Cannabinoids Test

GSL SOP 400

SHIMADZU INTEGRATED UPLC-PDA



Order #: 35764 Order Name: Hemp Seed Oil Virgin Batch#: ARFR18FC Received: 09/04/2019 Completed: 09/09/2019



UPLOADED: 09/06/2019 16:23:14

Sample





Cannabinoids	LOQ	weight(%)	mg/g
D9-THC	10 PPM	N/D	N/D
THCA	10 PPM	N/D	N/D
CBD	10 PPM	N/D	N/D
CBDA	20 PPM	N/D	N/D
CBDV	20 PPM	N/D	N/D
CBC	10 PPM	N/D	N/D
CBN	10 PPM	N/D	N/D
CBG	10 PPM	N/D	N/D
CBGA	20 PPM	N/D	N/D
D8-THC	10 PPM	N/D	N/D
THCV	10 PPM	N/D	N/D
TOTAL D9-THC		N/D	N/D
TOTAL CBD*		N/D	N/D
TOTAL CANNABINOIDS		N/D	N/D

PREPARED: 09/05/2019 15:05:49

Cannabinoid Weight(%)

0	CBDV	CBDA	CBGA	CBG	CBD	THCV	CBN	D9-THC	D8-THC	CBC	THCA
0-											
0.1-											
0.2											
0.3											
0.4											
0.5											
0.6											
0.7											
0.8											
9.9											
1.0											

Reporting Limit 10 ppm

*Total CBD = CBD + CBDA x 0.877 N/D - Not Detected, B/LOQ - Below Limit of Quantification



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com



Dr. Andrew Hall, Ph.D., CSO & Lab Director

Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.



Order #: 35764 Order Name: Hemp Seed Oil Virgin Batch#: ARFR18FC Received: 09/04/2019 Completed: 09/09/2019



PESTICIDE ANALYSIS:

GSL SOP 401

PREPARED: 09/05/2019 20:34:49

UPLOADED: 09/06/2019 19:52:47

GCMS-MS - Shimadzu GCMS-TQ8040

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
CAPTAN	0.700	N/D	0.003	0.001
CHLORDANE	0.100	N/D	0.003	0.001
CHLORFENAPYR	0.100	N/D	0.003	0.001
COUMAPHOS	0.100	N/D	0.003	0.001

Pesticide	Action Leve	l Results	LOQ	LOD
resticide	(ppm)	(ppm)	(ppm)	(ppm)
CYFLUTHRIN	2.000	N/D	0.003	0.001
CYPERMETHRIN	1.000	N/D	0.003	0.001
PARATHION-METHYL	0.100	N/D	0.003	0.001
PENTACHLORONITROBENZEN	E 0.100	N/D	0.003	0.001

LCMS-MS - Shimadzu LCMS-8060

Pesticide	Action Level	Results	LOQ	LOD
	(ppm)	(ppm)	(ppm)	(ppm)
ABAMECTIN B1A	0.100	N/D	0.005	0.001
ACEPHATE	0.100	N/D	0.001	0.001
ACEQUINOCYL	0.100	N/D	0.001	0.001
ACETAMIPRID	0.100	N/D	0.005	0.001
ALDICARB	0.100	N/D	0.005	0.001
AZOXYSTROBIN	0.100	N/D	0.001	0.001
BIFENAZATE	0.100	N/D	0.005	0.001
BIFENTHRIN	3.000	N/D	0.005	0.001
BOSCALID	0.100	N/D	0.005	0.001
CARBARYL	0.500	N/D	0.003	0.001
CARBOFURAN	0.100	N/D	0.001	0.001
CHLORANTRANILIPROLE	10.000	N/D	0.005	0.005
CHLORPYRIFOS	0.100	N/D	0.001	0.001
CLOFENTEZINE	0.100	N/D	0.001	0.001
DAMINOZIDE	0.100	N/D	0.005	0.001
DIAZANON	0.100	N/D	0.001	0.001
DICHLORVOS	0.100	N/D	0.005	0.001
DIMETHOATE	0.100	N/D	0.001	0.001
DIMETHOMORPH	2.000	N/D	0.005	0.001
ETHOPROPHOS	0.100	N/D	0.001	0.001
ETOFENPROX	0.100	N/D	0.001	0.001
ETOXAZOLE	0.100	N/D	0.010	0.005
FENHEXAMID	0.100	N/D	0.005	0.001
FENOXYCARB	0.100	N/D	0.005	0.001
FENPYROXIMATE	0.100	N/D	0.001	0.001
FIPRONIL	0.100	N/D	0.003	0.001
FLONICAMID	0.100	N/D	0.025	0.010
FLUDIOXONIL	0.100	N/D	0.003	0.001
HEXYTHIAZOX	0.100	N/D	0.005	0.001

Pesticide	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
IMAZALIL	0.100	N/D	0.005	0.001
IMIDACLOPRID	5.000	B/LOD	0.005	0.001
KRESOXIM-METHYL	0.100	N/D	0.010	0.005
MALATHION	0.500	N/D	0.005	0.001
METALAXYL	2.000	N/D	0.001	0.001
METHIOCARB	0.100	N/D	0.005	0.001
METHOMYL	1.000	N/D	0.001	0.001
MEVINPHOS	0.100	N/D	0.001	0.001
MYCLOBUTANIL	0.100	N/D	0.005	0.001
NALED	0.100	N/D	0.005	0.001
OXAMYL	0.500	N/D	0.001	0.001
PACLOBUTRAZOL	0.100	N/D	0.005	0.001
PERMETHRINS	0.500	N/D	0.005	0.001
PHOSMET	0.100	N/D	0.005	0.001
PIPERONYL BUTOXIDE	3.000	N/D	0.001	0.001
PRALLETHRIN	0.100	N/D	0.005	0.005
PROPICONAZOLE	0.100	N/D	0.010	0.005
PROPOXUR	0.100	N/D	0.001	0.001
PYRETHRINS (PYRETHRIN I)	0.500	N/D	0.005	0.005
PYRIDABEN	0.100	N/D	0.005	0.001
SPINETORAM	0.100	N/D	0.001	0.001
SPINOSAD	0.100	N/D	0.001	0.001
SPIROMESIFEN	0.100	N/D	0.005	0.001
SPIROTETRAMAT	0.100	N/D	0.001	0.001
SPIROXAMINE	0.100	N/D	0.001	0.001
TEBUCONAZOLE	0.100	N/D	0.005	0.001
THIACLOPRID	0.100	N/D	0.001	0.001
THIAMETHOXAM	5.000	N/D	0.001	0.001
TRIFLOXYSTROBIN	0.100	N/D	0.001	0.001

N/D = Not Detected, A/LOQ = Above LOQ Level, B/LOQ = Below LOQ Level, B/LOD = Below LOD Level



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com



Dr. Andrew Hall, Ph.D., CSO & Lab Director

Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy. Green Scientific Labs can only discuss results with the original client of record.



Order #: 35764 Order Name: Hemp Seed Oil Virgin Batch#: ARFR18FC Received: 09/04/2019 Completed: 09/09/2019



RESIDUAL SOLVENTS:

Headspace GCMS - Shimadzu GCMS QP2020 with HS20

GSL SOP 405 Prepared: 09/06/2019 00:04:32 Uploaded: 09/06/2019 16:32:04

Residual Solvent	Action Level (ppm)	Results (ppm)	LOQ (ppm)	LOD (ppm)
ACETONE	5,000	N/D	140	20
ACETONITRILE	410	N/D	25	1
BENZENE	1	N/D	1	0.5
BUTANE	5,000	N/D	50	10
CHLOROFORM	1	N/D	1	0.5
DICHLOROETHANE	1	N/D	1	0.5
DICHLOROMETHANE	1	N/D	1	0.5
ETHANOL	5,000	B/LOQ	140	20
ETHYL ACETATE	5,000	N/D	140	20
ETHYL ETHER	5,000	N/D	140	20
SOPROPYL ALCOHOL	5,000	N/D	140	20
METHANOL	3,000	N/D	100	20
N-HEPTANE	5,000	N/D	140	20
N-HEXANE	290	N/D	18	10
PENTANE	5,000	B/LOQ	140	20
PROPANE	5,000	N/D	20	1
TOLUENE	890	N/D	53	1
TRICHLOROETHENE	1	N/D	0	0
XYLENES	2,170	B/LOQ	130	20



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com



Dr. Andrew Hall, Ph.D., CSO & Lab Director

Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy, Green Scientific Labs can only discuss results with the original client of record.



Order #: 35764 Order Name: Hemp Seed Oil Virgin Batch#: ARFR18FC Received: 09/04/2019 Completed: 09/09/2019



Mycotoxin Analysis:

LC-MS - Shimadzu LCMS-8060 GSL SOP 401

Uploaded: 09/06/2019 19:52:46

Analyte	Action Lvl (ppb)	Results (ppb)
AFLATOXIN B1	20	N/D
AFLATOXIN B2	20	N/D
AFLATOXIN G1	20	N/D
AFLATOXIN G2	20	N/D
OCHRATOXIN A	20	N/D

LOQ is 4ppb, LOD is 1ppb

Microbial Analysis:

GSL SOP 403 Uploaded: 09/09/2019 14:45:09

Heavy Metals Analysis:

ICP-MS - Shimadzu ICPMS-2030

Metal	Action Level (ppb)	Result (ppb)
ARSENIC (AS)	200	B/LOQ
CADMIUM (CD)	200	B/LOQ
MERCURY (HG)	100	B/LOQ
LEAD (PB)	500	B/LOQ

Lower Limit of Quantitation (LOQ) is 75 ppb

Microbial Analysis GSL SOP 406

Uploaded: 09/09/2019 14:45:15

		Uploaded: 09/09	/2019 14:45:15		
Test Method Used	Device Used	LOD	Allowable Criteria	Actual Result	Pass/Fail
USP 61/62†	ARIAMX PCR	2 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
USP 61/62†	ARIAMX PCR	5 COPIES OF DNA	PRESENCE / ABSENT	BELOW LOD	PASS
USP 61/62†	ARIAMX PCR	ASP_LOD***	PRESENCE / ABSENT	BELOW LOD	PASS
USP 61/62†	ARIAMX PCR	363.05518 CFU/G**	1,000	BELOW THRESHOLD	PASS
USP 61/62†	ARIAMX PCR	0.25316 CFU/G**	10,000	BELOW THRESHOLD	PASS
USP 61/62†	ARIAMX PCR	3.41539 CFU/G**	100	BELOW THRESHOLD	PASS
USP 61/62†	ARIAMX PCR	0.32951 CFU/G**	100	BELOW THRESHOLD	PASS
	USP 61/62† USP 61/62† USP 61/62† USP 61/62† USP 61/62† USP 61/62†	UsedDevice UsedUSP 61/62†ARIAMX PCRUSP 61/62†ARIAMX PCRUSP 61/62†ARIAMX PCRUSP 61/62†ARIAMX PCRUSP 61/62†ARIAMX PCRUSP 61/62†ARIAMX PCRUSP 61/62†ARIAMX PCR	Test Method UsedDevice UsedLODUSP 61/62†ARIAMX PCR2 COPIES OF DNAUSP 61/62†ARIAMX PCR5 COPIES OF DNAUSP 61/62†ARIAMX PCRASP_LOD***USP 61/62†ARIAMX PCR363.05518 CFU/G**USP 61/62†ARIAMX PCR0.25316 CFU/G**USP 61/62†ARIAMX PCR3.41539 CFU/G**	UsedDevice UsedLODAllowable CriteriaUSP 61/62†ARIAMX PCR2 COPIES OF DNAPRESENCE / ABSENTUSP 61/62†ARIAMX PCR5 COPIES OF DNAPRESENCE / ABSENTUSP 61/62†ARIAMX PCRASP_LOD***PRESENCE / ABSENTUSP 61/62†ARIAMX PCR363.05518 CFU/G**1,000USP 61/62†ARIAMX PCR0.25316 CFU/G**10,000USP 61/62†ARIAMX PCR3.41539 CFU/G**100	Test Method UsedDevice UsedLODAllowable CriteriaActual ResultUSP 61/62†ARIAMX PCR2 COPIES OF DNAPRESENCE / ABSENTBELOW LODUSP 61/62†ARIAMX PCR5 COPIES OF DNAPRESENCE / ABSENTBELOW LODUSP 61/62†ARIAMX PCRASP_LOD***PRESENCE / ABSENTBELOW LODUSP 61/62†ARIAMX PCR363.05518 CFU/G**1,000BELOW THRESHOLDUSP 61/62†ARIAMX PCR0.25316 CFU/G**10,000BELOW THRESHOLDUSP 61/62†ARIAMX PCR0.25316 CFU/G**100BELOW THRESHOLDUSP 61/62†ARIAMX PCR0.32951 CFU/G**100BELOW THRESHOLD

† USP 61 (enumeration of bacteria TAC, TYM, and ENT/Coliform), USP 62 (identifying specific species E.coli Aspergillus etc)

* STEC and Salmonella run as Multiplex ** CFU/g Calculation based on Select Category Type Gummy MIP/Extract Flower matrix

*** Flavus = 2 Copies of DNA / Fumigatis = 2 Copies of DNA Niger = 20 Copies of DNA / Terrus = 10 copies of DNA

Water Activity:

HD-3A Water Activity Meter - GSL SOP 407

Uploaded: 09/06/2019 00:32:08

Water

0.85

Filth and Foreign Materials Analysis:

Microscope - Amscope Simul-Focal Trinocular Stereo Zoom Microscope - GSL SOP 409

Uploaded: 09/06/2019 00:29:18

Pass: No Foreign Materials Detected



4001 SW 47th Avenue Suite 208 Davie, FL 33314 1-833-TEST-CBD info@greenscientificlabs.com



Dr. Andrew Hall, Ph.D., CSO & Lab Director

Green Scientific Labs uses its best efforts to deliver high quality results and to verify that the data contained therein are based on sound scientific judgment and levels listed are guidelines only and all data was reported based on standard laboratory procedures and deviations. However Green Scientific Labs makes no warranties or claims to that effect and further shall not be liable for any damage or misrepresentation that may result from the use or misuse of the data contained herein in any way. Further, Green Scientific Labs makes no claims regarding representations of the analyzed sample to the larger batch from which it was taken. Data and information in this report are intended solely for the individual(s) for whom samples were submitted and as part of our strict confidentiality policy. Green Scientific Labs can only discuss results with the original client of record.