

Danodan Hempworks 6019 NF MI K JR, BI VD. PORTLAND, OR 97217 (503) 290-4079

Sample Type: Tinctures Sample Date: 12/28/2020 Analysis Date: 1/4/2020 Report Date: 1/20/2021

Metrc Batch ID:

Metrc Sample ID:

Harvest/Process Date: 12/2/2020 Report ID: LS-210106-9

Sample Plan ID:

Sample Procedure: 160721_LAB-SOP_SampleCollection-v008

Potency

Potency Analysis Date: 1/14/2021 Potency Batch ID: CAN_011421D Potency Method: JAOAC 2015.1

17.3 mg/mL Total CBD 1.59%

0.675 mg/mLtal THC

Samples: THJ-MPJ-JDG, BGD-DDR-CNB



Analyte	Description	LOQ	RPD (%)	Min.	Max.	Avg.	
Д9ТНС	Delta-9 Tetrahydrocannabinol	0.087	2.74	0.666	0.685	0.675	-
THCA	Tetrahydrocannabinolic acid	0.087	0.00	ND	ND	ND	
CBD	Cannabidiol	0.087	0.983	17.1	17.3	17.2	
CBDA	Cannabidiolic acid	0.087	1.92	0.169	0.172	0.171	•
∆8ТНС	Delta-8 Tetrahydrocannabinol*	0.087	0.00	ND	ND	ND	
THCV	Tetrahydrocannabivarin*	0.087	0.00	ND	ND	ND	
CBG	Cannabigerol*	0.087	2.84	0.416	0.428	0.422	•
CBGA	Cannabigerolic acid*	0.087	0.00	ND	ND	ND	
CBC	Cannabichromene*	0.087	0.545	0.598	0.602	0.600	-
CBCA	Cannabichromenic acid*	0.087	0.00	ND	ND	ND	
CBN	Cannabinol	0.087	0.00	<l0q< td=""><td><l0q< td=""><td><l0q< td=""><td></td></l0q<></td></l0q<></td></l0q<>	<l0q< td=""><td><l0q< td=""><td></td></l0q<></td></l0q<>	<l0q< td=""><td></td></l0q<>	
Total THC	Δ9THC + (THCA × 0.877)		2.74	0.666	0.685	0.675	-
Total CBD	CBD + (CBDA × 0.877)		0.958	17.2	17.4	17.3	
Total			0.692	18.9	19.2	19.0	

Compliance

Pesticides	Within limits	Analysis Date: 1/4/2020	Pass 🔗
Solvents	Within limits	Analysis Date: 1/4/2021	Pass 🔗
Potency	Within limits	Analysis Date: 1/14/2021	Pass 🕢

Bryce Kidd, Ph.D. Lab Director

Chief Science Officer





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Harvest/Process Date: 12/2/2020

Report ID: LS-210106-9

Sample Plan ID:

Sample Procedure: 160721_LAB-SOP_SampleCollection-v008



Pesticides Analysis Date: 1/4/2020 Pesticides Batch ID: PST_010421B Method: EN 15662 Unit: μg/g (ppm) Pass 🤡

Analyte	THJ-MPJ-JDG	BGD-DDR-CNB	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	THJ-MPJ-JDG	BGD-DDR-CNB	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
0xamy1	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	1.0		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



Danodan Hempworks 6019 NE MLK JR. BLVD. PORTLAND, OR 97217 (503) 290-4079 Sample Type: Tinctures Sample Date: 12/28/2020 Analysis Date: 1/4/2020 Report Date: 1/20/2021 Metrc Batch ID:

Metrc Sample ID:

Harvest/Process Date: 12/2/2020

Report ID: LS-210106-9 Sample Plan ID:

Sample Procedure: 160721_LAB-SOP_SampleCollection-v008

(1)

Pesticides Quality Control Data

Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
Abamectin	ND	0.1	0.905	1.00	90.5	50 - 150	
Acephate	ND	0.1	ND	1.00	0.00	50 - 150	
Acequinocyl	ND	1.5	1.09	1.00	109	50 - 150	
Acetamiprid	ND	0.1	0.744	1.00	74.4	50 - 150	
Aldicarb	ND	0.1	0.732	1.00	73.2	50 - 150	
Azoxystrobin	ND	0.1	0.845	1.00	84.5	50 - 150	
Bifenazate	ND	0.1	ND	1.00	0.00	50 - 150	
Bifenthrin	ND	0.1	0.954	1.00	95.4	50 - 150	
Boscalid	ND	0.1	0.975	1.00	97.5	50 - 150	
Carbaryl	ND	0.1	0.722	1.00	72.2	50 - 150	
Carbofuran	ND	0.1	0.641	1.00	64.1	50 - 150	
Chlorantraniliprole	ND	0.1	0.971	1.00	97.1	50 - 150	
Chlorfenapyr	ND	0.1	0.844	1.00	84.4	50 - 150	
Chlorpyrifos	ND	0.1	0.896	1.00	89.6	50 - 150	
Clofentezine	ND	0.1	0.724	1.00	72.4	50 - 150	
Cyfluthrin	ND	0.5	1.03	1.00	103	50 - 150	
Cypermethrin	ND	0.1	0.936	1.00	93.6	50 - 150	
Daminozide	ND	0.5	0.958	1.00	95.8	10 - 150	
Diazinon	ND	0.1	0.809	1.00	80.9	50 - 150	
Dichlorvos (DDVP)	ND	0.5	0.626	1.00	62.6	50 - 150	
Dimethoate	ND	0.1	0.730	1.00	73.0	50 - 150	
Ethoprophos	ND	0.1	0.738	1.00	73.8	50 - 150	
Etofenprox	ND	0.1	0.986	1.00	98.6	50 - 150	
Etoxazole	ND	0.1	0.878	1.00	87.8	50 - 150	
Fenoxycarb	ND	0.1	0.869	1.00	86.9	50 - 150	
Fenpyroximate	ND	0.1	0.875	1.00	87.5	50 - 150	
Fipronil	ND	0.1	0.914	1.00	91.4	50 - 150	
Flonicamid	ND	0.1	0.778	1.00	77.8	50 - 150	
Fludioxonil	ND	0.1	0.646	1.00	64.6	50 - 150	
Hexythiazox	ND	0.1	0.781	1.00	78.1	50 - 150	
Imazalil	ND	0.1	0.922	1.00	92.2	50 - 150	
Imidacloprid	ND	0.1	0.738	1.00	73.8	50 - 150	
Kresoxim-methyl	ND	0.1	0.875	1.00	87.5	50 - 150	
Malathion	ND	0.1	0.897	1.00	89.7	50 - 150	

Pesticides QC Analysis Date: 1/4/2020 Pesticides QC Batch ID: PST 010421B Method: EN 15662 Unit: μg/g (ppm)

Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
Metalaxyl	ND	0.1	0.928	1.00	92.8	50 - 150	
Methiocarb	ND	0.1	0.987	1.00	98.7	50 - 150	
Methomyl	ND	0.1	0.769	1.00	76.9	50 - 150	
Methyl Parathion	ND	0.2	ND	1.00	0.00	30 - 150	
MGK-264	ND	0.2	0.489	0.600	81.5	50 - 150	
Myclobutanil	ND	0.1	0.920	1.00	92.0	50 - 150	
Naled	ND	0.2	0.609	1.00	60.9	50 - 150	
0xamyl	ND	0.1	0.770	1.00	77.0	50 - 150	
Paclobutrazol	ND	0.1	0.751	1.00	75.1	50 - 150	
Permethrins	ND	0.1	0.923	1.00	92.3	50 - 150	
Phosmet	ND	0.1	0.951	1.00	95.1	50 - 150	
Piperonyl Butoxide	ND	1.0	0.844	1.00	84.4	50 - 150	
Prallethrin	ND	0.1	0.887	1.00	88.7	50 - 150	
Propiconazole	ND	0.1	0.997	1.00	99.7	50 - 150	
Propoxur	ND	0.1	0.650	1.00	65.0	50 - 150	
Pyrethrins	ND	0.5	0.553	1.00	55.3	50 - 150	
Pyridaben	ND	0.1	0.939	1.00	93.9	50 - 150	
Spinosad	ND	0.1	0.822	1.00	82.2	50 - 150	
Spiromesifen	ND	0.1	0.973	1.00	97.3	50 - 150	
Spirotetramat	ND	0.1	0.861	1.00	86.1	50 - 150	
Spiroxamine	ND	0.1	1.06	1.00	106	50 - 150	
Tebuconazole	ND	0.1	0.964	1.00	96.4	50 - 150	
Thiacloprid	ND	0.1	0.759	1.00	75.9	50 - 150	
Thiamethoxam	ND	0.1	0.846	1.00	84.6	50 - 150	
Trifloxystrobin	ND	0.1	0.921	1.00	92.1	50 - 150	



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Metrc Sample ID:

Harvest/Process Date: 12/2/2020

Report ID: LS-210106-9 Sample Plan ID:

Sample Procedure: 160721_LAB-SOP_SampleCollection-v008

Residual Solvents
Sample Data

Solvents Analysis Date: 1/4/2021 Solvents Batch ID: RES 010421A Method: EPA 5021A Unit: μg/g (ppm) Pass 🕢

Analyte	THJ-MPJ-JDG	BGD-DDR-CNB	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	<l0q< td=""><td><l0q< td=""><td>0.00</td><td>5000.0</td><td>250.0</td><td></td><td>Pass</td></l0q<></td></l0q<>	<l0q< td=""><td>0.00</td><td>5000.0</td><td>250.0</td><td></td><td>Pass</td></l0q<>	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	<l0q< td=""><td><l0q< td=""><td>0.00</td><td>3000.0</td><td>250.0</td><td></td><td>Pass</td></l0q<></td></l0q<>	<l0q< td=""><td>0.00</td><td>3000.0</td><td>250.0</td><td></td><td>Pass</td></l0q<>	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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Metrc Sample ID:

Harvest/Process Date: 12/2/2020

Report ID: LS-210106-9 Sample Plan ID:

Sample Procedure: 160721_LAB-SOP_SampleCollection-v008

Residual Solvents
Quality Control Data

Solvents QC Analysis Date: 1/4/2021 Solvents QC Batch ID: RES 010421A Method: EPA 5021A Unit: μg/g (ppm)

Analyte	Blank	LOQ	LCS	LCS Spike	LCS Rec (%)	Limits (%)	Notes
1,4-Dioxane	ND	50.0	899	1000	89.9	70 - 130	
2-Butanol	ND	250.0	912	1000	91.2	70 - 130	
2-Ethoxyethanol	ND	50.0	986	1000	98.6	70 - 130	
Acetone	ND	250.0	912	1000	91.2	70 - 130	
Acetonitrile	ND	50.0	966	1000	96.6	70 - 130	
Benzene	ND	2.0	20.6	20.0	103	70 - 130	
Butanes	ND	250.0	1940	2000	96.8	70 - 130	
Cumene	ND	50.0	862	1000	86.2	70 - 130	
Cyclohexane	ND	50.0	832	1000	83.2	70 - 130	
Ethyl Acetate	ND	250.0	866	1000	86.6	70 - 130	
Ethyl Ether	ND	250.0	863	1000	86.3	70 - 130	
Ethylene Glycol	ND	250.0	701	1000	70.1	70 - 130	
Ethylene Oxide	ND	50.0	845	1000	84.5	70 - 130	
Heptane	ND	250.0	822	1000	82.2	70 - 130	
Hexanes	ND	50.0	3420	5000	68.4	70 - 130	
Isopropanol (2-Propanol)	ND	50.0	921	1000	92.1	70 - 130	
Isopropyl Acetate	ND	250.0	936	1000	93.6	70 - 130	
Methanol	ND	250.0	876	1000	87.6	70 - 130	
Dichloromethane	ND	50.0	817	1000	81.7	70 - 130	
Pentanes	ND	250.0	2750	3000	91.5	70 - 130	
Propane	ND	250.0	855	1000	85.5	70 - 130	
Tetrahydrofuran	ND	50.0	900	1000	90.0	70 - 130	
Toluene	ND	50.0	867	1000	86.7	70 - 130	
Xylenes	ND	50.0	3440	4000	86.1	70 - 130	



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Qualifier Flag Descriptions

U The analyte was not detected in the sample at the estimated detection limit (EDL)

Reported result is an estimate - the value is less than the minimum calibration level but greater than 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



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.

CANNABINOID POTENCY



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.



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



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



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





HOW TO READ OUR CERTIFICATE OF ANALYSIS (COA)

PAGE 2-3 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.



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.



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