



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

Certificate of Analysis

Compliance Test

SUTHERLAND CBD
1420 BELKNAP ST
SUPERIOR, WI 54880

Batch # D91108220201
Batch Date: 2023-01-26
Extracted From: HEMP

Test Reg State: Florida

Order # SUT230130-010001
Order Date: 2023-01-30
Sample # AAEA874

Sampling Date: 2023-02-07
Lab Batch Date: 2023-02-07
Completion Date: 2023-02-12

Initial Gross Weight: 82.156 g



Product Image

Potency Tested	Terpenes Tested	Heavy Metals Passed	Mycotoxins Passed	Pesticides Passed
Residual Solvents Passed	Pathogenic Microbiology Passed	Listeria Monocytogenes Passed		

Delta 8/Delta 10 Potency 13 - (LCUV) Tested SOP13.052 (LCUV)

Specimen Weight: 82.810 mg

Analyte	LOD (%)	LOQ (%)	Result (mg/g)	(%)
Delta-9 THC	1.30E-5	0.1	3.000	0.0003
CBD	5.40E-5	0.0015	0.540	5.4E-5
CBC	1.80E-5	0.0015	<LOQ	<LOQ
CBDA	1.00E-5	0.0015	<LOQ	<LOQ
CBDV	6.50E-5	0.0015	<LOQ	<LOQ
CBG	2.48E-4	0.0015	<LOQ	<LOQ
CBGA	8.00E-5	0.0015	<LOQ	<LOQ
CBN	1.40E-5	0.0015	<LOQ	<LOQ
Delta-10 THC	3.00E-6	0.0015	<LOQ	<LOQ
Delta-8 THC	2.60E-5	0.0015	<LOQ	<LOQ
Delta6a10a-THC	8.47E-5	0.0015	<LOQ	<LOQ
THCA-A	3.20E-5	0.0015	<LOQ	<LOQ
THCV	7.00E-6	0.0015	<LOQ	<LOQ
Total Active CBD			<LOQ	5.4E-5
Total Active THC			<LOQ	0.0003

Potency Summary

Total Delta 8 None Detected	Total Delta 10 None Detected
Total Active THC 0.0003% <LOQ	Total Active CBD 5.4E-5% <LOQ
Total CBG None Detected	Total CBN None Detected
Other Cannabinoids None Detected	Total Cannabinoids 0.000354% <LOQ

Terpenes Summary

Analyte	Result (mg/g)	(%)
Total Terpenes: 0.000%		

Detailed Terpenes Analysis is on the following page

Mycotoxins Passed SOP13.007 (LCMS)

Specimen Weight: 266.200 mg

Dilution Factor: 5.630

Analyte	LOD (ppb)	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Aflatoxin B1	3.0400E-1	6	20	<LOQ
Aflatoxin B2	7.7000E-2	6	20	<LOQ
Aflatoxin G1	3.0400E-1	6	20	<LOQ

Pathogenic Microbiology SAE Passed SOP13.019 (Micro Array)

Specimen Weight: 1011.690 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

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

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Order Date: 2023-01-30
Sample # AAEA874

Sampling Date: 2023-02-07
Lab Batch Date: 2023-02-07
Completion Date: 2023-02-12

Initial Gross Weight: 82.156 g



Pesticides FL V4

Specimen Weight: 266.200 mg

Dilution Factor: 5.630

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	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
Flonicamid	5.1700E-1	30	2000	<LOQ					



Listeria Monocytogenes

Specimen Weight: 990.190 mg

Dilution Factor: 1.000

Analyte	Result
Listeria Monocytogenes	Absence in 1g

Passed

SOP13.032
(qPCR)

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



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Batch Date: 2023-01-26
Extracted From: HEMP

Test Reg State: Florida

Order # SUT230130-010001
Order Date: 2023-01-30
Sample # AAE874

Sampling Date: 2023-02-07
Lab Batch Date: 2023-02-07
Completion Date: 2023-02-12

Initial Gross Weight: 82.156 g



Terpenes

Specimen Weight: 114.580 mg

Tested

SOP13.045 (GC/GCMS)

Dilution Factor: 20.000

Analyte	LOQ (%)	Result (mg/g)	(%)	Analyte	LOQ (%)	Result (mg/g)	(%)
(+)-Cedrol	0.002	<LOQ		Fenchyl Alcohol	0.002	<LOQ	
(R)-(+)-Limonene	0.002	<LOQ		Gamma-Terpinene	0.002	<LOQ	
3-Carene	0.002	<LOQ		Geraniol	0.002	<LOQ	
alpha-Bisabolol	0.002	<LOQ		Geranyl acetate	0.002	<LOQ	
alpha-Cedrene	0.002	<LOQ		Guaiol	0.002	<LOQ	
alpha-Humulene	0.002	<LOQ		Hexahydrothymol	0.002	<LOQ	
alpha-Phellandrene	0.002	<LOQ		Isobomeol	0.002	<LOQ	
alpha-Pinene	0.002	<LOQ		Isopulegol	0.002	<LOQ	
alpha-Terpinene	0.002	<LOQ		Linalool	0.002	<LOQ	
beta-Myrcene	0.002	<LOQ		Nerol	0.002	<LOQ	
beta-Pinene	0.002	<LOQ		Ocimene	0.00033	<LOQ	
Borneol	0.004	<LOQ		Pulegone	0.002	<LOQ	
Camphene	0.002	<LOQ		Sabinene	0.002	<LOQ	
Camphors	0.006	<LOQ		Sabinene Hydrate	0.002	<LOQ	
Caryophyllene oxide	0.002	<LOQ		Terpinolene	0.002	<LOQ	
cis-Nerolidol	0.002	<LOQ		Total Terpeneol	0.00126	<LOQ	
Eucalyptol	0.002	<LOQ		trans-Caryophyllene	0.002	<LOQ	
Farnesene	0.002	<LOQ		trans-Nerolidol	0.002	<LOQ	
Fenchone	0.002	<LOQ		Valencene	0.002	<LOQ	

Total Terpenes: 0.000%



Residual Solvents - FL (CBD)

Specimen Weight: N/A Dilution Factor: 5000.000

Passed

SOP13.039 (GCMS)

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	NA	0.000	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					

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

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Initial Gross Weight: 82.156 g



Heavy Metals

Specimen Weight: 245.300 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

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