DANODAN
HEMPWORKS™

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.

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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
ORELAP #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

Metrc Batch ID:
Metrc 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
ΔBTHC	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, Ph.D.
Lab Director

Aaron Troyer
Chief Science Officer

LS-191204-28

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PESTICIDE DATA

All cannabis must be tested for the presence of a number of different contaminants, including pesticides. Danodan uses hemp that is grown using organic techniques, ensuring we use only the purest, cleanest hemp.

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Danodan Hempworks

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

Metrc Batch ID:
Metrc Sample ID:

Harvest/Process Date: 11/25/2019
Report ID:
LS-191204-28

Pesticides
Sample Data

Pesticides Analysis Date: 12/3/2019
Pesticides Batch ID: PST_120319C

Method: EN 15662
Unit: µg/g (ppm)

Pass

Analyte	ZJH-PDF-PFD	TTT-GNB-SHT	Limits	LOQ	Notes	Status
Abamectin	ND	ND	0.5	0.1		Pass
Acephate	ND	ND	0.4	0.1		Pass
Acequinocyl	ND	ND	2.0	1.5		Pass
Acetamiprid	ND	ND	0.2	0.1		Pass
Aldicarb	ND	ND	0.4	0.1		Pass
Azoxystrobin	ND	ND	0.2	0.1		Pass
Bifenazate	ND	ND	0.2	0.1		Pass
Bifenthrin	ND	ND	0.2	0.1		Pass
Boscalid	ND	ND	0.4	0.1		Pass
Carbaryl	ND	ND	0.2	0.1		Pass
Carbofuran	ND	ND	0.2	0.1		Pass
Chlorantraniliprole	ND	ND	0.2	0.1		Pass
Chlorfenapyr	ND	ND	1.0	0.1		Pass
Chlorpyrifos	ND	ND	0.2	0.1		Pass
Clofentezine	ND	ND	0.2	0.1		Pass
Cyfluthrin	ND	ND	1.0	0.5		Pass
Cypermethrin	ND	ND	1.0	0.1		Pass
Daminozide	ND	ND	1.0	0.5		Pass
Diazinon	ND	ND	0.2	0.1		Pass
Dichlorvos (DDVP)	ND	ND	1.0	0.5		Pass
Dimethoate	ND	ND	0.2	0.1		Pass
Ethoprophos	ND	ND	0.2	0.1		Pass
Etofenprox	ND	ND	0.4	0.1		Pass
Etoxazole	ND	ND	0.2	0.1		Pass
Fenoxycarb	ND	ND	0.2	0.1		Pass
Fenpyroximate	ND	ND	0.4	0.1		Pass
Fipronil	ND	ND	0.4	0.1		Pass
Flonicamid	ND	ND	1.0	0.1		Pass
Fludioxonil	ND	ND	0.4	0.1		Pass
Hexythiazox	ND	ND	1.0	0.1		Pass
Imazalil	ND	ND	0.2	0.1		Pass
Imidacloprid	ND	ND	0.4	0.1		Pass
Kresoxim-methyl	ND	ND	0.4	0.1		Pass
Malathion	ND	ND	0.2	0.1		Pass

Analyte	ZJH-PDF-PFD	TTT-GNB-SHT	Limits	LOQ	Notes	Status
Metalaxyl	ND	ND	0.2	0.1		Pass
Methiocarb	ND	ND	0.2	0.1		Pass
Methomyl	ND	ND	0.4	0.1		Pass
Methyl Parathion	ND	ND	0.2	0.2		Pass
MGK-264	ND	ND	0.2	0.2		Pass
Myclobutanil	ND	ND	0.2	0.1		Pass
Naled	ND	ND	0.5	0.2		Pass
Oxamyl	ND	ND	1.0	0.1		Pass
Paclobutrazol	ND	ND	0.4	0.1		Pass
Permethrins	ND	ND	0.2	0.1		Pass
Phosmet	ND	ND	0.2	0.1		Pass
Piperonyl Butoxide	ND	ND	2.0	0.1		Pass
Prallethrin	ND	ND	0.2	0.1		Pass
Propiconazole	ND	ND	0.4	0.1		Pass
Propoxur	ND	ND	0.2	0.1		Pass
Pyrethrins	ND	ND	1.0	0.5		Pass
Pyridaben	ND	ND	0.2	0.1		Pass
Spinosad	ND	ND	0.2	0.1		Pass
Spiromesifen	ND	ND	0.2	0.1		Pass
Spirotetramat	ND	ND	0.2	0.1		Pass
Spiroxamine	ND	ND	0.4	0.1		Pass
Tebuconazole	ND	ND	0.4	0.1		Pass
Thiacloprid	ND	ND	0.2	0.1		Pass
Thiamethoxam	ND	ND	0.2	0.1		Pass
Trifloxystrobin	ND	ND	0.2	0.1		Pass

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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.

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Report ID:
LS-191204-28

Residual Solvents
Sample Data

Solvents Analysis Date: 12/3/2019
Solvents Batch ID: RES_120319A

Method: EPA 5021A
Unit: µg/g (ppm)

Pass

Analyte	ZJH-PDF-PFD	TTT-GNB-SHT	RPD (%)	Limits	LOQ	Notes	Status
1,4-Dioxane	ND	ND	0.00	380.0	50.0		Pass
2-Butanol	ND	ND	0.00	5000.0	250.0		Pass
2-Ethoxyethanol	ND	ND	0.00	160.0	50.0		Pass
Acetone	ND	ND	0.00	5000.0	250.0		Pass
Acetonitrile	ND	ND	0.00	410.0	50.0		Pass
Benzene	ND	ND	0.00	2.0	2.0		Pass
Butanes	ND	ND	0.00	5000.0	250.0		Pass
Cumene	ND	ND	0.00	70.0	50.0		Pass
Cyclohexane	ND	ND	0.00	3880.0	50.0		Pass
Ethyl Acetate	ND	ND	0.00	5000.0	250.0		Pass
Ethyl Ether	ND	ND	0.00	5000.0	250.0		Pass
Ethylene Glycol	ND	ND	0.00	620.0	250.0		Pass
Ethylene Oxide	ND	ND	0.00	50.0	50.0		Pass
Heptane	ND	ND	0.00	5000.0	250.0		Pass
Hexanes	ND	ND	0.00	290.0	50.0		Pass
Isopropanol (2-Propanol)	ND	ND	0.00	5000.0	50.0		Pass
Isopropyl Acetate	ND	ND	0.00	5000.0	250.0		Pass
Methanol	<LOQ	<LOQ	0.00	3000.0	250.0		Pass
Dichloromethane	ND	ND	0.00	600.0	50.0		Pass
Pentanes	ND	ND	0.00	5000.0	250.0		Pass
Propane	ND	ND	0.00	5000.0	250.0		Pass
Tetrahydrofuran	ND	ND	0.00	720.0	50.0		Pass
Toluene	ND	ND	0.00	890.0	50.0		Pass
Xylenes	ND	ND	0.00	2170.0	50.0		Pass

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LOQ - (Limit of Quantitation):
The lowest quantity of a substance that can be reliably measured. If a product measures <LOQ, that means that the substance was detected, but at levels below which it can be accurately measured. This is different from ND, which means that none of that substance was detected.

RPD (%) - Relative Percent Difference:
Each sample we send to the lab is tested multiple times, and the results of the various tests are averaged to give the final results. RPD represents the average variation in measurement of a certain substance between multiple rounds of testing