

## PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

Document #	FP.002		Rev.	Effective Date
Product Code#	QSBSHO	01	5	04/29/2020
NANOEMULSIFIE	D BROAD S	SPECTRUM HE	EMP EXTRACT 400	
Lot Number:	В	SHO2101/I		
<b>Manufacturing Date</b>	: 0	04/2021		
Bottle Size:	5	0 mL		
Storage Recommen	dation:	Room Temperature		
Shelf Life / EXP Date	e: E	EXP:04/2023		

## **Final Product Tests**

Test Performed	Method	Specification	Result	Pass/Fail
Aerobic Plate Count	USP2021	≤ 10 <sup>5</sup> 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	≤ 0.01%	0.0004%	Pass  Fail
Cannabidiol	LC/MS/MS or HPLC	≥16mg/2 mL	17.476mg/2ml	Pass  Fail
CBDV	LC/MS/MS or HPLC	For Information Only	0.029mg/ml	Pass  Fail



# PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

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		INEV.

Test Performed	Method	Specification	Result	Pass/Fail
CBDA	LC/MS/MS or HPLC	For Information Only		☑ Pass
CBG	LC/MS/MS or HPLC	For Information Only	<loq< td=""><td>Pass</td></loq<>	Pass
CBN	LC/MS/MS or HPLC	For Information Only	None Detected	Pass
CBC	LC/MS/MS or HPLC	For Information Only	<loq< td=""><td>☐ Fail ☐ Pass ☐ Fail</td></loq<>	☐ Fail ☐ Pass ☐ Fail
α-Pinene	GC/MS or GC-F	For Information Only	0.048%	Pass  Fail
Isopulegol	GC/MS or GC-F	For Information Only	None Detected	Pass
Camphene	GC/MS or GC-F	ID For Information Only	None Detected	Pass  Fail
Menthol	GC/MS or GC-F	ID For Information Only	None Detected	Pass
ß-Myrcene	GC/MS or GC-F	ID For Information Only	0.011%	Pass  Fail
(-)-Borneol	GC/MS or GC-F	ID For Information Only	None Detected	Pass  Fail
ß-Pinene	GC/MS or GC-F	ID For Information Only	0.048%	Pass  Fail
Terpineol	GC/MS or GC-F	ID For Information Only	None Detected	Pass Fail
δ -3-Carene	GC/MS or GC-F	ID For Information Only	BLOQ	Pass  Fail
Citronellol	GC/MS or GC-FI	D For Information Only	None Detected	Pass  Fail
Limonene	GC/MS or GC-FI	D For Information Only	0.564%	Pass    Fail
Geraniol	GC/MS or GC-FI	D For Information Only	None Detected	Pass  Fail
α-Terpinene	GC/MS or GC-FI	D For Information Only	BLOQ	Pass    Fail
ß-Caryophyllene	GC/MS or GC-FI	D For Information Only	0.291%	Pass  Fail
trans-beta-Ocimene	GC/MS or GC-FI	D For Information Only	None Detected	Pass    Fail
α-Humulene	GC/MS or GC-FI	D For Information Only	0.019%	Pass    Fail



## PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

FP.002	Rev.	Effective Date
QSBSHO01	5	04/29/2020
		NEV.

Test Performed	Meth	nod	Specification	Result	Pass/Fail
cis-beta-Ocimene	GC/MS or	GC-FID	For Information Only	None Detected	Pass  Fail
cis-Nerolidol	GC/MS or	GC-FID	For Information Only	None Detected	☐ Pass☐ Fail
p-Cymene	GC/MS or	GC-FID	For Information Only	None Detected	Pass  Fail
trans-Nerolidol	GC/MS or	GC-FID	For Information Only	None Detected	Pass
Eucalyptol	GC/MS or	GC-FID	For Information Only	None Detected	Pass  Fail
Guaiol	GC/MS or	GC-FID	For Information Only	None Detected	Pass    Fail
γ-Terpinene	GC/MS or	GC-FID	For Information Only	0.020%	Pass  Fail
Caryophyllene Oxide	GC/MS or	GC-FID	For Information Only	None Detected	Pass
Terpinolene	GC/MS or	GC-FID	For Information Only	0.003%	☐ Pass ☐ Fail
α-Bisabolol	GC/MS or 0	GC-FID	For Information Only	0.003%	Pass  [ Fail
inalool	GC/MS or 0	GC-FID	For Information Only	0.002%	Pass  Fail
udesmol 00% label claim at th	GC/MS or 0	E ST K WANTE	For Information Only	None detected	Pass  Fail

<sup>\*100%</sup> label claim at the time of manufacture

<sup>\*\*</sup>Solvent and Pesticide testing performed annually



## PRODUCT SPECIFICATION AND CERTIFICATE OF ANALYSIS

Document #	ED 000		AIALIOIO
Document #	FP.002	Rev.	Effective Date
Product Code#	QSBSHO01	5	04/29/2020

ES

Total Batch Size: 194 L

Bottles Produced: 3787

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

Ingredient		
	Manufacturer	Lot Number
Broad Spectrum Hemp Extract		210400
Broad Spectrum Hemp Extract	The state of the s	210400
Broad Spectrum Hemp Extract		

Released:

Quality Assurance:



May 07, 2021

**QUICKSILVER SCIENTIFIC** 

Attn: Erin Bingham 1376 Miners Drive Suite 101 Lafayette, CO 80026 Order No. 523226 Sample No. 1082117

#### **SAMPLE INFORMATION**

**Description** Broad Spectrum Hemp Extract

Lot Number BSHO2101/1

Category (Type) Non-Inhalable Orally Consumed Concentrate (Tincture)

Received May 05, 2021

**ANALYTICAL RESULTS** 

**Analysis** Terpene Profile

**Instrument** Gas Chromatography Mass Spectrometry (GC/MS)

MethodAmerican Herbal PharmacopoeiaAnalysis DateMay 05, 2021 to May 07, 2021

Terpene	mg/g	%
α-Pinene	0.07	0.007
Isopulegol	ND	ND
Camphene	ND	ND
Menthol	ND	ND
ß-Myrcene	0.11	0.011
(-)-Borneol	ND	ND
β-Pinene	0.48	0.048
Terpineol	ND	ND
δ -3-Carene	BLOQ	BLOQ
Citronellol	ND	ND
Limonene	5.64	0.564
Geraniol	ND	ND
α-Terpinene	BLOQ	BLOQ
ß-Caryophyllene	2.91	0.291
trans-beta-Ocimene	ND	ND
α-Humulene	0.19	0.019
cis-beta-Ocimene	ND	ND
cis-Nerolidol	ND	ND
p-Cymene	ND	ND
trans-Nerolidol	ND	ND
Eucalyptol	ND	ND
Guaiol	ND	ND
y-Terpinene	0.20	0.020
Caryophyllene Oxide	ND	ND
Terpinolene	0.03	0.003
α-Bisabolol	0.03	0.003
Linalool	0.02	0.002
Eudesmol	ND	ND
Total Terpenes	9.67	0.967

Reported by **Anresco, Inc.** 

Ginzu Fung Guan Analyst

May 07, 2021

Limit of Detection: 0.004 % Limit of Quantitation: 0.013 %

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".

Sample #: 1082117 Batch #: BSHO2101/1



1945 S Fremont Drive Salt Lake City, Utah 84104 Phone: 801.973.8824 www.dyadlabs.com

### **Certificate Of Analysis**

Quicksilver Scientific 1960 Cherry St Louisville, CO 80027	Report Date Customer PO Receipt Date	140701 04-30-2021 04-26-2021 04-30-2021	
Analytical Testing Results			
Customer Lot BSHO2101/1 Description Broad Spectrum Hemp Extract	•	612090 1 Milliliters	
Method ^ AOAC 993.14/GL-500 Analysis Lead (Pb) Cadmium (Cd) Arsenic (As)	Test Type ICP-MS Specification <= 1 <= 2 <= 2	Result <0.009 <0.008 <0.016	U/M ppm ppm ppm
Method ^ EPA 7473/GL-585 Analysis Mercury (Hg)	Test Type DMA Specification <= 1	Result <0.001	U/M ppm
Method ^ AOAC 2014.05/GL-451 Analysis Yeasts and Molds	Test Type Yeasts and Mole Specification <= 1000	ds Result <10	<b>U/M</b> cfu/ml
Method ^ USP <2022>/GL-461 Analysis Salmonella	Test Type Salmonella Specification Negative	Result Negative	U/M
Method ^ USP <2022>/GL-441 Analysis Staphylococcus aureus	Test Type Staphylococcus Specification Negative	aureus Result Negative	U/M
Method ^ USP <2022>/GL-423 Analysis E. coli	Test Type E. coli Specification Negative	Result Negative	U/M
Method ^ AOAC 991.14/GL-420 Analysis Coliforms	Test Type Coliforms Specification <= 100	Result <10	<b>U/M</b> cfu/ml
Method ^ USP <2021>/GL-411 Analysis Aerobic Plate Count	Test Type Aerobic Plate C Specification <= 1000000	ount Result <1000	<b>U/M</b> cfu/ml
Method USP <62>/GL-480 Analysis Pseudomonas aeruginosa	Test Type Pseudomonas a Specification Negative	aeruginosa Result Negative	U/M

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**Laboratory Comments:** 

1945 S. Fremont Drive Salt Lake City, Utah 84104 Phone: 801.973.8824 www.dyadlabs.com

Certificate ID#: 140701

Reviewed By:	Shiarra Deletter	Approved By:	Edgar Grigorian, VP of Technical Affairs On Behalf of Dyad Labs

Samples were received in acceptable condition unless otherwise noted in the laboratory comments section. This report may not be distributed or reproduced except in full, without written permission from Dyad Labs. Client shall not at any time misrepresent or alter the contents of this report. Any violation of these conditions voids this report. Dyad Labs assumes no responsibility, and client hereby waives all claims against Dyad Labs, for interpretation of such results. The results apply only to the sample(s) provided by the client. All work is done in accordance with Dyad Labs Terms and Conditions of Sale.

### Result Symbol Definitions:

**Laboratory Notes:** 

- ^ = ISO 17025 certified method
- \* = Analysis performed at a subcontract location

Full text available on www.dyadlabs.com/Terms



April 28, 2021

**QUICKSILVER SCIENTIFIC** 

Attn: Erin Bingham 1376 Miners Drive Suite 101 Lafayette, CO 80026 Order No. 522880 Sample No. 1081009

**SAMPLE INFORMATION** 

**Description** Broad Spectrum Hemp Oil

Lot Number BSHO2101/1

Category (Type) Non-Inhalable Orally Consumed Concentrate (Tincture)

Received April 26, 2021

**ANALYTICAL RESULTS** 

Analysis Mycotoxins

**Instrument** Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) & Gas Chromatography Tandem

Mass Spectrometry (GC-MS/MS)

Analysis Date April 26, 2021 to April 28, 2021

Analyte	LOD/LOQ (ppb)	Findings (ppb)	Limit (ppb)	Status
Aflatoxin B1	2/5	ND	-	-
Afalatoxin B2	2/5	ND	-	-
Aflatoxin G1	2/5	ND	-	-
Aflatoxin G2	2/5	ND	-	-
Total Aflatoxins	8/20	ND	20	Pass
Ochratoxin A	6/18	ND	20	Pass

Reported by ND = None Detected

Anresco, Inc.

Eric Tam Senior Chemist

April 28, 2021

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



April 28, 2021

**QUICKSILVER SCIENTIFIC** 

Attn: Erin Bingham 1376 Miners Drive Suite 101 Lafayette, CO 80026 Order No. 522880 Sample No. 1081009

### **SAMPLE INFORMATION**

**Description** Broad Spectrum Hemp Oil

Lot Number BSHO2101/1

Category (Type) Non-Inhalable Orally Consumed Concentrate (Tincture)

Received April 26, 2021

**ANALYTICAL RESULTS** 

Analysis Pesticide Screen Pass

**Instrument** Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) & Gas Chromatography Tandem

Mass Spectrometry (GC-MS/MS)

Method MF 21P030

Analysis Date April 26, 2021 to April 28, 2021

Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
Abamectin	0.04/0.10	ND	0.3	Pass
Acephate	0.02/0.06	ND	5.0	Pass
Acequinocyl	0.04/0.10	ND	4.0	Pass
Acetamiprid	0.02/0.06	ND	5.0	Pass
Aldicarb	0.02/0.06	ND	0.02	Pass
Azoxystrobin	0.02/0.06	ND	40.0	Pass
Bifenazate	0.02/0.06	ND	5.0	Pass
Bifenthrin	0.04/0.10	ND	0.5	Pass
Boscalid	0.02/0.06	ND	10.0	Pass
Captan	0.20/0.06	ND	5.0	Pass
Carbaryl	0.02/0.06	ND	0.5	Pass
Carbofuran	0.02/0.06	ND	0.02	Pass
Chlorantraniliprole	0.02/0.06	ND	40.0	Pass
Chlordane	0.02/0.06	ND	0.02	Pass
Chlorfenapyr	0.02/0.08	ND	0.02	Pass
Chlorpyrifos	0.02/0.06	ND	0.02	Pass
Clofentezine	0.02/0.06	ND	0.5	Pass
Coumaphos	0.02/0.06	ND	0.02	Pass
Cyfluthrin	0.10/0.30	ND	1.0	Pass
Cypermethrin	0.10/0.30	ND	1.0	Pass
Daminozide	0.02/0.06	ND	0.02	Pass
DDVP (Dichlorvos)	0.02/0.06	ND	0.02	Pass
Diazinon	0.02/0.06	ND	0.2	Pass
Dimethoate	0.02/0.06	ND	0.02	Pass
Dimethomorph	0.02/0.06	ND	20.0	Pass
Ethoprop(hos)	0.02/0.06	ND	0.02	Pass
Etofenprox	0.02/0.06	ND	0.02	Pass
Etoxazole	0.02/0.06	ND	1.5	Pass
Fenhexamid	0.02/0.06	ND	10.0	Pass
Fenoxycarb	0.02/0.06	ND	0.02	Pass
Fenpyroximate	0.02/0.06	ND	2.0	Pass
Fipronil	0.02/0.06	ND	0.02	Pass

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

**Anresco Laboratories** www.anresco.com 1375 Van Dyke Ave,. San Francisco, CA 94124 Sample #: 1081009 page **1** of **2**Batch #: BSHO2101/1



Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
Flonicamid	0.02/0.06	ND	2.0	Pass
Fludioxanil	0.02/0.06	ND	30.0	Pass
Hexythiazox	0.02/0.06	ND	2.0	Pass
Imazalil	0.02/0.06	ND	0.02	Pass
Imidacloprid	0.02/0.06	ND	3.0	Pass
Kresoxim Methyl	0.02/0.06	ND	1.0	Pass
Malathion	0.02/0.06	ND	5.0	Pass
Metalaxyl	0.02/0.06	ND	15.0	Pass
Methiocarb	0.02/0.06	ND	0.02	Pass
Methomyl	0.02/0.06	ND	0.1	Pass
Methyl parathion	0.02/0.06	ND	0.02	Pass
Mevinphos	0.02/0.06	ND	0.02	Pass
Myclobutanil	0.02/0.06	ND	9.0	Pass
Naled	0.02/0.06	ND	0.5	Pass
Oxamyl	0.02/0.06	ND	0.2	Pass
Paclobutrazol	0.02/0.06	ND	0.02	Pass
Pentachloronitrobenzene	0.04/0.10	ND	0.2	Pass
Permethrins	0.10/0.30	ND	20.0	Pass
Phosmet	0.02/0.06	ND	0.2	Pass
Piperonyl Butoxide	0.02/0.06	ND	8.0	Pass
Prallethrin	0.04/0.10	ND	0.4	Pass
Propiconazole	0.02/0.06	ND	20.0	Pass
Propoxur	0.02/0.06	ND	0.02	Pass
Pyrethrins	0.10/0.30	ND	1.0	Pass
Pyridaben	0.02/0.06	ND	3.0	Pass
Spinetoram	0.02/0.06	ND	3.0	Pass
Spinosad	0.02/0.06	ND	3.0	Pass
Spiromesifen	0.04/0.10	ND	12.0	Pass
Spirotetramat	0.02/0.06	ND	13.0	Pass
Spiroxamine	0.02/0.06	ND	0.02	Pass
Tebuconazole	0.02/0.06	ND	2.0	Pass
Thiaclorprid	0.02/0.06	ND	0.02	Pass
Thiamethoxam	0.02/0.06	ND	4.5	Pass
Trifloxystrobin	0.02/0.06	ND	30.0	Pass

Reported by ND = None Detected Anresco, Inc.



April 28, 2021

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

**Sample #:** 1081009

**Batch #:** BSHO2101/1



April 28, 2021

#### **QUICKSILVER SCIENTIFIC**

Attn: Erin Bingham 1376 Miners Drive Suite 101 Lafayette, CO 80026 Order No. 522880 Sample No. 1081009

### **SAMPLE INFORMATION**

**Description** Broad Spectrum Hemp Oil

Lot Number BSHO2101/1

Category (Type) Non-Inhalable Orally Consumed Concentrate (Tincture)

Received April 26, 2021

**ANALYTICAL RESULTS** 

Analysis Residual Solvent Screen SFail

**Instrument** Gas Chromatography Mass Spectrometry (GC/MS)

Method USP OVI<467>

Analysis Date April 26, 2021 to April 28, 2021

Analyte	LOD/LOQ (ppm)	Findings (ppm)	Limit (ppm)	Status
1,2-Dichloroethane	0.1/1	ND	1	Pass
Acetone	50/150	ND	5000	Pass
Acetonitrile	4/12	ND	410	Pass
Benzene	0.1/1	ND	1	Pass
n-Butane	48/160	ND	5000	Pass
Chloroform	0.1/1	ND	1	Pass
Ethanol	67/200	112000.00	5000	Fail
Ethyl acetate	27/80	ND	5000	Pass
Ethyl ether	17/50	ND	5000	Pass
Ethylene oxide	0.5/1	ND	1	Pass
n-Heptane	1/4	ND	5000	Pass
n-Hexane	2/10	ND	290	Pass
Isopropyl alcohol	33/100	ND	5000	Pass
Methanol	50/150	ND	3000	Pass
Methylene chloride	0.5/1	ND	1	Pass
n-Pentane	2/6	ND	5000	Pass
Propane	10/33	ND	5000	Pass
Toluene	10/30	ND	890	Pass
Total xylenes (ortho-, meta-, para-)	30/90	ND	2170	Pass
Trichloroethylene	0.1/1	ND	1	Pass

Reported by ND = None Detected **Anresco, Inc.** 



April 28, 2021

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



April 28, 2021

#### **QUICKSILVER SCIENTIFIC**

Attn: Erin Bingham 1376 Miners Drive Suite 101 Lafayette, CO 80026 Order No. 522880 Sample No. 1081009

#### SAMPLE INFORMATION

**Description** Broad Spectrum Hemp Oil

Lot Number BSHO2101/1

Category (Type) Non-Inhalable Orally Consumed Concentrate (Tincture)

Received April 26, 2021

#### **ANALYTICAL RESULTS**

Analysis Cannabinoid Profile

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

Method MF12D012

Analysis Date April 26, 2021 to April 28, 2021

Cannabinoid	mg/g	%	mg/ml
Δ8-ΤΗC	ND	ND	ND
Δ9-ΤΗС	0.004	0.0004	0.004
Δ9-ΤΗCΑ	ND	ND	ND
THCV	ND	ND	ND
THCVA	ND	ND	ND
CBD	8.294	0.8294	8.700
CBDA	ND	ND	ND
CBC	<loq (0.002)<="" td=""><td><loq (0.0002)<="" td=""><td><loq (0.002)<="" td=""></loq></td></loq></td></loq>	<loq (0.0002)<="" td=""><td><loq (0.002)<="" td=""></loq></td></loq>	<loq (0.002)<="" td=""></loq>
CBCA	ND	ND	ND
CBDV	0.028	0.0028	0.029
CBG	<loq (0.002)<="" td=""><td><loq (0.0002)<="" td=""><td><loq (0.003)<="" td=""></loq></td></loq></td></loq>	<loq (0.0002)<="" td=""><td><loq (0.003)<="" td=""></loq></td></loq>	<loq (0.003)<="" td=""></loq>
CBGA	ND	ND	ND
CBN	ND	ND	ND
Total THC	0.004	0.0004	0.004
Total CBD	8.294	0.8294	8.700
Total Cannabinoids	8.330	0.8330	8.738
Total Active Cannabinoids	8.330	0.8330	8.738
g/ml Conversion Factor	1.049		

Reported by **Anresco, Inc.** 

Derek Moy Senior Analyst

April 28, 2021

Limit of Detection: 0.0008 mg/g Limit of Quantitation: 0.0025 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".