



DEA No. RA0571996
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

R&D

3 TALL PINES LLC
W6326 COUNTY ROAD Z
PLYMOUTH
PLYMOUTH, WI 53073

Batch # THCV-DI-071122
Batch Date: 2022-07-11
Extracted From: Hemp

Test Reg State: Florida

Order # 3TA220803-020001
Order Date: 2022-08-03
Sample # AADF107

Sampling Date: 2022-08-05
Lab Batch Date: 2022-08-05
Completion Date: 2022-08-11

Initial Gross Weight: 133.456 g



Product Image

Potency Tested
 Heavy Metals Passed
 Mycotoxins Passed
 Pesticides Passed
 Residual Solvents Passed

Pathogenic Microbiology Passed
 Listeria Monocytogenes Passed

Potency 21 (LCUV)

Specimen Weight: 54.320 mg

Tested
SOP13.043 (LCUV)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
Delta-8 THC	Empty	2.60E-5	0.0015	471.4100	47.1410
CBN	Empty	1.40E-5	0.0015	89.0300	8.9030
CBG	Empty	2.48E-4	0.0015	76.5500	7.6550
Delta-8 THCv	100.000	4.00E-5	0.0015	24.5500	2.4550
CBNA	10.000	9.50E-5	0.0015	6.1650	0.6165
CBT	10.000	2.00E-4	0.0015	3.9910	0.3991
CBC	Empty	1.80E-5	0.0015	3.2300	0.3230
BCA	10.000	1.07E-4	0.0015	<LOQ	
CBD	Empty	5.40E-5	0.0015	<LOQ	
CBDA	Empty	1.00E-5	0.0015	<LOQ	
CBDV	Empty	6.50E-5	0.0015	<LOQ	
CBDVA	10.000	1.40E-5	0.0015	<LOQ	
CBGA	Empty	8.00E-5	0.0015	<LOQ	
CBL	10.000	3.50E-5	0.0015	<LOQ	
Delta-8 THC-O Acetate	10.000	2.70E-5	0.0003	<LOQ	
Delta-9 THC	Empty	1.30E-5	0.0015	<LOQ	
Delta-9 THC-O Acetate	10.000	7.70E-5	0.0003	<LOQ	
Exo-THC	10.000	2.30E-4	0.0015	<LOQ	
THCA	10.000	3.20E-5	0.0015	<LOQ	
THCV	Empty	7.00E-6	0.0015	<LOQ	
THCVA	10.000	4.70E-5	0.0015	<LOQ	

Potency Summary

Total THC None Detected	Total CBD None Detected
Total CBG 7.655%	Total CBN 9.444%
Other Cannabinoids 50.318%	Total Cannabinoids 67.417%

Xueli Gao
Xueli Gao Lab Toxicologist
Ph.D., DABT

Aixia Sun
Aixia Sun Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



Definitions and Abbreviations used in this report: Total CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), Total THC = THCA-A * 0.877 + Delta 9 THC, Total THCv = THCV + (THCVA * 0.87), CBG Total = (CBGA * 0.877) + CBG, CBN Total = (CBNA * 0.877) + CBN, Total CBC = CBC + (CBCA * 0.877), Total THC-O-Acetate = Delta 8 THC-O-Acetate + Delta 9 THC-O-Acetate, Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, Total Detected Cannabinoids = Delta8-THC + Delta9-THC + Total CBN + CBT + Delta8-THCV + Total CBG + Total CBD + Total THCV + CBL + Total THC + Total CBC + Total CBDV + Delta10-THC + Total THC-O-Acetate, Analyte Details above show the Dry Weight Concentrations unless specified as 12% moisture concentration. (mg/ml) = Milligrams per Milliliter, LOQ = Limit of Quantitation, LOD = Limit of Detection, Dilution = Dilution Factor (ppb) = Parts per Billion, (%) = Percent, (cfu/g) = Colony Forming Unit per Gram (cfu/g) = Colony Forming Unit per Gram, , LOD = Limit of Detection, (µg/g) = Microgram per Gram (ppm) = Parts per Million, (ppm) = (µg/g), (aw) = aw (area ratio) = Area Ratio, (mg/Kg) = Milligram per Kilogram, *Measurement of Uncertainty = +/- 10%

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Completion Date: 2022-08-11

Initial Gross Weight: 133.456 g

Pesticides FL V4
Specimen Weight: 263.800 mg

Passed
SOP13.002
(LCMS/GCMS)

**Pathogenic Microbiology
SAE (MicroArray)**

Passed
SOP13.019
(Micro Array)

Dilution Factor: 5.690

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	2.8800E-1	28.23	300	<LOQ	Fludioxonil	1.7400E+0	48	3000	<LOQ
Acephate	2.3000E-2	30	3000	<LOQ	Hexythiazox	4.9000E-2	30	2000	<LOQ
Acequinocyl	9.5640E+0	48	2000	<LOQ	Imazalil	2.4800E-1	30	100	<LOQ
Acetamiprid	5.2000E-2	30	3000	<LOQ	Imidacloprid	9.4000E-2	30	3000	<LOQ
Aldicarb	2.6000E-2	30	100	<LOQ	Kesoxim Methyl	4.2000E-2	30	1000	<LOQ
Azoxystrobin	8.1000E-2	10	3000	<LOQ	Malathion	8.2000E-2	30	2000	<LOQ
Bifenazate	1.4150E+0	30	3000	<LOQ	Metaxyl	8.1000E-2	10	3000	<LOQ
Bifenthrin	4.3000E-2	30	500	<LOQ	Methiocarb	3.2000E-2	30	100	<LOQ
Boscalid	5.5000E-2	10	3000	<LOQ	Methomyl	2.2000E-2	30	100	<LOQ
Captan	6.1200E+0	30	3000	<LOQ	methyl-Parathion	1.7100E+0	10	100	<LOQ
Carbaryl	2.2000E-2	10	500	<LOQ	Mevinphos	2.1500E+0	10	100	<LOQ
Carbofuran	3.4000E-2	10	100	<LOQ	Myclobutanil	1.0290E+0	30	3000	<LOQ
Chlorantraniliprole	3.3000E-2	10	3000	<LOQ	Naled	9.5000E-2	30	500	<LOQ
Chloridane	1.0000E+1	10	100	<LOQ	Oxamyl	2.5000E-2	30	500	<LOQ
Chlorfenapyr	3.4000E-2	30	100	<LOQ	Paclitaxel	6.5000E-2	30	100	<LOQ
Chlomequat Chloride	1.0800E-1	10	3000	<LOQ	Pentachloronitrobenzene	1.3200E+0	10	200	<LOQ
Chlorpyrifos	3.5000E-2	30	100	<LOQ	Permethrin	3.4300E-1	30	1000	<LOQ
Clofentezine	1.1900E-1	30	500	<LOQ	Phosmet	8.2000E-2	30	200	<LOQ
Coumaphos	3.7700E+0	48	100	<LOQ	Piperonylbutoxide	2.9000E-2	30	3000	<LOQ
Cyfluthrin	3.1100E+0	30	1000	<LOQ	Prallethrin	7.9800E-1	30	400	<LOQ
Cypermethrin	1.4490E+0	30	1000	<LOQ	Propiconazole	7.0000E-2	30	1000	<LOQ
Daminozide	8.8500E-1	30	100	<LOQ	Propoxur	4.6000E-2	30	100	<LOQ
Diazinon	4.4000E-2	30	200	<LOQ	Pyrethrins	2.3593E+1	30	1000	<LOQ
Dichlorvos	2.1820E+0	30	100	<LOQ	Pyridaben	3.2000E-2	30	3000	<LOQ
Dimethoate	2.1000E-2	30	100	<LOQ	Spinetoram	8.0000E-2	10	3000	<LOQ
Dimethomorph	5.8300E+0	48	3000	<LOQ	Spinosad	8.8000E-2	30	3000	<LOQ
Ethoprophos	3.6000E-1	30	100	<LOQ	Spiromesifen	2.6100E-1	30	3000	<LOQ
Etofenprox	1.1600E-1	30	100	<LOQ	Spirotetramat	8.9000E-2	30	3000	<LOQ
Etoxazole	9.5000E-2	30	1500	<LOQ	Spiroxamine	1.3100E-1	30	100	<LOQ
Fenhexamid	5.1000E-1	10	3000	<LOQ	Tebuconazole	6.7000E-2	30	1000	<LOQ
Fenoxycarb	1.0700E-1	30	100	<LOQ	Thiacloprid	6.4000E-2	30	100	<LOQ
Fenpyroximate	1.3800E-1	30	2000	<LOQ	Thiamethoxam	5.0000E-2	30	1000	<LOQ
Fipronil	1.0700E-1	30	100	<LOQ	Trifloxystrobin	3.7000E-2	30	3000	<LOQ
Fonicamid	5.1700E-1	30	2000	<LOQ					

Specimen Weight: 1011.430 mg

Dilution Factor: 1.000

Analyte	Result (cfu/g)	Analyte	Result (cfu/g)
Aspergillus flavus	Absence in 1g	Aspergillus terreus	Absence in 1g
Aspergillus fumigatus	Absence in 1g	Salmonella	Absence in 1g
Aspergillus niger	Absence in 1g	STEC E. Coli	Absence in 1g



Listeria Monocytogenes
Specimen Weight: 1018.800 mg

Passed
SOP13.010
(qPCR)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result
Listeria Monocytogenes	1	Absence in 1g

Xueli Gao
Lab Toxicologist
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Aixia Sun
Lab Director/Principal Scientist
D.H.Sc., M.Sc., B.Sc., MT (AAB)



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Initial Gross Weight: 133.456 g

Residual Solvents - FL (CBD)

Passed
SOP13.039 (GCMS)

Specimen Weight: 12.900 mg

Dilution Factor: 1.000

Analyte	LOD (ppm)	LOQ (ppm)	Action Level (ppm)	Result	Analyte	LOD (ppm)	LOQ (ppm)	Action Level (ppm)	Result
1,1-Dichloroethane	0.0094	0.16	8	<LOQ	Heptane	0.0013	1.39	5000	<LOQ
1,2-Dichloroethane	0.0003	0.04	5	<LOQ	Hexane	0.068	1.17	290	<LOQ
Acetone	0.015	2.08	5000	<LOQ	Isopropyl alcohol	0.0048	1.39	500	<LOQ
Acetonitrile	0.06	1.17	410	<LOQ	Methanol	0.0005	0.69	3000	<LOQ
Benzene	0.0002	0.02	2	<LOQ	Methylene chloride	0.0029	2.43	600	<LOQ
Butanes	0.4167	2.5	2000	<LOQ	Pentane	0.037	2.08	5000	31.971
Chloroform	0.0001	0.04	60	<LOQ	Propane	0.031	5.83	2100	<LOQ
Ethanol	0.0021	2.78	5000	<LOQ	Toluene	0.0009	2.92	890	<LOQ
Ethyl Acetate	0.0012	1.11	5000	<LOQ	Total Xylenes	0.0001	2.92	2170	<LOQ
Ethyl Ether	0.0049	1.39	5000	<LOQ	Trichloroethylene	0.0014	0.49	80	<LOQ
Ethylene Oxide	0.0038	0.1	5	<LOQ					

Mycotoxins

Passed
SOP13.007 (LCMS)

Specimen Weight: 263.800 mg

Dilution Factor: 5.690

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result
Aflatoxin B1	3.0400E-1	6	20	<LOQ	Aflatoxin G2	2.7100E-1	6	20	<LOQ
Aflatoxin B2	7.7000E-2	6	20	<LOQ	Ochratoxin A	7.5400E-1	12	20	<LOQ
Aflatoxin G1	3.0400E-1	6	20	<LOQ					

Heavy Metals

Passed
SOP13.048 (ICP-MS)

Specimen Weight: 253.410 mg

Dilution Factor: 197

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result
Arsenic (As)	4.83	100	1500	<LOQ	Lead (Pb)	11.76	100	500	<LOQ
Cadmium (Cd)	.64	100	500	<LOQ	Mercury (Hg)	.58	100	3000	<LOQ

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