



Certificate of Analysis
Compliance Test

Client Information:

FOUR WINDS FARM LLC
2312 ALPINE AVE NW
HOMESTEAD, IA 52236

Batch # 230607004
Batch Date: 2023-06-09
Extracted From: cbg hemp

Test Reg State: Florida

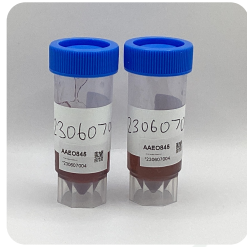
Production Facility: Partnered process
Production Date: 2023-06-09

Order # FOU230615-010001
Order Date: 2023-06-15
Sample # AAE0845

Sampling Date: 2023-06-20
Lab Batch Date: 2023-06-20
Completion Date: 2023-06-26

Initial Gross Weight: 52.893 g
Net Weight: 29.755 g

Number of Units: 2
Net Weight per Unit: 14877.500 mg
Sampling Method: MSP 7.3.1



Product Image

Potency Tested	Heavy Metals Passed	Mycotoxins Passed	Pesticides Passed	Residual Solvents Passed
Water Activity Tested	Pathogenic Microbiology Passed	Listeria Monocytogenes Passed	Microbiology Petrifilm Passed	

Potency 10

Specimen Weight: 1532.300 mg

Tested

SOP13.001 (LCUV)

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBG	100.000	2.48E-4	0.0015	8.540	0.854
CBD	100.000	5.40E-5	0.0015	0.600	0.060
Delta-9 THC	100.000	1.30E-5	0.0015	0.060	0.006
CBN	100.000	1.40E-5	0.0015	0.030	0.003
CBC	100.000	1.80E-5	0.0015	<LOQ	<LOQ
CBDA	100.000	1.00E-5	0.0015	<LOQ	<LOQ
CBDV	100.000	6.50E-5	0.0015	<LOQ	<LOQ
CBGA	100.000	8.00E-5	0.0015	<LOQ	<LOQ
THCA-A	100.000	3.20E-5	0.0015	<LOQ	<LOQ
THCV	100.000	7.00E-6	0.0015	<LOQ	<LOQ
Total Active CBD	100.000			0.600	0.060
Total Active THC	100.000			0.060	0.006

Potency Summary

Total Active THC 0.006% 0.890mg	Total Active CBD 0.060% 8.930mg
Total CBG 0.854% 127.050mg	Total CBN 0.003% 0.450mg
Other Cannabinoids None Detected	Total Cannabinoids 0.923% 137.320mg

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Definitions and Abbreviations used in this report: Total Active CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.87), Total Active THC = THCA-A * 0.877 + Delta 9 THC, Total THC = THC + (THCV * 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, Total THCP = Delta8-THCP + Delta9-THCP, Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, Total Detected Cannabinoids = Delta6a10a-THC + Delta8-THC + Total CBN + CBT + CBE + Delta8-THCV + Total CBG + Total CBD + Total THC + CBL + Total THC + Total CBC + Total CBDV + Delta10-THC + Total THC-O-Acetate + Total THCP. (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, μg/g = Microgram per Gram (ppm) = Parts per Million, (ppm) = (μg/g), (aw) = Water Activity, (mg/Kg) = Milligram per Kilogram, ACS uses simple acceptance criteria. Passed - Analyte/microbe is not detected or is at the level below the action limit per FL rule 64ER20-39, 5K-4.036, 5K-4.034. Failed - Analyte/microbe is at the level that equal or above the action limit per FL rule 64ER20-39, 5K-4.036, 5K-4.034 Sample not received via laboratory sampling.

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Order # FOU230615-010001 Order Date: 2023-06-15 Sample # AAE0845	Sampling Date: 2023-06-20 Lab Batch Date: 2023-06-20 Completion Date: 2023-06-26	Initial Gross Weight: 52.893 g Net Weight: 29.755 g	Number of Units: 2 Net Weight per Unit: 14877.500 mg Sampling Method: MSP 7.3.1

Water Activity Net Weight: 29.755 g	Tested SOP13.016 (Water Activity Analyzer)	Listeria Monocytogenes Specimen Weight: 985.100 mg	Passed SOP13.032 (qPCR)		
Dilution Factor: 1.000		Dilution Factor: 1.000			
Analyte	Action Level (aw)	Result (aw)	Analyte	Action Level (cfu/g)	Result
Water Activity	0.85	0.732	Listeria Monocytogenes	1	Absence in 1g

Microbiology (Petrifilm) Specimen Weight: 993.900 mg	Passed SOP13.003 (Petrifilm)	Pathogenic Microbiology SAE (MicroArray) Specimen Weight: 1045.700 mg	Passed SOP13.019 (Micro Array)				
Dilution Factor: 1.000		Dilution Factor: 1.000					
Analyte	LOQ (cfu/g)	Action Level (cfu/g)	Result (cfu/g)	Analyte	LOQ (cfu/g)	Action Level (cfu/g)	Result (cfu/g)
Aerobic Bacteria	10	10000	<10	Total Enterobacteriaceae	10	1000	<10
E. Coli / Coliform	10	100	<10	Yeast/Mold	10	1000	<10

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

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Heavy Metals

Specimen Weight: 252.200 mg

Passed
SOP13.048 (ICP-MS)

Dilution Factor: 198

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
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



Mycotoxins

Specimen Weight: 595.000 mg

Passed
SOP13.007 (LCMS)

Dilution Factor: 2.520

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
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	3.8	20	<LOQ
Aflatoxin G1	3.0400E-1	6	20	<LOQ					



Residual Solvents - FL (CBD)

Specimen Weight: 303.400 mg

Passed
SOP13.039 (GCMS)

Dilution Factor: 1.000

Analyte	LOD (ppm)	LOQ (ppm)	Action Level (ppm)	Result (ppm)	Analyte	LOD (ppm)	LOQ (ppm)	Action Level (ppm)	Result (ppm)
1,1-Dichloroethene	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	12.282
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	<LOQ
Chloroform	0.0001	0.04	60	<LOQ	Propane	0.031	5.83	2100	<LOQ
Ethanol	0.0021	2.78	5000	490.966	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					

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Pesticides **Passed**
Specimen Weight: 595.000 mg SOP13.007 (LCMS/GCMS)

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
Acetaminiprid	5.2000E-2	30	3000	<LOQ	Imidacloprid	9.4000E-2	30	3000	<LOQ
Aldicarb	2.6000E-2	30	100	<LOQ	Kresoxim 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	Metalaxyl	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
Chlordane	1.0000E+1	10	100	<LOQ	Oxamyl	2.5000E-2	30	500	<LOQ
Chlorfenapyr	3.4000E-2	30	100	<LOQ	Pacllobutrazol	6.5000E-2	30	100	<LOQ
Chlormequat 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					

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