



Certificate of Analysis

R&D

Client Information:

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

Manufacturing Facility:

FOUR WINDS FARM LLC
2312 ALPINE AVE NW
HOMESTEAD, IA 52236
Production Date: 2025-11-02

Batch Data:

Batch # 25001601
Batch Date: 2025-11-02
Extracted From: cbg hemp
flower

Order Details:

Test Reg State: Florida

Order

FOU251103-010001
Order Date: 2025-11-03
Sample # AAHE688

Sampling Date:

2025-11-10
Lab Batch Date: 2025-11-10
Completion Date: 2025-11-13

Initial Gross Weight:

76.500 g
Density: 1.024 g/ml

Net Weight per Package:

30000.000 mg

Net Weight per Serving:

500 mg
Servings Per Package:
60



Product Image



Potency
Tested



Heavy Metals
Passed



Mycotoxins
Passed



Pesticides
Passed



Residual Solvents
Passed



Water Activity
Tested



Pathogenic Microbiology
Passed



Microbiology Petrifilm
Passed

Potency Summary

Delta 9 THC	<LOQ	Total Active CBD	<LOQ
per Serving	0.00 mg	per Serving	0.00 mg
per Package	0.00 mg	per Package	0.00 mg
Total CBG	4.80%	Total CBN	2.12%
per Serving	24.0 mg	per Serving	10.6 mg
per Package	1440 mg	per Package	635 mg
Total Cannabinoids	6.96%	Total Active THC	<LOQ
per Serving	34.8 mg	per Serving	0.00 mg
per Package	2090 mg	per Package	0.00 mg

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 Active CBD = CBD + (CBD-A * 0.877), *Total CBDV = CBDV + (CBDVA * 0.867), Total Active THC = THCA-A * 0.877 + Delta 9 THC, Total THCV = THCV + (THCVA * 0.87), CBG Total = (CBGA * 0.878) + CBG, CBN Total = (CBNA * 0.876) + 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, Total Cannabinoids = Total percentage of cannabinoids within the sample. (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, (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 Client supplied the net weight of ml The results apply to the sample as received. This report shall not be reproduced, without written approval, from ACS Laboratory. The results of this report relate only to the material or product analyzed. Test results are confidential unless explicitly waived otherwise. ACS Laboratory is accredited to the ISO/IEC 17025:2017 Standard. The scope of this analysis is limited to the parameters listed in this COA. Testing for food additives (e.g., preservatives, colorant, flavor enhancers) was not conducted. Therefore, no conclusions should be drawn regarding the presence or absence of such additives.



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30000.000 mg

Net Weight per Serving:

500 mg
Servings Per Package:
60



Potency 11 (LCUV)

Specimen Weight: 100.810 mg

Tested

SOP13.001 (LCUV)

Analyte	Dilution (1:n)	LOD (mg/g)	LOQ (%)	Result (mg/ml)	(%)	Per Serving (mg)	Per Package (mg)
CBG	10.000	2.48E-4	0.015	47.7	4.77	23.8	1430
CBN	10.000	1.40E-5	0.015	21.2	2.12	10.6	635
CBGA	10.000	8.00E-5	0.015	0.370	0.0370	0.185	11.1
CBC	10.000	1.80E-5	0.015	0.320	0.0320	0.160	9.60
CBD	10.000	5.40E-5	0.015	<LOQ	<LOQ	0.00	0.00
CBDA	10.000	1.00E-5	0.015	<LOQ	<LOQ	0.00	0.00
CBDV	10.000	6.50E-5	0.015	<LOQ	<LOQ	0.00	0.00
Delta-8 THC	10.000	2.60E-5	0.015	<LOQ	<LOQ	0.00	0.00
Delta-9 THC	10.000	1.30E-5	0.015	<LOQ	<LOQ	0.00	0.00
THCA-A	10.000	3.20E-5	0.015	<LOQ	<LOQ	0.00	0.00
THCV	10.000	7.00E-6	0.015	<LOQ	<LOQ	0.00	0.00
Total Active THC	10.000			<LOQ	<LOQ	0.00	0.00
Total Active CBD	10.000			<LOQ	<LOQ	0.00	0.00

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500 mg
Servings Per Package:
60



Water Activity

Specimen Weight: 0.500 g

Tested

SOP13.016 (Water Activity Analyzer)

Dilution Factor: 1.000

Analyte	Action Level (aw)	Result (aw)
Water Activity	0.85	0.228



Microbiology (Petrifilm)

Specimen Weight: 991.300 mg

Passed

SOP13.003 (Petrifilm)

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



Pathogenic Microbiology SAE (MicroArray)

Specimen Weight: 1045.100 mg

Passed

SOP13.019 (Micro Array)

Dilution Factor: 1.000

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

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500 mg
Servings Per Package:
60

Heavy Metals

Specimen Weight: 254.100 mg

Passed

SOP13.048 (ICP-MS)

Dilution Factor: 196

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	4.830	100	1500	<LOQ	Lead (Pb)	11.760	100	500	<LOQ
Cadmium (Cd)	0.640	100	500	<LOQ	Mercury (Hg)	0.580	100	3000	<LOQ



Mycotoxins FL

Specimen Weight: 607.600 mg

Passed

SOP13.007 (LCMS/GCMS)

Dilution Factor: 2.470

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Aflatoxin B1	0.304	4.9	20	<LOQ	Aflatoxin G2	0.271	4.9	20	<LOQ
Aflatoxin B2	0.077	4.9	20	<LOQ	Ochratoxin A	0.754	9.8	20	<LOQ
Aflatoxin G1	0.304	4.9	20	<LOQ					



Residual Solvents - FL (CBD)

Specimen Weight: 17.900 mg

Passed

SOP13.039 (GCMS-HS)

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	0.009	1.6	8	<LOQ	Heptane	0.001	13.9	5000	<LOQ
1,2-Dichloroethane	0.000	0.4	2	<LOQ	Hexane	0.068	11.7	250	<LOQ
Acetone	0.015	20.8	750	<LOQ	Isopropyl alcohol	0.005	13.9	500	<LOQ
Acetonitrile	0.060	11.7	60	<LOQ	Methanol	0.001	6.9	250	<LOQ
Benzene	0.000	0.2	1	<LOQ	Methylene chloride	0.003	24.3	125	<LOQ
Butanes	0.417	25	5000	<LOQ	Pentane	0.037	20.8	750	<LOQ
Chloroform	0.000	0.4	2	<LOQ	Propane	0.031	58.3	5000	<LOQ
Ethanol	0.002	27.8	NA	<LOQ	Toluene	0.001	29.2	150	<LOQ
Ethyl Acetate	0.001	11.1	400	<LOQ	Total Xylenes	0.000	29.2	150	<LOQ
Ethyl Ether	0.005	13.9	500	<LOQ	Trichloroethylene	0.001	4.9	25	<LOQ
Ethylene Oxide	0.004	1	5	<LOQ					

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Pesticides Florida

Specimen Weight: 607.600 mg

Passed

SOP13.007 (LCMS/GCMS)

Dilution Factor: 2.470

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	0.399	23.3	300	<LOQ	Flonicamid	0.466	24.8	2000	<LOQ
Acephate	0.141	24.8	3000	<LOQ	Fludioxonil	0.360	24.8	3000	<LOQ
Acequinocyl	2.178	24.8	2000	<LOQ	Hexythiazox	0.113	24.8	2000	<LOQ
Acetamiprid	0.140	24.8	3000	<LOQ	Imazalil	0.258	24.8	100	<LOQ
Aldicarb	0.203	24.8	100	<LOQ	Imidacloprid	0.402	24.8	3000	<LOQ
Azoxystrobin	0.188	24.8	3000	<LOQ	Kresoxim Methyl	0.182	24.8	1000	<LOQ
Bifenazate	0.086	24.8	3000	<LOQ	Malathion	0.223	24.8	2000	<LOQ
Bifenthrin	0.100	24.8	500	<LOQ	Metalaxyl	0.270	24.8	3000	<LOQ
Boscalid	0.595	24.8	3000	<LOQ	Methiocarb	0.118	24.8	100	<LOQ
Captan	1.850	323	3000	<LOQ	Methomyl	0.064	24.8	100	<LOQ
Carbaryl	0.122	24.8	500	<LOQ	methyl-Parathion	2.390	24.8	100	<LOQ
Carbofuran	0.086	24.8	100	<LOQ	Mevinphos	0.093	24.8	100	<LOQ
Chlorantraniliprole	0.084	24.8	3000	<LOQ	Myclobutanil	0.573	24.8	3000	<LOQ
Chlordane	9.671	24.8	100	<LOQ	Naled	0.069	24.8	500	<LOQ
Chlorfenapyr	1.500	24.8	100	<LOQ	Oxamyl	0.041	24.8	500	<LOQ
Chloromequat Chloride	0.205	24.8	3000	<LOQ	Paclobutrazol	0.065	24.8	100	<LOQ
Chlorpyrifos	0.109	24.8	100	<LOQ	Pentachloronitrobenzene	7.950	24.8	200	<LOQ
Clofentezine	0.212	24.8	500	<LOQ	Permethrin	0.624	24.8	1000	<LOQ
Coumaphos	0.206	24.8	100	<LOQ	Phosmet	0.127	24.8	200	<LOQ
Cyfluthrin	0.980	24.8	1000	<LOQ	Piperonylbutoxide	0.149	24.8	3000	<LOQ
Cypermethrin	0.985	24.8	1000	<LOQ	Prallethrin	1.476	24.8	400	<LOQ
Daminozide	1.655	24.8	100	<LOQ	Propiconazole	0.294	24.8	1000	<LOQ
Diazinon	0.212	24.8	200	<LOQ	Propoxur	0.100	24.8	100	<LOQ
Dichlorvos	1.130	24.8	100	<LOQ	Pyrethrins	0.067	12.9	1000	<LOQ
Dimethoate	0.063	24.8	100	<LOQ	Pyridaben	0.140	24.8	3000	<LOQ
Dimethomorph	2.581	24.8	3000	<LOQ	Spinetoram	0.424	24.8	3000	<LOQ
Ethoprophos	0.151	24.8	100	<LOQ	Spiromesifen	0.120	24.8	3000	<LOQ
Etofenprox	0.172	24.8	100	<LOQ	Spirotetramat	0.211	24.8	30000	<LOQ
Etoxazole	0.866	24.8	1500	<LOQ	Spiroxamine	0.533	24.8	100	<LOQ
Fenhexamid	0.588	24.8	30000	<LOQ	Tebuconazole	0.230	24.8	1000	<LOQ
Fenoxycarb	0.274	24.8	100	<LOQ	Thiacloprid	0.170	24.8	100	<LOQ
Fenpyroximate	0.198	24.8	2000	<LOQ	Thiamethoxam	0.179	24.8	1000	<LOQ
Fipronil	0.317	24.8	100	<LOQ	Trifloxystrobin	0.134	24.8	3000	<LOQ

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