2	ND
CARBARYL	0.010	ppm	0.2	ND	SPIROTETRAMAT	0.020	ppm	0.2	ND
CARBOFURAN	0.010	ppm	0.2	ND	SPIROXAMINE	0.010	ppm	0.4	ND
CHLORANTRANILIPROLE	0.010	ppm	0.2	ND	TEBUCONAZOLE	0.010	ppm	0.4	ND
CHLORPYRIFOS	0.010	ppm	0.2	ND	THIACLOPRID	0.010	ppm	0.2	ND
CLOFENTEZINE	0.010	ppm	0.2	ND	THIAMETHOXAM	0.010	ppm	0.5	ND
COUMAPHOS	0.005	ppm	0.2	ND	TRIFLOXYSTROBIN	0.010	ppm	0.2	ND
CYPERMETHRIN	0.010	ppm	1	ND	<div><div><div><div><div></div><div></div></div><div></div></div><div>Pesticides</div><div>PASSED</div></div></div>				
DAMINOZIDE	0.010	ppm	1	ND					
DIAZANON	0.010	ppm	0.2	ND	Analyzed by	Weight	Extraction date	Extracted By	
DICHLORVOS	0.050	ppm	0.1	ND	NA	NA	NA	NA	
DIMETHOATE	0.010	ppm	0.2	ND	Analysis Method - SOP.T.30.060, SOP.T.40.060 ,				
DIMETHOMORPH	0.005	ppm	0.1	ND	Analytical Batch -				
ETHOPROPHOS	0.010	ppm	0.2	ND	Instrument Used :				
ETOFENPROX	0.010	ppm	0.4	ND	Running On :				
ETOXAZOLE	0.010	ppm	0.2	ND	Batch Date :				
FENHEXAMID	0.005	ppm	0.1	ND	Reagent	Dilution	Consums. ID		
FENOXYCARB	0.010	ppm	0.2	ND	Pesticide screen is performed using LC-MS which can screen down to below single digit ppb concentrations for regulated Pesticides. Currently we analyze for 57 Pesticides. (Method: SOP.T.30.060 Sample Preparation for Pesticides Analysis via LCMSMS and SOP.T40.060 Procedure for Pesticide Quantification Using LCMS). *				
FENPYROXIMATE	0.010	ppm	0.4	ND					
FIPRONIL	0.020	ppm	0.4	ND					
FLONICAMID	0.010	ppm	1	ND					
FLUDIOXONIL	0.010	ppm	0.4	ND					
HEXYTHIAZOX	0.010	ppm	1	ND					
IMAZALIL	0.010	ppm	0.2	ND					
IMIDACLOPRID	0.010	ppm	0.4	ND					
KRESOXIM-METHYL	0.010	ppm	0.4	ND					
MALATHION	0.010	ppm	0.2	ND					
METALAXYL	0.010	ppm	0.2	ND					
METHIOCARB	0.010	ppm	0.2	ND					
METHOMYL	0.010	ppm	0.6	ND					
MEVINPHOS	0.010	ppm	0.1	ND					
MYCLOBUTANIL	0.010	ppm	0.2	ND					
NALED	0.010	ppm	0.5	ND					
OXAMYL	0.010	ppm	1	ND					
PACLOBUTRAZOL	0.010	ppm	0.4	ND					
PERMETHRINS	0.050	ppm	1	ND					
PHOSMET	0.010	ppm	0.2	ND					
PIPERONYL BUTOXIDE	0.010	ppm	3	ND					

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David Greene  
Lab Director

State License # 19-05-02P  
ISO Accreditation # .

Signature

01/19/2021

Signed On





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**PASSED**

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1710 Whitney Mesa Drive  
Henderson, NV, 89014, US  
Telephone: 2098181464  
Email: molly@cbd.io

Sample : MO10114017-001  
Harvest/LOT ID: 201022WM

Batch# : 201022WM  
Sampled : 01/13/21  
Ordered : 01/13/21

Sample Size Received : 13.5 gram  
Completed : 01/18/21 Expires: 01/18/22  
Sample Method : SOP Client Method

Page 4 of 5

	<b>Residual Solvents</b>	<b>PASSED</b>
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	<b>Residual Solvents</b>	<b>PASSED</b>
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Solvent	LOD	Units	Action Level (PPM)	Pass/Fail	Result
TRICHLOROETHENE	3	ppm	80	PASS	ND
CHLOROFORM	0.24	ppm	60	PASS	ND
1,2-DICHLOROETHENE	0.24	ppm	1870	PASS	ND
1,1-DICHLOROETHENE	2	ppm	8	PASS	ND
PENTANES	90	ppm	2500	PASS	ND
BUTANES (N-BUTANE)	50	ppm	5000	PASS	ND
ACETONITRILE	7.2	ppm	410	PASS	ND
ACETONE	90	ppm	5000	PASS	ND
2-PROPANOL	60	ppm	5000	PASS	ND
HEXANES	6	ppm	290	PASS	ND
XYLENES	18	ppm	2170	PASS	ND
TOLUENE	18	ppm	1068	PASS	ND
PROPANE	80	ppm	5000	PASS	ND
METHANOL	30	ppm	3000	PASS	ND
HEPTANE	60	ppm	4000	PASS	ND
XYLENES-P (1,4-DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYLENE OXIDE	0.6	ppm	50	PASS	ND
XYLENES-M (1,3-DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYL ETHER	60	ppm	5000	PASS	ND
XYLENES-O (1,2-DIMETHYLBENZENE)	18	ppm	2170	PASS	ND
ETHYL ACETATE	48	ppm	5000	PASS	ND
ETHANOL	120	ppm	5000	PASS	ND
DICHLOROMETHANE	15	ppm	600	PASS	ND

Analyzed by	Weight	Extraction date	Extracted By
18	0.036g	01/15/21 09:01:18	18
Analysis Method -SOP.T.40.032			
Analytical Batch -MO001654SOL		Reviewed On - 01/15/21 11:26:32	
Instrument Used : GCMS2010			
Running On :			
Batch Date : 01/15/21 09:33:42			

Reagent	Dilution	Consums. ID
Residual solvents screening is performed using GC-MS which can detect below single digit ppm concentrations. Currently we analyze for 33 Residual solvents. (Method: SOP.T.30.042 Residual Solvents Analysis via GC-MS).		



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Sample : MO10114017-001  
Harvest/LOT ID: 201022WM

Batch# : 201022WM  
Sampled : 01/13/21  
Ordered : 01/13/21

Sample Size Received : 13.5 gram  
Completed : 01/18/21 Expires: 01/18/22  
Sample Method : SOP Client Method

Page 5 of 5

	<b>Microbials</b>	<b>PASSED</b>		<b>Mycotoxins</b>	<b>PASSED</b>
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Analyte	LOD	Result	Analyte	LOD	Units	Result	Action Level (PPM)
ASPERGILLUS_TERREUS_1J2		not present in 1 gram.	AFLATOXIN G2	0.001	ppm	ND	0.02
ASPERGILLUS_NIGER		not present in 1 gram.	AFLATOXIN G1	0.001	ppm	ND	0.02
ASPERGILLUS_FUMIGATUS		not present in 1 gram.	AFLATOXIN B2	0.001	ppm	ND	0.02
ASPERGILLUS_FLAVUS		not present in 1 gram.	AFLATOXIN B1	0.001	ppm	ND	0.02
SALMONELLA_SPECIFIC_GENE		not present in 1 gram.	OCHRATOXIN A+	0.001	ppm	ND	0.02
ESCHERICHIA_COLI_SHIGELLA_SPP		not present in 1 gram.					

Analysis Method -SOP.T.40.043  
Analytical Batch -NA Batch Date :  
Instrument Used :  
Running On :

Analyzed by	Weight	Extraction date	Extracted By
NA	NA	NA	NA

Microbiological testing for Fungal and Bacterial Identification via Polymerase Chain Reaction (PCR) method consisting of sample DNA amplified via tandem Polymerase Chain Reaction (PCR) as a crude lysate which avoids purification. (Method SOP.T.40.043) If a pathogenic Escherichia Coli, Salmonella, Aspergillus fumigatus, Aspergillus flavus, Aspergillus niger, or Aspergillus terreus is detected in 1g of a sample, the sample fails the microbiological-impurity testing.

Analysis Method -SOP.T.30.060, SOP.T.40.060  
Analytical Batch - | Reviewed On - 01/18/21 15:16:47  
Instrument Used :  
Running On :  
Batch Date :

Analyzed by	Weight	Extraction date	Extracted By
NA	NA	NA	NA

Aflatoxins B1, B2, G1, G2, and Ochratoxins A testing using LC-MS. (Method: SOP.T.30.060 for Sample Preparation and SOP.T.40.060 Procedure for Mycotoxins Quantification Using LCMS. LOQ 1.0 ppb). Total Aflatoxins (Aflatoxin B1, B2, G1, G2) must be <20µg/Kg. Ochratoxins must be <20µg/Kg.

	<b>Heavy Metals</b>	<b>PASSED</b>
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### Reagent

110119.52  
110119.44  
112519.01  
110119.36

Metal	LOD	Unit	Result	Action Level (PPM)
ARSENIC	0.02	ppm	ND	10
CADMIUM	0.02	ppm	ND	4.1
LEAD	0.02	ppm	ND	10
MERCURY	0.02	ppm	ND	2

Analyzed by	Weight	Extraction date	Extracted By
18	0.517g	01/15/21 09:01:34	18

Analysis Method -SOP.T.40.050, SOP.T.30.052  
Analytical Batch -MO001649HEA | Reviewed On - 01/15/21 11:25:43  
Instrument Used : ICP-MS 2030  
Running On :  
Batch Date : 01/15/21 09:28:57

Heavy Metals screening is performed using ICP-MS (Inductively Coupled Plasma - Mass Spectrometer) which can screen down to below single digit ppb concentrations for regulated heavy metals using Method SOP.T.30.052 Sample Preparation for Heavy Metals Analysis via ICP-MS and SOP.T.40.050 Heavy Metals Analysis via ICP-MS. \*Action Limits based on Colorado Regulations.