

# HOW TO READ OUR CERTIFICATE OF ANALYSIS (COA)

Using Lightscale Labs, we perform all tests required under state law for recreational cannabis, medical cannabis, and industrial hemp. Chromatography is used for all required tests, a technique where liquid or gas separates different cannabinoids, pesticides, and residual solvents so that each can be identified and measured precisely.

## PAGE I CANNABINOID POTENCY



### TEST & HARVEST DATES

Here you can see the dates related to this particular batch of product, including when it was processed, sampled, analyzed, and when the report was finished.



### CBD & THC CONTENT

Total CBD and THC content in mg/ml and percentage.



### MAJOR & MINOR CANNABINOIDS

Δ9-THC, THCA, CBD, CBDA, and CBN in accordance with OAR 333-007-0430, plus minor cannabinoids.



### CHECKLIST RESULTS

PASS or FAIL results for Pesticides, Solvents, and Potency within this COA.



**LIGHTSCALE  
LABS**

2535 N Ross Ave  
Portland, OR 97227  
(503) 493-2535

info@lightscale.com  
ORLAP #4112  
OLCC #010-1003340D344

## Shot-15-12

Danodan Hempworks

(503) 290-4079

Sample Type: Tinctures  
Sample Date: 12/2/2019  
Analysis Date: 12/3/2019  
Report Date: 12/9/2019

Metro Batch ID:  
Metro Sample ID:

Harvest/Process Date: 11/25/2019

Report ID:

**LS-191204-28**

### Potency

Potency Analysis Date: 12/3/2019  
Potency Batch ID: CAN\_120319C  
Potency Method: JAOAC 2015.1

**16.5 mg/mL** Total CBD  
1.51%

**0.972 mg/mL** Total THC  
0.0892%

Samples: ZJH-PDF-PFD, TTT-GNB-SHT  
Density = 1.09 g/mL



Analyte	Description	LOQ	RPD (%)	Min.	Max.	Avg.	Unit: mg/mL
Δ9THC	Delta-9 Tetrahydrocannabinol	0.28	5.05	0.947	0.996	0.972	
THCA	Tetrahydrocannabinolic acid	0.28	0.00	ND	ND	ND	
CBD	Cannabidiol	0.28	0.534	16.1	16.2	16.1	
CBDA	Cannabidiolic acid	0.28	4.24	0.352	0.367	0.360	
Δ8THC	Delta-8 Tetrahydrocannabinol*	0.28	0.00	ND	ND	ND	
THCV	Tetrahydrocannabivarin*	0.28	0.00	ND	ND	ND	
CBG	Cannabigerol*	0.28	0.493	0.441	0.444	0.443	
CBGA	Cannabigerolic acid*	0.28	0.00	ND	ND	ND	
CBC	Cannabichromene*	0.28	4.72	0.586	0.615	0.601	
CBCA	Cannabichromenic acid*	0.28	0.00	ND	ND	ND	
CBN	Cannabinol	0.28	0.00	<LOQ	<LOQ	<LOQ	
Total THC	Δ9THC + (THCA × 0.877)		5.05	0.947	0.996	0.972	
Total CBD	CBD + (CBDA × 0.877)		0.605	16.4	16.5	16.5	
Total			0.977	18.4	18.6	18.5	

### Compliance

Pesticides	Within limits	Analysis Date: 12/3/2019	Pass
Solvents	Within limits	Analysis Date: 12/3/2019	Pass
Potency	Within limits	Analysis Date: 12/3/2019	Pass

*Bryce Kidd*  
Bryce Kidd, Ph.D.  
Lab Director

*Aaron Troyer*  
Aaron Troyer  
Chief Science Officer



Lightscale Labs is accredited by ORLAP (Lab #4112) for analysis in compliance with OAR 333-064 and OAR 333-087. Results pertain to submitted samples only. Unless otherwise noted, samples were received in good condition and Quality Control samples met acceptance criteria. This Certificate shall not be reproduced except in full, without the written approval of Lightscale Labs. Results marked with an asterisk (\*) are not within scope of accreditation and for informational purposes only.





# PAGE 4-5 RESIDUAL SOLVENT DATA

Certain solvents can be harmful to human health and safety if they remain in the final product. If a producer uses a solvent or concentrate in their product, thorough testing is required to ensure that potential residual amounts are below recognized safety limits. Danodan uses a high-purity concentrate in our yellow and red label products, so Residual Solvent testing is required. Our blue label products do not use any solvents or concentrates; therefore, no Residual Solvent testing is needed for blue label products.

[illegible]



# Shot-10-11

Danodan Hempworks  
AG-R1058177IHH  
6019 NE MLK JR. BLVD.  
PORTLAND, OR 97217  
(503) 290-4079

Harvest/Process Date: 9/28/2021  
Sample Date: 9/30/2021  
Analysis Date: 10/4/2021  
Report Date: 10/7/2021  
Report ID: LS-211007-8

Client Batch ID: Shot-10-11  
Metr Batch ID:  
Metr Sample ID:

Sample Type: Tinctures  
Sample Plan:  
WM-FZ-HS-MH\_20210930\_1A  
Sample Procedure:  
160721\_LAB-SOP\_SampleCollection-v010

## Potency

Potency Analysis Date: 10/4/2021  
Potency Batch ID: CAN\_100421B  
Potency Method: JAOAC 2015.1

Unit Potency:  
1.0 fl oz retail unit  
10.91 mg THC per 1.0 fl oz unit  
365.53 mg CBD per 1.0 fl oz unit

**12.3 mg/mL** **Total CBD 1.13%**

**0.370 mg/mL** **Total THC 0.0339%**

Samples: HWH-JTZ-DHH, HTH-TNH-WCD



Analyte	Description	LOQ (%)	RPD (%)	Min.	Max.	Avg.	Unit: mg/mL
<b>Δ9THC</b>	Delta-9 Tetrahydrocannabinol	0.011	3.25	0.363	0.375	<b>0.370</b>	
<b>THCA</b>	Tetrahydrocannabinolic acid	0.011	0.00	ND	ND	<b>ND</b>	
<b>CBD</b>	Cannabidiol	0.011	7.42	11.6	12.4	<b>12.0</b>	
<b>CBDA</b>	Cannabidiolic acid	0.011	7.94	0.435	0.471	<b>0.453</b>	
<b>Δ8THC</b>	Delta-8 Tetrahydrocannabinol*	0.011	0.00	ND	ND	ND	
<b>THCV</b>	Tetrahydrocannabivarin*	0.011	0.00	ND	ND	ND	
<b>CBG</b>	Cannabigerol*	0.011	9.52	0.229	0.252	0.241	
<b>CBGA</b>	Cannabigerolic acid*	0.011	0.00	ND	ND	ND	
<b>CBC</b>	Cannabichromene*	0.011	8.45	0.482	0.524	0.504	
<b>CBCA</b>	Cannabichromenic acid*	0.011	0.00	ND	ND	ND	
<b>CBN</b>	Cannabinol*	0.011	14.3	0.0142	0.0164	0.0153	
<b>Total THC</b>	Δ9THC + (THCA × 0.877)		3.25	0.363	0.375	<b>0.370</b>	
<b>Total CBD</b>	CBD + (CBDA × 0.877)		7.43	11.9	12.9	<b>12.3</b>	
<b>Total</b>			7.40	13.1	14.1	13.5	

## Compliance

Potency Within limits Analysis Date: 10/4/2021 Pass

Ann McCutchan  
Lab Director

Aaron Troyer  
Chief Science Officer



LS-211007-8

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Harvest/Process Date: 9/28/2021  
Sample Date: 9/30/2021  
Analysis Date: 10/4/2021  
Report Date: 10/7/2021  
Report ID: LS-211007-8

Client Batch ID: Shot-10-11  
Metrac Batch ID:  
Metrac Sample ID:

Sample Type: Tinctures  
Sample Plan:  
WM-FZ-HS-MH\_20210930\_1A  
Sample Procedure:  
160721\_LAB-SOP\_SampleCollection-v010



## Potency Quality Control Data

Potency QC Analysis Date: 10/4/2021  
Potency QC Batch ID: CAN\_100421B

Method: JAOAC 2015.1  
Unit: µg/g (ppm)

Analyte	Blank	LOQ (%)	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
Δ9THC	ND	0.011	17.1	20.8	82.3	80 - 120	
THCA	ND	0.011	19.9	21.4	93.3	80 - 120	
CBD	ND	0.011	22.3	27.0	82.6	80 - 120	
CBDA	ND	0.011	19.3	21.7	88.9	80 - 120	



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Sample Date: 9/30/2021  
Analysis Date: 10/4/2021  
Report Date: 10/7/2021  
Report ID: LS-211007-8

Client Batch ID: Shot-10-11  
MetrC Batch ID:  
MetrC Sample ID:

Sample Type: Tinctures  
Sample Plan:  
WM-FZ-HS-MH\_20210930\_1A  
Sample Procedure:  
160721\_LAB-SOP\_SampleCollection-v010

## Qualifier Flag Descriptions

J	Reported result is an estimate - the value is less than the minimum calibration level but greater than the estimated detection limit (EDL)
U	The analyte was not detected in the sample at the estimated detection limit (EDL)
E	Exceeds calibration range
D	Dilution data - result was obtained from the analysis of a dilution
B	Analyte found in sample and associated blank
C	Co-eluting compound
R	Relative Percent Difference (RPD) outside control limits
NR	Analyte not reported because of problems in sample preparation or analysis
ND	Non-Detect
X	Results from reinjection/repeat/re-column data
EMC	Estimated maximum possible concentration - indicates that a peak is detected but did not meet the method required criteria
M	Manual integration
PS	Peaks split
HB	Control acceptance criteria are exceeded high and the associated sample is below the detection limit
LB	Control acceptance criteria are exceeded low and the associated sample exceeds the regulatory limit
ME	Marginal Exceedance
LR	Low Recovery Analyte
LOQ	Limit of Quantitation





12423 NE Whitaker Way  
Portland, OR 97230  
503-254-1794



**Report Number:** 21-011436/D002.R000  
**Report Date:** 10/04/2021  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/28/21 15:31

**Customer:** Danodan Hemp Works  
**Product identity:** Shot-10-11  
**Client/Metric ID:** .  
**Laboratory ID:** 21-011436-0001

### Summary

#### Metals:

Analyte	Result	Units	Limit	Status	Analyte	Result	Unit	Limit	Status
Arsenic	0.0168	mg/kg			Lead	0.0123	mg/kg		

#### Microbiology:

*Less than LOQ for all analytes.*





12423 NE Whitaker Way  
Portland, OR 97230  
503-254-1794



**Report Number:** 21-011436/D002.R000  
**Report Date:** 10/04/2021  
**ORELAP#:** OR100028  
**Purchase Order:**  
**Received:** 09/28/21 15:31

**Customer:** Danodan Hemp Works  
6019 NE MLK Jr Blvd  
Portland Oregon 97211  
United States of America (USA)

**Product identity:** Shot-10-11  
**Client/Metric ID:** .  
**Sample Date:**  
**Laboratory ID:** 21-011436-0001  
**Evidence of Cooling:** No  
**Temp:** 22.6 °C  
**Relinquished by:** Client

## Sample Results

### Microbiology

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Aerobic Plate Count	< LOQ		cfu/g	10	2108789	10/02/21	AOAC 990.12 (Petrifilm)	X	
E.coli	< LOQ		cfu/g	10	2108786	10/02/21	AOAC 991.14 (Petrifilm)	X	
Staphylococcus aureus	< LOQ		cfu/g	10	2108791	10/01/21	AOAC 2003.07	X	
Mold (RAPID Petrifilm)	< LOQ		cfu/g	10	2108788	10/02/21	AOAC 2014.05 (RAPID)	X	
Yeast (RAPID Petrifilm)	< LOQ		cfu/g	10	2108788	10/02/21	AOAC 2014.05 (RAPID)	X	
Pseudomonas spp.	< LOQ		cfu/g	10	2108794	10/02/21	ISO 13720:1995	X	

### Metals

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Arsenic	0.0168		mg/kg	0.00604	2108823	09/30/21	AOAC 2013.06 (mod.)	X	
Cadmium	< LOQ		mg/kg	0.00604	2108823	09/30/21	AOAC 2013.06 (mod.)	X	
Lead	0.0123		mg/kg	0.00604	2108823	09/30/21	AOAC 2013.06 (mod.)	X	
Mercury	< LOQ		mg/kg	0.00302	2108823	09/30/21	AOAC 2013.06 (mod.)	X	

### Nutrition

Analyte	Result	Limits	Units	LOQ	Batch	Analyze	Method	Status	Notes
Gluten	< LOQ		mg/kg	5.0	2108796	09/30/21	AOAC 991.19 (mod.)	X	Q,Q1





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**Purchase Order:**  
**Received:** 09/28/21 15:31

These test results are representative of the individual sample selected and submitted by the client.

**Abbreviations**

**Limits:** Action Levels per OAR-333-007-0400, OAR-333-007-0210, OAR-333-007-0220

**Limit(s) of Quantitation (LOQ):** The minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.

**Units of Measure**

cfu/g = Colony forming units per gram

mg/kg = Milligram per kilogram = parts per million (ppm)

% wt =  $\mu\text{g/g}$  divided by 10,000

**Glossary of Qualifiers**

Q: Matrix interference affecting spike or surrogate recoveries.

Q1: Quality control result biased high. Only non-detect samples reported.

X: Not ORELAP accredited.

Approved Signatory

Derrick Tanner  
General Manager









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Portland, OR 97230  
503-254-1794



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Explanation of QC Flag Comments:

Code	Explanation
Q	Matrix interferences affecting spike or surrogate recoveries.
Q1	Quality control result biased high. Only non-detect samples reported.
Q2	Quality control outside QC limits. Data considered estimate.
Q3	Sample concentration greater than four times the amount spiked.
Q4	Non-homogenous sample matrix, affecting RPD result and/or % recoveries.
Q5	Spike results above calibration curve.
Q6	Quality control outside QC limits. Data acceptable based on remaining QC.
R	Relative percent difference (RPD) outside control limit.
R1	RPD non-calculable, as sample or duplicate results are less than five times the LOQ.
R2	Sample replicates RPD non-calculable, as only one replicate is within the analytical range.
LOQ1	Quantitation level raised due to low sample volume and/or dilution.
LOQ2	Quantitation level raised due to matrix interference.
B	Analyte detected in method blank, but not in associated samples.
B1	The sample concentration is greater than 5 times the blank concentration.
B2	The sample concentration is less than 5 times the blank concentration.