



Certificate of Analysis
Compliance Test

Client Information:

SUTHERLAND CBD
1420 BELKNAP ST
SUPERIOR, WI 54880

Batch # D9CBNGUM02132024
Batch Date: 2024-02-13
Extracted From: HEMP

Test Reg State: Florida

Production Facility: MIDWEST BOTANICAL
COALITION
Production Date: 2024-02-13

Order # SUT240213-010001
Order Date: 2024-02-13
Sample # AAFH587

Sampling Date: 2024-02-14
Lab Batch Date: 2024-02-14
Completion Date: 2024-02-20

Initial Gross Weight: 70.745 g
Net Weight: 63.645 g

Number of Units: 1
Net Weight per Unit: 4243.000 mg
Sampling Method: MSP 7.3.1



Product Image

Potency Tested	Heavy Metals Passed	Mycotoxins Passed	Pesticides Passed	Residual Solvents Passed
Pathogenic Microbiology Passed	Microbiology (qPCR) Passed			

Potency 10
Specimen Weight: 1507.900 mg

Tested
SOP13.001 (LCUV)

Potency Summary

Total Active THC 0.050% 2.122 mg	Total Active CBD - None Detected
Total CBG - None Detected	Total CBN 0.256% 10.862 mg
Other Cannabinoids 0%	Total Cannabinoids 0.306% 12.984 mg

Pieces For Panel: 15

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/g)	(%)
CBN	10.000	1.40E-5	0.015	2.560	0.256
Delta-9 THC	10.000	1.30E-5	0.015	0.500	0.050
CBC	10.000	1.80E-5	0.015	<LOQ	<LOQ
CBD	10.000	5.40E-5	0.015	<LOQ	<LOQ
CBDA	10.000	1.00E-5	0.015	<LOQ	<LOQ
CBDV	10.000	6.50E-5	0.015	<LOQ	<LOQ
CBG	10.000	2.48E-4	0.015	<LOQ	<LOQ
CBGA	10.000	8.00E-5	0.015	<LOQ	<LOQ
THCA-A	10.000	3.20E-5	0.015	<LOQ	<LOQ
THCV	10.000	7.00E-6	0.015	<LOQ	<LOQ
Total Active CBD	10.000			<LOQ	<LOQ
Total Active THC	10.000			0.500	0.050

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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 + (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, Total THCP = Delta8-THCP + Delta9-THCP, Other Cannabinoids Total = Total Cannabinoids - All the listed cannabinoids on the summary section, Total Detected Cannabinoids = Delta8-THC + Delta9-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, (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. 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.



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Total Yeast and Mold
Specimen Weight: 511.400 mg

Passed
SOP13.017 (qPCR)

Pathogenic Microbiology SAE
(MicroArray)

Passed
SOP13.019
(Micro Array)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result (cfu/g)	Remark
Total Yeast/Mold	100000	<LOQ	Passed

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

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Heavy Metals

Specimen Weight: 245.700 mg

Passed
SOP13.048 (ICP-MS)

Dilution Factor: 203

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: 584.200 mg

Passed
SOP13.007 (LCMS)

Dilution Factor: 2.570

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: 300.000 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	<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	148.996	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

Specimen Weight: 584.200 mg

Passed

SOP13.007 (LCMS/GCMS)

Dilution Factor: 2.570

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	Paclbutrazol	6.5000E-2	30	100	<LOQ
Chloromequat 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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