



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

Certificate of Analysis

R&D

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

Batch # E18822-1
Batch Date: 2022-07-18
Extracted From: cbg hemp

Test Reg State: Florida

Production Facility: partnered process llc

Order # FOU220801-010001
Order Date: 2022-08-01
Sample # AADE807

Sampling Date: 2022-08-09
Lab Batch Date: 2022-08-09
Completion Date: 2022-08-15

Initial Gross Weight: 39.179 g
Net Weight: 33.779 g

Number of Units: 1
Net Weight per Unit: 3377.900 mg



Product Image

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

Potency 10
Specimen Weight: 1536.800 mg

Tested
SOP13.001 (LCUV)

Pieces For Panel: 10

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBG	1000.000	2.48E-4	0.0015	10.3100	1.0310
CBD	1000.000	5.40E-5	0.0015	0.7200	0.0720
Delta-9 THC	1000.000	1.30E-5	0.0015	0.1600	0.0160
CBGA	1000.000	8.00E-5	0.0015	0.0200	0.0020
CBC	1000.000	1.80E-5	0.0015	<LOQ	<LOQ
THCA	1000.000	3.20E-5	0.0015	<LOQ	<LOQ
CBN	1000.000	1.40E-5	0.0015	<LOQ	<LOQ
CBDV	1000.000	6.50E-5	0.0015	<LOQ	<LOQ
CBDA	1000.000	1.00E-5	0.0015	<LOQ	<LOQ
THCV	1000.000	7.00E-6	0.0015	<LOQ	<LOQ

Potency Summary

Total THC 0.016%	0.540mg	Total CBD 0.072%	2.430mg
Total CBG 1.033%	34.890mg	Total CBN -	None Detected
Other Cannabinoids -	None Detected	Total Cannabinoids 1.121%	37.870mg

Potency per Gummy

Mycotoxins
Specimen Weight: 259.900 mg

Passed
SOP13.007 (LCMS)

Dilution Factor: 5.770

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	12	20	<LOQ
Aflatoxin G1	3.0400E-1	6	20	<LOQ					

Pathogenic SAE (qPCR)
Specimen Weight: 237.600 mg

Passed
SOP13.010 (qPCR)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result (cfu/g)	Analyte	Action Level (cfu/g)	Result (cfu/g)
Aspergillus (Flavus, Fumigatus, Niger, Terreus)	1	Absence in 1g	Salmonella	1	Absence in 1g
E.Coli	1	Absence in 1g			

Xueli Gao
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Ph.D., DABT
Lab Toxicologist

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



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Pesticides FL V4

Specimen Weight: 259.900 mg

Passed

SOP13.007 (LCMS/GCMS)

Dilution Factor: 5.770

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	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
Chlomequat Chloride	1.0800E-1	10	3000	<LOQ	Pentachloronitrobenzene	1.3200E+0	10	200	<LOQ
Chlorpyrifos	3.5000E-2	30	100	<LOQ	Pemethrin	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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Lab Toxicologist

Aixia Sun
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Residual Solvents - FL (CBD)

Specimen Weight: 12.500 mg

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	<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	<LOQ
Chloroform	0.0001	0.04	60	<LOQ	Propane	0.031	5.83	2100	<LOQ
Ethanol	0.0021	2.78	5000	214.680	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					

Passed
SOP13.039 (GCMS)



Microbiology (Petrifilm/Plating)

Specimen Weight: 995.900 mg

Dilution Factor: 1.000

Analyte	LOQ (cfu/g)	Result (cfu/g)	Analyte	LOQ (cfu/g)	Result (cfu/g)
Aerobic Bacteria	10	<10	Yeast/Mold	10	10.000
E. Coli / Coliform	10	<10			

Tested
SOP13.003
(Petrifilm)

Heavy Metals

Specimen Weight: 252.050 mg

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

Passed
SOP13.048 (ICP-MS)



Water Activity

Net Weight: 33.779 g

Dilution Factor: 1.000

Analyte	Action Level (aw)	Result (aw)
Water Activity	0.85	0.635

Tested
SOP13.016
(Water Activity Analyzer)

Listeria Monocytogenes

Specimen Weight: 995.500 mg

Dilution Factor: 1.000

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

Passed
SOP13.032 (qPCR)

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