

(818) 922-2416 http://www.csalabs.com Lic# C8-18-0000037-TEMP

1 of 6

Pass

Certified Organic Direct Isolate 1

Sample ID: 1903CSALA2043.7084 Strain: Certified Organic Direct Isolate 1 Matrix: Concentrates & Extracts Type: Other Sample Size: 3 units; Batch:

Total THC

Produced: N/A Collected: 03/07/2019 Received: 03/07/2019 Completed: 03/28/2019 Batch#:



Summary

99.96%	Pass	Pass
Total Cannabinoids	Pesticides	Residual Solvents
Pass	Pass	Pass



Cannabino <mark>ids</mark>				Complete		
Testing metho Analyte	d: HPLC-SOP 10	1 LOO	Mass	Mass		
Analyte	%	<u> </u>	%	mg/g		
THCa	0.00002	0.0001	ND	ND		
Δ9-THC	0.00004	0.0001	ND	ND		
∆8-THC	0.00004	0.0001	ND	ND		
THCV	0.00004	0.0001	ND	ND		
CBDa	0.00002	0.0001	ND	ND		
CBD	0.00004	0.0001	99.96	999.60		
CBDV	0.00001	0.0001	ND	ND		
CBN	0.00002	0.0001	ND	ND		
CBGa	0.00002	0.0001	ND	ND		
CBG	0.00004	0.0001	ND	ND		
CBC	0.00001	0.0001	ND	ND		
Total			99.96	999.60		
	ND		9	9.96%		

Total CBD

Terpenes			Com	plete
Testing method: HS-GC-FID - SOP 201				
Analyte	LOD	LOQ	Mass	Mass
	%	%	%	mg/g
α-Bisabolol	0.00015	0.0013	ND	ND
α-Humulene	0.00057	0.0013	ND	ND
α-Pinene	0.00015	0.0013	ND	ND
α-Terpinene	0.00012	0.0013	ND	ND
β-Caryophyllene	0.00017	0.0013	ND	ND
β-Myrcene	0.00012	0.0013	ND	ND
β-Pinene	0.00034	0.0013	ND	ND
Camphene	0.00072	0.0013	ND	ND
Caryophyllene Oxide	0.00017	0.0013	ND	ND
cis-Nerolidol	0.00009	0.0013	ND	ND
δ-3-Carene	0.00040	0.0013	ND	ND
δ-Limonene	0.00016	0.0013	ND	ND
Eucalyptol	0.00017	0.0013	ND	ND
y-Terpinene	0.00012	0.0013	ND	ND
Geraniol	0.00013	0.0013	ND	ND
Guaiol	0.00018	0.0013	ND	ND
Isopulegol	0.00011	0.0013	ND	ND
Linalool	0.00015	0.0013	ND	ND

0.00013 0.0013

0.00010 0.0013

0.00016 0.0013

0.00058 0.0013

Total THC = THCa * 0.877 + d9-THC Total CBD = CBDa * 0.877 + CBD LOQ = Limit of Quantitation; LOD = Limit of Detection; NR = Not Reported; NT = Not Tested; ND = Not Detected. The reported result is based on a sample weight with the applicable moisture content for that sample;





Date Tested: 03/28/2019



ISO / IEC 17025:2017 ACCREDITED LABORATORY Accreditation No. 73653

Mallory Speakman Laboratory Director - LA 03/28/2019

Ocimene

Total

p-Cymene

Terpinolene

trans-Nerolidol

Anya Engen Quality Manager 03/28/2019



ND

ND

ND

ND

0.00

Pass

ND

ND

ND

ND

0.00



(818) 922-2416 http://www.csalabs.com Lic# C8-18-0000037-TEMP

2 of 6

Pass

Certified Organic Direct Isolate 1

Sample ID: 1903CSALA2043.7084 Strain: Certified Organic Direct Isolate 1 Matrix: Concentrates & Extracts Type: Other Sample Size: 3 units; Batch:

Produced: N/A Collected: 03/07/2019 Received: 03/07/2019 Completed: 03/28/2019 Batch#:

Client **Certified Organic Direct** Lic.# 1230 Rosecrans Ave. Manhattan Beach, CA 90266

Pesticides

Test Method: LCMS & GCMS-SOP 301

Analyte	LOD	LOQ	Limit	Mass	Status	Analyte	LOD	LOQ	Limit	Mass	Status
	µg/g	µg/g	µg/g	µg/g			µg/g	µg/g	µg/g	µg/g	
Abamectin	0.018	0.059	0.1	ND	Pass	Fludioxonil	0.007	0.024	0.1	ND	Pass
Acephate	0.009	0.029	0.1	ND	Pass	Hexythiazox	0.007	0.024	0.1	ND	Pass
Acequinocyl	0.005	0.018	0.1	ND	Pass	Imazalil	0.004	0.012	0.004	ND	Pass
Acetamiprid	0.004	0.013	0.1	ND	Pass	Imidacloprid	0.039	0.129	5	ND	Pass
Aldicarb	0.004	0.013	0.004	ND	Pass	Kresoxim Methyl	0.005	0.017	0.1	ND	Pass
Azoxystrobin	0.006	0.019	0.1	ND	Pass	Malathion	0.01	0.032	0.5	ND	Pass
Bifenazate	0.004	0.014	0.1	ND	Pass	Metalaxyl	0.003	0.01	2	ND	Pass
Bifenthrin	0.008	0.027	3	ND	Pass	Methiocarb	0.006	0.02	0.006	ND	Pass
Boscalid	0.006	0.019	0.1	ND	Pass	Methomyl	0.009	0.03	1	ND	Pass
Captan	0.0789	0.2631	0.7	ND	Pass	Methyl Parathion	0.007	0.0233	0.007	ND	Pass
Carbaryl	0.005	0.015	0.5	ND	Pass	Mevinphos	0.003	0.011	0.003	ND	Pass
Carbofuran	0.005	0.018	0.005	ND	Pass	Myclobutanil	0.017	0.058	0.1	ND	Pass
Chlorantraniliprole	0.007	0.024	10	ND	Pass	Naled	0.007	0.024	0.1	ND	Pass
Chlordane	0.0291	0.0969	0.0291	ND	Pass	Oxamyl	0.003	0.009	0.5	ND	Pass
Chlorfenapyr	0.01	0.033	0.01	ND	Pass	Paclobutrazol	0.013	0.044	0.013	ND	Pass
Chlorpyrifos	0.005	0.017	0.005	ND	Pass	Pentachloronitrobenzene	0.0046	0.0152	0.1	ND	Pass
Clofentezine	0.006	0.019	0.1	ND	Pass	Permethrin	0.011	0.036	0.5	ND	Pass
Coumaphos	0.009	0.028	0.009	ND	Pass	Phosmet	0.007	0.025	0.1	ND	Pass
Cyfluthrin	0.008	0.026	2	ND	Pass	Piperonyl Butoxide	0.005	0.018	3	ND	Pass
Cypermethrin	0.013	0.044	1	ND	Pass	Prallethrin	0.007	0.024	0.1	ND	Pass
Daminozide	0.021	0.07	0.021	ND	Pass	Propiconazole	0.008	0.026	0.1	ND	Pass
DDVP	0.004	0.012	0.004	ND	Pass	Propoxur	0.004	0.013	0.004	ND	Pass
Diazinon	0.005	0.017	0.1	ND	Pass	Pyrethrins	0.003	0.01	0.5	ND	Pass
Dimethoate	0.003	0.011	0.003	ND	Pass	Pyridaben	0.008	0.027	0.1	ND	Pass
Dimethomorph	0.007	0.023	2	ND	Pass	Spinetoram	0.007	0.022	0.1	ND	Pass
Ethoprophos	0.004	0.013	0.004	ND	Pass	Spinosad	0.005	0.016	0.1	ND	Pass
Etofenprox	0.005	0.017	0.005	ND	Pass	Spiromesifen	0.007	0.023	0.1	ND	Pass
Etoxazole	0.006	0.018	0.1	ND	Pass	Spirotetramat	0.009	0.03	0.1	ND	Pass
Fenhexamid	0.009	0.03	0.1	ND	Pass	Spiroxamine	0.006	0.019	0.006	ND	Pass
Fenoxycarb	0.007	0.022	0.007	ND	Pass	Tebuconazole	0.013	0.042	0.1	ND	Pass
Fenpyroximate	0.009	0.03	0.1	ND	Pass	Thiacloprid	0.007	0.023	0.007	ND	Pass
Fipronil	0.017	0.056	0.017	ND	Pass	Thiamethoxam	0.004	0.013	5	ND	Pass
Flonicamid	0.0244	0.0814	0.1	ND	Pass	Trifloxystrobin	0.004	0.014	0.1	ND	Pass

Date Tested: 03/26/2019 LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.





ISO / IEC 17025:2017 ACCREDITED LABORATORY Accreditation No. 73653

Mallory Speakman Laboratory Director - LA 03/28/2019

Anya Engen



Quality Manager 03/28/2019



Van Nuys, CA 91406

(818) 922-2416 http://www.csalabs.com Lic# C8-18-0000037-TEMP

3 of 6

Pass

Certified Organic Direct Isolate 1

Sample ID: 1903CSALA2043.7084	Produced: N/A	Client
Strain: Certified Organic Direct Isolate 1	Collected: 03/07/2019	Certified Organic Direct
Matrix: Concentrates & Extracts	Received: 03/07/2019	Lic.#
Type: Other	Completed: 03/28/2019	1230 Rosecrans Ave.
Sample Size: 3 units; Batch:	Batch#:	Manhattan Beach, CA 90266

Heavy Metals

	Analyte	LOD	LOQ	Limit	Mass	Status
Testing method: ICPMS-SOP 501		µg/g	µg/g	µg/g	µg/g	
	Arsenic	0.001	0.01	0.2	<loq< td=""><td>Pass</td></loq<>	Pass
	Cadmium	0.001	0.01	0.2	ND	Pass
	Lead	0.001	0.01	0.5	0.127	Pass
	Mercury	0.001	0.01	0.1	0.030	Pass

Date Tested: 03/27/2019 LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.





ISO / IEC 17025:2017 ACCREDITED LABORATORY Accreditation No. 73653

Mallory Speakman Laboratory Director - LA 03/28/2019





Anya Engen Quality Manager 03/28/2019



(818) 922-2416 http://www.csalabs.com Lic# C8-18-0000037-TEMP

4 of 6

Pass

Certified Organic Direct Isolate 1

Sample ID: 1903CSALA2043.7084	Ρ
Strain: Certified Organic Direct Isolate 1	C
Matrix: Concentrates & Extracts	R
Type: Other	C
Sample Size: 3 units; Batch:	В

Produced: N/A Collected: 03/07/2019 Received: 03/07/2019 Completed: 03/28/2019 Batch#:

Client **Certified Organic Direct** Lic.# 1230 Rosecrans Ave. Manhattan Beach, CA 90266

Residual Solvents

Testing method: HSGCMS-SOP 202					Pass
Analyte	LOD	LOQ	Limit	Mass	Status
	µg/g	µg/g	µg/g	µg/g	
1,2-Dichloro-Ethane	0.024	0.24	1	ND	Pass
Acetone	0.112	1.12	5000	ND	Pass
Acetonitrile	0.0196	0.196	410	ND	Pass
Benzene	0.0096	0.096	1	ND	Pass
Butane	0.2	2	5000	ND	Pass
Chloroform	0.0288	0.288	1	ND	Pass
Ethanol	0.112	1.12	5000	ND	Pass
Ethyl-Acetate	0.112	1.12	5000	ND	Pass
Ethyl-Ether	0.112	1.12	5000	ND	Pass
Ethylene Oxide	0.024	0.24	1	ND	Pass
Heptane	0.112	1.12	5000	123.58	Pass
Isopropanol	0.112	1.12	5000	ND	Pass
Methanol	0.144	1.44	3000	ND	Pass
Methylene-Chloride	0.0288	0.288	1	ND	Pass
n-Hexane	0.1392	1.392	290	ND	Pass
Pentane	0.112	1.12	5000	ND	Pass
Propane	0.08	0.8	5000	ND	Pass
Toluene	0.4272	4.272	890	ND	Pass
Trichloroethene	0.0384	0.384	1	ND	Pass
Xylenes	1.0416	10.416	2170	ND	Pass

Date Tested: 03/26/2019 LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.





ISO / IEC 17025:2017 ACCREDITED LABORATORY Accreditation No. 73653

Mallory Speakman Laboratory Director - LA 03/28/2019

Anya Engen



Quality Manager 03/28/2019



Van Nuys, CA 91406

(818) 922-2416 http://www.csalabs.com Lic# C8-18-0000037-TEMP

5 of 6

Pass

Certified Organic Direct Isolate 1

Sample ID: 1903CSALA2043.7084 Strain: Certified Organic Direct Isolate 1 Matrix: Concentrates & Extracts	Produced: N/A Collected: 03/07/2019 Received: 03/07/2019 Completed: 03/28/2019	Client Certified Organic Direct Lic. # 1230 Poscerans Ave
Type: Other	Completed: 03/28/2019	1230 Rosecrans Ave.
Sample Size: 3 units; Batch:	Batch#:	Manhattan Beach, CA 90266

Mycotoxins

	Analyte	LOD	LOQ	Limit	Units	Status
Test method: LCMS-SOP 301		µg/kg	µg/kg	µg/kg	µg/kg	
	B1	0.001	0.005		ND	Tested
	B2	0.007	0.022		ND	Tested
	G1	0.007	0.022		ND	Tested
	G2	0.006	0.021		ND	Tested
	Total Aflatoxins			20	ND	Pass
	Ochratoxin A	0.013	0.045	20	ND	Pass

Date Tested: 03/26/2019 LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.;





ISO / IEC 17025:2017 ACCREDITED LABORATORY Accreditation No. 73653

Mallory Speakman Laboratory Director - LA 03/28/2019



Anya Engen Quality Manager 03/28/2019



(818) 922-2416 http://www.csalabs.com Lic# C8-18-0000037-TEMP

6 of 6

Dace

Certified Organic Direct Isolate 1

Sample ID: 1903CSALA2043.7084 Strain: Certified Organic Direct Isolate 1 Matrix: Concentrates & Extracts Type: Other Sample Size: 3 units; Batch:

Produced: N/A Collected: 03/07/2019 Received: 03/07/2019 Completed: 03/28/2019 Batch#:

Client **Certified Organic Direct** Lic.# 1230 Rosecrans Ave. Manhattan Beach, CA 90266

Microhials

Microbials Test method: PCR-SOP 401		Pass
Analyte	Result	Status
Aspergillus flavus	Not Detected	Pass
Aspergillus fumigatus	Not Detected	Pass
Aspergillus niger	Not Detected	Pass
Aspergillus terreus	Not Detected	Pass
Shiga toxin-producing E. Coli	Not Detected	Pass
Salmonella	Not Detected	Pass

Date Tested: 03/26/2019

LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.

NAVC	otovinc
IVIVC	otoxins

Test method: LCMS-	SOP 301				Pd55
Analyte	LOD	LOQ	Limit	Units	Status
	µg/kg	µg/kg	µg/kg	µg/kg	
B1	0.001	0.005		ND	Tested
B2	0.007	0.022		ND	Tested
G1	0.007	0.022		ND	Tested
G2	0.006	0.021		ND	Tested
Total Aflatoxins			20	ND	Pass
Ochratoxin A	0.013	0.045	20	ND	Pass

Date Tested: 03/26/2019 LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.;

Heavy Metals	14				Pass
Analyte	LOD	LOQ	Limit	Units	Status
	µg/g	µg/g	µg/g	µg/g	
Arsenic	0.001	0.01	0.2	<loq< td=""><td>Pass</td></loq<>	Pass
Cadmium	0.001	0.01	0.2	ND	Pass
Lead	0.001	0.01	0.5	0.127	Pass
Mercury	0.001	0.01	0.1	0.030	Pass

Date Tested: 03/27/2019 LOQ = Limit of Quantitation; LOD = Limit of Detection; NT = Not Tested; ND = Not Detected.



Anya Engen

Quality Manager

03/28/2019

