

PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

		HIGHTE OF	AIVAL 1313	
Document #	P.004	Rev.	Effective Date	
Product Code#	QSFSHO01	6	04/29/2020	
NANOEMULSIFIED	FULL SPECTRUM HEMP EX	TRACT 400	3 1/23/2020	
Lot Number:	FSHO2004/1			
Manufacturing Date:	07/2020			
Bottle Size:	50 mL			
Storage Recommenda	ion: Room Temperature			
	EXP Date: EXP:07/2022			

Final Product Tests

Test Performed	Method	Specification	Result	Pass/Fai
Aerobic Plate Count	USP2021	≤ 10⁵cfu/mL	Conforms	☐ Pass☐ Fail
Coliforms	AOAC 991.14	≤ 100cfu/mL	Conforms	☐ Pass☐ Fail
E. Coli	USP2022	Absent	Conforms	☐ Pass☐ Fail
Staph aureus	USP2022	Absent	Conforms	☐ Pass ☐ Fail
Yeast/Mold	USP2021	≤ 1000cfu/mL	Conforms	☐ Pass☐ Fail
Salmonella	USP2022	Absent	Conforms	☐ Pass☐ Fail
Pseudo. aeruginosa	mUSP62	Absent	Conforms	☐ Pass☐ Fail
Arsenic	ICPMS	≤ 2ppm	Conforms	☐ Pass☐ Fail
Cadmium	ICPMS	≤ 2ppm	Conforms	☐ Pass☐ Fail
Lead	ICPMS	≤ 1ppm	Conforms	☐ Pail
Mercury	ICPMS	≤ 1ppm	Conforms	☐ Pall ☐ Pass ☐ Fail
Liposome size	DLS	10 nm– 50 nm	Conforms	☐ Pass☐ Fail
THC	LC/MS/MS or HPLC	≤ 0.3%	0.04%	☐ Pass☐ Fail
Cannabidiol	LC/MS/MS or HPLC	≥16mg/2 mL	20.8mg/2mL	⊠ Pass
CBDV	LC/MS/MS or HPLC	For Information Only	Not Detected	☐ Fail ☐ Pass ☐ Fail



Effective Date 04/29/2020	

Test Performed	Method	Specification	Result	Pass/Fai
CBDA	LC/MS/MS or HPLC	For Information Only	Not Detected	⊠ Pass □ Fail
CBG	LC/MS/MS or HPLC	For Information Only	0.211mg/g	☐ Pass☐ Fail
CBN	LC/MS/MS or HPLC	For Information Only	0.015mg/g	☐ Pass☐ Fail
CBC	LC/MS/MS or HPLC	For Information Only	0.428mg/g	⊠ Pass
α -Pinene	GC/MS or GC-FID	For Information Only	0.097mg/g	☐ Fail ☐ Pass
Isopulegol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Fail ☐ Pass ☐ Fail
Camphene	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass ☐ Fail
Menthol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Fail
ß-Myrcene	GC/MS or GC-FID	For Information Only	0.139	☐ Pass☐ Fail
(-)-Borneol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
ß-Pinene	GC/MS or GC-FID	For Information Only	0.491	☐ Pass☐ Fail
Terpineol	GC/MS or GC-FID	For Information Only	Not Detected	⊠ Pass □ Fail
δ -3-Carene	GC/MS or GC-FID	For Information Only	Not Detected	⊠ Pass □ Fail
Citronellol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
Limonene	GC/MS or GC-FID	For Information Only	5.98mg/g	☐ Pass☐ Fail
Geraniol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
α-Terpinene	GC/MS or GC-FID	For Information Only	<loq< td=""><td>☐ Pass☐ Fail</td></loq<>	☐ Pass☐ Fail
S-Caryophyllene	GC/MS or GC-FID	For Information Only	2.77mg/g	☐ Pass☐ Fail
rans-beta-Ocimene r-Humulene	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
	GC/MS or GC-FID	For Information Only	0.137mg/g	☐ Pass☐ Fail



FP.004	Rev.	Effective Date	
uct Code# QSFSHO01		04/29/2020	
	FP.004	Rev.	

Test Performed	Method	Specification	Result	Pass/Fai
cis-beta-Ocimene	GC/MS or GC-FID	For Information Only	Not Detected	□ Pass
cis-Nerolidol	GC/MS or GC-FID	For Information Only	Not Detected	Fail Pass
p-Cymene	GC/MS or GC-FID	For Information Only	Not Detected	☐ Fail ☐ Pass ☐ Fail
trans-Nerolidol	GC/MS or GC-FID	For Information Only	<loq< td=""><td>☐ Pass☐ Fail</td></loq<>	☐ Pass☐ Fail
Eucalyptol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
Guaiol	GC/MS or GC-FID	For Information Only	<loq< td=""><td>☐ Pass ☐ Fail</td></loq<>	☐ Pass ☐ Fail
γ-Terpinene	GC/MS or GC-FID	For Information Only	.207mg/g	☐ Pass☐ Fail
Caryophyllene Oxide	GC/MS or GC-FID	For Information Only	0.017mg/g	☐ Pass☐ Fail
Terpinolene	GC/MS or GC-FID	For Information Only	0.207mg/g	☐ Pass☐ Fail
a-Bisabolol	GC/MS or GC-FID	For Information Only	0.027 mg/g	☐ Pass☐ Fail
Linalool	GC/MS or GC-FID	For Information Only	0.016mg/g	☐ Pass☐ Fail
Eudesmol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail

^{**}Solvent and Pesticide testing performed annually



PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

FP.004	Rev.	Effective Date
QSFSHO01	6	04/29/2020
		Rev.

NOTES:

Total Batch Size: 381 L Bottles Produced: 5007

Product Description: Liposomal hemp tincture. 16mg cannabinoids per serving.

Ingredient	Manufacturer	Lot Number
Full Spectrum Hemp Extract	CBD Universe	200281
Full Spectrum Hemp Extract	CBD Universe	200497
full Spectrum Hemp Extract	CBD Universe	200671

Released:

Quality Assurance: Jave B

Date: 07 21 / 100



PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

Document #	ED 004	D.		F" " D :	
Document #	GSFSHO01		Rev.	Effective Date	
Product Code#				04/29/2020	
NANOEMULSIFIED	FULL S	PECTRUM HEMP EXTR	ACT 400		
Lot Number:		FSHO2004/2			
Manufacturing Date:		07/2020			
Bottle Size:		50 mL			
Storage Recommend	dation:	Room Temperature			
Shelf Life / EXP Date		EXP:07/2022			

Final Product Tests

Test Performed	Method	Specification	Result	Pass/Fail
Aerobic Plate Count	USP2021	≤ 10 ⁵ cfu/mL	Conforms	☐ Pass☐ Fail
Coliforms	AOAC 991.14	≤ 100cfu/mL	Conforms	☐ Pass☐ Fail
E. Coli	USP2022	Absent	Conforms	☐ Pass☐ Fail
Staph aureus	USP2022	Absent	Conforms	☐ Pass☐ Fail
Yeast/Mold	USP2021	≤ 1000cfu/mL	Conforms	☐ Pass☐ Fail
Salmonella	USP2022	Absent	Conforms	☐ Pass☐ Fail
Pseudo. aeruginosa	mUSP62	Absent	Conforms	☐ Pass☐ Fail
Arsenic	ICPMS	≤ 2ppm	Conforms	☐ Pass☐ Fail
Cadmium	ICPMS	≤ 2ppm	Conforms	☐ Pass☐ Fail
Lead	ICPMS	≤ 1ppm	Conforms	☐ Pass☐ Fail
Mercury	ICPMS	≤ 1ppm	Conforms	☐ Pass☐ Fail
Liposome size	DLS	10 nm– 50 nm	Conforms	⊠ Pass □ Fail
THC	LC/MS/MS or HPLC	≤ 0.3%	0.04%	⊠ Pass □ Fail
Cannabidiol	LC/MS/MS or HPLC	≥16mg/2 mL	20.8mg/2ml	⊠ Pass □ Fail
CBDV	LC/MS/MS or HPLC	For Information Only	Not detected	⊠ Pass □ Fail



Document #	FP.004	Rev.	Effective Date
Product Code#	QSFSHO01	6	04/29/2020
NANOEMULSIFII	ED FULL SPECTRUM HEN	IP EXTRACT 400	

Test Performed	Method	Specification	Result	Pass/Fail
CBDA	LC/MS/MS or HPLC	For Information Only	Not Detected	☐ Pass☐ Fail
CBG	LC/MS/MS or HPLC	For Information Only	0.211 mg/g	☐ Pass☐ Fail
CBN	LC/MS/MS or HPLC	For Information Only	0.015mg/g	⊠ Pass □ Fail
CBC	LC/MS/MS or HPLC	For Information Only	0.428mg/g	☐ Pass☐ Fail
α-Pinene	GC/MS or GC-FID	For Information Only	0.097mg/g	☐ Pass☐ Fail
Isopulegol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
Camphene	GC/MS or GC-FID	For Information Only	Not Detected	□ Pass □ Fail
Menthol	GC/MS or GC-FID	For Information Only	Not Detected	⊠ Pass □ Fail
ß-Myrcene	GC/MS or GC-FID	For Information Only	0.139	⊠ Pass □ Fail
(-)-Borneol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
ß-Pinene	GC/MS or GC-FID	For Information Only	0.491	⊠ Pass □ Fail
Terpineol	GC/MS or GC-FID	For Information Only	Not Detected	⊠ Pass □ Fail
δ -3-Carene	GC/MS or GC-FID	For Information Only	Not Detected	⊠ Pass □ Fail
Citronellol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
Limonene	GC/MS or GC-FID	For Information Only	5.98mg/g	⊠ Pass □ Fail
Geraniol	GC/MS or GC-FID	For Information Only	Not detected	☐ Pass☐ Fail
α-Terpinene	GC/MS or GC-FID	For Information Only	<loq< td=""><td>⊠ Pass □ Fail</td></loq<>	⊠ Pass □ Fail
ß-Caryophyllene	GC/MS or GC-FID	For Information Only	2.77mg/g	□ Pass □ Fail
trans-beta-Ocimene	GC/MS or GC-FID	For Information Only	Not detected	☐ Pass☐ Fail
α-Humulene	GC/MS or GC-FID	For Information Only	0.137mg/g	⊠ Pass □ Fail



Document #	FP.004	Rev.	Effective Date		
Product Code#	QSFSHO01	6	04/29/2020		
NANOEMULSIFIED FULL SPECTRUM HEMP EXTRACT 400					

Test Performed	Method	Specification	Result	Pass/Fail
cis-beta-Ocimene	GC/MS or GC-FID	For Information Only	Not detected	☐ Pass☐ Fail
cis-Nerolidol	GC/MS or GC-FID	For Information Only	Not detected	☐ Pass☐ Fail
p-Cymene	GC/MS or GC-FID	For Information Only	Not detected	☐ Pass☐ Fail
trans-Nerolidol	GC/MS or GC-FID	For Information Only	<loq< td=""><td>⊠ Pass □ Fail</td></loq<>	⊠ Pass □ Fail
Eucalyptol	GC/MS or GC-FID	For Information Only	Not Detected	☐ Pass☐ Fail
Guaiol	GC/MS or GC-FID	For Information Only	<loq< td=""><td>☐ Pass☐ Fail</td></loq<>	☐ Pass☐ Fail
γ-Terpinene	GC/MS or GC-FID	For Information Only	.207mg/g	⊠ Pass □ Fail
Caryophyllene Oxide	GC/MS or GC-FID	For Information Only	0.017mg/g	☐ Pass☐ Fail
Terpinolene	GC/MS or GC-FID	For Information Only	.207mg/g	☐ Pass☐ Fail
α-Bisabolol	GC/MS or GC-FID	For Information Only	0.027mg/g	⊠ Pass □ Fail
Linalool	GC/MS or GC-FID	For Information Only	0.016mg/g	☐ Pass☐ Fail
Eudesmol	GC/MS or GC-FID	For Information Only	Not detected	☐ Pass☐ Fail

^{*100%} label claim at the time of manufacture

^{**}Solvent and Pesticide testing performed annually



PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

Rev.	Effective Date	
6	04/29/2020	

NOTES:

Total Batch Size: 381 L Bottles Produced: 5007

Product Description: Liposomal hemp tincture. 16mg cannabinoids per serving.

Ingredient	Manufacturer	Lot Number
Full Spectrum Hemp Extract	CBD Universe	200281
Full Spectrum Hemp Extract	CBD Universe	200497
Full Spectrum Hemp Extract	CBD Universe	200671

Date: 08 18 200

Released:

Quality Assurance:



Certificate of Analysis

July 14, 2020

QUICKSILVER SCIENTIFIC

Attn: Erin Bingham 1376 Miners Drive Suite 101 Lafayette, CO 80026 Order No. 514294 Sample No. 1053124

SAMPLE INFORMATION

Description Nanoemulsified Full Spectrum Hemp Oil

Lot Number FSHO2004

Category (Type) Orally Consumed Concentrate (Tincture)

Received July 09, 2020

ANALYTICAL RESULTS

Analysis Cannabinoid Profile

Instrument Liquid Chromatography Tandem Mass Spectrometry (LC/MS/MS)

Method MF12D012

Analysis Date July 09, 2020 to July 14, 2020

Analyte	mg/g	%	Status
Δ8-ΤΗС	-	-	-
Δ9-ΤΗС	0.4442	0.04442	-
Δ9-ΤΗCΑ	ND	ND	-
THCV	-	-	-
CBD	9.328	0.9328	-
CBDA	ND	ND	-
CBC	0.428	0.0428	-
CBCA	-	-	-
CBDV	-	-	-
CBG	0.2115	0.02115	-
CBGA	-	-	-
CBN	0.0149	0.00149	-
Total THC	0.4442	0.04442	-
Total CBD	9.328	0.9328	-
Total Cannabinoids	10.4266	1.04266	-
Total Active Cannabinoids	10.4266	1.04266	-

Reported by **Anresco, Inc.**

Derek Moy

July 14, 2020

Limit of Quantitation: 0.0050 mg/g Limit of Detection: 0.0017 mg/g ND = None Detected

<LOQ = Below Limit of Quantitation <LOD = Below Limit of Detection



Certificate of Analysis

Order No. 514294

Sample No. 1053124

July 13, 2020

QUICKSILVER SCIENTIFIC

Attn: Erin Bingham 1376 Miners Drive Suite 101 Lafayette, CO 80026

SAMPLE INFORMATION

Description Nanoemulsified Full Spectrum Hemp Oil

Lot Number FSHO2004

Category (Type) Orally Consumed Concentrate (Tincture)

Received July 09, 2020

ANALYTICAL RESULTS

Analysis Terpene Profile

Instrument Gas Chromatography Mass Spectrometry (GC/MS)

MethodAmerican Herbal PharmacopoeiaAnalysis DateJuly 09, 2020 to July 13, 2020

Terpene	mg/g	%	Status
α-Pinene	0.097	0.010	-
Isopulegol	ND	ND	-
Camphene	ND	ND	-
Menthol	ND	ND	-
ß-Myrcene	0.139	0.014	-
(-)-Borneol	ND	ND	-
β-Pinene	0.491	0.049	-
Terpineol	ND	ND	-
δ -3-Carene	ND	ND	-
Citronellol	ND	ND	-
Limonene	5.980	0.598	-
Geraniol	ND	ND	-
α-Terpinene	<loq< td=""><td><loq< td=""><td>-</td></loq<></td></loq<>	<loq< td=""><td>-</td></loq<>	-
ß-Caryophyllene	2.770	0.277	-
trans-beta-Ocimene	ND	ND	-
α-Humulene	0.137	0.014	-
cis-beta-Ocimene	ND	ND	-
cis-Nerolidol	ND	ND	-
p-Cymene	ND	ND	-
trans-Nerolidol	<loq< td=""><td><loq< td=""><td>-</td></loq<></td></loq<>	<loq< td=""><td>-</td></loq<>	-
Eucalyptol	ND	ND	-
Guaiol	<loq< td=""><td><loq< td=""><td>-</td></loq<></td></loq<>	<loq< td=""><td>-</td></loq<>	-
y-Terpinene	0.207	0.021	-
Caryophyllene Oxide	0.017	0.002	-
Terpinolene	<loq< td=""><td><loq< td=""><td>-</td></loq<></td></loq<>	<loq< td=""><td>-</td></loq<>	-
α-Bisabolol	0.027	0.003	-
Linalool	0.016	0.002	-
Eudesmol	<loq< td=""><td><loq< td=""><td>-</td></loq<></td></loq<>	<loq< td=""><td>-</td></loq<>	-
Total Terpenes	9.880	0.988	-

Reported by **Anresco, Inc.**

Darryl Cudia Analyst

July 13, 2020

Limit of Detection: 0.0004 mg/g Limit of Quantitation: 0.0013 mg/g

ND = None Detected

<LOQ = Below Limit of Quantitation <LOD = Below Limit of Detection

If there are any questions with this report, please contact "compliance@anresco.com".

page 1 of 1



If you liked our service, please tell a friend. If you didn't, please tell us!

40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com **FDA Registration #14353128308**

Test Certificate

Description: Full Spectrum Hemp Oil Client: Quicksilver Scientific

1376 Miners Drive Sample ID:

Suite 103

Lot No: FSHO2004/1 Lafayette, CO 80026 Location:

Received: 7/13/2020 Completed: 7/20/2020 Lab No: 199737-01

Analysis	Result	Per Unit	Specifications	Method
Mercury	0.003	ppm	Report	ICP-MS USP <730>
Lead	< 0.001	ppm	Report	ICP-MS USP <730>
Arsenic	0.064	ppm	Report	ICP-MS USP <730>
Cadmium	0.013	ppm	Report	ICP-MS USP <730>
Total Aerobic Microbial Count	<10	CFU/g	Report	USP <2021>
Coliform	<10	CFU/g	Report	AOAC 991.14
E Coli	Absent	per 10 grams	Report	USP <2022>
Salmonella	Absent	per 10 grams	Report	USP <2022>
Staphylococcus aureus	Absent	per 10 grams	Report	USP <2022>
Total Yeast & Mold	<10	CFU/g	Report	USP <2021>
Pseudomonas	Absent	per 10 grams	Report	USP <62>

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Dated: 7/20/2020

Printed: 7/20/2020 4:37:56 PM





8/10/2020

Received:

If you liked our service, please tell a friend. If you didn't, please tell us!

40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com **FDA Registration #14353128308**

Test Certificate

Description: Full Spectrum Hemp Client: Quicksilver Scientific Sample ID:

1376 Miners Drive

Suite 103 Lot No: FSHO2004/2

Lafayette, CO 80026 Location:

Completed: 8/17/2020 Lab No: 201184-02

Analysis	Result	Per Unit	Specifications	Method
Mercury	0.001	ppm	Report	ICP-MS USP <730>
Lead	0.019	ppm	Report	ICP-MS USP <730>
Arsenic	< 0.001	ppm	Report	ICP-MS USP <730>
Cadmium	< 0.001	ppm	Report	ICP-MS USP <730>

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Kristina Nolff-Quality Technician

Dated: 8/17/2020

Printed: 8/17/2020 2:59:25 PM





If you liked our service, please tell a friend. If you didn't, please tell us!

40 West Louise Ave., Salt Lake City, UT 84115 Phone: (801) 485-1800 Fax: (801) 484-9211

Email: utlab@advancedlabsinc.com **FDA Registration #14353128308**

Test Certificate

Description: Full Spectrum Hemp Client: Quicksilver Scientific 1376 Miners Drive

Sample ID: FSHO2004/2

Lot No:

Suite 103

Location:

Lafayette, CO 80026

Received: 8/10/2020 Completed: 8/13/2020

Lab No: 201183-02

Analysis	Result	Per Unit	Specifications	Method
Total Aerobic Microbial Count	<10	CFU/g	Report	USP <2021>
Coliform	<10	CFU/g	Report	AOAC 991.14
E Coli	Absent	per 10 grams	Report	USP <2022>
Salmonella	Absent	per 10 grams	Report	USP <2022>
Staphylococcus aureus	Absent	per 10 grams	Report	USP <2022>
Total Yeast & Mold	<10	CFU/g	Report	AOAC 2014.05
Pseudomonas	Absent	per 10 grams	Report	USP <62>

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Dated: 8/13/2020

Printed: 8/13/2020 11:42:21 AM

